

Mental Health Labels and Their Effects on Public Stigma among College Students

by

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Abstract

This study examined the relationship between labels used to refer to mental health, whether or not participants were asked to reflect on their preconceived notions around these labels, and endorsement of mental health stigma across multiple dimensions. Based on the body of literature addressing how mental health stigma is transmitted via the labels used to refer to mental health, it was predicted that mental health labels with a longer history of use, such as mental illness or psychiatric disorder, would carry more mental health stigma than newer labels like mental health concern or a control term of personal concern. The aim of providing evidence for these hypotheses was to provide a low-cost intervention for reducing stigma, choosing to use words with less stigma endorsed.

Using a factorial design, this study examined the relationship between labels to refer to mental health— specifically, the labels mental illness, psychiatric disorder, and mental health concern, as well as a control term, personal concern— engagement (or not) in a reflective task around these mental health labels or control, and impact on endorsement of public stigma across two major dimension, negative emotional reactions and recoverability. Participants read a vignette involving a college student that included the mental health label or control randomly assigned to them before completing outcome measures. A total of 319 valid response sets were analyzed. Factorial ANCOVAs were utilized to compare the 4x2 conditions for both simple main effects and interactions after controlling for relevant factors. Results indicated very few significant differences in public stigma endorsed based on either mental health labels or engagement/lack thereof in the reflection task on either dimension of public stigma measured. The simple main effect with significant differences indicated participants reacted with higher endorsement of

public stigma when presented with psychiatric disorder compared to those that were assigned mental health concern. Limitations and areas for future research and practice are discussed, including the implication that mental health stigma may look different within college populations or when perceiving lower severity distress or dysfunction, with previous research in the field focusing on broader populations and more severe mental health issues.

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Chapter 1

Introduction

Actions and behaviors in and of themselves are powerful, but it is our ability to communicate with language that makes human beings unique in the known universe. From how political groups decide to frame their debates and policies to what names or labels we use to refer to those around us, our words shape the way we interpret and interact with the world we live in (Tversky & Kahneman, 1981). Our words hold value for many reasons, but one of the vital components of language is that we attach meaning and promote action through the ways we label and thereby conceptualize the world around us.

Our use of language is ever evolving, especially in technical fields where what and how we label new ideas or modifications to previous knowledge help shape the future direction of their conceptualization and our approach to work within these fields. This is especially true of psychology (Lilienfeld et al., 2015), a relatively young field of science when compared to its peers (Piaget, 1979), which is still in its early growing pains in many respects. This can be seen vividly in the recent proposal within the American Psychological Association (APA) to unite the field in the use of the term “patient” across settings relating to services provided by practitioners who would fall upon the APA’s jurisdiction (A. Kluck, personal communication, February 28, 2018; APA COR, 2017; APA, 2018). Though the measure did not pass, the many and varied reactions to this proposal point to the importance of the labels we use and the varied opinions of experts and practitioners on such labels.

Among the many powerful effects that labels have is the ability to create groups and attach assumptions about them via grouping terms. As will be discussed at length in the literature review below, labeling provides impactful benefits and shortcuts, but these shorthand groupings also come with meaningful costs. One such cost is the possibility of stigma being attached to entire groups and individuals within them, which can and does result in meaningful consequences.

Among the hotly contested grouping labels in the field of psychology, how one refers to individuals dealing with and/or perceived as having psychological pain or mental anguish has been ongoing and often shifting. From the *insane* and *invalids* of the mid-19th century, to the *hysterias*, *neuroses*, and *syndromes* of the late 19th and early 20th centuries, to the *psychiatric disorders* and *mental illnesses* still referred to today, how we as a society describe individuals dealing with suffering of a psychological nature has quickly changed for a variety of reasons. Though the field of psychology is often quick to technically define or operationalize its terms, many terms relating to mental health (or lack thereof) are often used loosely and interchangeably. This is even more pronounced with laypersons' use of terms, such as the media's descriptions of alleged perpetrators with mental health difficulties as violent or otherwise dangerous (Chen & Lawrie, 2017).

Regardless of what labels have been used to describe those who deal with such experiences, a major factor has remained constant: stigma has been attached. The definition of stigma will be discussed at length in this study, but in short, mental health stigma can be broadly defined as “negative attitudes and beliefs towards people who have a mental health condition” (Mayo Clinic, 2017, paragraph 1). In defining mental health stigma or stigma of mental illness, it is important to point out that these negative attitudes or beliefs arise in relation to *perceptions* of

a mental health condition. In other words, being seen as having a mental health condition, whether or not an individual actually holds the related symptoms and/or diagnosis, and thereby being given a label is how stigma becomes attached, as opposed to some objective metric or system. As will be further discussed, there are several major aspects of mental health stigma. However, public stigma, or the negative perceptions individuals have toward those perceived as having a mental health condition, is the best-defined and measurable aspect of the construct. Self-stigma, or the internalized aspects of stigma held by those with a mental health condition, is outside the scope of this study and harder to operationalize (Picco et. al, 2017).

Stigma itself comes with personal consequences (feelings of inadequacy, negative feelings towards self within stigmatized groups), but even worse, can lead to discrimination with impactful negative outcomes (Angell, 2003; Weingarten, 1989, 1994), including lower access to positive employment and housing opportunities, poorer health care services, decreased quality of interpersonal relationships, and lowered likelihood of accessing relevant mental health care, to name a few (Corrigan, 2005). In essence, stigma of mental illness comes with real-world costs for those experiencing it. In a further ironic twist illustrating our lack of operationalization as a field, the term used to address this particular kind of stigma has undergone some changes over the years of exploring it, with the two main terms used being *stigma of mental illness* and *mental health stigma* (Corrigan 1998; 2000). These terms will both be used in this paper interchangeably, as they have not been separately and definitely delineated. This author prefers to use the term *mental health stigma*, as it is more inclusive of those who may have mental health concerns that may or may not be diagnosed and/or treated. However, the field of stigma research focused specifically on mental illness first arose out of looking at the effects of stigma on those with generally higher levels of distress and/or dysfunction, such as those with a diagnosis of

schizophrenia (Corrigan et al., 2001), and therefore *stigma of mental illness* has a longer history of use within this realm of study.

While language around mental health is important across a variety of topics and settings, a focus of this area is college students. For a myriad of reasons, college students are seeking help for addressing, promoting, and maintaining mental health in growing numbers (Reilly, 2018; Ward, 2018; Williams, 2017), including access to services through their school systems and increasing scholastic and professional demands. However, stigma around holding a mental health label and seeking help for it remain a widespread problem among college students (Aphroditi, 2010; Eisenberg et al., 2009; Gaddis, Ramirez, & Hernandez, 2018; Kulesza et al., 2015; Vogel, Wade, & Hackler, 2007). With universities increasing funding for mental health services and related aspects of care (Druss 2006), having knowledge of which mental health labels carry the most stigma, that is to say, which linguistic terms are most associated with negative thoughts and beliefs and thereby with the most propensity for discrimination or negative outcomes, could inform how best to advertise and otherwise talk about services. If labels(s) with lessened stigma were used consistently across university campuses, stigma may be thereby reduced to some extent, possibly resulting in better outcomes for those individuals who may carry or be perceived to have such a label, including increased access to mental healthcare and social support from family, peers, and/or faculty. Additionally, clinicians working with the college population may be better informed about how to reduce stigma of mental illness in talking with their students about what has caused them to come in for treatment/help.

Though there is much literature on the negative effects and components of mental health stigma, most of the literature focuses on populations with highly distressing and culturally recognized social stigmatization, such as individuals with a diagnosis of schizophrenia (Byrne,

2000; Corrigan, 1998; Gallo 1994) or a substance abuse disorder (Corrigan et al., 2005; Link et al., 1997; Williams, 1976). The study presented aimed to shed light on more nuanced and varied images of mental health, as the labels examined were not limited to individual psychiatric diagnoses. Meaningful findings could inform relatively simple, real-world decisions at a moderately large Southern university while informing potential directions of future research.

An additional aspect of mental health stigma worth noting is how stigma is transmitted and activated between and within individuals. Though there are several major theories as to how mental health stigma arises and is attributed to individuals or groups (Corrigan, 2000; Link et al., 1989), less is known or explicitly hypothesized about how such attitudes and beliefs are activated on a more microscopic, individual level. Newer literature within the field points in the direction of schematic activation (Canfield & Cunningham, 2018). Drawing on the larger bodies of cognitive, social, and neuro-psychology, there exists the understanding that terms are represented in the brain as a map of related concepts and emotions with greater and lesser centrality. For mental health stigma, it is important to establish a relationship between activation of these networks and its effects on stigma endorsed. So, in this study, an aspect that was manipulated is the activation of schema related to stigmatizing beliefs through a reflection task. Beyond testing cognitive relationships of labels to mental health stigma, this holds the additional benefit of allowing for the reflective task output to be thematically analyzed to provide further information about similarities and differences across perceptions of labels.

So, the current study explored the relationships between the labels used to refer to individuals perceived as having a mental health condition, the invocation of previously held thoughts and beliefs, and the public stigma differentially attached based on these processes. Simply put, would using different labels interacting with whether or not individuals are asked to

reflect on these labels influence the amount of public stigma endorsed? Findings from this study may begin to inform the labels that may elicit differential levels of stigma, how/if activating preconceived notions affect levels of stigma endorsed, and future areas of research within this realm.

In summary, three research questions were sought to be answered in the current study. First, does the use of different labels to refer to mental health result in higher endorsement of mental health stigma across dimensions measured? Second, does prompting reflection of beliefs around mental health labels result in differential endorsement of mental health stigma across dimensions measured? And finally, are there significant interactions between these two independent variables, mental health label or control assigned and whether or not participants were asked to reflect on their beliefs about their assigned label or control?

Chapter 2

Literature Review

What Is Mental Health Stigma?

In the broadest of senses, stigma of mental illness can be defined as negative effects related to having— or being perceived as having— a diagnosis of a mental condition or illness (Hayward, & Bright, 1997). Such negative effects have meaningful impacts on the lives of those with a mental illness (Wahl, 1999), including real-world consequences such as loss of employment and housing opportunities (Anthony & Blanch, 1987; Burke-Miller et al., 2006; Harris, 1986), decreased access to and lowered quality of medical and mental health care (Corrigan, 2004; Knaak, Mantler, & Szeto, 2017), and more punitive treatment by law enforcement and the justice system as a whole (Corrigan, & Kleinlein, 2005; Steadman, McCarty, & Morrissey, 1989). Very broadly defined constructs are often not very helpful in psychology, however, and many inquisitive individuals and groups have dedicated themselves to fleshing out the components that comprise mental health stigma. It will be useful to quickly review several of these categories and summarize the major findings and conceptualizations of the forms mental health stigma takes, so as to be able to better express which aspects will be explored in the current study.

An important aspect to note here is that the current study is focused on public stigma, or the negative attitudes and beliefs held about persons perceived as having a mental health condition, and aspects that fall under this broad umbrella within stigma research. Though self-stigma, or the internalized aspects of stigma held by individuals with a mental health concern or

condition, is a major area of research within stigma of mental illness (Corrigan & Calabrese, 2005), it is a separate aspect with its own set of theories and challenges. Such a direction of inquiry is outside the scope and means of the current study. Therefore, the below dimensions of mental health stigma fall under the realm of public stigma and are referred to thusly or under the general labels *mental health stigma* or *stigma of mental illness*.

Dimensions of Mental Health Stigma & Negative Consequences

Responsibility. With mental health stigma, there is theorized to be an attribution of whether or not people with mental illness are responsible for their condition (Corrigan et al., 2002), which will be discussed in greater length in the theoretical underpinnings section below. Suffice it to say, whether or not people see mental illness as the responsibility— or not— of those carrying a label impacts their emotional reactions. Such responses include feelings of anger towards those people perceived as responsible for their symptoms while presenting as feelings of pity toward those they view as not being able to control their mental illness (Corrigan, 2005). These negative emotional reactions are problematic in how they influence behavior towards individuals carrying a label, and these reactions are even more problematic when coming from healthcare providers. Negative emotional reactions from caregivers can result in feelings of dehumanization for patients, experiences of being patronized, and lowered expectations of positive health outcomes (Angell, Cooke, & Kovac, 2005).

Chronicity/recoverability. A related but separate aspect from responsibility, chronicity and recoverability are aspects of mental health stigma involving attitudes around the ability (or lack thereof) of people with mental illness to live a fulfilling life in light of their illness (Anthony, 1993), as well as how longstanding their conditions are seen as by others. This component of mental health stigma has often been examined alongside that of responsibility. In

the current study, recoverability and chronicity were examined through a measure of recoverability. There is evidence that if those providing care or support hold a stigmatizing view that those with mental illness are unlikely to recover— have a high chronicity— they are unlikely to provide the best care possible (Corrigan et al. 1999). This may also be true of laypersons' beliefs as well, as being treated as if one is doomed or fated to continue suffering could certainly negatively influence one's own outlook on the future. Having individuals and/or systems treating someone as if they cannot live a meaningful life or are unlikely to get better— at the least, not quickly— may act as a self-fulfilling prophecy leading to decreased access to necessary support and care, such that individuals may not seek help because they do not believe it will help (Guylt et al., 2010; Steele, 1977). So, understanding perceptions of ability to recover from the effects of mental health concerns is key to examining a unique, important aspect of mental health stigma.

Dangerousness. An important aspect of mental health stigma is the belief that people with mental illness are dangerous, or likely to be violent (Sowislo, 2017; Varshney et. al, 2016). This broadly overlaps with the construct of responsibility; seeing one as responsible for their supposedly dangerous symptoms and/or behaviors allows and helps to “justify” individuals placing judgments of moral or ethical shortcomings on those experiencing mental health concerns (Jorm, Reavley, & Ross, 2012). Within the past 25 years, this belief of dangerousness was held by up to three-quarters of the public (Link et al., 1999; Pescosolido et al., 1999), which there is some empirical evidence to suggest is an increased figure when compared to the public in 1950 (Phelan et al., 2000). Though there has been some controversy around findings supporting dangerousness as an assumption commonly held (Corrigan & Watson, 2005), more in-depth studies have shown individuals with mental illness are not more likely to dangerous or

violent. In the few cases that individuals with mental illness were found to have higher levels of dangerousness, the findings and reporting were misconstrued, sometimes with personal or political motivations (Klassen & O'Connor, 1988; Monahan, 2002). Dangerousness, or perceptions of it, is portrayed consistently in the media in a manner that sensationalizes real but often misunderstood symptoms or aspects of experience of mental health concerns (Stuart, 2006). This perception of dangerousness is associated with higher rates of arrest (Klassen & O'Connor, 1988), increased difficulties with co-workers (Corrigan et al., 2002), and higher endorsement of forced and/or separate treatment from others in health care settings (Corrigan et al., 2003). Therefore, those who are assumed to be more dangerous are treated as if they are more dangerous, which puts these individuals in more dangerous situations, such as being placed in jail or prison with less access to mental health care and/or social support.

Social distance and rejection. As human beings, we have an ingrained need for social interaction and support (Levenson, 2003). When mental illness occurs, those who experience it often distance themselves from others in order for their condition to not be discovered, as the fear of rejection is unfortunately grounded in reality for many people (Corrigan et al., 2001). If one is “outed” as having a mental health concern, others may withdraw support and interaction from them (Link et al., 1987). Even if they are not outed by others, the self-selected behavior of distancing themselves can and does still occur, resulting in reduced access to social support. This can lead to diminished social adaptability (Perlick et al., 2001) and lowered self-esteem (Link et al., 2001). So instead of waiting to be rejected by others, people with mental health concerns may distance themselves from potential allies and resources to reduce the likelihood of future discrimination, making them further vulnerable to the negative impact of their own symptoms and circumstances (Lillis et al., 2010).

Though there are several ways of measuring these potential negative outcomes from stigma, most measures of mental health stigma have had some difficulty striking a balance between exploring individual components of the constructs involved and trying to encapsulate multiple aspects of public stigma into a single measure. For the current study, this author has made modifications to two major, researched measures, the Attribution Questionnaire (AQ-27; Corrigan 2000) and the Recovery Scale (RS; Corrigan et al., 1999; 2004). The AQ-27 assesses for a combination of responsibility, dangerousness, and social rejection, all aspects of the construct of controllability within mental health stigma. The RS measures endorsement of participants' beliefs around recoverability/chronicity of those experiencing mental health stigma. With these two measures having sound psychometric properties and good empirical bases, the current study possesses a strong general encapsulation of the major components of mental health stigma while maintaining the ability to look more closely at unique relationships across these dimensions.

