A Dissertation

Entitled

The Effects of Anti-Stigma Interventions in Resident Advisors’ Attitudes Toward Mental Illness

By

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College students with mental illness benefit from counseling services to overcome barriers to success. Resident Advisors (RAs) can refer students, but need education and training to decrease the effects of mental health stigma. The purpose of this study was to determine if anti-stigma interventions produced differences in mental health stigma in the RA population. In this study, 94 RAs participated in interventions involving education and personal testimony. Three published instruments were selected to measure mental health stigma. The Separate-Sample Pretest-Posttest Design 12c (Campbell & Stanley, 1963) was used to separate participants into two groups. Paired samples and independent samples t-tests were calculated to determine within and between group results. Results showed that public stigma and one factor of self-stigma was less from time one to time two. Effect sizes were mostly in the small to medium range. In addition, post-test scores were not sensitized by pre-test scores with any of the measures. Limitations include reliability of one of the instruments and generalizability to other populations. Implications for counseling center personnel, Residence Life staff, and university administrators are discussed as well as future directions for research.

Keywords: stigma, retention, college student, resident advisor, personal testimony
For my husband and daughter who supported me throughout this journey.
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# Summary

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List of Abbreviations

ACT…………………American College Testing
AIDS……………….. Auto-Immune Deficiency Syndrome
ANOVA……………Analysis of Variance
AQ………………….Attribution Questionnaire
ATSPPH…………..Attitudes Toward Seeking Professional Psychological Help
ATSPPH-SF………..Attitudes Toward Seeking Professional Psychological Help – Short Form
CAMI………………Community Attitudes Toward the Mentally Ill
CCMH……………..Center for Collegiate Mental Health
CMHI………………Community Mental Health Ideology Scale
CO-ED…………….Computer-Assisted Education System
DES………………..Disclosure Expectations Scale
IOOV……………….In Our Own Voice
IRB…………………..Institutional Review Board
ISCI………………….Intentions to Seek Counseling Inventory
NAMI……………….National Alliance for the Mentally Ill
OMI…………………Opinions About Mental Illness Scale
OSTEP……………..Openness to Seeking Treatment for Emotional Problems
PDD…………………..Perceived Devaluation-Discrimination Scale
PSOSH……………..Perception of Stigmatization by Others for Seeking Help
RA…………………...Resident Advisor
RIBS……………….Reported and Intended Behaviour Scale
SSDS………………..Star Social Distance Scale
SSMIS-SF…………Self-Stigma of Mental Illness Scale – Short Form
SSOSH……………..Self-Stigma of Seeking Psychological Help
SSRP……………….Stigma Scale for Receiving Psychological Help
UCLA……………….University of California, Los Angeles
Value and Need in Seeking Treatment
Virtual Reality
World Health Organization
Chapter 1

Introduction

1.1 Introduction

This chapter will provide an introduction to the topic of mental health stigma, including a definition and the impact of stigma on college campuses with regard to help-seeking behavior. Information on the importance and training of Resident Advisors (RAs) will also be discussed as they are instrumental in the guidance and support for residential college students. It will then address the research problem, background of the problem, purpose of the study, and research questions. This chapter will conclude with an organization of the dissertation.

1.2 Statement of the Problem

The problem addressed in this study was that the stigma of mental illness prevents those who are in a position to help from intervening and referring others with mental health issues to treatment. Stigma often prevents people from helping those with mental illness; they believe that those with mental illness are dangerous, crazy, and should not be approached (Link, Phelan, Bresnahan, Stueve, & Pescosolido, 1999; McVicar, 2015; Penn & Martin, 1998; Phelan & Link, 2004). The stigma of receiving counseling services also prevents people from helping those who need mental health treatment. Mental health
treatment is viewed in a negative light, as the history of psychiatric institutions and poor treatment of those with mental illness continues to influence us today. Those in a position to help are reluctant to refer to mental health treatment out of concern for how those who need help might be treated. They are also concerned that if they approach these people, it may result in aggression or hostility. Either way, mental health stigma often prevents us from doing what is right by those who have mental health issues.

The World Health Organization defined mental health as “a state of well-being in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community” (WHO; 2014). Therefore, mental illness may play a significant role in the loss of societal human capital (Hunt, Eisenberg, & Kilbourne, 2010). However, the stigma attached to receiving mental health services prevents many from seeking the help they need. As a result, many discontinue treatment and experience a decreased quality of life due to symptoms and effects of the illness.

1.2.1 The Stigma of Mental Illness

Stigma is a key factor that prevents those with mental illness from seeking help (Hogan, 2003). Stigma can be defined as “a socially constructed mark of disapproval, shame or disgrace that causes significant disadvantage through the curtailment of opportunities” (Martin, 2010, p. 261). Put another way, stigma includes negative and erroneous stereotypes, labels, or discrimination by a majority or dominant group toward an individual or group of individuals that view them as socially undesirable and unacceptable (Corrigan & Penn, 1999; Link & Phelan, 2001; Vogel, Wade, & Haake, 2006). Stigma is multidimensional and involves attitudes, feelings, and behaviors (Penn
It is one of the most profound social barriers to inclusion for those with mental illness (Krupa, Kirsh, Cockburn, & Gewurtz, 2009). Many factors contribute to stigma including lack of social skills and poor appearance of those with mental illness and the perception of others that people with mental illness are dangerous (Penn & Martin, 1998). Stigma devalues particular characteristic and traits, leaving those with mental illness without community and social support (Crocker, Major, & Steele, 1998).

Corrigan, Druss, and Perlick (2014) defined stigma as a “complex construct that includes public, self, and structural components” (p. 37). Public stigma is the perception of a group who endorse bias and discrimination against the stigmatized group (Corrigan, 2004). Public stigma discriminates against the stigmatized group and discriminates against individuals within that group who want to seek help for a mental illness (Vogel & Wade, 2009). The perception of public stigma from those who want to seek help is often referred to as perceived public stigma (Corrigan, 2004). It is often perceived public stigma that prevents individuals from seeking help so as to avoid the negative labels.

Labeling is a process by which specific traits are selected to be excluded from the dominant group (Link & Phelan, 2001). Self-stigma is the internalization of the public stigma; allowing the perceptions of how they might be treated to affect their self-concept (Corrigan, 1998; Link, 1987; Link & Phelan, 2001). All three types of stigma are interrelated and affect how the majority view mental illness and whether those with mental illness decide to seek treatment.

### 1.2.2 Perceived Public Stigma

Perceiving that others view mental illness negatively can impact an individuals’ willingness to seek help (Corrigan, 2004; Link, Yang, Phelan, & Collins, 2004).
Treatment avoidance often occurs when individuals perceive that others will view them negatively for having mental illness. In a study measuring the relationship between perceived public stigma, depression, and stress among college students, a direct relationship was found among the three variables, indicating that when perceived public stigma was high, the other variables were also elevated (Britt, Greene-Shortridge, Brink, Nguyen, & Rath, 2008). The correlation indicates that those who experience stress and depression also experience perceived public stigma, which often prevents help-seeking behavior (Corrigan, 2004). In another study, students with high levels of perceived public stigma indicated high levels of self-stigma, which also negatively impacts help-seeking behaviors (Vogel, Wade, & Hackler, 2007). A third study found conflicting results in that students between ages 18-22 possessing a high level of perceived public stigma were less likely to seek help, whereas those above age 22 with perceived public stigma were more likely to seek help (Golberstein, Eisenberg, & Gollust, 2008). Possible reasons for this discrepancy included the level of maturity and the amount of time exposed to the symptoms among older students. Overall, all three studies indicated that perceived public stigma impacts help-seeking behavior, but further research is needed to determine to what degree and if certain populations are more vulnerable than others.

1.2.3 Self-Stigma

For some individuals with mental illness, how they are perceived by the public leads to negative self-esteem, vulnerability to discrimination, and poor treatment compliance (Corrigan & Watson, 2002; Lannin, Vogel, Brenner, & Tucker, 2015). The internalizing of public stigma is known as self-stigma (Corrigan, 2004; Eisenberg, Downs, Golberstein, & Zivin, 2009; Vogel et al., 2006). Self-stigma is damaging to a
person’s self-concept in that the individual internalizes the stereotypes and discrimination and agrees with and behaves according to these beliefs (Corrigan & Watson, 2002; Tucker et al, 2013; Vogel, Bitman, Hammer, & Wade, 2013b).

There are two types of self-stigma: the self-stigma of having a mental illness and the self-stigma with seeking psychological help (Tucker et al., 2013). Link (1987) defined seeking psychological help as part of self-stigma, and proposed that much self-stigma research focuses on those who are seeking psychological services as it is this behavior that indicates to someone that they have a mental illness. According to Vogel and Wade (2009), labeling occurs with the self-stigma of having a mental illness (internalizing labels from others), whereas those who seek mental health services assign a label to themselves (internalizing their thoughts about mental illness which are replicated in the thoughts of the public). Either way, individuals tend to avoid mental health services in order to escape both public and self-labeling.

Self-stigma is a process of stereotype awareness / stereotype agreement (being aware that the stigma exists and applying it to others), self-concurrence (belief that the stereotypes apply to them), and self-esteem decrement (diminished self-esteem as a result of the beliefs) (Corrigan, Watson, & Barr, 2006). These phases are also known as the “three A’s” of self-stigma: awareness, agreement, and application (Corrigan, Larson, & Rusch, 2009, p. 75). Those who incorporate the “three A’s” Link tend to avoid pursuing opportunities that would lead to a better quality of life, such as housing and employment (Link, 1987). However, Corrigan et al. (2006) found that not everyone applies the stereotype of stigma to themselves. For some, stigma evokes a sense of empowerment;
therefore, these individuals refuse to behave in a way that confirms the perceptions (Corrigan et al., 2009).