Consequences of Stigma

The previous information has provided evidence for broad negative ramifications of mental health stigma; it is important to provide further examples of empirical evidence pointing out specific systemic and individualized consequences of this kind of stigma. Not only do those experiencing mental health concerns have a higher likelihood of being incarcerated than peers with equal or higher levels of offending behavior, but this group is further victimized by being more likely to experience physical and/or sexual abuse both inside of the American prison system and outside in civilian life (Ditton, 1999). In addition to previously mentioned difficulties with quality of care for medical and mental healthcare services (Corrigan, 2004; Knaak, Mantler, & Szeto, 2017), people with mental health stigma are at an increased risk of not being able to

access affordable care at all. There is evidence that such individuals are at a higher likelihood than similarly healthy peers to be denied ability to successfully apply for and receive healthcare insurance (Knaak, Mantler, & Szeto, 2017). This trend is continuing, as jurisdiction meant to provide patient protections has continually been challenged and undergone legislative review (Protection & Act, 2010), and mental health conditions or concerns could again be treated as a pre-existing conditions and grounds for denial of healthcare insurance (Druss & Rosenheck, 1998). If these realities are not overwhelming in and of themselves, safe and stable housing can be an additional concern for individuals with mental illness. Mental health stigma can result in a loss of housing, inadequate quality shelter, and homelessness (Carling, 1990), key necessities that can reduce an individual's ability to achieve and even meet basic needs in everyday life. Finally, there is evidence to suggest that stigma of mental illness can result in a loss of self-esteem, self-worth, and positive self-evaluations (Crocker & Lawrence, 1999; Gallo, 1994), further stripping individuals of a healthy self-concept necessary for positive inter- and intra-personal relationships.

In summary, mental health stigma is multidimensional and can result in poignant and personally impactful results. Reducing public stigma at both systematic and individual levels, such as for students within a university campus and ecosystem, could improve the lives of individuals experiencing such stigma, as well as encourage those that need help to seek it out before negative consequences come about.

Previous Interventions to Reduce Mental Health Stigma

As this study aims to provide some direction in small, practical ways to reduce stigma through examination of language, it is useful to examine interventions and other means by which this reduction has been previously attempted. Through such an examination, it can be

demonstrated that a low-cost, relatively simple change of label use can make small, sustainable, meaningful change.

One major aspect of attempting to reduce mental health stigma is to increase experiences of empowerment (Corrigan & Calabrese, 2005). This includes aspects of increasing individuals' autonomy within their mental health care (Mowbray, 1997), such as by hiring those with experiences with mental health stigma themselves as providers to be given a chance to help others as they were helped, as well as creation of programs to help facilitate independence in work and living activities. Though some such programs have been effective and engaging (Stein & Test, 1980), especially when such programs allow treatment to be stepwise, well-paced, and reasonably funded, they come with myriad difficulties. Such programs are hard to establish and keep financially viable, as much of the business of healthcare has traditionally been reactive rather than proactive (Waldman & Terzic, 2019). The effectiveness of such programs, both in cost and patient outcome-based senses, is difficult to measure, as which aspects of change are to be considered as most crucial is debatable and hard to assess. Finally, buy-in from service providers, potential employees, and other necessary parties for such programs to succeed is vital and by no means a given, especially as mental health programs receive lower financial backing amidst larger financial difficulties. As has been stated in several places in this review, mental health stigma can and does affect all aspects of society, including impacting the views of providers meant to help those experiencing difficulties. In short, empowerment is a worthwhile, lofty goal that is hard to experimentally manipulate or measure, and it is even harder to put into practice or achieve.

Another form of stigma reduction that has been explored empirically is personal disclosure, or the act of “coming out” as having a mental illness or health concern (Corrigan,

2005). Such a process allows for positive steps forward in identity formation, reduction of social distance created for fear of being “discovered” as having a mental illness, as well as challenging the stigmas and other pre-conceived notions held by people that one may disclose their health status to. This disclosure of status also taps into the larger body of research on positive interpersonal contact as a means to lessening stigma, biases, and other negative cognitions held towards groups, which has provided particular evidence for the effectiveness of exposure to people with mental illness (Couture & Penn, 2003).

While the goal of reducing stigma through personal disclosure is worthwhile, it is not without its challenges and shortcomings. First, this puts the onus of a society shortcoming on the individuals who experience its consequences; coming out requires the stigmatized person(s) to potentially face more stigma and discrimination by making their label (more) known.

Additionally, though exposure to member(s) of a stigmatized group can reduce stigma, this only holds true under particular conditions (Allport, 1954). Namely, those exposed to the group must perceive them positively, which may be a difficult condition to meet if those coming out are disadvantaged in other relevant manners. Finally, coming out is a long-term, multifaceted, and often difficult process that not everyone chooses to embark on, which should be respected and supported as within any individual’s rights and dignity (APA, 2002). So, although coming out may be an effective means of reducing mental health stigma, the choice belongs to each individual in this group to choose for themselves. Whether or not this intervention is right for them will vary greatly depending on their situations, their social support, and their access to coping skills and strategies (Stuart, 2016). Though this exposure effect was not a manipulated variable in this study, contact with a stigmatized group has shown to have a potential to affect stigma, and it was important to account for this. Therefore, level of contact with mental illness

was measured and controlled for when needed so that such a confounding variable did not unduly influence the findings of the current study.

A final major category of stigma reduction interventions is education, which can take many forms. One of these is protest, by which members of stigmatized groups and their allies may publicly and often peacefully demonstrate against stigmatizing representation in the media or society. This has some evidence as being effective in punishing stigmatizing behavior (Wahl, 1995) and thereby reducing its frequency and duration. Education can also take the form of legal action against discrimination associated with mental health stigma, such as legal proceedings challenging housing providers or employees on the grounds of discrimination according to the Americans with Disabilities Act (ADA; Act D, 2008). Education can take place in more traditional settings as well, including academic settings like classrooms, sources of information like books and print media, or more broad educational videos and advertisements publicly available through organizations such as National Alliance on Mental Illness (NAMI). Effective education is paramount; however, understanding what types and forms of education are meaningful to individuals as well as the potential effects of said education are very difficult to adequately measure. In essence, categorically effective education in any sense is elusive, which is not aided by the difficulty of defining and measuring mental health stigma and its many aspects.

In summary, there is a growing body of research on the reduction of mental health stigma, with some emerging areas of interest that show promise. Though these modalities show potential, many are grand-scale changes or interventions that have been slow and burdensome to implement and challenging to operationalize in order to measure outcome. Though adjustment of what labels are used to refer to mental health may not have a large-scale impact each time it is

enacted, the ease of such a change, the lack of known negative consequences to such an action, and the potential cumulative impact of altered language use make it a viable direction of inquiry.

College Students and Mental Health

From the media (James, 2017) to federal agencies (Sommers, 2017) to the governing body of doctoral level psychologists (APA, 2018), the growing need of and demand for mental health services for college students is garnering attention, research, and funding. With this increase in funding and thereby increased ability to hire more mental healthcare providers, caseworkers, psychiatrists, and other related personnel, there is also an increase in the presence of and awareness towards these services. Whether it be social media presence (Reif & Much, 2017), local advertising (De Maria, Readdean, & Vincent, 2010), or fellow peers (APA, 2005), college students are getting more exposure than ever before to what mental health services are provided on campus and in the surrounding communities. Additionally, the average university student is likely to come in contact with mental illness in some form or another, as current estimates place rates of a diagnosable mental illness among students at around 25% (NAMI, 2017), with rates of “significant mental health issues” at 39% (Active Minds, 2019).

Given the unique combination of heightened exposure to and greater access to free and/or reduced cost care than much of the world, mental health stigma has a unique ability to hinder college students in America from accessing mental health help that they can more freely access than most groups in the world. Though college students can be seen as a convenience sample with findings that may not generalize well (Peterson & Merunka, 2014), the current study aimed to use a definable population (i.e., undergraduate students at a moderately large public university in the American South) and inform simple, effective changes that could have real-world applications. Namely, if particular labels result in higher endorsement of stigma, services related

to mental health and college students— such as the counseling center, student health services, and support services to name a few— could make small, practical changes to advertising, official language, and marketing to decrease students’ experiences of stigma. If findings are informative, such research could then be expanded and explored at other campuses, settings, and populations at risk.

Theoretical Underpinnings

The relationship between stigma of mental illness and negative outcomes in real-world experiences has been difficult to establish, as such research requires drawing meaningful, causal associations between these negatively held, often sub- or semi-conscious attitudes and beliefs and actual, real world consequences (Woodward, 2016). As with much research in the field of psychology, analogous activities and representations are used to ascertain links between hard-to-measure constructs and real-world outcomes and applications (Allen, 2018; Pescosolido, 2013). In the case of stigma of mental illness, two theories of relevance will be used to conceptualize how stigma arises and comes to have consequences in people’s lives. These theories are the modified labeling theory of mental disorder, developed by Link and his colleagues (1989), and attribution theory of mental health stigma, developed by Corrigan (2000) and peers.

Modified labeling theory. In the seminal piece on the topic, Link and his team (1989) drew from Scheff’s (1966) controversial model of how stigma arose to take a more balanced, grounded empirical approach to understand the mechanisms by which stigma comes about for those with a mental illness/diagnosis. In summary, Scheff (1966) posited that stigma arises from the process of being labeled as mentally ill alone; specifically, the label of a mental illness acts as the discriminatory stimulus for societally determined attitudes and behaviors that are further reinforced by expectations and shaping by others’ actions and reactions. Those who are labeled

as mentally ill then internalize these negative attitudes and behaviors, which become a self-fulfilling prophecy resulting in chronic/disabling mental illness, or even the symptoms that are associated with it (Scheff, 1966; 1974). This very strongly worded, cognitive-behaviorally oriented, constructionist theory of mental health stigma's etiology was hotly debated after being published, but suffered from the difficulty of trying to draw a direct causal relationship between being labeled, negative attitudes and beliefs by society as well as those being labeled, and the long-term display of detrimental symptoms.

Drawing on this framework but attempting to establish a less extreme relationship, Link et al. (1989) established a modified labeling theory, which posited the idea that individuals hold societally communicated and implied understandings of what it means to have mental illness(es). Drawing broadly from just world theory (Lerner & Simmons, 1966), distance is made from individuals with mental illness, as they can be seen as other or somehow morally wrong/inferior. Once someone is labeled with a mental illness, they respond in a number of ways, such as hiding this from others to avoid being rejected, withdrawing from social interaction due to negative attitudes/beliefs adopted about themselves, and/or educating those around them on the realities of mental illness (Link et al., 1989). No matter the actions taken, the label and societal burdens attached to stigma of mental illness come with consequences, especially on self-esteem and self-concept, ranging from dissonance from deceit of loved ones and/or peers, loss of social support, and disclosure that can result in discrimination, respective to the above options (Link et al., 1989). All of these effects can then make individuals vulnerable to greater experience of symptoms and thereby increased risk for chronic/disabling experience of mental illness.

With the promising findings in Link et al.'s (1989) seminal piece on modified labeling theory, other major research following (Corrigan et al., 2003; Kroska & Harkness, 2008) that

provided evidence for this model. It has been furthered explored and expanded in a variety of ways, including labeling effects on coping strategies (Link, Mirotznik, & Cullen, 1991), mental health stigma minimization/management in mental health court systems (Ray & Dollar, 2014) and with individuals found guilty of sexually-related offenses (Mingus & Burchfield, 2012), and mental health stigma effects on meaning making and life satisfaction (Kroska & Harkness, 2006; Rosenfield, 1997). For the purposes of this study, it is important to note that according to the theory, societal judgments in the form of stigmas become attached to specific labels in unique ways. As with much of the field of mental health stigma, this line of research began with looking at more extreme or obvious forms of mental illness, such as psychotic disorders, while more recent studies referenced above have begun to look at more nuanced and less apparent or intense aspects of this stigma.

In summary, modified labeling theory provides evidence for an etiology of mental health stigma that involves different perceptions, attitudes, and beliefs differentially attaching themselves to different terms to refer to groups. Drawing from this conclusion, it would follow that different labels for the same prototypical group, in this case, those with mental health stigma and/or a mental health label, may attract more or less stigma, whether this is due to differing societal perceptions of labels or different attributions of cause, as will be explored through the theory below.

Attribution theory of mental health stigma. As with modified labeling theory, Corrigan and his peers have been greatly involved in mental health stigma research, further contributing by using an amalgam of previous theoretical and empirical work to develop their own theory of mental health stigma. In the seminal piece establishing attribution theory of mental health stigma (henceforth AT), Corrigan (2000) posits that among other signals, labels

around mental health given to individuals act as discriminative stimuli for others to engage cognitive stereotypes about this group, such as beliefs of inferiority or dangerousness (Brockington et al., 1993; Cohen & Struening, 1962; Taylor & Dear, 1980).

These stereotypes are the bases on which mental health stigma occurs. Corrigan then goes on to complete this social cognitive model by suggesting that discriminatory behavior arises from these stigmatizing cognitions and related emotional reactions; labels lead to stigma, stigma leads to discrimination. Where AT comes into this model is of importance; Corrigan drew from Weiner's (1980; 1983; 1985) model of motivation in that stereotypes involve attributing—rightly or wrongly— causal relationships between labels and those having them (Corrigan 2000). Two major attributions made with mental health stigma are stability (or as it will be referred to in this text for consistency, chronicity), and controllability. Often, those with a mental health concern or mental health label are assumed attributed with a high chronicity of their condition, both within the beginnings of the field of psychology (Kraepelin, 1896) and laypersons (Corrigan et al., 2001; Jones 1984). Additionally, controllability can be understood as a double-edged sword of stigma from this theoretical perspective, as attributing mental illness as controllable may elicit negative emotional reactions such as anger accompanied by punishing behaviors (Graham, Hudley, & Williams, 1992; Graham, Weiner, & Zucker, 1997; Reizenzein, 1986), whereas attributing mental illness as uncontrollable may elicit pity (Lin, 1993; Menec & Perry, 1998; Weiner, Perry, & Magnusson, 1988). Though this pity may be acted on with helping behaviors, it can also be a way of making people carrying mental health stigma more of an “other” and distancing themselves both cognitively and societally from these individuals.

Of most relevance for the study at hand, the attribution theory of mental health stigma provides a framework for understanding how stigma arises from mental health labels and the

attributions attached to them, and how discriminatory behavior can come about due to these attributions. More specifically, it points out two major areas of attribution and connected reactions, namely, negative emotions in the case of attributed controllability, and assumed long-term stability of symptoms/dysfunction in the attribution of chronicity. Being able to measure these two components, through the means of looking at endorsed negative emotional reactions/behaviors and beliefs about recoverability/chronicity, gives us insight into mental health stigma and the potential negative ramifications that can be attached to it.

A final aspect that should be noted is this theory's ties to the study at hand is the qualitative aspect of the model. Though not explicitly discussed by Corrigan, his reliance on a social-cognitive model and direct discussion of mental health markers as discriminatory stimuli brings in the concept of schematic activation of internal cognitive schemas via a stimulus or set of stimuli. This is a body of literature that is relatively well established in a general sense (Alvarez & Risko, 1989; Cohen & Ebbesen, 1979; Henderson, Orbell, & Hagger, 2009), and has a collection of somewhat related research focused on other forms of stigma, including body image (Brown & Dittmar, 2005; Hargreaves & Tiggemann, 2002, 2003). In short, schematic activation of stigma has been conceptualized as semi-conscious decision-making shortcuts (similar to heuristics) that form around deeply engrained beliefs about individuals with mental illness (Canfield & Cunningham, 2018), which can help people identify such individuals as dangerous or other aspects of public stigma discussed earlier. These schemas are relatively easy to acquire, are often societally reinforced, and are seldom challenged; efforts like the interventions discussed above are hard fought, few and far between, and often costly for advocates and people actually experiencing the stigma. Such schemas can be passed down through myth or other culturally transmitted stories, such as negative news media, television, and

movie representations of mental illness that are pervasive today (American Psychiatric Association, 2017).

Though there has been little if any research specifically on schematic activation of mental health stigma, it is a worthwhile addition to this study to include a reflection task condition that will allow effects of schematic activation on mental health stigma to be assessed. Additionally, these written responses can be thematically analyzed to look for further insights into similarities and differences between mental health labels and the specific perceptions of them.

Previous Research Manipulating Mental Health Labels

Consistent with modified labeling theory, several studies have examined the differential impact of various labels for mental illness. Berkelman (2003) examined the stigma of mental illness, specifically within the domain of dangerousness and social distance, based on manipulation of labels within a consistent vignette that expressed or implied mental health concerns, including the phrases “in psychotherapy,” “in a 12-step program,” “on psychiatric medication,” and “mentally ill,” all as compared to a control term, “a college student.” Across labels, differences were found in ratings of dangerousness and social distance, with the college student label incurring significantly lowered ratings of stigma and stigmatizing labels experiencing differing levels of stigma across different dependent variables, with “on psychiatric medication” and “mentally ill” receiving the highest ratings of stigma.

Of importance here is that a control variable is helpful; though there were differences between the mental health-related labels with stigma attached, not having a baseline for stigma attached to simply having conveyed symptoms would have made such comparisons simply relative to one another. Also, measuring multiple dimensions of public stigma is important, as Berkelman’s (2003) study found different relationships across different dimensions.

A qualitative study by Rose et al. (2007) demonstrated other important aspects of stigma of mental illness research. Namely, these authors explored stigma through a qualitative lens, gathering 250 words that 14-year-old students used to describe “people with mental health problems.” Through a grounded theory approach to thematic analysis (Corbin & Strauss, 2008), the authors found that the terms used mapped onto additional aspects of stigma, including disability stigma. The study points to a greater need of understanding for what mental health is, while also showing the importance of exploration of qualitative components of mental health stigma.

In a study that combines aspects of the two discussed above, Found and Duarte (2011) studied Chinese high school students and their differential reaction to various terms referring to mental illness in a vignette. The symptoms described within the story presented were also manipulated. The authors found effects across both label and symptoms, including the use of the general term “illness” resulting in lower levels of stigma than labels referring to mental illness or schizophrenia specifically. However, these results are difficult to meaningfully tease apart due to the confounding nature of changing both labels and symptoms. This study demonstrated that a student population can provide meaningful findings, as well as provided evidence for the validity of using a vignette and subsequent measures in tandem for mental health stigma research.

On the whole, these studies demonstrate several impact factors within label manipulation with mental health stigma. First, there has actually been little work with a college population in this area, which is somewhat unexpected, as researchers are often quick to sample from this group (Bornstein, Jager, & Putnick, 2013). Second, the findings of Rose and colleagues (2007) show that student’s written responses can bring about meaningful information that informs a deeper understanding of mental health stigma, so there is precedence for the current study to

suggest its qualitative component could be both illuminating and effective with the population of college students. Finally, Berkelman's (2003) study provided strong indication that a control or neutral term is a useful aspect of a study relating to manipulation of labels. Though the author would claim to have found significant differences between the labels referring to mental health alone, such differences are less meaningful in the vacuum of only comparing results to one another. The control term of "college student" created a comparable "floor," or baseline, that allowed insight into how much stigma is attached simply by the presence of symptoms and distress being stated, which thereby allowed for a more absolute understanding of the impact of labels on mental health stigma. In essence, having a control variable term with the symptoms still described allows for an understanding of the effect(s) of just the label, even when the actual symptoms/behaviors remain constant.

Current Study

The current study aimed to investigate relationships among different mental health labels, the power of reflection to activate preconceived notions around these labels, and their effects on several aspects of mental health stigma, including negative emotional reactions, discriminatory beliefs about potential actions, and perceptions of self-efficacy and ability to recover for individuals with a mental health label. Being able to examine differences based on the labels used as well as whether or not individuals are primed to think about their own beliefs regarding mental health concerns allowed this author to examine the different degree and kinds of stigma attached across these various conditions. That is to say, though it could be argued from a broad understanding that mental health stigma in general relates to perceptions of disability or distancing for preservation of self-image, the theories explored through this study would postulate that stigma attaches itself to differing labels in differing manners. Specifically, though the actual symptoms and circumstances used to describe the fictional character in the current study were exactly the same, differences in the terminology attached to presented facts would result in differing aspects and levels of mental health stigma endorsed. While the vast majority of previous research in the realm of stigma of mental illness has focused on establishing the general relationships between mental illness and stigma, as well as stigma to actual negative outcomes, this study allowed for a different level of insight into the power of terminology on mental health stigma in a population that is rapidly becoming a major focus of mental health care for both providers and administrators, undergraduate students (Ruble, 2017; Lauber et. al, 2004).

Additionally, there is evidence within the general field of psychology (Gaertner et al., 1994) as well as within the study of stigma of mental illness specifically (Boyd et. al, 2010; Corrigan & Penn, 1999) that increased positive contact with member(s) of an out-group increases positive attitudes towards them. As measuring stigmatizing attitudes was the key to this study,

being able to assess whether contact is evenly distributed across conditions or needs to be controlled for was of great importance. If distribution of this contact was skewed, this was controlled for to prevent a potential confound. Similarly, social desirability in responding has an impact on culturally sensitive topics, such as mental health (Braun, Jackson, & Wiley, 2001), and must be measured and controlled for.

From the literature and empirical evidence above, the following questions and hypotheses were proposed.

Preliminary Research Question: Do levels of endorsed public stigma across dimensions (negative reactions and perceived recoverability) differ based on identity factors, specifically, gender identity, race/ethnicity, academic major, and/or sexual orientation? If so, these factors were controlled for in the main analyses.

Supplemental Research Question: Do qualitative responses differ across mental health labels, specifically, mental illness, psychiatric disorder, mental health concern, and personal concern?

Hypotheses

Research Question 1: Do use of different mental health labels result in differing levels of endorsed public stigma?

Hypothesis 1: After controlling for covariates, it was predicted that use of any mental health label (*mental illness, psychiatric disorder, or mental health concern*) would result in significantly higher endorsement of the negative reactions dimension of public stigma (as measured by the modified version of the Attribution Questionnaire [m-AQ-27]; Corrigan, Markowitz, Watson, Rowan, & Kubiak, 2003) when compared to a control term of *personal concern*. However, the label *mental health concern* was also expected to result in significantly

lower negative reactions when compared to both *mental illness* and *psychiatric disorder* (which were not expected to significantly differ from one another).

Hypothesis 2: After controlling for covariates, it was predicted that use of any mental health label (*mental illness*, *psychiatric disorder*, or *mental health concern*) would result in significantly lower scores on the recoverability dimension of public stigma (as measured by the modified version of the Recovery Scale [m-RS]; Corrigan et al., 1999; Corrigan et al., 2004) when compared to a control term of *personal concern*. However, the label *mental health concern* was also expected to result in significantly lower public stigma-recoverability when compared to both *mental illness* and *psychiatric disorder* (which were not expected to significantly differ from one another).

Research Question 2: Does the use of a reflective task result in differing levels of endorsed public stigma?

Hypothesis 3: After controlling for covariates, it was predicted that participation in the reflective task would result in significantly higher endorsement of the negative reactions dimension of public stigma (as measured by the modified version of the Attribution Questionnaire [m-AQ-27]; Corrigan, et al., 2003) when compared to a control condition not asked to reflect on the label they are assigned.

Hypothesis 4: After controlling for covariates, it was predicted that participation in the reflective task would result in significantly lower scores on the recoverability dimension of public stigma (as measured by the modified version of the Recovery Scale [m-RS]; Corrigan et al., 2003; Corrigan et al., 2004) when compared to a control condition not asked to reflect on the label they are assigned.

Research question 3: Was there meaningful interaction between independent variables?

Hypothesis 5: It was expected that use of labels and the reflection task would interact, such that individuals who were asked to reflect on their assigned label (compared to those who were not) would only report greater public stigma—as measured by both negative reactions and recoverability—when assigned to one of the three mental health labels (*mental illness*, *psychiatric disorder*, and *mental health concern*). It was expected that public stigma would not differ between those asked to reflect on the label and those not asked to reflect among individuals assigned to the control term of *personal concern*.

Chapter 3

Method

Participants

The participant sample consisted of undergraduate students from Auburn University. The only major criterion for participation was that individuals were 18 years of age or older, that is, old enough to consent to participate when given relevant informed consent information. Names were not be linked with responses within the study, making the information less identifiable. Potential participants were recruited through SONA, a system within Auburn University that can provide extra credit for students enrolled in courses for participating in research projects. This means compensation for participation, which consisted of credit or extra credit for a course they were then enrolled in according to the discretion of their instructor, was independent of this author.

An initial power analysis was run using the program G*Power 3.1 (Faul et al., 2007). A priori methods with a predicted small effect size of 0.20, which falls within the normal range of effect sizes (between .10 and .30) for mental health stigma research (Corrigan et al., 2012), was used. Additionally, with an alpha error probability of .05 and a power of 0.8, with 8 groups due to the 4X2 nature of the study, and two covariates to be controlled for (see below), the output indicated that 256 participants were needed to achieve sufficient power.

After the initial data collection period following the procedures described in the previous chapter was completed, a total of 397 participants accessed the survey. Upon initial review, 46 participants were eliminated from the final data set because they did not complete all of the

required measures and/or materials, all of whom stopped partway through the presented materials. Upon review of the two attention checks built into the measures of stigma, an additional 18 participants were removed due to failure of at least one of these. Upon review of the manipulation check, an additional 14 participants were removed due to failure of this task. The final pool of participants was 319, exceeding the 256 participants minimally required by the completed power analysis.

A majority of the participants were women ($n = 209$, 65.5%), White/Caucasian ($n = 267$, 83.7%), and self-identified as heterosexual/straight ($n = 291$, 91.2%). The mean age of participants was 20.85 years (range: 18 – 45, $SD = 2.97$), and largest group of majors represented was physical health/medical related majors ($n = 125$, 39.2%). Appendix J provides the demographic characteristics of this study's participant pool, which also appear in a table with some variables collapsed as needed for statistical analysis.

Procedure

The study received exempt-status IRB approval prior to beginning data collection. After being given a brief description of the study and relevant inclusion criteria information through the SONA-System website, students who opted to participate in the study followed a link from the initial webpage to the first page of the study on Qualtrics, an internet-based survey program supported by the university for research use.

The first page of the survey provided students with an information letter (Appendix E) addressing aspects of the study, such as what tasks they would be asked to perform as participants- in the case of this study, reading a brief vignette, filling out questionnaires, and providing demographic information. This first page also provided information on anticipated risks and benefits involved in acting as a participant, as well as how compensation, specifically,

extra credit for a course they were then enrolled in, was to be granted to them through the SONA-System upon completion of the survey materials. Further information included in this page described the participant's ability to withdraw from the study at any time throughout the process and that such an action would not result in any negative consequences for them.

Participants were informed that no identifying information, such as their names or dates of birth, were gathered in a way that linked their responses to their identities. If individuals read this information and agreed to act as participants, they indicated their consent and willingness to participate by clicking a box indicating that they had fully read the information letter described above and consented to being a part of the study. They at this point were directed to the body of the study.

Participants then began the main body of the study, starting with being randomly assigned to their condition in the 4 (label: mental illness, psychiatric disorder, mental health concern, personal concern) X 2 (reflective task: asked to reflect on assigned label or not) experimental design. Each participant was randomly assigned a label as listed above, which appeared in the vignette and the two outcome measures. The vignette and measures were otherwise the same across conditions, thereby allowing for the constructs of public stigma across negative emotional reactions and negative behavioral attitudes—under the umbrella of “negative reactions”—as well as perceived recoverability to be compared for each label. For those randomly assigned to the reflective task, they began by writing about their general perceptions of the label they had been assigned (Appendix I). The instructions stated “Please, in no less than 200 characters, describe what comes to mind when you think about [label]. Please write in complete sentences.” Upon completion of this task (or not for those who are not assigned it), participants read the vignette and then completed outcome measures (Appendixes A & B) that

were administered to all participants, focused on aspects of stigma of mental illness. Each measure was given on a separate page without the ability for participants to go back so as not to influence the ways that different measures may have caused them to think about and thereby respond to previously completed items. Upon completion of outcome measures, which each included an attention check item, participants were asked to complete a manipulation check (Appendix H) consisting of a multiple-choice question asking, “Which term was used throughout the questionnaire materials thus far?” The four options consisted of the possible labels to be assigned, namely mental illness, psychiatric disorder, mental health concern, and personal concern. Because the manipulation of a single phrase is relatively subtle, even if done a number of times across items, assessing for the participants’ attention to this component was key. After the manipulation check, participants were asked to complete a social desirability measure (Appendix C) to be able to control for its effects on their responding to the above measures if needed. They were then asked to complete a quick measure of their level of contact with mental illness (Appendix D), before finishing the study by responding to questions about their demographic information (Appendix G). Following the survey, the final page of the study thanked the participants for the time dedicated to completing this task and gave them the contact information for the study’s primary investigator in the event that there were questions about the study. Given varying reactions to reflecting on mental illness and the stigma associated with it, this final page also included contact information for the Auburn University Student Counseling & Psychological Services (SCPS), whose services could be accessed at no cost to the participants. Participants were then redirected to a separate survey not linked to the one described above to give information in order to receive their credit within the SONA system. It

was estimated that the entirety of the study would take approximately 30 minutes or less to complete for participants.

Measures

All of the measures used are described in some detail below, including any modifications made to better suit the research questions of this study.

Public stigma: Negative reactions. A modified version of the *Attribution Questionnaire* (AQ-27; Corrigan et al., 2003; see Appendix A), a measure of public stigma including negative emotional reactions, attributions, and discriminatory behaviors, or “negative reactions” for short, was used to assess participant’s endorsement of public stigma. The measure requires the reading of a short vignette, with the original version giving information about a 30 year-old man with schizophrenia. With the author’s permission (Corrigan, personal communication, March 19, 2018), the vignette was modified to be more relevant to the purposes of this study, specifically stating that the person is a 20-year-old single college student identified in a non-gendered manner. No specific diagnosis was given, as what label is used is part of the manipulation of the study, with each version stating that the label sometimes impairs the person’s functioning and causes distress, general requirements for diagnosis in the current DSM-5 (American Psychiatric Association, 2013).

Past research has found the AQ-27 to have adequate or better reliability (Corrigan et al., 2003; Corrigan et al., 2004; Brown, 2008), with norms including the target college population, internal consistency on the original measure ranging between .70 and .89 in the original psychometrics (Corrigan et al., 2003), test-retest reliability ranging from .74 to .90 across scales after a one-week follow-up. Based on the outcomes of the current study and the version of the AQ-27 used, Cronbach’s alpha was calculated to be .83, within range of previous studies,

indicating similar internal consistency to past versions of the measure. Validity evidence for the AQ-27 includes convergent construct validity provided through positive correlations with scales measuring social distancing, perceived dangerousness, and negative affective reactions to individuals with mental illness, all components of mental illness stigma (Brown, 2008). Predictive criterion validity of the measure has been demonstrated with studies involving predicting how individuals would allot funds in a hypothetical situation (Corrigan et al., 2004), with the authors correctly predicting that higher amounts of stigma leading to discriminatory actions of increased funding for mandated treatments and lessened funding for rehabilitation services. The nine subscales included in this version span a variety of negative emotional reactions and discriminatory behavior making up meaningful aspects of stigma of mental illness, providing increased content validity by covering a variety of facets of “negative reactions.”

The AQ-27 and its modified form in this study consists of 27 items, each with a 1-9 Likert scale forced choice, with the anchors being “not at all” at 1 and “very much” at 9. The measure is scored by adding up the total for each response to create a total score, with 6 items across two subscales being reverse scored. Total scores can range from 27 to 243, with higher scores indicating more endorsement of public stigma. Basic statistical data indicated the modified version of this measure had consistent responding style to previous versions.

Perceptions of recoverability. In similar fashion to the measure above, a modified version of the *Recovery Scale* (RS; Corrigan et al., 1999; Corrigan et al., 2004; see Appendix B) was used to assess perceptions and beliefs of participants about recoverability (sense of confidence, hope, goal-orientation, reliance on others, and life view beyond symptoms) of those carrying a mental health label. Higher perceptions of recoverability are correlated with more affirming attitudes towards people with mental illness (Corrigan, Powell, & Michaels, 2012;

Corrigan, Powell, & Michaels, 2013; Michaels et al., 2014), so measuring potential differences between perceptions of recoverability between different labels is a relevant and important aspect of understanding public stigma and its consequences. The RS showed strong psychometric properties in its development, with test-retest reliability of 0.88 and internal consistency of .93. Using the data collected in this study, the internal consistency for the modified version of the RS was calculated to be .81, slightly lower than those of the original version while still considered good. The measure also demonstrated good concurrent validity with relevant measures of empowerment and self-esteem in its initial form asking individuals with serious mental illness about their perceptions of self and recoverability (Corrigan et al., 1999), while showing convergent validity due to strong correlations with hope and quality of life measures (Corrigan et al., 2004).

The RS is itself an adaptation from the Recovery Assessment Scale (Giffort et al., 1995), which was used to assess the perceptions of recoverability, as defined by the five factors listed previously, people with serious mental illnesses have about themselves. The RS was modified to ask about general beliefs around the recoverability of those with serious mental illness. This modified RS also has acceptable internal consistency, with an estimate of .73, as well as convergent construct validity with the Herth Hope Index (Corrigan et al., 2004). The RS is scored by adding up all the response scores, with higher scores indicating higher perceptions of recoverability. With the permission of this measure's author (Corrigan, personal communication, April 18, 2018), this was modified to look at differences between perceptions of recoverability based on mental health label provided by replacing the generic term used in the original form with the specific assigned mental health label or control in the study.

The RS and its modified form in this study consists of 13 items, each with a 1-9 Likert scale forced choice, with the anchors being “strongly agree” at 1 and “strongly disagree” at 9. The measure is scored by adding up the total for each response to create a total score; higher scores indicate higher endorsement of public stigma, in this case, lower agreement with positive statements about recoverability. Total scores range from 13 to 117. Basic statistical data indicated the modified version of this measure had consistent responding style to previous versions.