1.2.4 How Stigma Affects Personal Lives

Internalizing perceived public stigma is a major reason why those with mental illness refuse to seek treatment (Corrigan, 2004). Individuals refuse to be recognized as having mental illness which leads to delays or avoidance in seeking mental health treatment. Self-stigma may also cause many with mental illness to see themselves as responsible for their disorders and refuse or delay treatment due to self-blame (Cooper, Corrigan, & Watson, 2003). Avoiding treatment may include noncompliance with medications, as their use is associated with weakness, severity of illness, and an inability to cope with problems (Castaldelli-Maia et al., 2011). Most individuals with mental illness eventually seek treatment after years of delay, when symptoms become overwhelming (Thornicroft, 2008). At this point, treatment may not be able to combat symptoms that led to a lower level of functioning and overall lower quality of life. Lack of support, achievements, and career success are negatively impacted the longer an individual is without treatment. In addition, these individuals may be experience unemployment, homelessness, and multiple hospitalizations. Others experience a lack of support and understanding from family and friends (Quinn, Wilson, MacIntyre, & Tinklin, 2009) the longer they are without treatment.

1.2.5 How Stigma Affects Opportunities

Public stigma can affect opportunities for those with mental illness. It affects the way the public interacts and behaves toward those with mental illness. Individuals who stigmatize are less likely to hire or provide adequate housing for those with mental illness.
People in authority who stigmatize believe that those with mental illness are unable to live on their own and should be cared for by professionals (Corrigan, Watson, & Ottati, 2003b). Attitudes and beliefs that give rise to public stigma largely vary depending on the perception of the diagnosis and severity of symptoms (Mann & Himelein, 2004). However, these perceptions are often exaggerated so that all forms of mental illness are stigmatized regardless of diagnosis and symptomology. Many are thought of as dangerous, socially undesirable (Link et al. 1999; Phelan & Link, 2004) and subject to involvement with law enforcement (Corrigan, 1998). Public thoughts about these negative behaviors create fear, and the result is social isolation from society. As a result, those with mental illness of any type or severity tend to be denied opportunities to live a better quality of life (Corrigan, 2004).

Public stigma affects individuals’ income, access to health care, and availability of resources (Sharac, McCrone, Clement, & Thornicroft, 2010). Without access to job training, mental health treatment, and a steady source of income, these individuals become liabilities. The workforce is affected due to a lack of qualified employees, homeless shelters become full due to lack of affordable housing, and jails become overcrowded due to desperation. Without a steady income, those with mental illness must rely on a government system that stigmatizes them and provides them with fewer medical benefits than they need (Corrigan, 2004). Mental health crises result in hospitalizations rather than ongoing community care. The consequences of stigma not only affect individuals with mental illness, but also employers, businesses, social service and government agencies, and communities as a whole.

1.2.6 Mental Health in the College Population
The college years are a period of identity development, where students transition from adolescence to the independence of adulthood (Arnett, 2000). It can be a time of self-discovery but also challenging as students experience increased stress over career and financial decisions as well as find a sense of purpose and belonging. In addition, some students are challenged with mental or emotional problems. As they have not yet traversed the challenges of adulthood, mental health issues complicate these milestones as students often do not possess the coping skills needed to manage their symptoms and make sound decisions. As a result, they may also find themselves engaged in maladaptive behaviors such as substance abuse as a way to cope (Hunt & Eisenberg, 2010). Their lack of coping ability can affect physical, emotional, cognitive, and interpersonal functioning (Kitzrow, 2003) in the forms of self-care, motivation to achieve, and the desire for social integration (Salzer, 2012). In addition, stress, anxiety, depression, and substance use interfere with problem solving and affect an individual’s creativity, motivation, and commitment to succeed (Douce and Keeling, 2014).

Students with mental illness experience academic and social challenges at a greater intensity due to their symptoms and perceived public stigma. One study found that grade point averages were .49 of a point lower in students with diagnosed depression due to the frequency and impact of their symptoms (Hysenbegasi, Hass, & Rowland, 2005). Douce and Keeling (2014) reported that students with depression may experience learning difficulties as compared to their peers. These difficulties may reveal themselves in the form of test anxiety, lower self-efficacy, and less use of academic resources (Kitzrow, 2003). Salzer (2012) found that college students with mental health issues had fewer close relationships with friends, faculty, and administration on campus than those
without mental health issues. Students with these issues are also less likely to seek assistance for these problems. These results suggest that interventions are needed to engage students with mental illness in order to promote academic and social success in college (Salzer, 2012).

As a result, these students are a greater risk for dropping out (O’Keefe, 2013; Salzer, 2012). Being seen as having a mental illness can affect their self-esteem (Kondrat & Early, 2011; Link, Struening, Neese-Todd, Asmussen, & Phelan, 2001). Without help, students with mental illness may withdraw from attending class and social activities due to shame, guilt, and fear – the same emotions that prevent students from seeking help through counseling (Mowbray et al., 2006). In addition, those students experiencing their symptoms for the first time during the college years endure additional challenges of understanding their symptoms. Without coping skills, a college education can seem a distant dream.

These students need the help of counseling services to aid in developing coping skills and managing their symptoms. Without treatment, many of these students will continue to experience these problems which may result in dropping out. However, those who are in a position to recognize and refer students to counseling could help them (Boswinkel, 1987). Promoting help-seeking behavior can lead students with mental illness to receiving mental health care, improving their self-worth, and decreasing their self-stigma.

1.3 Background of the Problem

Approximately one-fourth of the United States population meets criteria for at least one DSM-IV diagnosis each year (Kessler, Chiu, Demler, & Walters, 2005). Over
the lifetime, half of mental illnesses begin at age 14; three-fourths begin by age 24 (Kessler et al., 2005). In other words, the likelihood of an adolescent or young adult experiencing a mental illness is one in four. Many of these young adults will enter college and experience mental health issues for the first time.

1.3.1 Utilization of Counseling Services

The American College Health Association’s National College Health Assessment (2013) reported statistics on mental health related concerns regarding the college student population. In this study, over 48% of students reported their highest stress in the areas of academics, finances, and intimate relationships. Over 41% of college students rated their stress as “more than average” (p. 16). Only 8.4% reported that they received mental health (p. 15) treatment for one issue while fewer received treatment for multiple issues.

In 2014, 140 college counseling centers participated in a survey for The Center for Collegiate Mental Health (CCMH; 2014). The CCMH has reported trend data on counseling center utilization since 2008. At that time, 66 institutions participated in the survey. The number of clients who took the survey increased from 32,329 in 2008 to 101,027 in 2014. Within that time, the number of students who received counseling services remained constant, from 51% in the fall of 2008 to 48.1% in 2014. However, those with serious issues, either trauma or a suicidal ideation increased from 25% in 2008 to 38% in 2014. In a 2-year study by Ziven, Eisenberg, Gollust, and Golberstein (2009), 60% of college students who reported a mental health problem in 2005 continued to experience problems in 2007. Only 18% of those students received treatment in 2005, and only 25% received any treatment in the two years of the study. In another 2-year study, 33% of students received treatment at the beginning of the study, and only 20%
received treatment two years later (Eisenberg, Hunt, Speer, & Zivin, 2011). In a third study, only 15% out of 30% of students who identified a need for mental health treatment actually received counseling or medication (Eisenberg, Golbertstein, & Gollust, 2007).

In the National Survey of College Counseling Centers (Gallagher, 2014), 94% of counseling center directors reported a steady increase in past academic years of students presenting with mental health issues. Directors reported that many were receiving counseling for severe issues, and many of those students had been previously diagnosed with mental illnesses. Approximately 8% of the students had impairment to the degree that they considered dropping out. Similar results were reported in another study of counseling center directors (Watkins, Hunt, & Eisenberg, 2011) who stated that the number of students served remained consistent from year to year, but their presenting issues were more severe, requiring more counseling resources in order to help them.

The results of these studies suggested that more students are experiencing emotional and mental stress at a greater rate and at a greater intensity than in previous years (Zivin et al., 2009). The results also suggested that the same number of students seeking services can indicate an underutilization of counseling services. This underutilization means that there are many college students struggling with the challenges of their mental health issues that are not seeking help which may force them to make tough decisions about their academic career.

Many factors result in an underutilization of counseling services. Many students are not aware of counseling services on campus (Eisenberg et al., 2007; Kitzrow, 2003) or know where to find or access them. Many students do not understand the purpose of counseling (Quinn et al., 2009) or see it as an extension of academic advising. Staff who
are not aware of counseling services or who do not understand what services are provided cannot refer students to counseling centers. Those that do may not recognize students’ mental issues as affecting their academic performance, so treatment is often overlooked (Quinn et al., 2009). The lack of visibility and collaboration between the counseling center the campus community can hinder students from getting the mental health services they need.

Students who are aware of college counseling centers do not utilize them for many reasons. Many do not recognize their stress as impacting their mental health (Eisenberg, Speer, and Hunt, 2012c; Hunt & Eisenberg, 2010; Quinn et al., 2009) and believe that stress is a common occurrence in college (Eisenberg, et al., 2012c). Some do not believe that counseling is effective (Eisenberg et al., 2007), others do not recognize the point at which counseling could be helpful (Eisenberg et al., 2012c; Hunt & Eisenberg, 2010), and still others only seek services when their needs are severe (Quinn et al., 2009). In addition, Eisenberg et al. (2007) found that students did not seek counseling for logistical reasons, including a lack of understanding of insurance coverage or lack of coverage in general and a lack of time to commit to treatment. Other students chose to approach their advisor or faculty to discuss academic issues (Quinn et al., 2009) regardless if their mental health was affected. Finally, certain demographic groups are reluctant to seek counseling, including males (Komiya, Good, & Sherrod, 2000), minorities, international students, and those who are religious, heterosexual, or of a lower socio-economic status (Eisenberg et al., 2011). Still others do not seek help because they are not open to displaying emotions (Hunt & Eisenberg, 2010; Komiya et al., 2000).

Overall, both students who know and who do not know about counseling services
underutilize them, resulting in a continued struggle between mental health issues and success in college.

1.3.2 The Impact of Mental Health Stigma on Help Seeking Behavior

There are two possibilities embedded in history that may explain why mental health stigma continues to be an issue in deciding whether to seek help (Satcher, 1999). Both explanations suggest that the mind and body are separate entities. Regarding treatment, they should be treated as such. Families cared for other members within the same household. As families migrated to other parts of the country, this option was no longer feasible. Therefore, institutions were built to house and care for those with mental illness. As the population within these institutions grew, so did the fear and stigma of mental illness. New medications brought relief for the patients, and it was believed that many could live outside of the confines of the hospitals. Deinstitutionalization became a movement in the 1960s to transition patients from institutions to the community. However, this movement did not eliminate the stigma that people came to believe about mental illness, so patients who were transferred to the community were treated as second-class citizens and socially isolated from the rest of the community. To avoid the labeling and shunning from the community, patients were hesitant to continue or seek mental health treatment despite the availability of services. It is because of this history that stigma may be one of the largest barriers to seeking mental health treatment (Corrigan, 2004).

It is thought that ignorance is the main cause of mental health stigma (Boysen & Vogel, 2008). In the case of mental health, ignorance involves negative attitudes and beliefs as well as the lack of knowledge. Therefore, stigma is the culmination of a lack of
knowledge, negative attitudes, and discriminating behavior (Thornicroft, Brohan, Kassam, & Lewis-Holmes, 2008). Attitudes involving stereotypes, segregation, and discrimination exist not only to exclude those with mental illness from the larger population (Link & Phelan, 2001) but also to emanate power over them (Corrigan, Markowitz, Watson, Rowan, & Kubiak, 2003a; Link & Phelan, 2001). These negative beliefs include labeling those with mental illness as dangerous, incompetent, and responsible for their illness (Corrigan, 1998). These beliefs exist solely to marginalize and segregate those with mental illness from the community.

The effects of stigma are also felt by families and communities. Families often need psychological help to support their loved ones. Communities cannot thrive if segregated. Therefore, mental health professionals need to research and develop interventions that can decrease or eliminate stigma. Decreasing stigma not only leads more people to treatment, it also reduces the negative effects felt by individuals, families, and the community.

1.3.3 Retention.

Retention is defined as the continued enrollment in higher education with the intention to graduate (Tinto, 1975; Turner & Berry, 2000). As explained in Tinto’s Student Integration Model (1975), students each bring individual attributes, experiences, and backgrounds to college. These traits influence the development of academic goals and institutional commitment as well as the interaction between the individual and the academic and social systems of the university. It is theorized that either low goal or institutional commitment can lead to attrition. In other words, the level of integration is directly related to retention (Tinto, 1975). In this model, students with mental health
issues do not align with the social norms and culture of the university and often drop out of school. In order to support retention efforts, Tinto (1999) stated that information/advice, support, involvement, and learning initiatives are essential for students. In the case of those students with mental health issues, support in the form of counseling is key.

Students with mental health issues are at higher risk for attrition while students who receive counseling are more often retained (Van Brunt, 2008). The retention rate for the general student body at a four-year public institution from the first to second year is 54.8% (American College Testing [ACT], 2014). The retention rate for those who identified with having mental illness was 36%. Of the 64% who dropped out, 50% of them reported never seeking counseling services. Several studies have been conducted to demonstrate counseling’s effect on retention. Illovsky (1997) found that 75% of students who received counseling continued enrollment from their first to second year of school which is an increase over the general student body retention rate of 68%. In another study, more than 86% of students who received counseling enrolled for at least another semester (Bishop & Brenneman, 1986). Wilson, Mason, and Ewing (1997) found that students who received counseling were retained 14% over those who did not receive counseling. Finally, Lee, Olson, Locke, Michelson, and Odes (2009) found that students who received counseling were three times more likely to stay enrolled in school than those who did not.

Even with counseling, students with certain diagnoses are more prone to dropping out of college. Hunt et al. (2010) found that students diagnosed with Bipolar Disorder and Antisocial Personality Disorder were more likely to drop out of school regardless of
receiving counseling. In another study, men with conduct disorders and women with anxiety disorders often dropped out of school (Kessler, Foster, Saunders, & Stang, 1995; Stevenson, 2010). Despite these reports, counseling often benefits students which can lead to retention. In terms of these benefits, Bishop and Walker (1990) reported that students who received counseling stated that they appreciated having someone to listen, provide personal support, and help them with their fear of failure.

Students with mental health issues, particularly depression, reported lower levels of concentration, energy levels, and motivation. They stated they were bored in class, skipped class or were often late, and fell asleep more often than those who did not report depression (Eagan et al., 2014). Another study reported students with mental illness having trouble concentrating, completing work on time, staying motivated, and attending classes (Martin, 2010). Finally, of those who used counseling, 70% stated that their issues impacted their academic performance and 20% of those students considered dropping out (Douce and Keeling, 2014). The symptoms and behaviors mentioned in these studies lend more credit to the idea that mental health issues affect retention rates.

Emotional and social adjustments can affect retention rates more than academics. Banyard and Cantor (2004) studied protective factors, individual traits that promote positive adaptation, and found that those who possessed positive coping skills and resiliency were more likely to be successful in college. Shields (2001) found that those with a perception of control over their environment, or ability to actively cope, were more likely to cope with the stress of college. In one study, emotional and social adjustment, particularly feeling a sense of belonging (O’Keefe, 2013; Salzer, 2012) predicted whether students remained or dropped out of school as well or better than academic concerns.
Gerdes and Mallinckrodt, 1994). Martin (2010) found that students rated personal and social issues as more difficult to overcome than academics. Overall, these students were less satisfied with the college experience when they have difficulty adjusting socially and emotionally.

Dropping out of college can have a permanent impact on a person’s life. Students who drop out find it difficult to live away from home (Gerdes & Mallinckrodt, 1994). They are more likely to be unemployed or underemployed (O’Keefe, 2013). If employed, they likely make less than if they had a college education. However, these consequences do not only impact those with mental illness; the community can be affected as well. With unemployment, the labor market is weakened. State and federal funding is stretched to assist more people who earn less than a living wage (Sharac et al., 2010). In addition, healthcare costs increase. The community validates its stigma of those with mental illness as they become resentful toward them. Regarding the students themselves, they are just as likely to not seek treatment in their community as they were in college. As a result, their quality of life and measures of success are lowered.

However, if students receive counseling services in college, the results can have a positive effect on families and the community. Retention leads to graduation which can leads to employment. Families are more supportive of their students. The community thrives with the addition to the employment rate. Although results are not guaranteed, treatment for mental health issues is much preferred over refusing treatment.

University data that demonstrate counseling’s impact on retention rates can benefit administrative planning and budget development (Bishop, 2010; Sharkin, 2004). The relationship between counseling and retention is important and should be recognized
by college administration (Bishop, 2010). Counseling improves retention; there is value in providing financial and staff resources to counseling services to improve students’ social, emotional, and academic success.

1.3.4 The Effects of Stigma on the Community

Stigma affects the public’s attitude and behavior about mental illness. Those with stigma are less likely to hire or provide adequate housing for those with mental illness (Corrigan, 1998). In one study, employers discriminated against those with mental illness in terms of hiring, promoting, and providing benefits (Krupa et al., 2009). Criminalizing mental illness often results in the arrest of those with mental illness due to stigmatized beliefs (Corrigan, 2004). Therefore, stigma often leads to unemployment or jail time. It affects their ability to secure an income, have access to health care, and have available resources (Sharac et al., 2010). They become burdens on the community as they rely on government subsidies and social services. They are less likely to receive comprehensive medical benefits that cover the services they need (Corrigan, 2004). This cycle perpetuates the attitude and beliefs of mental health stigma in the public eye.

Public stigma affects those with mental illness in other ways. A lack of support from both family and community are felt by those who are stigmatized (Penn & Martin, 1998). This lack of support can lead to isolation, substance abuse, or other unhealthy behaviors. In other words, the lack of support can intensify symptoms and increase self-stigma as those with mental illness continue the path of self-deprecation brought on by public stigma.

As the cycle of stigma continues, those with mental illness often delay or refuse to seek mental health treatment (Corrigan, 2004; Komiya et al., 2000) including compliance
with medication. Treatment can be associated with weakness (Castaldelli-Maia et al., 2011) which only serves to perpetuate stigma. Many refuse treatment to avoid being labeled as mentally ill (Cooper et al., 2003) while other avoid help due to a lack of support and understanding from family and friends (Quinn et al., 2009). In a literature review by Hunt and Eisenberg (2010), many studies reported that stigma impacted help-seeking behavior. According to Britt et al. (2008), the lack of mental health treatment not only exacerbates symptoms but also increases the stress felt by mental health stigma (Britt et al., 2008), creating an avoidance cycle where individuals continue to deny themselves the help they need.

1.3.5 The Impact of Training

In order to increase counseling center utilization, staff must know and understand the services offered. However, any stigma they possess will interfere with providing help to students. One method of decreasing mental health stigma while providing information on counseling resources is to train staff who work with students on a regular basis (Brunson & McKee, 1982). On a residential campus, Resident Advisors (RAs) serve to recognize the needs of students and refer them to campus resources (Boswinkel, 1987). Arguably, since they live and work within the residence halls, they have the potential to have the most contact with students who live on campus. According to Boswinkel (1987), “The RA is exposed to the students daily and can identify problem situations before they turn into crises” (p. 53). College administrators agree that RAs are well-suited to identify and help students as they are not only mentors, they are also peers (Dodge, 1990).