Social desirability. Because all the above measures are self-report and have the potential to be affected by social desirability, the *Balanced Inventory of Desirable Responding Short Form* (BIDR-16; Hart et al., 2015; see Appendix C) was administered to participants. This 16-item short form of the BIDR (Paulhus, 1984; 1988), which had 40 items, retains the contemporary language, two-factor model of social desirable responding including self-deceptive enhancement and impression management determined by a series of confirmatory factor analyses, and strong psychometric properties of the original while reducing the amount of time and focus necessary to complete the measure (Hart et al., 2015). Test-retest reliability with a university student sample ranged between .74 and .79, and the BIDR-16 has shown strong construct validity when looking at its relationship to major social desirability scales and personality measures, including social desirable responding with the Marlowe-Crowne Social Desirability Scale, several self-enhancement scales with the self-deceptive enhancement subscale of the BIDR-16, and correlations with BIG 5 personality measures consistent with those of previous social desirability measures (Hart et al., 2015). Correlation between the two dimensions of the measure, impression management and self-deceptive enhancement, were .46, indicating the subscales assess related

but unique aspects of desirable responding. These two subscales allow for broader measurement of socially desirable responding.

The BIDR-16 allowed for socially desirable responding to be controlled for when examining the relationship between label and endorsed public stigma, thereby reducing the effects of this potential confound. Each item of the BIDR-16 is a 1-7 Likert scale forced choice, with the anchors being “not true” at 1, “somewhat” at 4, and “very true” at 7. A score for each subscale of the measure (both SDE and IM subscales are 8 items each) is created by adding up response scores of each item in the subscale, with 4 items in each subscale being reversed scored. Total scores for the scales range from 8-56. Higher scores on both scales indicate a greater propensity for socially desirable responding. This measurement of social desirability in responding is important due to the sensitive nature of asking participants to respond to items asking about mental health, which have some evidence of inducing socially desirable responding (Grove et al., 1976; Henderson et al., 2012). Internal consistency calculated for both subscales as used within this study was on the low end of acceptable (.73 for the SDE and .72 for the IM subscale), providing some evidence for the internal validity of these measures within the current study.

Contact with mental illness. A final measure was used to assess and potentially control for a possible confound of the study, the *Level-of-Contact Report* (Holmes et al., 1999; see Appendix D), which assesses for familiarity/contact with individuals who have a mental illness. The LCR is scored by having participants respond to eleven items that increase progressively in intimacy of exposure to mental illness. These items range from no knowledge of any contact with a person who has mental illness (1), up to endorsing that the respondent themselves has a mental illness (11). Participants are then giving a score based on the highest level of endorsed

contact, with higher scores indicating more intimate experience with mental illness. The LCR had an inter-rater reliability of .83, using “three experts in severe mental illness and psychiatric rehabilitation” to rank the intimacy of the type of contact in each item (Holmes et al., 1999) and showed that rank order was more valuable information than simply knowing whether or not a participant knew someone with a mental illness (Corrigan et al., 2001). Evidence of validity for this scale is its correlation with benevolent attitudes and positive regard (Holmes et al., 1999), specifically, increased intimacy of contact with mental illness correlated with participants gaining more benevolent attitudes and positive regards towards those with mental illness.

Analytic Strategies

All analyses for this project were calculated using SPSS or other statistical software available through the university. Descriptive statistics were computed and presented for all relevant components, including demographic variables.

For the m-AQ-27 and m-RS, both measures were modified from their original forms. Therefore, basic psychometrics assessing the internal consistency reliability of the measures were produced and examined, as described above.

Basic statistics were run to check for the central tendency of the sample. Separate ANOVAs with post-hoc tests were run for each variable to assess whether or not identity factors of gender identity, sexual orientation, academic major, and/or race/ethnicity impacted the scores on both dimensions of negative reactions and perceived recoverability; if so, such variable(s) were controlled for in the major analyses.

For hypotheses 1, 3, and 5, a 4X2 factorial ANCOVA was conducted to look at the influence of label assigned and whether participants were asked to reflect upon the label on levels of endorsed public stigma across the dimension of negative reactions. Level of contact and

gender identity were controlled for as covariates in the analyses, as scores for the AQ-27 differed based on these constructs. Post-hoc analyses were run to look at more specific relationships, given what were found to be significant in the major analysis. For hypothesis 1, if the main effect of label on endorsed negative reactions was significant, a post-hoc Bonferroni test was used to identify which labels differed significantly from one another on this dimension. For hypothesis 3, if the main effect of the reflective task on endorsement of negative reactions was significant, a t-test was used to identify the differences on this dimension between the two conditions. Finally, looking at the interaction between label and reflective task conditions via the ANCOVA provided insight into hypothesis 5 along the dimension of negative reactions.

For hypotheses 2, 4, & 5, a 4X2 factorial ANCOVA was conducted to look at the influence of label assigned and whether participants were asked to reflect upon the label on levels of endorsed public stigma across the dimension of recoverability. The self-deceptive enhancement subscale of the BIDR was controlled for as a covariate in the analyses given its significant correlation with the RS. Post-hoc analyses were run to look at more specific relationships, given what was found to be significant in the major analysis. For hypothesis 2, if the main effect of label on perceptions of recoverability was significant, a post-hoc Bonferroni test was used to identify which labels differed significantly from one another on recoverability. For hypothesis 4, if the main effect of the reflective task on perceptions of recoverability was significant, a t-test was used to identify the differences on perceptions of recoverability between the two conditions. Finally, looking at the interaction between label and reflective task conditions via the ANCOVA provided insight into hypothesis 5 along the dimension of recoverability.

Finally, content analysis was performed on the text-based responses collected from half of respondents. Specifically, a qualitative content analysis, a systematic yet flexible technique for review of text-based responses, with the aim of comparing and contrasting the responses across the mental health labels was performed (Krippendorff, 2004; White & Marsh, 2006). Examples of this include what aspects of responses to each mental health label were thematically similar and which components were unique to a given label. This was carried out with the help of two research assistants. This author read the responses and developed an initial list of “content codes” that encompassed the participant responses. For example, one content code was dangerousness, which indicated the participant had mentioned perceptions of dangerousness relating to their given label. After development of the initial codebook, the two research assistants independently coded a subset of 20 responses by indicating whether or not each content code was present in a given response, reaching an inter-rater reliability (IRR) of .73. This author then acted as the “tie-breaker” for discrepant codes between coders and determined any modifications needed to the codebook. The research assistants then independently coded another subset of 20 responses, resulting in a .84 IRR that met the .8 IRR required to move forward (McAlister et al., 2017). After each subsequent coding and calculation of IRR, we discussed areas of uncertainty and again came to agreement upon any modifications of the codebook, as necessary. Findings were reported as the proportion of respondents whose responses contained each content code, separated by Label condition, with this author coding any responses that were not agreed upon by the coders. Chi-square was utilized to examine whether proportions were significantly different across conditions for each content code.

Chapter 4

Results

The purpose of this study was to examine the relationship between the labels used to describe those perceived as having mental health-related condition(s), the potential impact of previously held thoughts and beliefs around mental health labels as manipulated by a reflective task being completed or not, and the public stigma differentially attached based on these processes. This chapter provides the results of the statistical analyses described in Chapter 3 related to the hypotheses outlined at the end of Chapter 2.

Descriptive Statistics for Instruments

Descriptive statistics including means and standard deviations were calculated for all measures (see Table 1). Table 2 shows the correlations among the study's measures. Table 3 shows the Cronbach's alpha for each measure.

Table 1: Means and Standard Deviations of Measures Used

Measure	Mean	SD
Attribution Questionnaire 27 (AQ-27)	72.15	19.06
Recovery Scale (RS)	48.02	14.34
Balanced Inventory of Desirable Responding (BIDR-16)		
Self-Deceptive Enhancement (SDE) subscale	33.03	8.14
Impression Management (IM) subscale	31.57	8.19
Level of Contact Report (LCR)	8.51	2.38

Table 2: Correlations among Measures (Pearson R)

Measure	1	2	3	4	5
1. AQ-27	-				
2. RS	.065	-			
3. BIDR SDE	.003	-.183**	-		
4. BIDR IM	-.081	-.103	.458**	-	
5. LCR	-.252**	.101	-.225**	-.138*	-

N = 319

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

AQ-27 = Attribution Questionnaire 27

RS = Recoverability Scale

BIDR SDE = Balanced Inventory of Desirable Responding Short Form 16 Self-Deceptive
Enhancement

BIDR IM = Balanced Inventory of Desirable Responding Short Form 16 Impression
Management

LCR = Levels of Contact Report

Table 3: Cronbach's Alpha for Measures Used, Calculated from Data Analyzed

Measure	Cronbach's Alpha	Rating*
AQ-27 ^a	.83	Good
RS ^b	.81	Good
BIDR SDE ^c	.73	Acceptable
BIDR IM ^d	.72	Acceptable

N = 319

* According to George & Mallery, 2003

AQ-27 = Attribution Questionnaire 27

RS = Recoverability Scale

BIDR SDE = Balanced Inventory of Desirable Responding Short Form 16 Self-Deceptive Enhancement

BIDR IM = Balanced Inventory of Desirable Responding Short Form 16 Impression Management

Statistical Analyses

Three major assumptions were considered when performing the ANOVAs or ANCOVAs for the major hypotheses. These assumptions were independence of groups, homogeneity of variance, and normal distribution, as laid out by Morgan et al. (2013). The first assumption, that scores achieved across measures were independent, was met by the random assignment of participants to their condition/group and only allowing participants to access the survey once. The assumption of homogeneity of variance was examined through the use of a Levene's test along with each completed ANOVA/ANCOVA. Results of each Levene's test indicated that homogeneity of variance held for all the dependent variables, across all conditions, in all

analyses run. The final assumption of normal distribution is of a high level of concern for small sample sizes due to the major impact of outlier responses. Most conditions in the present study consisted of over 50 participants, making any variance of distribution less impactful (i.e., decreasing the negative impact of outliers due to sample size). The greatest likely impact of outlier responding is when looking at an interaction effect, which breaks down the participants into 8 groups due to the 4X2 formulation, the smallest group sizes. Even at this size, the smallest group consisted of 35 participants (those assigned mental health concern that completed the reflective task), meaning non-normal distribution would unlikely to have a meaningful impact on the study. This author conducted the Shapiro-Wilk test to examine the normality of distribution for each condition relative to each relevant outcome measure, recognizing that there would likely be some non-normality in responding given that some individuals would endorse very low or very high stigma on one or both measures. There was a wide variance of meeting or not meeting this assumption across condition relative to outcome measure. This limitation was addressed by removing participants that did not attend to manipulation and/or were more likely to have engaged in random responding due to failure of an attention check, increasing the likelihood that any outliers were valid respondents.

Preliminary research question. The preliminary research question, as stated fully in Chapter 2, centered around the impact demographic factors had on outcome measures. In short, there was a high amount of homogeneity of identity represented in the sample, namely, White, heterosexual, traditional college-aged women were overrepresented in the participant pool. Given this, several comparisons between identity groups required collapsing underrepresented groups into larger ones, which is something that should be done with caution; again, this author acknowledges this limitation throughout the remainder of the study.

Across both the AQ-27 and RS, there were no significant differences in scores based on race/ethnicity ($df = 2, 316$), sexual orientation ($df = 2, 316$), or academic major ($df = 4, 314$). The prefer not to respond group in sexual orientation only consisted of 3 participants and had significantly higher endorsement of stigma on the AQ-27 than Gay, Lesbian, Bisexual, Pan, or Asexual-identified participants, but this size group is too small to be necessary to control for, especially as it is spread across conditions. There were statistically significant differences between the scores on the AQ-27 ($F = 3.78, p = .011$) along the dimension of gender identity, with those that self-identified as men achieving higher scores (endorsing more public stigma) than women. Those that self-identified as gender fluid/queer also endorsed significantly higher levels of stigma than women, but the group size of only 3 gives pause to making meaningful interpretation of that relationship. This result's significance indicated that gender identity was to be controlled for in the main analyses of the study related to the AQ-27, in addition to the level of contact with mental illness for the AQ-27 and the BIDR SDE subscale for the RS given their strong correlations shown in Table 2. Table 4 contains means and standard deviations for the analyses.

Table 4: Means, Standard Deviations, and One-Way Analysis of Variance for Demographic Factors

	<i>n</i>	Attribution Questionnaire		Recoverability Scale		
		<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Gender Identity						
Woman	209	69.44 ^{a, b}	19.44	48.35	14.68	
Man	106	76.84 ^a	17.27	46.61	13.48	
Gender Fluid/Queer	3	76.26 ^b	32.72	64.67	8.33	

Prefer not to Respond	1	61		59	
Sexual Orientation					
Heterosexual/Straight	291	72.13	18.83	47.83	14.26
GLBQPA	25	66.79 ^a	17.78	48.88	15.95
Prefer not to Respond	3	96.00 ^a	40.37	53.00	1.00
Race/Ethnicity					
White/Caucasian	267	70.94	18.55	47.57	14.56
Person Of Color/Non-White	48	77.15	21.64	49.78	13.20
Prefer not to Respond	4	75.50	17.33	52.5	10.88
Academic Major					
Physical Health/Medical	125	71.46	18.47	47.82	13.63
Engineering/STEM	69	73.18	16.53	47.82	14.84
Business	67	74.43	20.75	46.19	13.92
Mental Health/Helping	33	65.85	20.95	51.45	16.16
Other	25	72.24	21.39	49.20	15.03

^{a, b}. Significant differences at the 0.05 level (two-tailed)

Higher scores on both measures indicate higher endorsement of stigmatizing beliefs

Supplemental research question. The supplemental research question, as stated fully in Chapter 2, centered on exploring the differential responding to mental health labels within the reflective task. When data collection was completed, 170 participants were assigned and gave written responses, with between 41 and 45 participants responding to each label or control. Upon review of all 170 responses, this author produced 25 initial codes for content, all of which occurred multiple times across multiple respondents. Two coders were recruited; these individuals were undergraduate research assistants receiving academic credit through Auburn University for their regular involvement in research work and lab-based activities. These coders worked initially with a subset of 20 responses, resulting in a .73 inter-rater reliability (IRR), with one coder being consistently more likely to endorse a code being present than the other. Upon review, 3 codes were combined or deleted, as well as alternations made to several descriptors to give further information on the code. This left the 22 codes used for the remainder of the study (shown in Appendix J). The coders were then given a new subset of 20 responses to code, which resulted in an IRR of .84, allowing for them to move forward with the complete 170 response set. Over the course of several weeks, the coders each completed the full response set, with the final coding resulting in an IRR of .71; the IRR being lower than the second subset scored is likely due to the number of responses required to be coded (a total of 3740 code responses). This author then coded the discrepant responses, thereby creating united data set to be analyzed. Finally, 12 participants were removed due to not completing other measures or failing attention or manipulation checks, resulting in 158 qualitative responses being included in the final analysis.

Chi square tests were run in SPSS for all 22 codes to assess if there was differential responding across the four phrases, with each participant being coded as having endorsed each code or not for all 22 codes. The assumptions were met to be able to use and interpret these chi

square results, including sufficient sample size, random sampling, independences of observation, and homogeneity of distribution. Of the 22 codes, 15 codes showed significant differences in occurrence across labels. The codes, their number of times endorsed across conditions, and the results of the chi square tests can be found below in Table 5. Appendix K contains the code descriptions developed in the coding process.