Students are reluctant to receive counseling services if they do not feel supported by faculty or staff (Quinn et al., 2009). According to Watkins et al. (2011), college
administrators admitted that faculty and staff need additional training in mental health resources due to the increase in the number and severity of cases on campus. Overall, college communities must be more receptive to students asking for help (Corrigan et al., 2003b). Training RAs is a first step in this process.

University counseling center staff is often responsible for training staff and faculty on mental health issues and options for treatment. These trainings are often conducted in a classroom setting and focus on separating myth from fact. However, while they provide information, it is unclear whether these trainings affect attitudes regarding mental health. Understanding the effectiveness that trainings can have on attitudes in the university setting can start the path to changing the stigma toward mental health.

1.4 Purpose of the Study

The purpose of this study was to determine if anti-stigma interventions produce differences in the level of mental health stigma in Resident Advisor attitudes toward mental health. Mental health stigma includes public stigma domains such as authoritarianism, benevolence, social restrictiveness, community mental health ideology (CMHI), perceived public stigma, and self-stigma domains of openness to seeking treatment and the value and need in seeking treatment. All domains were researched in this study.

1.5 Research Questions

1. Do anti-stigma interventions decrease authoritarianism in the RA population?
2. Do anti-stigma interventions increase benevolence in the RA population?
3. Do anti-stigma interventions decrease social restrictiveness in the RA population?
4. Do anti-stigma interventions increase community mental health ideology in the RA population?

5. Do anti-stigma interventions decrease perceived public stigma in the RA population?

6. Do anti-stigma interventions increase the openness to seek treatment for emotional problems in the RA population?

7. Do anti-stigma interventions increase the value and need in seeking treatment in the RA population?

8. Is there a difference in authoritarianism among RAs who were administered a pre-test versus those who were not?

9. Is there a difference in benevolence among RAs who were administered a pre-test versus those who were not?

10. Is there a difference in social restrictiveness among RAs who were administered a pre-test versus those who were not?

11. Is there a difference in community mental health ideology among RAs who were administered a pre-test versus those who were not?

12. Is there a difference in perceived public stigma among RAs who were administered a pre-test versus those who were not?

13. Is there a difference in the openness to seek treatment for emotional problems among RAs who were administered a pre-test versus those who were not?

14. Is there a difference in the value and need in seeking treatment among RAs who were administered a pre-test versus those who were not?

1.6 Significance of the Study
During a time when resources are at a premium, university administration and college counseling centers can benefit from research that focuses on effective ways to reach students in need of mental health services. Reaching more students leads to positive retention rates. College counseling centers benefit in that they can rely on university staff who are better equipped to identify and refer students in need of mental health treatment. Finally, students with mental health issues benefit the most by having their needs addressed by a compassionate campus community.

1.7 Definition of Terms

The following terms include dependent and independent variables. Operational definitions are provided for clarity and replication of the study.

- Authoritarianism: Attitude that those with mental illness need constant care and are responsible for their illness (Taylor & Dear, 1981).

- Benevolence: Attitude that those with mental illness should receive kindness, care, and opportunity (Taylor & Dear, 1981).

- College students: Students enrolled either part or full time at a university, living either on or off campus, of traditional college age of 18-22.

- Community mental health ideology: Attitude that those with mental illness are able to live in the community and contribute to society (Taylor & Dear, 1981).

- Counseling services: Professional services that could be offered either on or off campus, including individual or group counseling, psychiatric medication, day treatment programs, case management, or psychosocial rehabilitation. Support groups facilitated by non-professionals are not included in this definition.
• Deinstitutionalization: The process of transferring care for those with mental illness from inpatient facilities to community outpatient facilities (Taylor & Dear, 1981).

• Education: Intervention providing information about mental health etiology, symptomology, treatment, and recovery principles, including information on facts and myths, which is essential to education programs (Corrigan & Penn, 1999).

• Help-seeking behavior: The willingness to locate and utilize counseling services due to a perceived need (Eisenberg et al., 2009).

• Mental illness issues: Concerns of an emotional or cognitive nature that inhibit the functioning of a person in at least one area of life. Concerns do not have to be diagnosable.

• Openness to seeking treatment for emotional problems (OSTEP): Willingness to seek help for one’s own emotional problems (Elhai, Schweinle, & Anderson, 2008).

• Perceived public stigma: The extent to which a person views how the public marginalizes an undesirable group (Corrigan, 2004).

• Personal testimony: An intervention whereby an individual volunteers information about his or her personal history with the intent of educating the audience on the issues discussed.

• Public stigma: The act of endorsing stereotypes against a marginalized group (Corrigan, 2004).

• Retention: Continued enrollment in higher education with the intention of graduation (Turner & Berry, 2000).
• Resident advisors: Students assigned to monitor students living in residence housing for the purposes of safety, information and referral, and peer support.

• Self-stigma: The internalization of mental health stigma, resulting in decreased self-esteem and self-efficacy (Watson, Corrigan, Larson, & Sells, 2007).

• Social restrictiveness: Attitude that those with mental illness are dangerous and should be isolated from society (Taylor & Dear, 1981).

• Stigma: a negative and erroneous stereotype, label, or discrimination toward an individual or group of individuals that view them as socially undesirable and unacceptable (Corrigan & Penn, 1999; Link & Phelan, 2001; and Vogel et al., 2006).

• Value and need in seeking treatment (VNST): Perceptions regarding the value of mental health treatment (Elhai et al., 2008).

• Willingness: The ability and desire to obtain help for one’s mental health concerns.

1.8 Organization of Chapters

Chapter One introduced the topic of study, provides background on the problem, and offers a rationale for the research. Chapter Two will review the current literature relevant to the study. Chapter Three will define the method, describe the instruments, and outline the procedures. Chapter Four will detail the statistical results of the study. Chapter Five will provide a discussion of the results including the strengths and weaknesses of the study, and provide implications for practice and further research.

1.9 Summary
One-fourth of the United States population will be diagnosed with a mental illness in their lifetime; three-fourths of those will be diagnosed by age 24 (Kessler et al., 2005). The early adult years come with challenges of newfound independence and identity development. Many of these individuals are in college. Those who develop mental illness during these years have additional challenges to meet. Stigma is one of those challenges as the perception of having a mental disorder is one of inadequacy and underproductive members of society. This stigma may become internalized, known as self-stigma, which can demoralize individuals, causing them to refrain from getting the help they need.

The purpose of this study was to determine if anti-stigma interventions produce differences in the level of mental health stigma in Resident Advisor attitudes toward mental health. Students who believe they are being stigmatized to the point where they drop out of college are less likely to believe that they can be productive members of society. The effects can be catastrophic for the individuals, their families, and society. Understanding the factors that contribute to stigma can help create interventions to reduce, even eliminate, stigma.
Chapter 2

Literature Review

2.1 Introduction

This chapter provides a review of the literature regarding the presence of student mental health issues on college campuses, the importance of addressing mental health issues, mental health stigma involved in seeking help, education and training of campus staff to recognize and refer students with mental health issues, and training methods that have proven effective in reducing mental health stigma including a description of instruments. This chapter is organized using the following primary headings: Mental Health Issues on College Campuses, Stigma, Methods to Decrease Stigma, and Measures of Public, Perceived Public, and Self-Stigma. The chapter closes with a summary of the literature provided.

2.2 Mental Health Issues on College Campuses

Approximately 26% of the U.S. population meets criteria for at least one DSM-IV diagnosis each year (Kessler et al., 2005). Over the lifetime, half of mental illnesses begin at age 14; three-fourths begin by age 24 (Kessler et al., 2005). These statistics suggest that the likelihood of an adolescent or young adult experiencing a mental illness is one in
four. Many of these young adults will enter the work force; many others will enter college.

The college years are at time of development to adulthood, transition to independence, and awareness into an emerging identity (Arnett, 2000). This is a challenging time for young adults, characterized by increased stress regarding career and financial concerns and finding a sense of belonging. However, some students are challenged in other ways, possessing mental or emotional problems, and do not often possess the skills necessary to cope with college life. They need the help of additional campus services, such as counseling. Without the aid of counseling services, many of these students, particularly those with severe or persistent symptoms, will continue to experience these problems, resulting in academic and social issues that may impact their ability to complete college. In addition, they may also find themselves engaged in maladaptive behaviors such as substance abuse (Hunt & Eisenberg, 2010).

Mental health is defined as “a state of well-being in which every individual relies on his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community” (WHO, 2014). It is not simply the absence of mental illness, but efforts at promoting emotional health. It is essential to our individual abilities as well as to a collective society.

Mental health issues, or the lack of positive mental health, are prevalent among the college population. The American College Health Association’s National College Health Assessment (2013) reported that over 41% of college students surveyed rated their stress in the 12 months prior to the survey as “more than average” (p. 16). Over 48%
reported more than three areas of their lives were “traumatic or difficult to handle” with the highest amount of stress experienced in academics, finances, and intimate relationships, respectively (p.15). Stress attributed to 28.5% of students reporting difficulties. Over 19% reported that anxiety affected their performance, while over 12% reported that their academics were affected by depression. However, with all of this stress, only 8.4% reported that they received a diagnosis, such as Anxiety Disorder, Major Depression, ADHD, or Panic Disorder, or treatment from a professional for mental health issues as a result from their stress. Moreover, diagnosis and treatment was only provided for one type of mental health issue in this population; even fewer students received diagnoses or treatment for multiple issues.

College students with mental health issues experience college differently than their counterparts (Salzer, 2012). Mental health issues can affect students’ physical, emotional, cognitive, and interpersonal functioning (Kitzrow, 2003). Douce and Keeling (2014) found that stress, anxiety, depression, and harmful behaviors such as substance use compromise the quality and quantity of learning. These issues decrease problem solving ability, weaken creativity, and undermine motivation and commitment needed to succeed in higher education. In a study conducted by Salzer, 2012, there was a statistically significant difference between students with mental health issues and those without regarding significant relationships with other students on campus ($p < .005$) in that those with mental illness have fewer of these relationships. The magnitude of this result is large as determined by the effect size ($d = .93$). The same is true with regard to relationships with faculty ($p < .005$) and relationships with administration ($p < .005$) although the effect size is smaller ($d = .28$ and .35, respectively). Those with mental
health issues also reported less use of campus facilities ($p < .005; d = .58$). These results suggested that interventions are needed to engage students on campus, as it is a successful college experience that leads to retention (Salzer, 2012).

Students with mental health issues also experience academic problems at a higher rate than those not experiencing mental health problems. Hysenbegasi et al. (2005) found that grade point averages were .49 of a point (half a letter grade) lower in students with diagnosed depression. These students reported frequent interruptions with their symptoms that prevented them from performing at a higher level. Douce and Keeling (2014) reported that students who are depressed can expect to learn more slowly, learn not as well, and learn less than their peers. In her review of the impact of mental health on academic performance, Kitzrow (2003) found consistency in students with higher test anxiety, lower academic self-efficacy, less effective time management skills, and fewer use of academic resources. They were also less likely to seek assistance for these problems.

Students with mental health issues not only affect their own college success, but can also affect the success of others in the form of disruptive and potentially dangerous behavior (Kitzrow, 2003). They often have difficulty getting along with roommates and can be disruptive in class. At the extreme, they can pose a risk of harm to themselves and others, leading to risk management concerns and possible legal ramifications. Students who do not address these issues often require more attention and time from faculty, staff, and administration.

The CCMH (2014) reported trend data on counseling center utilization beginning in the fall of 2008. At that time, 66 institutions participated in the survey. During the
2013-2014 academic year, 140 institutions participated. The number of clients who took the survey in 2008 was 32,329; in 2013-2014 the number was 101,027. During that time, the number of students who sought counseling services remained steady, from 51% in the fall of 2008 to 48.1% in the 2013-2014 academic year. However, those who had seriously considered suicide increased from 25% in 2008 to 30.9% in 2013-2014. Those who reported having experienced a traumatic event also increased from 31.1% in 2008 to 38% in 2013-2014. These numbers indicate that more students are experiencing emotional and mental stress at a greater rate and intensity, but the same number of students are seeking services. It also suggests that student mental health issues are more than adjustment issues, but involve severe mental health and emotional problems (Zivin et al., 2009).

The same authors studied college students over a two-year period and found that 60% of those who stated they had a mental health problem in 2005 continued to experience problems in 2007, albeit some of the issues had changed over time and varied in intensity (Zivin et al., 2009). Only 18% of those students received treatment in 2005; only 25% received any treatment in the two years of the study. Another longitudinal study surveyed students across a two-year period and found that 33% of those identified with mental health issues received treatment at the beginning of the study which then decreased to 20% receiving treatment two years later (Eisenberg et al., 2011). In another study, 30% of students identified a need for mental health treatment, but only 15% of students actually received counseling or medication, with services for depression and anxiety higher than for other mental health issues (Eisenberg et al., 2007). In all three studies, sample sizes represented demographics on the national level, with two of the
studies focusing on one large public 4-year institution while the other recruited students from 26 campuses.

The National Survey of College Counseling Centers (Gallagher, 2014) surveyed counseling center directors and found that 94% of directors believed that there has been a steady increase in the number and severity of students with mental health issues. In addition, 86% reported that there has also been an increase in the number of students arriving on campus already diagnosed and prescribed psychiatric medication. Of the students that receive counseling services, directors reported that 52% had severe psychological problems, with 8% having impairment so serious that it impacted their ability to remain in school. Similar results were reported in a qualitative study with university counseling center directors (Watkins et al., 2011). Although the number of students served remained consistent, the presenting mental health issues increased in severity over prior years, and more resources were needed to meet the demand and complexity of these issues from year to year.

### 2.2.1 Explanations for the Underutilization of Counseling Services

Many factors have been attributed to underutilization of counseling services. As much as these students may benefit from counseling services, many are not aware that these services exist (Eisenberg, Golberstein, & Gollust, 2007; Kitzrow, 2003) or do not understand the purpose of the services (Quinn et al., 2009). There may be a lack of visibility on campus, affecting the ability of the counseling center to recruit and engage students in services. Professional staff and faculty may also overlook these services, focusing more on academic routes to success such as disability services, tutoring, and advising. The lack of visibility also leads to a lack of referrals from staff and faculty.
Academic departments, financial aid offices, and admissions offices have regular contact with students and often overlook this service due to lack of information about counseling services or the lack of understanding of what counseling provides. Staff who are familiar with counseling services often do not recognize student issues as affecting their mental health or feel qualified to refer them to treatment (Quinn et al., 2009). This lack of information and coordination between the counseling center and the rest of the university can present real problems for students who continue to experience mental health symptoms without adequate coping skills.

Students who are aware of counseling services do not seek them out for many reasons. Often, students are unable to recognize stress as impacting their mental health. According to Quinn et al. (2009), students tend to come to counseling only when they assess their needs to be severe. Otherwise, they are likely to seek out other resources on campus, such as faculty, friends, tutors, and advisors. With the advent of social media, many students disclose their issues online, whether to seek help from others or simply vent (Eisenberg, Hunt, & Speer, 2012b). In addition, students often do not recognize that their issues can be helped by counseling services (Hunt & Eisenberg, 2010). Eisenberg et al. (2012b) found similar results in that students who were surveyed reported positive beliefs about treatment but questioned whether their issues were serious enough to warrant counseling and preferred to discuss them with friends or handle the issue themselves. The students also believed that stress was a normal part of the college experience, thus did not need professional attention. Similarly, Eisenberg et al. (2007) found that students did not seek services due to a disbelief in its effectiveness, a lack of knowledge of insurance coverage, a lack of time, and a lack of perceived need. Other
students believed that if they were having academic difficulties, regardless of the mental health impact, they should approach their advisor or faculty to discuss the issues (Quinn et al., 2009).

In a study of students with suicidal thoughts, results found that they kept silent due to concerns about burdening others and academic consequences or hospitalization (Eisenberg et al., 2012c). In another study, it was found that approximately half of those who identify as suicidal do not seek treatment (Nordberg, Hayes, McAleavey, Castonguay, & Locke, 2013) for similar reasons. Rejection by others is also a reason students were silent. Finally, self-mutilation was also found to be an indicator to not seek treatment, possibly because, in their mind, these behaviors are often used to reduce emotional tension which negates the need for counseling.

There are other reasons that students do not seek counseling. In terms of demographics, students are reluctant to engage in services if they are male (Komiya et al., 2000), of a minority race, classified as an international student, religious, heterosexual, or of a lower socio-economic status (Eisenberg et al., 2011). Some students do not seek help due to a lack of openness to emotions (Hunt & Eisenberg, 2010; Komiya et al., 2000). According to Vogel et al. (2007), the amount of emotional expression that students were willing to disclose was positively linked to anticipated benefits of treatment and negatively related the anticipated risks of treatment. For this reason, symptoms of social anxiety and hostility often cause students to avoid seeking counseling (Nordberg et al., 2013). It is evident that many college staff, faculty, and students are either unfamiliar with or do not understand the benefits of receiving mental health services. Therefore, counseling services remain underutilized while students continue to struggle with the
challenges that mental health issues bring. Symptoms of anxiety, depression, and overall stress can lead to academic, social, and financial difficulties. Eventually, many of these students are faced with the decision to stay or leave the college environment.

2.2.2 Retention and Mental Health

With the issue of underutilization among students with mental health issues, the question of retaining these students becomes challenging. Retention is defined as the continued enrollment in higher education with the intention to graduate (Tinto, 1975; Turner & Berry, 2000). As explained in Tinto’s Student Integration Model (1975), students each bring individual attributes, experiences, and backgrounds to college. These traits influence the development of academic goals and institutional commitment as well as the interaction between the individual and the academic and social systems of the university. It is theorized that either low goal or institutional commitment can lead to attrition. In other words, the level of integration is directly related to retention (Tinto, 1975). In this model, students with mental health issues do not align with the social norms and culture of the university and often drop out of school. In order to support retention efforts, Tinto (1999) stated that information/advice, support, involvement, and learning initiatives are essential for students. In the case of those students with mental health issues, support in the form of counseling is key.

Van Brunt (2008) found that students with mental health issues are at higher risk for leaving college; however, students who were in counseling for emotional issues were more often retained than those who did not have counseling. UCLA’s Higher Education Research Institute conducted its annual study of first-year students across the country and found that those students who felt frequently depressed reported lower levels of
concentration, energy levels, and motivation as evidenced by feeling bored in class, arriving late to or being absent from class, and falling asleep more often than those who occasionally reported or did not report depression (Eagan et al, 2014). Martin (2010) found that of 54 students studied, 53 reported that mental health issues negatively impacted their studies, including problems with concentration, completing work on time, motivation, and attending classes. Douce and Keeling (2014) reported that about 70% of students who use counseling services state that their personal issues have impacted their academic performance, and at least 20% of those students have considered dropping out as a result.