Table 5: Number of Endorsements (Total and across Conditions) and Chi Square Results for Qualitative Coding

Code Name	Endorsements by Condition				Chi-square (df=3,157)
	<i>Personal Concern</i> n = 43	<i>Mental Health Concern</i> n = 37	<i>Psychiatric Disorder</i> n = 36	<i>Mental Illness</i> n = 42	
Self-Care/ Well-Being	21 (48.8%) ^{a, b}	7 (18.9%) ^a	0 (0%) ^a	2 (4.8%) ^b	38.87**
Care for Others	4 (9.3%)	4 (10.8%)	1 (2.8%)	3 (7.1%)	1.93
Mental Health	16 (37.2%) ^a	28 (75.7%) ^{a, b}	19 (52.8%)	17 (40.5%) ^b	14.18**
Physical Health	21 (48.8%) ^{a, b, c}	2 (5.4%) ^a	0 (0%) ^b	0 (0%) ^c	56.41**
Private	13 (31.0%) ^{a, b, c}	0 (0%) ^a	0 (0%) ^b	1 (2.4%) ^c	34.46**
Stress/Worry	11 (25.6%) ^{a, b, c}	1 (2.7%) ^a	0 (0%) ^b	1 (2.4%) ^c	23.77**
Serious, Impactful, Important	6 (14%)	10 (27%)	9 (25%)	10 (23.8%)	2.42
Anxiety	6 (14%)	14 (37.8%)	8 (22.2%)	9 (21.4%)	6.56
Schizophrenia	0 (0%) ^a	1 (2.7%) ^b	11 (30.6%) ^{a, b, c}	2 (4.8%) ^c	27.77**

Depression	0 (0%) ^{a,b,c}	16 (43.2%) ^a	12 (33.3%) ^b	14 (33.3%) ^c	22.65**
Bipolar	0 (0%) ^a	0 (0%) ^b	9 (25%) ^{a, b}	4 (9.5%)	20.68**
Multiple Personality	1 (2.3%)	1 (2.7%)	6 (16.7%) ^a	0 (0%) ^a	13.42**
Other Diagnosis	1 (2.3%) ^a	6 (16.2%)	10 (27.8%) ^a	8 (19%)	10.07*
Need Help	0 (0%) ^a	7 (18.9%) ^a	3 (8.3%)	6 (14.3%)	8.91*
Need Attention	1 (2.3%) ^a	9 (24.3%) ^{a, b}	0 (0%) ^b	4 (9.5%)	16.75**
Ignored/Shamed	0 (0%)	4 (10.8%)	1 (2.8%)	4 (9.5%)	6.12
Cannot Control	0 (0%) ^a	3 (8.1%)	4 (11.1%)	8 (19%) ^a	9.16*
Dangerousness	1 (2.3%)	5 (13.5%) ^a	0 (0%) ^a	1 (2.4%)	9.75*
Crazy	0 (0%)	0 (0%)	3 (8.3%)	2 (4.8%)	6.10
Dysfunction	4 (9.3%)	3 (8.1%)	3 (8.3%)	2 (4.8%)	.70
Biological	0 (0%)	0 (0%)	1 (2.8%)	3 (7.1%)	5.71
Suicide	0 (0%) ^a	1 (2.7%)	0 (0%) ^b	5 (11.9%) ^{a, b}	10.80*

** . Chi-square value is significant at the 0.01 level (2-tailed).

* . Chi-square value is significant at the 0.05 level (2-tailed).

^{a, b, c} . Significant differences between conditions at the 0.0125 level (two-tailed)

Hypothesis 1. After controlling for contact with mental illness and gender identity, it was predicted that use of any mental health label (*mental illness, psychiatric disorder, or mental health concern*) would result in significantly higher endorsement of the negative reactions dimension of public stigma when compared to a control term of *personal concern*. However, the label *mental health concern* was also expected to result in significantly lower negative reactions when compared to both *mental illness* and *psychiatric disorder* (which were not expected to significantly differ from one another). A factorial ANCOVA was run comparing scores for the 3 mental health labels and one control label on the AQ-27 score (see Table 6). After controlling for gender identity ($F = 3.32, p = .069, \eta^2 = .01$) and contact with mental illness ($F = 17.61, p = >.001, \eta^2 = .05$) there were significant differences across mental health label conditions for the AQ-27 ($F = 3.77, p = .011, \eta^2 = .04$). Due to the finding of significant differences, a Bonferroni post-hoc test was performed to assess which mental health labels and/or control differed significantly from one another and whether this aligned with the hypothesized outcomes. In partial support of what was hypothesized, psychiatric disorder ($M = 77.63, SD = 20.22$) had significantly higher rating of public stigma than mental health concern ($M = 68.01, SD = 18.30$). Mental illness ($M = 71.16, SD = 17.95$) and personal concern ($M = 70.99, SD = 19.03$) were not significantly different from any other labels. Given the above results, hypothesis 1 was not supported.

Hypothesis 2. After controlling for the self-deceptive enhancement aspect of social desirability, it was predicted that use of any mental health label (*mental illness, psychiatric disorder, or mental health concern*) would result in significantly higher scores on the recoverability dimension of public stigma when compared to a control term of *personal concern*.

However, the label *mental health concern* was also expected to result in significantly lower public stigma-recoverability when compared to both *mental illness* and *psychiatric disorder* (which were not expected to significantly differ from one another). A factorial ANOVA was run comparing scores for the 3 mental health labels and one control label on the RS score (see Table 7). After controlling for the self-deceptive enhancement aspect of social desirability ($F = 10.65$, $p = .001$, $\eta^2 = .03$), there were no significant differences across mental health label conditions for the RS [$F = 1.97$, $p = .118$, $\eta^2 = .02$]. Due to not finding any significant differences, the Bonferroni post-hoc test was not examined to assess which mental health labels and/or control term differed significantly from one another and whether this aligned with the hypothesized outcomes. Across the control term personal concern ($M = 48.06$, $SD = 12.57$) and mental health labels of mental health concern ($M = 51.06$, $SD = 14.84$), psychiatric disorder ($M = 47.52$, $SD = 15.10$), and mental illness ($M = 45.47$, $SD = 14.49$), scores were highly similar. Given the above results, Hypothesis 2 was not supported by the findings.

Hypothesis 3. After controlling for contact with mental illness and gender identity, it was predicted that participation in the reflective task would result in significantly higher endorsement of the negative reactions dimension of public stigma when compared to the control condition not asked to reflect on the label they are assigned, regardless of the mental health or control term used. The factorial ANCOVA used in Hypothesis 1 for the AQ-27 score was examined on this dimension (see Table 6). After controlling for significant impact of gender identity ($F = 3.32$, $p = .069$, $\eta^2 = .01$) and contact with mental illness ($F = 17.61$, $p = >.001$, $\eta^2 = .05$), there were not significant differences across reflective conditions for the AQ-27 ($F = .90$, $p = .344$, $\eta^2 = .00$), with those asked to complete the reflective task ($M = 72.64$, $SD = 20.55$) endorsing similar

scores of negative reaction public stigma to those not asked to complete this task ($M = 71.24$, $SD = 17.62$). Given the above results, Hypothesis 3 was not supported by the findings.

Hypothesis 4. After controlling for the self-deceptive enhancement aspect of social desirability, it was predicted that participation in the reflective task would result in significantly higher scores on the recoverability dimension of public stigma when compared to a control condition not asked to reflect on the label they are assigned, regardless of the mental health or control term used. The factorial ANCOVA used in Hypothesis 2 for the RS score was examined on this dimension (see Table 7). After controlling for the self-deceptive enhancement aspect of social desirability ($F = 10.65$, $p = .001$, $\eta^2 = .03$), there was not a significant difference across conditions for the RS ($F = .39$, $p = .534$, $\eta^2 = .00$), with those that completed the reflective task ($M = 47.45$, $SD = 14.48$) having almost identical scores to those that did not ($M = 48.46$, $SD = 14.19$). Given the lack of significant differences found in these analyses, Hypothesis 4 was not supported by these findings.

Hypothesis 5. It was expected that use of labels and the reflection task would interact, such that individuals who were asked to reflect on their assigned label (compared to those who were not) would only report greater public stigma—as measured by both negative reactions and recoverability—when assigned to one of the three mental health labels (*mental illness*, *psychiatric disorder*, and *mental health concern*). It was expected that public stigma would not differ between those asked to reflect on the label and those not asked to reflect among individuals assigned to the control term of *personal concern*. The same two factorial ANCOVAs controlling for the same variables in the previous hypotheses, one for each of the AQ-27 and RS dependent variables, were examined. Table 6 contains the results of the ANCOVA for the AQ-27; Table 7 contains the results for the ANOCVA for the RS. There were no significant

interaction effects between conditions for negative emotional reactions via the AQ-27 [$F(3, 318) = .69, p = .562, \eta^2 = .01$] or the RS [$F(3, 318) = 2.19, p = .090, \eta^2 = .02$]. Due to the lack of interaction effects across the 2 analyses, Hypothesis 5 was not supported by the findings.

Table 6: Means and Standard Deviations from Factorial ANCOVA for AQ-27($n = 319$)

	Label Assigned										
	Personal Concern		Mental Health Concern		Psychiatric Disorder		Mental Illness		Total		
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Reflective											
Yes	71.13	22.05	68.64	17.76	81.43	22.23	69.82	17.92	72.64	20.55	
No	70.83	15.32	67.46	19.07	74.11	17.73	72.54	18.10	71.24	17.62	
Total	70.99	19.03	68.01*	18.30	77.63*	20.22	71.16	17.95	71.94	19.11	

*. Significant simple main effect at .05

Higher scores indicate higher endorsement of stigmatizing beliefs

Table 6: Means and Standard Deviations from Factorial ANCOVA for RS ($n = 319$)

	Label Assigned										
	Personal Concern		Mental Health Concern		Psychiatric Disorder		Mental Illness		Total		
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Reflective											
Yes	44.55	12.38	50.73	15.16	48.95	15.77	46.46	14.57	47.45	14.48	
No	51.93	11.75	51.35	14.75	46.21	14.53	44.46	14.52	48.46	14.19	
Total	48.06	12.57	51.06	14.84	47.52	15.10	45.47	14.49	47.96	14.32	

No significant simple main effects nor interaction effects were found

Higher scores indicate higher endorsement of stigmatizing beliefs

Chapter 5

Discussion

The current study was undertaken in order to explore the relationship between labels used to refer to mental health, preconceived notions about mental health and these labels, and the stigma attached to individuals who hold such labels. Past studies have explored the basic relationship between stigma of mental illness and negative real-world outcomes, as well as some manipulation of labels referring to mental health. It was the intention of this study to compare differential endorsement of public stigma, specifically, across the dimensions of negative emotional reactions and recoverability, in relation to the use of different labels and the activation of previously held thoughts, beliefs, and feelings relating to them. The study also used a control term, which has not been a major area of focus that this author could find within the body of research on mental health stigma. The study drew theoretically from modified labeling theory and attribution theory of mental health stigma, resulting in the proposed hypotheses that long-standing, recognizable phrases relating to mental health such as psychiatric disorder and mental illness would come with higher endorsements of public stigma than broader, newer labels like mental health concern, or control terms of colloquial ways to refer to mental health like “personal concern,” as well as higher endorsements of stigma correlating with activation of previously held beliefs about mental health.

Hypotheses 1 and 2 compared differential endorsement of public stigma across dimensions by mental health label used, with the prediction being that psychiatric disorder and mental illness would result in higher endorsements of public stigma than mental health concern

and personal concern, with personal concern resulting in significantly lower endorsement of public stigma than all mental health labels. These hypotheses were not supported, even with the findings relating to Hypothesis 1 somewhat aligning with the theorized outcomes. The only statistically significant finding was that psychiatric disorder resulted in significantly higher levels of stigma on the dimension of negative reactions than mental health concern. With no other significant findings, the actual attribution of mental health stigma may be more complicated than what labels have been around the longest period of time or related to stigmatizing individuals in the past. This is supported in the findings of the content analysis, wherein codes around specific diagnoses were endorsed differently across diagnoses; schizophrenia, multiple personality, and bipolar were significantly more often identified when the label presented was psychiatric disorder, but depression was relatively highly endorsed across all three mental health labels and not endorsed at all with the control. Dangerousness was almost exclusively talked about in describing an understanding of mental health concern, and broader constructs like the private nature of a label, the general stress/worry attached, and the physical health perspective was mostly attributed to personal concern, the control variable. In short, these relationships and understandings of how these labels align and differ are complicated.

There are perhaps a number of reasons why a difference in public stigma across dimensions was found, why the results indicated some significant results on the negative emotional reactions dimension and no significant results for the recoverability dimension. When comparing and contrasting the two major dimensions of mental health stigma examined via the outcome measures, the construct of negative emotional reactions may be more understandable and concrete than that of recoverability. In other words, it may be easier to indicate how one would treat or react to another human being (via the negative emotional reactions measure) than

it is to think abstractly about their quality of life and how their mental health label may or may not impact general welfare (via the recoverability measure). Alternatively, the dimension of negative emotional reactions may be more state (as opposed to trait) dependent, in which case activating thoughts and feelings would have a greater impact on responding. Additionally, the negative emotional reactions measure was given first and has the vignette attached to it, whereas the recoverability measure speaks more generally about beliefs relating to the mental health label presented. Though this order was chosen purposefully to frame the vignette as relevant when completing both measures, the broader way individuals with mental health labels (or the control term) are talked about may evoke different response patterns based on internal points of reference within each participant.

Additionally, mental health labels electing differences of significance or not across the dimensions of public stigma measured indicates that public stigma may be a complicated construct. The most salient example was that psychiatric disorder resulted in significantly higher stigma than mental health concern for negative emotional reactions but not being significantly different on recoverability. So, what may increase or decrease public stigma in the realm of recoverability may actually have different effects within the realm of negative emotional reactions. All this is to say that although the results did not align with the first two hypotheses, these findings provide some evidence that relationships between mental health labels are an area of study that may reveal relevant and impactful findings with further exploration.

Another point to note when assessing the outcomes of the first two hypotheses is to examine the labels that correlated most strongly in their wording. Namely, the labels personal concern and mental health concern both have the word “concern” embedded in them. Though there is not the empirical data to directly support any additional hypotheses around this finding,

the word “concern” when combined with another word resulted in varying endorsement across the dimensions of public stigma measured, which did not align with this author’s preconceived notion that words like disorder or illness would correlate with higher levels of stigma. It is possible that seeing the word “concern” used aroused a unique reaction in participants, impacting their likelihood of endorsing greater stigma. The content analysis gives some indication that overlap in labels impacted endorsement, as the code relating broadly to one’s mental health or well-being was most often used for the label mental health concern, which starts with the phrase “mental health.” The relationship of labels that share some of their wording is complicated by the finding that both labels that share part of the phrase mental health concern, personal concern and mental illness, induced significantly lower rates of endorsement than mental health concern. Simply put, though these labels each share part of the code’s name, they evoked significantly different responding. Regardless of the reason for these patterns of responding, the consideration of overlap in language used across labels points out that the sum of the parts may not be equal to that of the whole. As with stimuli besides language, participants may attend to very different aspects of prompts or questionnaires, mirroring people’s background experiences leading them to attend differently to presented information.

In contrast with the first two hypotheses, Hypotheses 3 and 4 examined differential endorsement of public stigma across the condition of whether or not participants completed the reflection task. The hypotheses predicted increased endorsement of stigma would have been seen with those who completed this reflective task, as it would (presumably) evoke participants to engage their pre-existing beliefs and biases around individuals identified with a mental health label. Similar to the earlier hypotheses, these were not supported by the findings. The content analysis showed that there was relatively low and not significantly different responding across

labels for topics like shame, perception of individuals or groups as “crazy,” or statements that those with mental health labels are more likely to be dysfunctional; so, engaging in this task did not cause participants to “assume the worst.” However, participants did identify a number of specific diagnoses and negative impacts or corollaries, such as the lack of help or attention these experiences receive, based on this engagement. In the realm of public stigma, reflection on one’s own beliefs about a mental health label may vary in content and quality as seen by the content analysis responses, but in this case instructions to reflect did not result in differential endorsement of stigmatizing attitudes or beliefs as assessed via the outcome measures. It would seem based on the findings that mental health labels may invoke different beliefs, thoughts, and feelings, but these differences do not then lead to differential endorsement of public stigma.

Hypothesis 5 is hard to address, as it attempted to look at both the impact of mental health label and reflective task participation across both dimensions of mental health stigma measured in the study. Neither of the two factorial ANCOVAs run within these conditions found significant differences between groups. When the recoverability measure was represented graphically, it appeared that personal concern may have interacted with reflective condition, as participants that completed the reflective task scored more than 6 points lower than those who did not complete this task, but this difference did not reach traditional levels of significance ($p = .090$) Given that personal concern induced insignificant but somewhat varying results across reflective conditions, it is unclear whether participants were uncertain how to respond to this term or attended differently to the broad descriptors given in the vignette than participants who were given a mental health label.

An important aspect of the findings is that overall stigma endorsed, regardless of condition or identifying factors, was relatively low across both dimensions of mental health

stigma assessed in the current study relative to the maximum possible total scores. Specifically, the overall mean for the negative emotional reaction measure (the AQ-27) was approximately 72, with a maximum possible score of 243, and overall average for the recoverability measure (the RS) was approximately 48, with a maximum possible score of 117. This was mirrored in the findings of the content analysis; the most endorsed code of “mental health,” which usually involved participants stating that the label presented made them think broadly about the construct of mental health, was still endorsed by less than half of participants. Many of the more “negative” codes represented in the study had overall low endorsement rates, such as only five references to “craziness” or seven references to dangerousness. Even specific disorders, which were endorsed relatively often, almost always were referred to in the context of “when I think about my assigned mental health label, it makes me think of these disorders,” as opposed to something more negative, presumptive, or problematic. These were simply associations, not judgments or negative evaluations.