During the past several decades, studies have been conducted to demonstrate the effectiveness of counseling with retention. Bishop and Brenneman (1986) reported that more than 86% of students who sought counseling due to adjustment and academic concerns enrolled for at least one more semester. Bishop and Walker (1990) reported that students who received counseling responded favorably in that someone was there to listen, provide personal support, and help them deal with their fear of failure. Illovsky (1997) found that 75% of students who received counseling were retained from year one to year two, whereas only 68% of the general population was retained. Wilson et al. (1997) found that students who received counseling for issues related to well-being succeeded more in academics and were retained 14% over those who did not receive counseling. More recently, Lee et al. (2009) found that students who received counseling were three times more likely to stay enrolled in school than those who did not. Conversely, Hunt et al. (2010) found that students with certain diagnoses, including Bipolar Disorder and Antisocial Personality Disorder, who received counseling, were
more likely to drop out of school. In other studies, Kessler et al. (1995) and Stevenson (2010) reported that among college students, 4.7% drop out due to mental health issues, with men affected by conduct disorders and women from anxiety disorders. This equates to approximately five million students who dropped out of college during that year.

It is not just academic issues that predict attrition. Banyard and Cantor (2004) studied protective factors, individual traits that promote positive adaptation, and found that those who possessed positive coping skills and resiliency were more likely to be successful in college. Shields (2001) found that those with a perception of control over their environment, or ability to actively cope, were more likely to cope with the stress of college. Gerdes and Mallinckrodt (1994) found that emotional and social adjustment predicted attrition as well or better than academic issues. Students in the study tended to overestimate their ability to adjust academically and socially to college. O’Keefe (2013) and Salzer (2012) determined that feeling rejected and not being able to develop a sense of belonging were strong predictors of attrition. Their stress and fear of being seen as having a mental illness can affect their self-esteem, and thus their academic and social lives (Kondrat & Early, 2011; Link et al., 2001). Thus, they may withdraw from attending class and social activities due to shame, guilt, and fear, all of which can prevent students from seeking those services that may help with their mental health concerns (Mowbray et al., 2006). Martin (2010) found that over half of students studied rated personal and social issues higher than academics as the most difficult obstacles to overcome when dealing with mental health issues. Overall, these students were less satisfied with the college experience and often had difficulty adjusting to the role of a college student.
Data which demonstrate that counseling has an impact on retention rates is useful in administrative planning and budget development (Bishop, 2010; Sharkin, 2004). However, it is often less recognized as having a direct impact on education in favor of academic advising. According to ACT (2014) data, first-to-second year retention rates for students at a 4-year public institution with open enrollment is 54.8%. Of those who identify with having mental illness, 64% said they dropped out of college due to the struggles with their illness, and 50% of those students reported to have never sought counseling services. According to Stevenson (2010), 4.7% of college students drop out each year due to mental illness. This equates to approximately five million students per year. Overall, the relationship between counseling and retention is of great importance and deserves recognition by college administration (Bishop, 2010). Counseling students with mental health issues help improve retention, and college administrators need to recognize the value in referring students to counseling services for social, emotional, and academic purposes.

College attrition has lasting effects on a person’s life, and can also affect the larger population. Students who drop out report difficulty managing independence and living away from home (Gerdes & Mallinckrodt, 1994). Unfortunately, these students are just as likely to not seek treatment for their mental health issues in their community as they were in college. They often experience the loss of the revenue that comes with a higher education, and are more likely to be unemployed or underemployed (O’Keefe, 2013). As a result, the labor market is weakened. State and federal funding is appropriated to more programs to assist with those who earn less than a living wage (Sharac et al., 2010). In addition, healthcare costs increase. The community becomes
resentful toward those who cannot “make it on their own.” Thus, their inability to cope with stress remains a challenge to their everyday lives.

2.3 Stigma

Why might college students who have mental illness not take advantage of counseling services despite knowing that they exist? Stigma, the negative attitudes and beliefs about mental health treatment, may be one explanation. As the studies above demonstrate, negative attitudes and beliefs significantly inhibit help seeking behavior among college students (Eisenberg et al., 2007; Eisenberg, Downs, & Golberstein, 2012a; Hunt & Eisenberg, 2010). Stigma can be defined as “a socially constructed mark of disapproval, shame or disgrace that causes significant disadvantage through the curtailment of opportunities” (Martin, 2010, p.261). Stigma is multidimensional and involves attitudes, feelings, and behaviors (Penn & Martin, 1998). It is one of the most profound social barriers to inclusion for those with mental illness (Krupa et al., 2009). The factors that contribute to the manifestation of these stigmatizing components also include lack of social skills, poor appearance, and the perception that people with mental illness are dangerous (Penn & Martin, 1998). In this sense, stigma is also defined as a characteristic or trait that is devalued in a particular social context (Crocker et al., 1998).

In a broad sense, mental health stigma consists of the interaction of negative and derogatory components which serve to exclude those with mental illness from the larger population (Link & Phelan, 2001). These components include labeling, stereotyping, separating, and discriminating in a way that exudes power over those who are oppressed (Corrigan et al., 2003b; Link & Phelan, 2001). Labeling is defined as a process by which human differences are selected for exclusion of the salient group (Link & Phelan, 2001).
This type of categorization infers that certain traits are desirable while other traits are undesirable. Stereotyping is central to the concept of stigma in which labels form a set of undesirable characteristics (Link & Phelan, 2001). Stereotypes evoke split-second decisions about a group of people who possess those characteristics. In social science, both labeling and stereotyping are means to marginalize a certain population from the mainstream culture.

Separating is the act of removing the stereotyped and labeled population from the mainstream culture (Link & Phelan, 2001). It creates an “us” versus “them” culture which serves to reassure those who stigmatize that they are part of a more desired standard. This separation then causes the labeled and stereotyped person to experience status loss and discrimination (Link & Phelan, 2001). In this sense, labeling is associated with negative outcomes of having a mental illness, which may actually exacerbate the symptoms of the condition (Penn & Martin, 1998).

Figure 2.1 illustrates the components of stigma. When people are labeled due to undesirable characteristics, a rationale is developed for rejecting and excluding them. According to Corrigan (2004), those who possess the traits may seek to avoid labeling by denying the existence of the traits and not seeking the care to help them. “This kind of label avoidance is perhaps the most significant way in which stigma impedes care seeking” (p. 616). Link et al. (2004) also consider emotional reactions as a function of stigma. Those who stigmatize often have negative feelings toward the disenfranchised population, such as anger, hate, pity, anxiety, fear, and irritation. Those who are stigmatized often feel embarrassment, shame, humiliation, alienation, fear, and anger. Emotions on the part of both those who stigmatize and those who are stigmatized can
lead to further labeling, stereotyping, and separating as the feelings often reinforce these thoughts or are reinforced as a result of behaviors due to the emotions.

The Impact of Stigma and Discrimination

- Biological Vulnerability
- Psychiatric Symptoms
- Misconceptions
  - Stigma
  - Discrimination
- Loss of Social Opportunities
- Poor Quality of Life

Figure 2-1: The Impact of Mental Health Stigma on Individuals (Corrigan, 2004)

Corrigan et al. (2014) defined stigma as a “complex construct that includes public, self, and structural components” (p. 37). Public stigma is defined as the acts of a naïve public when they endorse prejudice against the stigmatized group (Corrigan, 2004). There are two types of public stigma: that which discriminates against the stigmatized group and that which discriminates against those who might seek help for a mental illness (Vogel & Wade, 2009). A person’s perception of stigma is often referred to as perceived public stigma (Corrigan, 2004). Self-stigma is how members of the stigmatized group see themselves as a result of internalizing the public stigma (Corrigan, 1998; Link, 1987; Link & Phelan, 2001).

Table 2.1 explains the differences in public and self-stigma. Note that stereotype, prejudice, and discrimination apply to both types. One component of self-stigma is due to
perceived public stigma (Corrigan & Matthews, 2003), the label avoidance which occurs when those who need help recognize the public discrimination against those with mental illness (Corrigan et al., 2014). As a result, they refuse to seek the help they need so as to avoid being seen as part of that group, which only exacerbates the problem. Although not a focus of this study, structural stigma involves the social and institutional policies that undermine and oppress those who are stigmatized (Corrigan et al., 2004). Lack of funding for mental health services and lack of parity in health care coverage are examples of structural stigma.

Table 2.1: Comparing and Contrasting the Definitions of Public and Self-Stigma

<table>
<thead>
<tr>
<th>Stereotype</th>
<th>Prejudice</th>
<th>Discrimination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Stigma</td>
<td>Negative belief about a group</td>
<td>Agreement with belief and/or negative reaction</td>
</tr>
<tr>
<td></td>
<td>e.g., dangerousness, incompetence, character weakness</td>
<td>e.g., anger, fear</td>
</tr>
<tr>
<td>Self-stigma</td>
<td>Negative belief about self</td>
<td>Agreement with belief as it pertains to the self</td>
</tr>
<tr>
<td></td>
<td>e.g., character weakness, incompetence</td>
<td>e.g., negative emotion about self</td>
</tr>
</tbody>
</table>

Stigma exists on a continuum (Link & Phelan, 2001). There are varying degrees of labeling which can connect to one or several stereotypes. The amount of separation into different groups can vary from one context to many and according to only a few or many labels. Discrimination and status loss also exist as a matter of degree. Some groups
are discriminated more than others, usually due to how labels and stereotypes are perceived and according to context.

Stigma is the result of a number of factors involving knowledge, attitudes, and behavior (Thornicroft et al., 2008). Ignorance is the result of a lack of knowledge about mental illness, treatments, and persons living with its effects. A widely held assumption regarding ignorance is that it is the main cause of stigma (Boysen & Vogel, 2008). However, ignorance is not solely the lack of knowledge; other factors that lead to ignorance include attitudes and beliefs. Stigmatizing attitudes are displayed through prejudicial beliefs which seek to find reasons to exclude those with mental illness from the mainstream population. Research states that these negative beliefs often involve the idea that those with mental illness are dangerous, incompetent in that they cannot care for themselves, and that they are somehow responsible for the character flaw that is their mental illness (Corrigan, 1998). Finally, discrimination is the acting out of prejudicial beliefs and attitudes toward those with mental illness.