Though all the limitations below must be taken into account when interpreting this finding of low overall mental health stigma endorsed, and it is hard to compare these results to other uses of the outcome measures given the modifications used in this study, relatively low stigma endorsement may provide some measure of hope. A college student sample representing a rising cohort of educated individuals with the possibility of positively impacting our society are endorsing low levels of mental health stigma. Just as important as finding small ways of impacting stigma is acknowledging the ways we are making improvements in the grand scheme of things, and this may point to just such a glimmer of optimism. Such conclusion has some precedence, as a dissertation looking at stigma within psychotherapy provided online compared

to traditional in-person meetings similarly found that stigma was consistently low across all groups examined (Reiner, 2016), showing that this may be an emerging trend.

Limitations

There are a number of limitations to the current study to be examined and taken into account. In reference to the sample, it was relatively homogenous, over-representing White heterosexual women when compared to both Auburn University students in general and the national statistics on university/college students (DataUSA, 2019; US Census Bureau, 2019). The fact that the data gathering took place through a participant pool grounded within a particular school on a college campus likely limited the variety of respondents. This may have had several effects on the data. First and foremost, due to a relatively small representation of diversity within demographic identities and need to combine groups to be able to run analyses, comparisons across identity groups needed to be interpreted with some level of caution. With the lack of alignment with multiple demographic factors when compared to the Auburn University campus as a whole, the sample does not seem to ideally represent the population it was drawn from particularly well, meaning that the findings (and lack thereof) may or may not meaningfully represent those within the entirety of the undergraduate student body. This goes even further when trying to draw meaningful conclusions about college students in general, as this sample is even less representative of the population of students in U.S. colleges or universities as a whole. So, generalizability of the present findings is limited.

Another limitation due to the sampling relates to the generalizability of the findings. This author chose to recruit participants from a single university, with hopes that significant findings would be more targeted and applicable than if the sample was less representative of a particular population. Given the combination of a particular population being sampled and generally non-

significant findings, caution should be had in extrapolating on or generalizing these results to apply to other groups or individuals.

Additionally, there were differences across conditions in failure rate on the manipulation check given after the completion of both outcomes measures. Specifically, all those that failed the manipulation check and had been assigned mental health concern (9 participants) all endorsed having been assigned mental illness. Of course, this could simply be a statistical anomaly. This author reviewed the data collection formatting as well as the data cleaning procedures and was unable to find an error that would explain this occurrence.

Though vignettes provide a user-friendly means to provide an understandable example that limits nonessential information given to participants (Atzmuller & Steiner, 2010; Brauer et al., 2009), a limitation with vignette use that has been found across multiple settings of research is that participants have the potential to respond differently to imaginary circumstances and/or persons than they would in actual experiences (Bradbury-Jones, Taylor, & Herber, 2014; Munday, 2013). It is quite possible that participants may have thought or responded differently to the person portrayed in the vignette should they have met them in real life. While participants were unable to return to the vignette after completing the initial outcome measure, they did have the opportunity to read and consider the presented data on this person multiple times before or in the midst of answering these questions. In real life, we seldom have the facts laid out about a person's distress or impairment in such stark terms as given in the vignette; much of this is often picked up through small pieces of information gleaned over time, or never understood at all. Reactions may well have been influenced by how closely or how many times the participants reviewed the vignette, which is not possible to examine directly within the given administration format of the current study.

Additionally, the vignette was originally designed to describe a 30-year-old man with schizophrenia, as opposed to the non-gendered traditional college age student with no diagnoses given. While this change was made to shape the hypothetical person to be more relatable to someone many participants had interacted with during their time as an undergraduate student, the vignette was changed meaningfully from its original design, including a pronounced reduction in the distress and dysfunction described in the vignette for the current study. Given this change from the original form of the study and without the ability to compare who participants would have responded to the original prompt, it is hard to assess the more nuanced impacts on the data this alteration made. The reliability data collected provides some comfort with the use of the measure with modifications, but lack of ability to explore construct validity components due to only one vignette being used is a limitation on external validity.

Another limitation was the use of personal concern as the control term to compare to more clinical labels to refer to mental health. Across the current body of research and to this author's knowledge, there is no established term that has been used as a colloquial, non-technical word or phrase that people use to refer to mental health. The content analysis provides some indication that personal concern was unique to the other labels used, as it was more likely to be endorsed around the constructs of physical health, the privacy/personal nature of a matter, general stress/worry, as well as self-care and well-being than the mental health label used. Regardless of the similarities and differences, a lack of established and studied control terms is a limitation to note.

There was much deliberation when establishing the current study what term to use as a control, and personal concern was used in part because of its broadness, as well as the ability to directly compare with a more established label, mental health concern, due to their shared

linguistic base. In theory, this overlap in the label both using “concern” would allow for the assessment of whether the direct use of the phrase “mental health” had an impact on stigma regardless of the inclusion of it in tandem with “concern.” With personal concern and mental health concern not resulting in significantly different responding patterns, it is hard to draw meaningful conclusions about the root term concern being included. There is some indication of the uniqueness of the control term, as it received high endorsement in codes centered on overall self-care/well-being as well as relating specifically to physical health, as well as being endorsed at significantly lower rates on codes referring to specific diagnoses. Though potentially not an ideal control term, these qualitative differences may show that exploring participants’ understanding of labels may be fruitful outside of public stigma research.

A final limitation to consider is that the responses to the reflective prompt given to some participants varied widely in their depth, quality, and complexity. This was, in part, purposeful, as the vagueness of the prompt allowed for participants to express and consider their own beliefs, feelings, and preconceived perspectives around mental health labels and the control. However, this vagueness resulted in a relatively wide array of participants talking about their own experiences, those of loved ones, and/or “people with mental health stuff” more generally, ways they had heard these labels used and defined colloquially or technically, and so on. This made coding somewhat burdensome and more difficult to examine more closely, which for future research may suggest that the reflective task be made a longer, more integrated aspect of the study, as opposed to a small additional section for some participants to complete. Many participants’ unique lived experiences around mental health and stigma shown through in their written responses, which is encouraging but difficult to quantify well. In future work, it may be helpful to ask more targeted questions to allow for more direct comparison of categorical beliefs

about such terms as well as a greater depth of nuance to these explorations (i.e., “How do you see this mental health label relating to *X* construct [dangerousness, responsibility, etc.]”).

Implications for Future Research

The use of different labels to refer to mental health and individuals’ responses to them offers several areas for future research and exploration. An aspect of the study that was not particularly salient to this author at its start is the differential representation of severity and/or symptomology of mental health. Early research in the field of mental health stigma has focused on presenting concerns that correlate strongly with high dysfunction and/or distress, such as psychotic disorders or severe substance use disorders. The current study used a vignette involving a person with apparently less dysfunction and lower distress than these older studies. Scientific inquiry aimed at differential stigma relating to the labels and symptoms of different presenting concerns/severity may shed light on the complicated relationships mental health labels can have with preconceived notions about them. One possibility in at least some way supported by the general lack of significant findings in this study, is that stigma may not be activated or demonstrated when circumstances do not involve more stereotypical and/or more serious mental distress or dysfunction. It may also be the case that labels are more significant when conditions are less well defined than a vignette giving a relatively deep level of insight into a person’s life.

As was mentioned as a limitation, more work should be done around better understanding what terms are colloquially/non-technically used to refer to mental health, and if these terms elicit varying amounts of stigma. Personal concern was decided upon for this study after careful consideration, and analysis of responding indicated this label may actually elicit the same amount of stigma as more traditional, technical terms like psychiatric disorder or mental illness.

A deeper exploration of colloquial terms, like “mental health problems” or “issues,” and what responses they elicit may be fruitful.

A file drawer effect (Scargle, 1999) may influence the lack of literature base on exploration of mental health stigma and college population, given that the intervention of manipulating labels in vignettes is not particularly powerful and thereby more likely to result in null findings. However, being able to assess whether the findings established in the current study are consistent across universities, identity factors, or other relevant demographic variables could deepen the potential conclusions drawn from the small body of literature that exists currently. With the current sample being relatively homogenous, increased ability to explore how diversity impacts responding may be of interest, or even exploration of cohort-based differences based on age, which was outside the scope of the current study. A larger sampling of the college population across the country would allow for a more certainty to be attached to any findings, even if helpful limitations like region, size, or other statuses were required.

A final implication of interest is that the scope of the current study was aimed at major dimensions of public stigma and its relationship to mental health labels. It is unclear if the findings of this study would parallel or differ for personal stigma, or how individuals who carry a mental health label perceive themselves based on the term used to self-label. Being able to compare and contrast this may impact how providers talk to their clients about labels they may hold differently than how they would talk to or advertise services to the general public.

Conclusion

At time of completion, this is one of very few studies looking at stigma of mental illness and the college population, and among the first to begin exploring the impact of a control term when looking at the construct of stigma. While significant results that aligned with the

hypotheses set forth were minimal, this study had meaningful limitations that could be altered or mitigated in further studies. There is some evidence that use of different labels around mental health impact individual's endorsement of stigma, and the mechanisms by which this takes place may be further explored. The question of how and why differential stigma is attributed to mental health labels and control terms remains, and finding meaningful results in future research will allow for professionals and mental health allies to make conscientious choices of how to talk about mental health in an open, validating manner. Looking at different representations of mental health, including more dysfunctional behaviors or more distressing symptoms may result in different levels of stigma endorsement. Hopefully, the work done here will inform future research for the effective, equal, and equitable treatment of individuals across mental health statuses.

References

- Act, D. (2008). Americans with disabilities act. *Title VI of the Civil Rights*.
- Active Minds. (2019). Statistics. Retrieved from <https://www.activeminds.org/about-mental-health/statistics/>.
- Allen, M. (2018, December 19). Causality. Retrieved December 27, 2019, from <https://methods.sagepub.com/reference/the-sage-encyclopedia-of-communication-research-methods/i2397.xml>.
- Allport, G. W. (1954). *The nature of prejudice*. Oxford, England: Addison-Wesley.
- Alvarez, M. C., & Risko, V. J. (1989). Schema activation, construction, and application. ERIC Digest.
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders (DSM-5®)*. American Psychiatric Pub.
- American Psychiatric Association. (2017, August 16). Mental health in media and entertainment. Retrieved June 17, 2018, from <https://www.psychiatry.org/news-room/apa-blogs/apa-blog/2017/08/mental-health-in-media-and-entertainment>
- American Psychological Association. (2002). Ethical principles of psychologists and code of conduct. *American Psychologist*, 57(12), 1060-1073.
- American Psychological Association (2005). Not going it alone: Peer consultation groups. Retrieved May 25, 2018 from <http://www.apapracticecentral.org/ce/self-care/peer-consult.aspx>
- American Psychological Association. (2018). Campus mental health. Retrieved May 23, 2018, from <http://www.apa.org/advocacy/higher-education/mental-health/index.aspx>

American Psychological Association. (2018, March). APA Council of Representatives Spring Minutes, 2018. Retrieved June 12, 2018, from

<http://www.apa.org/about/governance/council/minutes-spring-2018.pdf>

American Psychological Association Council of Representatives. (2017). Resolution for the Use of the Term “Patient” In American Psychological Association Policies, Rules, and Public Relations Activities When Referring to the Health-Related and Scientific Activities of Health Service Psychologists and Scientists in Health Care Services and Settings. Retrieved February 28, 2018.

Angell, B. (2003). Contexts of social relationship development among assertive community treatment clients. *Mental Health Services Research*, 5(1), 13-25.

Angell, B., Cooke, A., & Kovac, K. (2005). First-person accounts of stigma. In P. Corrigan (Editor), *On the stigma of mental illness: Practical strategies for research and social change* (pp. 69-98). Washington, DC: American Psychological Association.

Anthony, W.A. (1993). Recovery from mental illness: The guiding vision of the mental health service system in the 1990s. *Psychosocial Rehabilitation Journal*, 16, 11-23.

Anthony, W. A., & Blanch, A. (1987). Supported employment for persons who are psychiatrically disabled: An historical and conceptual perspective. *Psychosocial Rehabilitation Journal*, 11(2), 5-23.

Aphrodit, Z. (2010). Stigma related to help-seeking from a mental health professional. *Health Science Journal*, 4(2).

Atzmuller, C., & Steiner, P.M. (2010). Experimental vignette studies in survey research. *Methodology*, 6, 128-138. doi: 10.1027/1614-2241/a000014

- Berkelman, L. A. (2003). *The role of labeling in the stigmatization of mental illness* (Master's thesis). University of Massachusetts Amherst.
- Bornstein, M. H., Jager, J., & Putnick, D. L. (2013). Sampling in developmental science: Situations, shortcomings, solutions, and standards. *Developmental Review, 33*(4), 357-370.
- Boyd, J. E., Katz, E. P., Link, B. G., & Phelan, J. C. (2010). The relationship of multiple aspects of stigma and personal contact with someone hospitalized for mental illness, in a nationally representative sample. *Social Psychiatry and Psychiatric Epidemiology, 45*(11), 1063-1070.
- Bradbury-Jones, C., Taylor, J., & Herber, O.R. (2014). Vignette development and administration: A framework for protecting research participants. *International Journal of Social Research Methodology, 17*, 427-440. doi: 10.1080/13645579.2012.750833
- Brauer, P.M., Hanning, R.M., Arocha, J.F., Royall, D., Goy, R., Grant, A.... & Horrocks, J. (2009). Creating case scenarios or vignettes using factorial study design methods. *Journal of Advanced Nursing, 65*, 1937-1945. doi: 10.1111/j.1365-2648.2009.05055.x
- Braun, H. I., Jackson, D. N., & Wiley, D. E. (2001). Socially desirable responding: The evolution of a construct. In *The role of constructs in psychological and educational measurement* (pp. 61-84). Routledge.
- Brockington, I. F., Hall, P., Levings, J., & Murphy, C. (1993). The community's tolerance of the mentally ill. *The British Journal of Psychiatry, 162*(1), 93-99.
- Brown, S. A. (2008). Factors and measurement of mental illness stigma: A psychometric examination of the Attribution Questionnaire. *Psychiatric Rehabilitation Journal, 32*(2), 89.

- Brown, A., & Dittmar, H. (2005). Think “thin” and feel bad: The role of appearance schema activation, attention level, and thin–ideal internalization for young women’s responses to ultra–thin media ideals. *Journal of Social and Clinical Psychology, 24*(8), 1088-1113.
- Burke-Miller, J. K., Cook, J. A., Grey, D. D., Razzano, L. A., Blyler, C. R., Leff, H. S., ... & Hoppe, S. K. (2006). Demographic characteristics and employment among people with severe mental illness in a multisite study. *Community Mental Health Journal, 42*(2), 143-159.
- Byrne, P. (2000). Stigma of mental illness and ways of diminishing it. *Advances in Psychiatric Treatment, 6*(1), 65-72.
- Canfield, B., & Cunningham, H. A. (2018). *Deconstructing stigma in mental health*. Hershey, PA: Medical Information Science Reference, an imprint of IGI Global.
- Carling, P. J. (1990). Major mental illness, housing, and supports: The promise of community integration. *American Psychologist, 45*(8), 969.
- Chen, M., & Lawrie, S. (2017). Newspaper depictions of mental and physical health. *British Journal of Psychology Bulletin, 41*(6), 308-313.
- Cohen, C. E., & Ebbesen, E. B. (1979). Observational goals and schema activation: A theoretical framework for behavior perception. *Journal of Experimental Social Psychology, 15*(4), 305-329.
- Cohen, J., & Struening, E. L. (1962). Opinions about mental illness in the personnel of two large mental hospitals. *The Journal of Abnormal and Social Psychology, 64*(5), 349.
- Corbin, J., & Strauss, A. (2008). Basics of qualitative research: Techniques and procedures for developing grounded theory.

- Corrigan, P. W. (1998). The impact of stigma on severe mental illness. *Cognitive and Behavioral Practice, 5*(2), 201-222.
- Corrigan, P. W. (2000). Mental health stigma as social attribution: Implications for research methods and attitude change. *Clinical Psychology: Science and Practice, 7*(1), 48-67.
- Corrigan, P. (2004). How stigma interferes with mental health care. *American Psychologist, 59*(7), 614-625.
- Corrigan, P. W., (2005). Dealing with stigma through personal disclosure. In P. W. Corrigan (Ed.), *On the stigma of mental illness: Practical strategies for research and social change* (pp. 20-21). Washington, DC, US: American Psychological Association.
- Corrigan, P. W., & Calabrese, J. D. (2005). Strategies for assessing and diminishing self-stigma. In P. Corrigan (Editor), *On the stigma of mental illness: Practical strategies for research and social change* (pp. 69-98). Washington, DC: American Psychological Association.
- Corrigan, P. W., Edwards, A. B., Green, A., Diwan, S. L., & Penn, D. L. (2001). Prejudice, social distance, and familiarity with mental illness. *Schizophrenia Bulletin, 27*(2), 219.
- Corrigan, P., Giffort, D., Rashid, F., Leary, M., & Okeke, I. (1999). Recovery as a psychological construct. *Community Mental Health Journal, 35*, 231-240.
- Corrigan, P. W., & Kleinlein, P. (2005). The impact of mental illness stigma. In P. W. Corrigan (Ed.), *On the stigma of mental illness: Practical strategies for research and social change* (pp. 20-21). Washington, DC, US: American Psychological Association.
- Corrigan, P. W., Lurie, B. D., Goldman, H. H., Slopen, N., Medasani, K., & Phelan, S. (2005). How adolescents perceive the stigma of mental illness and alcohol abuse. *Psychiatric Services, 56*(5), 544-550.

- Corrigan, P., Markowitz, F., Watson, A., Rowan, D., & Kubiak, M. (2003). An attribution model of public discrimination towards persons with mental illness. *Journal of Health and Social Behavior*, *44*(2), 162–179.
- Corrigan, P. W., Morris, S. B., Michaels, P. J., Rafacz, J. D., & Rüsçh, N. (2012). Challenging the public stigma of mental illness: a meta-analysis of outcome studies. *Psychiatric Services*, *63*(10), 963-973.
- Corrigan, P., & Penn, D. (1999). Lessons from social psychology on discrediting psychiatric stigma. *American Psychologist*, *54*(9), 765-776.
- Corrigan, P., Powell, K., Michaels, P. (2012). Measurement of stigmatizing versus affirming attitudes about mental illness: Psychometrics of a brief outcome battery. Manuscript submitted to *Journal of Social and Clinical Psychology*.
- Corrigan, P. W., Powell, K. J., & Michaels, P. J. (2013). The effects of news stories on the stigma of mental illness. *The Journal of Nervous and Mental Disease*, *201*(3), 179-182.
- Corrigan, P. W., River, L. P., Lundin, R. K., Penn, D. L., Uphoff-Wasowski, K., Campion, J., ... & Kubiak, M. A. (2001). Three strategies for changing attributions about severe mental illness. *Schizophrenia Bulletin*, *27*(2), 187.
- Corrigan, P. W., Rowan, D., Green, A., Lundin, R., River, P., Uphoff-Wasowski, K., ... & Kubiak, M. A. (2002). Challenging two mental illness stigmas: personal responsibility and dangerousness. *Schizophrenia Bulletin*, *28*(2), 293.
- Corrigan, P., Salzer, M., Ralph, R., Sangster, Y., & Keck, L. (2004). Examining the factor structure of the recovery assessment scale. *Schizophrenia Bulletin*, *30*, 1035-1041.
- Corrigan, P. W., & Watson, A. C. (2005). Findings from the National Comorbidity Survey on the frequency of violent behavior in individuals with psychiatric disorders. *Psychiatry*

- Research*, 136(2), 153-162.
- Corrigan, P., Watson, A., Warpinski, A., & Gracia, G. (2004). Stigmatizing attitudes about mental illness and allocation of resources to mental health services. *Community Mental Health Journal*, 40(4), 297-307.
- Couture, S., & Penn, D. (2003). Interpersonal contact and the stigma of mental illness: A review of the literature. *Journal of Mental Health*, 12(3), 291-305.
- Crocker, J., & Lawrence, J. S. (1999). *Social stigma and self-esteem: The role of contingencies of worth*. Russell Sage Foundation.
- DataUSA. (2019). Auburn University Statistics. Retrieved from <https://datausa.io/profile/university/auburn-university>
- De Maria, P., Readdean, K., & Vincent, D. (2010). Considerations for integration of counseling and health services on college and university campuses. *Journal of American College Health*, 58(6), 583-596.
- Ditton, P. M. (1999). Special report: Mental health and treatment of inmates and probationers. *Washington, DC: US Department of Justice, Bureau of Justice Statistics*.
- Druss, B. G. (2006). Rising mental health costs: What are we getting for our money?. *Health Affairs*, 25(3), 614-622.
- Druss, B. G., & Rosenheck, R. A. (1998). Mental disorders and access to medical care in the United States. *American Journal of Psychiatry*, 155(12), 1775-1777.
- Eisenberg, D., Downs, M. F., Golberstein, E., & Zivin, K. (2009). Stigma and help seeking for mental health among college students. *Medical Care Research and Review*, 66(5), 522-541.

- Faul, F., Erdfelder, E., Lang, A. – G., & Buchner, A. (2007). G*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, 39, 175-191.
- Found, A., & Duarte, C. (2011). Attitudes to mental illness: The effects of labels and symptoms. *East Asian Archives of Psychiatry*, 21(3), 91.
- Gaddis, S. M., Ramirez, D., & Hernandez, E. L. (2018). Contextualizing public stigma: Endorsed mental health treatment stigma on college and university campuses. *Social Science & Medicine*, 197, 183-191.
- Gaertner, S., Rust, M., Dovidio, J., Bachman, B., & Anastasio, P. (1994). The contact hypothesis: The role of a common ingroup identity on reducing intergroup bias. *Small Group Research*, 25(2), 224-249.
- Gallo, K. M. (1994). First person account: Self-stigmatization. *Schizophrenia Bulletin*, 20(2), 407.
- George, D., & Mallery, P. (2003). SPSS for Windows step by step: A simple guide and reference. 11.0 update (4th ed.). Boston: Allyn & Bacon.
- Giffort, D., Schmook, A., Woody, C., Vollendorf, C., & Gervain, M. (1995). Construction of a scale to measure consumer recovery. *Springfield, IL: Illinois Office of Mental Health*.
- Graham, S., Hudley, C., & Williams, E. (1992). Attributional and emotional determinants of aggression among African-American and Latino young adolescents. *Developmental Psychology*, 28, 731–740.
- Graham, S., Weiner, B., & Zucker, G. S. (1997). An attributional analysis of punishment goals and public reactions to O. J. Simpson. *Personality and Social Psychology Bulletin*, 23, 331–346.

- Gove, W. R., McCorkel, J., Fain, T., & Hughes, M. D. (1976). Response bias in community surveys of mental health: Systematic bias or random noise?. *Social Science & Medicine*, 10(9-10), 497-502.
- Guyll, M., Madon, S., Prieto, L., & Scherr, K. C. (2010). The potential roles of self-fulfilling prophecies, stigma consciousness, and stereotype threat in linking Latino/a ethnicity and educational outcomes. *Journal of Social Issues*, 66(1), 113-130.
- Hargreaves, D., & Tiggemann, M. (2002). The effect of television commercials on mood and body dissatisfaction: The role of appearance-schema activation. *Journal of Social and Clinical Psychology*, 21(3), 287-308.
- Hargreaves, D., & Tiggemann, M. (2003). The effect of “thin ideal” television commercials on body dissatisfaction and schema activation during early adolescence. *Journal of Youth and Adolescence*, 32(5), 367-373.
- Harris, L. (1986). The ICD survey of disabled Americans. *New York: Louis Harris and Associates*.
- Hart, C., Ritchie, T., Hepper, E., & Gebauer, J. (2015). The balanced inventory of desirable responding short form (BIDR-16). *Sage Open*, 5(4), 1-9.
- Hayward, P., & Bright, J. A. (1997). Stigma and mental illness: A review and critique. *Journal Of Mental Health*, 6(4), 345-354. doi:10.1080/09638239718671
- Henderson, C., Evans-Lacko, S., Flach, C., & Thornicroft, G. (2012). Responses to mental health stigma questions: the importance of social desirability and data collection method. *The Canadian Journal of Psychiatry*, 57(3), 152-160.
- Henderson, C. J., Orbell, S., & Hagger, M. S. (2009). Illness schema activation and attentional bias to coping procedures. *Health Psychology*, 28(1), 101.

- Holmes, E., Corrigan, P., Williams, P., Canar, J., & Kubiak, M. (1999). Changing attitudes about schizophrenia. *Schizophrenia Bulletin*, 25(3), 447-456.
- James, S. D. (2017, June 28). Mental health problems rising among college students. Retrieved June 1, 2018, from <https://www.nbcnews.com/feature/college-game-plan/mental-health-problems-rising-among-college-students-n777286>
- Jones, E. E. (1984). *Social stigma: The psychology of marked relationships*. WH Freeman.
- Jorm, A. F., Reavley, N. J., & Ross, A. M. (2012). Belief in the dangerousness of people with mental disorders: A review. *Australian & New Zealand Journal of Psychiatry*, 46(11), 1029-1045.
- Klassen, D., & O'Connor, W. A. (1988). Predicting violence in schizophrenic and non schizophrenic patients: A prospective study. *Journal of Community Psychology*, 16(2), 217-227.
- Knaak, S., Mantler, E., & Szeto, A. (2017, March). Mental illness-related stigma in healthcare: Barriers to access and care and evidence-based solutions. In *Healthcare management forum* (Vol. 30, No. 2, pp. 111-116). Sage CA: Los Angeles, CA: SAGE Publications.
- Krippendorff, K. (2004). *Content analysis: An introduction to its methodology* (2nd ed.). Thousand Oaks: Sage Publ.
- Kroska, A., & Harkness, S. K. (2006). Stigma sentiments and self-meanings: Exploring the modified labeling theory of mental illness. *Social Psychology Quarterly*, 69(4), 325-348.
- Kroska, A., & Harkness, S. K. (2008). Exploring the role of diagnosis in the modified labeling theory of mental illness. *Social Psychology Quarterly*, 71(2), 193-208.

- Kulesza, M., Pedersen, E. R., Corrigan, P. W., & Marshall, G. N. (2015). Help-seeking stigma and mental health treatment seeking among young adult veterans. *Military Behavioral Health, 3*(4), 230-239.
- Lauber, C., Nordt, C., Falcato, L., & Rössler, W. (2004). Factors influencing social distance toward people with mental illness. *Community Mental Health Journal, 40*(3), 265-274.
- Lerner, M. J., & Simmons, C. H. (1966). Observer's reaction to the "innocent victim": Compassion or rejection?. *Journal of Personality and social Psychology, 4*(2), 203-210.
- Levenson, H. (2003). *Time-limited dynamic psychotherapy: An integrationist perspective*. Educational Publishing Foundation.
- Lilienfeld, S. O., Sauvigné, K. C., Lynn, S. J., Cautin, R. L., Latzman, R. D., & Waldman, I. D. (2015). Fifty psychological and psychiatric terms to avoid: A list of inaccurate, misleading, misused, ambiguous, and logically confused words and phrases. *Frontiers in Psychology, 6*(1100), 1-15.
- Lillis, J., Luoma, J. B., Levin, M. E., & Hayes, S. C. (2010). Measuring weight self-stigma: the weight self-stigma questionnaire. *Obesity, 18*(5), 971-976.
- Lin, Z. (1993). An exploratory study of the social judgments of Chinese college students from the perspectives of attributional theory. *Acta Psychologica Sinica, 25*, 155–163.
- Link, B. G., Cullen, F. T., Struening, E., Shrout, P. E., & Dohrenwend, B. P. (1989). A modified labeling theory approach to mental disorders: An empirical assessment. *American Sociological Review, 400-423*.
- Link, B. G., Cullen, F. T., Frank, J., & Wozniak, J. F. (1987). The social rejection of former mental patients: Understanding why labels matter. *American Journal of Sociology, 92*(6), 1461-1500.

- Link, B. G., Mirotznik, J., & Cullen, F. T. (1991). The effectiveness of stigma coping orientations: can negative consequences of mental illness labeling be avoided?. *Journal of Health and Social Behavior*, 302-320.
- Link, B. G., Phelan, J. C., Bresnahan, M., Stueve, A., & Pescosolido, B. A. (1999). Public conceptions of mental illness: Labels, causes, dangerousness, and social distance. *American Journal of Public Health*, 89(9), 1328-1333.
- Link, B. G., Struening, E. L., Neese–Todd, S., Asmussen, S., & Phelan, J. C. (2001). The consequences of stigma for the self–esteem of people with mental illnesses. *Psychiatric Services*, 52, 1621–1626
- Link, B. G., Struening, E. L., Rahav, M., Phelan, J. C., & Nuttbrock, L. (1997). On stigma and its consequences: evidence from a longitudinal study of men with dual diagnoses of mental illness and substance abuse. *Journal of Health and Social Behavior*, 177-190.
- Mayo Clinic. (2017, May 24). Mental health: Overcoming the stigma of mental illness. Retrieved from <https://www.mayoclinic.org/diseases-conditions/mental-illness/in-depth/mental-health/art-20046477>
- McAlister, A. M., Lee, D. M., Ehlert, K. M., Kajfez, R. L., Faber, C. J., & Kennedy, M. S. (2017). Qualitative coding: An approach to assess inter-rater reliability. In *ASEE Annual Conference & Exposition*.
- Menec, V. H., & Perry, R. P. (1998). Reactions to stigmas among Canadian students: Testing attribution-affect-help judgment model. *Journal of Social Psychology*, 138, 443–453.
- Michaels, P., Corrigan, P., Buchholz, B., Brown, J., Arthur, T., Netter, C., & MacDonald-Wilson, K. (2014). Changing stigma through a consumer-based stigma reduction program. *Community Mental Health Journal*, 50(4), 395-401.

- Mingus, W., & Burchfield, K. B. (2012). From prison to integration: Applying modified labeling theory to sex offenders. *Criminal Justice Studies*, 25(1), 97-109.
- Monahan, J. (2000). Clinical and actuarial predictions of violence. *Modern Scientific Evidence: The Law and Science of Expert Testimony*, 1.
- Morgan, G.A., Leech, N.L., Gloeckner, G.W., & Barrett, K.C. (2013). IBM SPSS for introductory statistics: Use and interpretation (5th ed.). New York, NY: Routledge.
- Mowbray, C. T. (1997). *Consumers as providers in psychiatric rehabilitation*. International Association of Psychosocial Rehabilita.
- Munday, H. (2013). Making use of the vignette technique to examine methods of bereavement counselling: An exploratory study. *Counselling and Psychotherapy Research*, 13, 151-158. doi: 10.1080/14733145.2012.752021
- National Alliance on Mental Illness. (2017). Mental health by the numbers. Retrieved May 2, 2018 from <https://www.nami.org/Learn-More/Fact-Sheet-Library>
- Paulhus, D. L. (1984). Two-component models of socially desirable responding. *Journal of Personality and Social Psychology*, 46(3), 598-609.
- Paulhus, D. L. (1988). Balanced inventory of desirable responding (BIDR). *Acceptance and Commitment Therapy. Measures Package*, 41.
- Perlick, D. A., Rosenheck, R. A., Clarkin, J. F., Sirey, J. A., Salahi, J., Struening, E. L., & Link, B. G. (2001). Adverse effects of perceived stigma on social adaptation of persons diagnosed with bipolar affective disorder. *Psychiatric Services*, 52, 1627–1632.
- Pescosolido, B. A. (2013). The public stigma of mental illness: What do we think; What do we know; What can we prove? *Journal of Health and Social Behavior*, 54, 1–21.

- Pescosolido, B. A., Monahan, J., Link, B. G., Stueve, A., & Kikuzawa, S. (1999). The public's view of the competence, dangerousness, and need for legal coercion of persons with mental health problems. *American Journal of Public Health, 89*(9), 1339-1345.
- Peterson, R. A., & Merunka, D. R. (2014). Convenience samples of college students and research reproducibility. *Journal of Business Research, 67*(5), 1035-1041.
- Phelan, J. C., Link, B. G., Stueve, A., & Pescosolido, B. A. (2000). Public conceptions of mental illness in 1950 and 1996: what is mental illness and is it to be feared?. *Journal of Health and Social Behavior, 41*(2), 188-207.
- Piaget, J. (1979). Relations between psychology and other sciences. *Annual Review of Psychology, 30*(1), 1-9.
- Picco, L., Lau, Y. W., Pang, S., Abdin, E., Vaingankar, J. A., Chong, S. A., & Subramaniam, M. (2017). Mediating effects of self-stigma on the relationship between perceived stigma and psychosocial outcomes among psychiatric outpatients: findings from a cross-sectional survey in Singapore. *BMJ Open, 7*(8), e018228.
- Protection, P., & Act, A. C. (2010). Patient protection and affordable care act. *Public law, 111*(48), 759-762.
- Ray, B., & Dollar, C. B. (2014). Exploring stigmatization and stigma management in mental health court: Assessing modified labeling theory in a new context. *Sociological Forum, 29*(3), 720-735.
- Reif, C., & Much, K. (2017). # Socialmedia: A preliminary report of social networking use among university and college counseling center mental health providers. *Journal of College Student Psychotherapy, 31*(3), 257-264.