2.3.1 Theories of Stigma Development

Social cognitive theories are often used as the basis to describe how discrimination is formed and acted upon (Corrigan, 2000). They ascertain that stigma is the “product of processing human knowledge structures” (p. 49). These theories are heavily researched due to their broad theoretical base and serve to provide a simple explanation for why stigmas form. Two theories that describe how stigma forms include social cognitive theory and attribution theory. Both are based in the perceptions and beliefs individuals hold that categorize whether members of society display attributes that are inclusive or exclusive to the general population.
Corrigan et al. (2003b) broke down social cognitive theory into two models as to how stigma forms. The first is that stigma is a normal cognitive reaction to those with mental illness due to the bizarre thoughts and behaviors exhibited by them. In this case, stigma is based on assumptions (Krupa et al., 2009) that can fuel discrimination and uphold beliefs that prove resistant to change. These assumptions are borne out of perceptions and contact with the stigmatized group. Perceptions are often based on social and cultural norms about the particular group and often contain attributes not easily observed, such as motivation, values, and intentions (Corrigan, 1998). These assumptions and beliefs are implicit cognitive structures that individuals use to make sense of society, otherwise known as social cognitive theory (Bandura, 1989).

The second model is that stigma is a reaction to real aspects of mental illness common to all who feel it, otherwise known as stereotype accuracy (Corrigan et al., 2003b) or the “kernel of truth” described by Allport (1954) in his theory of personality. This model states that if people with mental illness are more dangerous, incompetent, and irresponsible that those without mental illness, then it is reasonable to assume that these traits are normally associated with mental illness. With attribution theory, individuals search for causal answers for events occurring in daily life by asking “why” and behaving according to the answer they receive (Weiner, 1993). With regard to mental illness, individuals behave according to the answers they receive about the stability and controllability of those factors. If mental illness is perceived as the responsibility of the person to control, individuals are more likely to project blame and judgment and act in ways that promote discrimination.

2.3.1.1 Social Cognitive Theory
Social cognitive theory looks at behavior through a triadic model of reciprocal causation (Bandura, 1989). The influences are behavior, personal factors, and environment. Each contribute a percentage of the cause, and one influence may be stronger than another. In terms of explaining mental illness, social cognitive theory attempts to categorize information to make sense of what it means (Corrigan, 1998). In this way, stigma is the cognitive structure that helps the mainstream public make sense of mental illness.

Despite the amount of research suggesting that stigma is a primary cause of untreated mental health problems, there is research that supports other barriers to treatment. While the socio-cognitive processes of stigma often cause people to avoid mental health care, and thus the stigma attached to it (Corrigan, 2004), the Healthy Minds study found that 65% of students with untreated mental health problems reported low stigma and positive beliefs about treatment (Eisenberg et al., 2012b). Other barriers include time, perceived need for help, and preferring to deal with the issues on their own. Golberstein et al. (2008) found that lack of knowledge about and availability of counseling resources presented themselves as barriers to treatment of college students over and above mental health stigma. However, these barriers may be related to stigma in how mental health treatment is perceived to be important to one’s overall health. On a macro-level, structural stigma may influence barriers to treatment over individual stigma (Corrigan, 2004). Economics, institutions, and universal policies can deny people access to care and opportunities for an improved quality of life.

2.3.1.2 Attribution Theory
Attribution theory addresses how explanations of behavior influence the perceptions of people (Boysen & Vogel, 2008). It is a social cognitive approach to categorizing information about social groups (Corrigan, 2000) through the use of motivation and emotions (Weiner, 1993). Attributes are formed in two ways. First, there is an oversimplification to creating groups (Link & Phelan, 2001). Most attributes are dichotomous; either black or white, gay or straight, those with or without mental illness.

Second, traits that are deemed most important due to social selection also define attributes, and differ according to culture, time, and place. In terms of mental illness, attribution theory helps determine whether those exhibiting symptoms should be shunned or accepted into the mainstream group, usually by assessing the controllability and responsibility one has for their illness and behaviors.

Controllability is defined as the amount of influence one can exert over their circumstances (Weiner, 1993). There are two types of controllability: onset controllability which determines whether the person has any influence over contracting the illness and offset responsibility which determines whether the person is trying to cope with and overcome the illness (Corrigan, 2000). When symptoms are seen as uncontrollable, the person is judged not responsible for their plight or their behaviors (Boysen & Vogel, 2008) and is considered an “innocent victim” (Weiner, 1993, p. 960). On the other hand, when symptoms are seen as controllable, the person is judged as responsible, thus moral failures (Weiner, 1993). The inferences lead to emotional reactions of those in the mainstream culture of anger or pity (Corrigan et al, 2003a).

The level of responsibility and amount of helping behavior and empathy exhibited by those in the mainstream group is an inverse relationship as those who cannot control
their behaviors are seen as needing help, while those who are perceived as able to control their behaviors are irresponsible and in need of helping themselves. Often this is based on whether the illness is seen as biologically based versus behaviorally based (Boysen & Vogel, 2008) with those who are biologically based seen as more sympathetic and not of the person’s doing. Boysen and Vogel (2008) studied college students’ perceptions of those with mental illness and found attribution theory at work: those with a biologically based mental illness (e.g., schizophrenia) were found to be held less responsible for their behavior whereas those with a behaviorally based issue (e.g., drug abuse) were found to be held more responsible. Corrigan et al. (2000) found that students discriminate more toward mental illnesses over physical or medical illnesses, and within mental illness, those illnesses deemed within the person’s control was stigmatized more than biologically based mental disorders. In yet another study, Corrigan et al. (2003a) found that attributions regarding the cause of mental illness as well as perceptions of dangerousness predicted people’s level of discriminatory responses such as unwillingness to help or to mandate treatment. They are also more likely to avoid those with mental illness for fear of dangerousness.

According to Weiner, Perry, and Magnusson (1988), individuals with biological issues such as blindness and cancer were found to have low controllability (onset-uncontrollable) and thus low responsibility for their issues whereas those whose conditions were more behaviorally based, such as drug addiction, obesity, and AIDS were deemed as having high level of controllability (onset-controllable) and thus a high level of responsibility. Onset-uncontrollable issues were more positively correlated with emotions of pity and liking and behaviors of help-giving and little judgment. Onset-
controllable issues were more associated with no pity, anger, dislike, and no help-giving behaviors.

Goffman (1963) was a primary researcher of mental health stigma. Besides defining the term as it pertains to mental health, he also made a distinction between discredited and discreditable groups. Discredited groups display a physical characteristic, such as skin color, that indicates group membership. Discreditable groups involve those characteristics that are hidden from view, such as mental illness, and that are only recognized unless a person discloses the information. Discredited groups are subjected to more cognitively constructed stereotypes because these traits are easily seen and perceived, whereas discreditable groups are subjected to social constructed in that the public learns what it means to possess a certain characteristic from those who possess it or those who study it. Other ways that the public must insinuate traits of mental illness are from labels, psychiatric symptoms, deficits in social skills, and physical appearance (Penn & Martin, 1998).

### 2.3.2 How Stigma Affects Opportunities

The public’s perception of mental illness can vary depending on the diagnosis and severity (Mann & Himelein, 2004). In fact, Mann and Himelein (2004) found that undergraduate students tended to stigmatize those diagnosed with schizophrenia over depression. However, public perceptions of mental illness often exaggerate symptomology and stigmatize all forms of mental illness regardless of diagnosis, creating a culture of stigmatization that knows no boundaries. As a result, those with all forms of mental illness tend to be denied opportunities to achieve goals and live a better quality of life (Corrigan, 2004). Denied opportunities lead to status loss (Link & Phelan, 2001) as
those with mental illness are relegated to second-class citizenship. Many are thought of as
dangerous and socially undesirable (Link et al., 1999; Phelan & Link, 2004). Their
behavior induces fear in the public’s eye, and the result is social isolation from the
mainstream population.

Stigma not only impacts the public’s attitudes about mental illness; it also affects
their behavior. Those who stigmatize are less likely to hire, less likely to provide
adequate housing, and often criminalize those with mental illness over those without
mental illness (Corrigan, 1998). People in authority believe that those with mental illness
are unable to live on their own, be responsible for a job, and need to be cared for by
professionals (Corrigan et al., 2003b). For example, employers were found to
discriminate toward those with mental illness in terms of hiring, promoting, accessing
benefits, and providing opportunities for morale (Krupa et al., 2009). Therefore, stigma
often leads to underemployment, unemployment, or underutilization of the person’s
skills. It affects their income, access to health care, and availability of resources (Sharac
et al., 2010). Those with mental illness become less of an asset, and the workforce
becomes strained for lack of additional, qualified employees, homeless shelters become
full, and jails become overcrowded. In the case of unemployment, those with mental
illness must rely on a government system that also stigmatizes them. They are less likely
to receive medical benefits that cover the range of services they need (Corrigan, 2004).

Criminalizing mental illness involves law enforcement officers who respond to,
and often arrest, those with mental illness due to stigmatized beliefs about their behavior
(Corrigan, 2004). This leads to overcrowding in jails where, due to lack of resources,
inmates are likely denied access to treatment or social services that would assist them once released. The overcrowding leads to early release, and the cycle begins again.

The impact of public stigma affects the well-being and self-concept of those with mental illness to a negative degree. Some internalize those beliefs and begin acting in a way that supports the stigma (Corrigan, 1998). The negative self-esteem and lack of confidence are evident in less successful employment and relationships. Family discord, lack of community acceptance, and withdrawal into isolation are also adverse effects felt by those who are stigmatized (Penn & Martin, 1998). As if having the mental illness is not enough, these people may also endure depression, anxiety, and substance use as a result of being shunned from society.