- Reilly, K. (2018, March 19). Anxiety and depression: More college students seeking help. Retrieved May 23, 2018, from <http://time.com/5190291/anxiety-depression-college-university-students/>
- Reiner, N. (2016). Stigma and Cybertherapy. (Unpublished doctoral dissertation). Auburn University, Auburn, Alabama.
- Reisenzein, R. (1986). A structural equation analysis of Weiner's attribution-affect model of helping behavior. *Journal of Personality and Social Psychology*, 50, 1123–1133.
- Rose, D., Thornicroft, G., Pinfold, V., & Kassam, A. (2007). 250 labels used to stigmatize people with mental illness. *BMC Health Services Research*, 7(1), 97.
- Rosenfield, S. (1997). Labeling mental illness: The effects of received services and perceived stigma on life satisfaction. *American Sociological Review*, 660-672.
- Rubley, J. N. (2017). The student-centered university: Pressures and challenges faced by college presidents and student affairs leaders. *The Chronicle of Higher Education*, 3-26.
- Scargle, J. D. (1999). Publication bias (the "file-drawer problem") in scientific inference. arXiv preprint physics/9909033.
- Scheff, Thomas. 1966. *Being mentally ill: A sociology theory*. Chicago: Aldine.
- Scheff, T. J. (1974). The labeling theory of mental illness. *American Sociological Review*, 444-452.
- Sommers, A. (2017, July 21). Federal study on college mental health services reveals long waiting lists, other gaps and barriers impeding student success. Retrieved June 1, 2018, from <https://ncd.gov/newsroom/2017/federal-study-college-mental-health>

- Sowislo, J. F., Gonet-Wirz, F., Borgwardt, S., Lang, U. E., & Huber, C. G. (2017). Perceived dangerousness as related to psychiatric symptoms and psychiatric service use—A vignette based representative population survey. *Scientific Reports*, 7, 45716.
- Steadman, H. J., McCarty, D. W., & Morrissey, J. P. (1989). *The mentally ill in jail: Planning for essential services*. Guilford Press.
- Steele, Claude, M. (1977). A threat in the air: How stereotypes shape intellectual identity and performance. *American Psychologist* (52)6: 613 – 629
- Stein, L. I., & Test, M. A. (1980). Alternative to mental hospital treatment. *Archives of General Psychiatry*, 37(4), 392-397.
- Stuart, H. (2006). Media portrayal of mental illness and its treatments. *CNS drugs*, 20(2), 99-106.
- Stuart, H. (2016). Reducing the stigma of mental illness. *Global Mental Health*, 3.
- Taylor, S. M. & Dear, M. J. (1980). Scaling community attitudes toward the mentally ill. *Schizophrenia Bulletin*, 7, 225–240.
- Tversky, A., & Kahneman, D. (1981). The framing of decisions and the psychology of choice. *Science*, 211(4481), 453-458.
- US Census Bureau. (2019, June 4). More Than 76 Million Students Enrolled in U.S. Schools. Retrieved from <https://www.census.gov/newsroom/press-releases/2018/school-enrollment.html>
- Varshney, M., Mahapatra, A., Krishnan, V., Gupta, R., & Deb, K. S. (2016). Violence and mental illness: What is the true story?. *Journal of Epidemiological Community Health*, 70(3), 223-225.
- Wahl, O. (1995). *Media madness*. New Brunswick: Rutgers UP.

- Wahl, O.F. (1999). Mental health consumers' experience of stigma. *Schizophrenia Bulletin*, 25(3), 467 – 478.
- Waldman, S., & Terzic, A. (2019). Health care evolves from reactive to proactive. *Clinical Pharmacology & Therapeutics*, 105(1), 10-13.
- Wampold, B. E., & Imel, Z. E. (2015). *The great psychotherapy debate: The evidence for what makes psychotherapy work*. Routledge.
- Williams, J. R. (1976). *Effects of labeling the "drug-abuser": An inquiry* (Vol. 6). Rockville, Md.: National Institute on Drug Abuse.
- Weiner, B. (1980). A cognitive (attribution)-emotion-action model of motivated behavior: An analysis of judgments of help-giving. *Journal of Personality and Social Psychology*, 39, 186–200.
- Weiner, B. (1983). Some methodological pitfalls in attributional research. *Journal of Educational Psychology*, 75, 530–543.
- Weiner, B. (1985). An attributional theory of achievement motivation and emotion. *Psychological Review*, 92, 548–573.
- Weiner, B., Perry, R. P., & Magnusson, J. (1988). An attributional analysis of reactions to stigmas. *Journal of Personality and Social Psychology*, 55, 738–748.
- White, M. D., & Marsh, E. E. (2006). Content analysis: A flexible methodology. *Library Trends*, 55(1), 22-45.
- Woodward, J. (2001). Causation and manipulability. *Stanford Encyclopedia of Philosophy*.

Appendix B

Modified Recovery Scale

Your responses should reflect your overall opinion about people with **[mental health label]** in general. Answer them on the nine-point scale (1=strongly agree, 9=strongly disagree).

**Bolded terms will be modified by mental health label condition (4), namely being: 1) mental illness 2) psychiatric disorder 3) mental health concerns 4) personal concern **

1. People with **[mental health label]** have goals in life that they want to reach.

1	2	3	4	5	6	7	8	9
Strongly								Strongly
Agree								Disagree

2. People with **[mental health label]** believe that they can meet their current personal goals.

1	2	3	4	5	6	7	8	9
Strongly								Strongly
Agree								Disagree

3. People with **[mental health label]** have a purpose in life.

1	2	3	4	5	6	7	8	9
Strongly								Strongly
Agree								Disagree

4. Even when people with **[mental health label]** don't care about themselves, other people do.

1	2	3	4	5	6	7	8	9
Strongly								Strongly
Agree								Disagree

11. People with [**mental health label**] have people they can count on.

1	2	3	4	5	6	7	8	9
Strongly								Strongly
Agree								Disagree

12. Even when people with [**mental health label**] don't believe in themselves, other people do.

1	2	3	4	5	6	7	8	9
Strongly								Strongly
Agree								Disagree

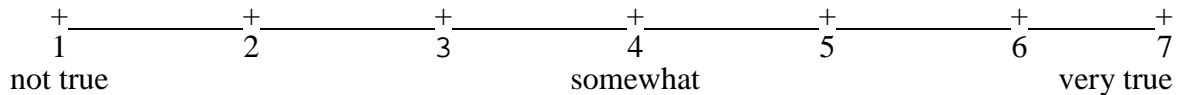
13. It is important for people with [**mental health label**] to have a variety of friends.

1	2	3	4	5	6	7	8	9
Strongly								Strongly
Agree								Disagree

Appendix C

Balanced Inventory of Desirable Responding Short Form 16

Using the scale below as a guide, write a number beside each statement to indicate how true it is.



- ___ 1. I have not always been honest with myself.
- ___ 2. I always know why I like things.
- ___ 3. It's hard for me to shut off a disturbing thought.
- ___ 4. I never regret my decisions.
- ___ 5. I sometimes lose out on things because I can't make up my mind soon enough.
- ___ 6. I am a completely rational person.
- ___ 7. I am very confident of my judgments
- ___ 8. I have sometimes doubted my ability as a lover.
- ___ 9. I sometimes tell lies if I have to.
- ___ 10. I never cover up my mistakes.
- ___ 11. There have been occasions when I have taken advantage of someone.
- ___ 12. I sometimes try to get even rather than forgive and forget.
- ___ 13. I have said something bad about a friend behind his/her back.
- ___ 14. When I hear people talking privately, I avoid listening.
- ___ 15. I never take things that don't belong to me.
- ___ 16. I don't gossip about other people's business.

Appendix D

Level of Contact Report

A *mental illness* is a psychological or behavioral pattern that occurs in an individual and is thought to cause distress or disability. Please keep this definition in mind as you respond to the following questions.

Please read each of the following statements carefully and place a check by each statement that is true for you.

	Yes	No
1. I have watched a movie or television show in which a character depicted a person with mental illness.		
2. My job involves providing services/treatment for persons with a mental illness.		
3. I have observed, in passing, a person I believe may have had a mental illness.		
4. I have observed persons with a mental illness on a frequent basis.		
5. I have a mental illness.		
6. I have worked with a person who had a mental illness at my place of employment.		
7. I have never observed a person that I was aware had a mental illness.		
8. A friend of the family has a mental illness.		
9. I have a relative who has a mental illness.		
10. I have watched a documentary on the television about mental illness.		
11. I live with a person who has a mental illness.		

Appendix E

Informational Letter

AUBURN UNIVERSITY
DEPARTMENT OF SPECIAL EDUCATION, REHABILITATION, AND COUNSELING

(NOTE: DO NOT AGREE TO PARTICIPATE UNLESS AN IRB APPROVAL NUMBER WITH CURRENT DATES HAS BEEN APPLIED TO THIS DOCUMENT.)

You are invited to participate in a research study that provides the opportunity to reflect on imagined situations on a college campus and your theoretical responses to one such situation. We are looking for participants who are current undergraduate students enrolled at Auburn University. Participants must be at least 19 years of age and comfortable with written English. The study is being conducted by a doctoral candidate in counseling psychology, Graham Morris, M.A., under the supervision of Marilyn Cornish, Ph.D., in the Auburn University Department of Special Education, Rehabilitation, and Counseling.

What will be involved if you participate? If you decide to participate in this research study, you will read a short vignette and fill out questionnaires relating to the situation described in this vignette. Your total time commitment will be approximately 30 minutes. You may participate in the study only once.

Are there any risks or discomforts? The risks associated with participating in this study are minimal. The questions we ask are commonly used in this type of research and have no right or wrong answers. You will be asked to provide responses in the form of a rating scale (e.g., Strongly Disagree – Strongly Agree). Questions and response options are structured in a generalist way so that information you provide will not be identifying. Furthermore, your responses will be anonymous and in no way associated with your email address. In addition, we have made it possible for you to skip items that you do not wish to answer. Although risks of participation are considered to be minimal, should you experience any discomfort as a result of this study, you can contact your university counseling center or call the emergency hotline at 1-800-273-8255.

Are there any benefits to yourself or others? There are no direct benefits to you for participating.

Will you receive compensation for participating? To thank you for your time, you will have the opportunity to enter your email address and indicate a course you are affiliated with that offers credit and/or extra credit for participation in SONA-based studies. You may participate in the study only once, and you must enter your university-affiliated email. This entry of information will not be linked to your responses.

If you change your mind about participating, you can withdraw at any time during the study. Your participation is completely voluntary. Your decision about whether or not to participate or to stop participating will not jeopardize your future relations with Auburn University, the Department of Special Education, Rehabilitation, and Counseling, or the researchers (Graham Morris, M.A., or Marilyn Cornish, Ph.D.).

Any data obtained in connection with this study will remain anonymous. To protect your privacy, we will not ask you to provide your name or other identifying information. To receive credit for participation within the SONA system, you will be redirected to a different webpage so that the email address you provide is not linked to your survey responses.

If you have questions about this study, please contact Graham Morris, M.A., at gwm0007@auburn.edu.

If you have questions about your rights as a research participant, you may contact the Auburn University Office of Human Subjects Research or the Institutional Review Board by phone (334)-844-5966 or e-mail at hsubjec@auburn.edu or IRBChair@auburn.edu.

HAVING READ THE INFORMATION PROVIDED, YOU MUST DECIDE IF YOU WANT TO PARTICIPATE IN THIS RESEARCH PROJECT. IF YOU DECIDE TO PARTICIPATE, THE DATA YOU PROVIDE WILL SERVE AS YOUR AGREEMENT TO DO SO. TAKE A SCREEN SHOT OF THIS LETTER FOR YOUR RECORDS.

The Auburn University Institutional Review Board has approved this document for use from (INSERT INFORMATION ONCE OBTAINED)

APPENDIX F

Recruitment Letter

Dear Prospective Participant,

My name is Graham Morris. I am a doctoral candidate here at Auburn University in the Counseling Psychology program. I am conducting an anonymous survey about imagined situations and reactions to others on our campus. To participate, you must be 19 years or older and be currently enrolled as a student here at Auburn University. The survey is voluntary.

Since your answers are to remain anonymous, **PLEASE DO NOT PUT ANY IDENTIFYING INFORMATION IN THE BODY OF THIS SURVEY.**

The survey will take approximately a half hour. Please answer the questions to your comfort level.

The results will be reported for the group of respondents as a whole.

Thank you for your consideration.

Sincerely,

Graham Morris, M.A.
gwm0007@aburn.edu

Appendix G

Demographic Questionnaire

1. What is your age?: _____
2. What is your gender or gender identify:
 - a. Man
 - b. Woman
 - c. Transgender Man
 - d. Transgender Woman
 - e. Gender Fluid/Queer
 - f. Or please specify: _____
3. What is your racial/ethnic identity?
 - a. American Indian or Native American
 - b. Asian, Asian American, or Pacific Islander
 - c. Black or African American
 - d. White (non-Hispanic or Latino)
 - e. Hispanic or Latino
 - f. Biracial or Multiracial
 - g. Or please specify: _____
 - h. I prefer not to respond
4. What is your sexual orientation?
 - a. Heterosexual/Straight
 - b. Gay
 - c. Lesbian
 - d. Bisexual
 - e. Questioning or unsure
 - f. Or please specify: _____
 - g. I prefer not to respond
5. What is your current academic major?: _____

Appendix H
Manipulation Check

Which term was used throughout the questionnaire materials thus far?

- a. Mental illness
- b. Psychiatric disorder
- c. Mental health concern
- d. Personal concern

Appendix I

Reflective Response Prompt

Please, in no less than 200 characters, describe what comes to mind when you think about [mental health label]. Please write in complete sentences.

Appendix J

Demographics Frequencies and Percentages (*n* = 319) Compared to Auburn University

Population as a Whole (2018-2019 School Year Data, Approximations)

Variable	Current Sample		Auburn University Student Population	
	<i>n</i>	%	<i>n</i>	%
Gender				
Woman	209	65.5	15020	49.3
Man	106	33.2	15420	50.7
Gender Fluid/Gender Queer	3	.9	Not Reported	Not Reported
Prefer Not to Respond	1	.3	Not Reported	Not Reported
Race/Ethnicity				
White	267	83.7	23113	75.9
Black/African American	22	6.9	1781	5.9
Asian/Asian American/Pacific Islander	15	4.7	707	2.3
Biracial/Multiracial	5	1.6	307	1.0
Prefer Not to Respond	4	1.3	300	1.0
Hispanic/LatinX	3	.9	915	3.9
American Indian/Native American	2	.6	305	1.0
Arab American	1	.3	Not Reported	Not Reported
Sexual Orientation				

Heterosexual/Straight	291	91.2	Not Reported	Not Reported
Bisexual	15	4.7	Not Reported	Not Reported
Pansexual	4	1.3	Not Reported	Not Reported
Gay	3	.9	Not Reported	Not Reported
Prefer Not to Respond	3	.9	Not Reported	Not Reported
Asexual	1	.3	Not Reported	Not Reported
Lesbian	1	.3	Not Reported	Not Reported
Questioning/Unsure	1	.3	Not Reported	Not Reported
Academic Major				
Physical Health/Medical Sciences	125	39.2	Not Reported	Not Reported
Engineering/STEM	69	21.6	8012	26.3
Business-related Studies	67	21.0	5038	16.6
Mental Health/Helping Fields	33	10.3	Not Reported	Not Reported
Other/Not Specified	25	7.8	Not Reported	Not Reported

Appendix K

Content Analysis Codes and Descriptions

Code Title	Content Code Description
Self-Care/ Well Being	Relating to self-care, well-being, or broadly maintaining one's own wellness
Care for Others	Having to do with caring for or about others
Mental Health	Relating broadly to mental health
Physical Health	Relating broadly to physical health
Private	Being a private or personal matter, not a shared responsibility or burden, not talked about with others
Stress/Worry	Coming out of or resulting in general sense of stress and/or worry
Serious, Impactful, Important	Something that can be seen as very important or highly impact on individuals or those around them; it really matters
Anxiety	Having to do with the experience of anxiety related disorder (racing thoughts, panic, increased heartrate or breathing, difficulty concentrating)
Schizophrenia	Having to do with the experience of schizophrenia or psychotic sxs (hearing voices, seeing things others do not)
Depression	Having to do with the experience of depressive disorder or symptoms (depressed mood, loss of energy/motivation, difficulty concentrating)
Bipolar	Bipolar, mania (manic experiences paired with depressive periods)
Multiple Personality	Having to do with multiple personalities, dissociative identity disorder, "being more than one person"
Other Diagnosis	Any diagnosis not covered by the ones listed above
Need Help	Requiring/deserving help with the term/relating concerns
Need Attention	Is not talked about/societally paid attention to in some way, needing more attention at a grander scale
Ignored/Shamed	Is unacceptable societally or personally, often under-recognized, and/or actively shamed, dismissed, and/or minimized
Cannot Control	Those experiencing term cannot control it
Dangerousness	Those experiencing term are dangerous or seen as such, may cause harm to self or others
Crazy	Acting in a way that is outside of social norms, enacting unacceptable behavior and/or perspective
Dysfunction	Acting in a way that does not meet needs and may actually get in the way of meeting needs
Biological	Having a biological or chemical cause or strong contributing factor (not environmentally related/caused)
Suicide	Relating to and/or causing/leading to suicide