### 2.3.3 How Stigma Affects Personal Lives

As a result of public stigma and lowered self-esteem, those with mental illness often delay or refuse to seek mental health treatment (Corrigan, 2004). This includes compliance with psychotropic medications, as use can be associated with weakness, severity of illness, and an inability to cope with problems (Castaldelli-Maia et al., 2011). According to Thornicroft (2008), most eventually seek treatment, but do so after an average of eight to nine years after symptoms began. Due to some of the negative feelings they have about themselves and their condition, many see others with mental illness as responsible for their disorders and refuse treatment so as not to be identified with that group (Cooper et al., 2003). Still others do not receive help due to a lack of support and understanding from family and friends (Quinn et al., 2009). It is this perception of others who are in need of mental health treatment, usually from a lack of
understanding about such issues, which is a major reason why students refuse to seek treatment.

Some individuals continue to believe that if they have issues and are attending treatment, some of their friends will think that they are “crazy” (McVicar, 2015, p. 2). Komiya et al. (2000) found that sigma was a deterrent to seeking counseling, and Hunt and Eisenberg’s (2010) literature review provided evidence of many studies where negative attitudes and stigma impacted help-seeking behavior. As a result, this lack of care tends to exacerbate symptoms and increase the stress felt by mental health stigma (Britt et al., 2008).

2.3.4 Perceived Public Stigma

According to Modified Labeling Theory (MLT; Link et al., 1989), internalization of the stereotypes of mental illness can negatively affect a person’s willingness to seek help. If they perceive receiving help as a negative consequence of mental illness, they will avoid treatment in order to avoid the labeling that comes with it. Britt et al. (2008) conducted a study measuring the relationship between help-seeking and perceived public stigma among college students. They found a direct relationship between perceived public stigma and depression and stress level, meaning that when perceived public stigma was high, students’ symptoms of depression and stress level were higher than those without a high level of stigma. The results indicated that perceived public stigma may be a primary indicator for students to avoid getting the help they need.

In another study of undergraduate students, high levels of perceived public stigma contributed to self-stigma, which negatively affected help-seeking attitudes and behaviors (Vogel et al., 2007). A third study contradicted the previous results regarding younger
students (Golberstein et al., 2008). Whereas a direct relationship between perceived public stigma and help seeking was found among older students (above age 22), the same was not true for undergraduates between the ages of 18-22. Possible reasons for this discrepancy include the amount of time exposed to the symptoms; younger students may not have had time to experience the negative stereotypes of having mental health issues. Another is that the older graduate-level students were of the opinion that they need to address their mental health issues on their own, similar to how they would address other issues in their lives. Although conflicting results were found, the study indicated that perceived public stigma does impact help-seeking with certain groups, and further research is needed to determine to what degree and which groups this impacts.

2.3.5 Self-Stigma

Those with mental illness are often aware of how they are perceived by the public. While some do not agree with the stereotypes and persist in their quest for a better quality of life, others succumb to these beliefs, leading to negative self-esteem, vulnerability to discrimination, and poor treatment compliance (Corrigan & Watson, 2002; Lannin et al., 2015). The internalizing of public stigma is known as self-stigma (Corrigan, 2004; Eisenberg et al., 2009; Vogel et al., 2006) which can further be broken down into the self-stigma of having a mental illness and the self-stigma with seeking psychological help (Tucker et al., 2013). This internalization of public stigma (Corrigan, 1998; Link, 1987; Link & Phelan, 2001) can be more detrimental to a person’s psyche than public stigma. Research confirms that those who experience self-stigma are aware of the stereotypes and discrimination and, in turn, agree with and behave according to these
beliefs, leading to decreased self-esteem, demoralization, and decreased self-efficacy (Corrigan & Watson, 2002; Tucker et al, 2013; Vogel et al., 2013b).

Whereas self-stigma is defined as both the stigma of having a mental illness as well as the stigma of seeking professional help, there are differences between the two (Tucker et al., 2013). Link (1987) considered seeking services as part of self-stigma, and proposed that much of the research in this area focuses on those who are seeking psychological services, as it is this behavior that tends to link someone to identifying as having a mental illness. Whereas labeling from others often occurs with self-stigma associated with having a mental illness, those who seek mental health services are assigning a label to themselves (Vogel & Wade, 2009). As a result, individuals tend to avoid receiving services so as to avoid the consequences of labeling and self-stigma.

Tucker et al. (2013) studied two samples of undergraduate students: one with clinical levels of psychological distress, and the other with a reported history of mental illness. Both groups were provided several instruments measuring self-stigma. Results indicated that both types of self-stigma are indeed different, and that each type can affect self-concept differently. Two constructs associated with self-stigma, shame and self-blame, were analyzed in both groups. Shame was measured equally among both types of stigma while self-blame was a predictor associated with the self-stigma of seeking help, likely due to perceived controllability of having a mental illness. In other words, those who perceive that receiving treatment will assist in managing their symptoms were less likely to blame themselves and more likely to perceive control over their illness. Those who perceive a lack of control over their symptoms were more likely to blame themselves and incur self-stigma.
Corrigan et al. (2006) describe the process of developing self-stigma as stereotype awareness / stereotype agreement (being aware that the stigma exists and applying it to others), self-concurrence (belief that the stereotypes apply to them), and self-esteem decrement (diminished self-esteem as a result of the beliefs). These phases are also known as the “three A’s” of self-stigma: awareness, agreement, and application (Corrigan et al., 2009, p. 75). Link (1987) found that those who agree with the negative stereotype tended to avoid pursuing opportunities that would lead to a better quality of life, such as housing and employment. On the other hand, while Corrigan et al. (2006) found that self-esteem and self-efficacy were significantly related to stereotype awareness, it was not significantly related to stereotype agreement. In other words, those who agreed with the stereotype of mental illness did not necessarily apply it to themselves. It could be that stigma could evoke a sense of empowerment in that those with mental illness refuse to be thought of and act in that way (Corrigan et al., 2009).

According to Vogel et al. (2013b), MLT helps explain the relationship between public and self-stigma. Negative perceptions often lead to negative internalized perceptions. These negative perceptions of self, or self-stigma, can lead to counterproductive behavior. In this case, those with self-stigma often refuse counseling and other therapeutic measures.

Vogel et al. (2013b) studied the relationship between public and self-stigma among college students over a three-month time span and found that public stigma is internalized with self-stigma over time, and that the higher the public stigma level, the higher the self-stigma. This supports the view posited by MLT. In another study, Vogel et al. (2007) found that public stigma and self-stigma were positively correlated with one
another, and that self-stigma, in particular the self-stigma of seeking psychological help (Lannin et al., 2015; Vogel et al., 2013b) was negatively correlated with help-seeking behavior. In this study, it was the internalized beliefs that stemmed from public beliefs that prevented those with mental illness from making decisions in their best interest. This is also known as the “why try,” or learned helplessness, effect in that those who possess self-stigma often ask themselves why they should try to promote a better life for themselves (Corrigan et al., 2009; Seligman, Maier, & Geer, 1968). According to Corrigan et al. (2009), this effect is the result of three components: self-stigma, level of self-esteem, and level of accomplishment with goals. Combined with how mental illness is perceived, these components create a sense of devaluation and discrimination within the affected person, resulting in the question, “Why try?”

2.4 Resident Advisors

With data on retention rates focusing on first- and second-year students, it is reasonable to assume that focusing on these students, especially those with mental health issues, will help retain them. An effective method of decreasing mental health stigma on a college campus with the hope of increasing counseling utilization is to work with staff who come into contact with students on a frequent basis (Brunson & McKee, 1982). On a residential campus, Resident Advisors (RAs) often have frequent contact with students living in the residence halls. The RA serves a dual role as peer and support provider who can assist students with mental health and academic needs. As a support provider, they serve a critical function in recognizing the needs of students and referring them to campus resources, including mental health services (Boswinkel, 1987). According to
Boswinkel (1987), “The RA is exposed to the students daily and can identify problem situations before they turn into crises” (p. 53).

College administrators agree that RAs are in a better position to identify and help students who live on campus since students relate more to their peers than adults or authority figures (Dodge, 1990). However, they also agree that the job of RA has become more complex and demanding as the needs of students have changed, thus creating more of a need for ongoing and intensive training by service units such as counseling centers. Some resign due to the stress of the job, while others confuse roles and endure job dissatisfaction. Deluga and Winters (1990) found that as stress increased among RAs, the more they would confuse their roles and responsibilities and endure role conflict.

Students who are reluctant to receive counseling services often do not feel supported to do so by the majority of faculty or staff due to lack of training and knowledge of resources (Quinn et al., 2009). Students are also leery of asking for help or disclosing information due to stigma that may impact the opinions of faculty or other staff in a position to help make career decisions. Administrators admit to needing more training for faculty and staff due to the increase in the number and severity of cases seen on campus (Watkins et al., 2011). Overall, the system must change to be more accepting of students who appear at one’s door asking for help (Corrigan et al., 2003b). Until then, training those with the most student contact, such as RAs, is a step in the right direction.

The overall goal of training involving RAs should be to improve interpersonal skills in order to better recognize, address, and refer students who are in need (Bowman & Bowman, 1995). In addition to becoming familiar with services offered on campus (Boswinkel, 1987), RAs should also be able to “distinguish between student problems
that are within their scope of training and those that require referral to more qualified personnel” (Bowman & Bowman, 1995, p. 45). More personal goals include how to handle the daily stress of the job and separate their work from home life while living on campus (Brunson & McKee, 1982).

2.4.1 Training Modules

The training curriculum for RAs varies in content and structure. In addition to education about referral services, RAs should also possess basic counseling skills, such as listening and clarifying, to help address the mental health needs of their students and determine whether the needs constitute a referral to the counseling center (Boswinkel, 1987). In most cases, RAs will be faced with these non-crisis situations, thus increasing the importance of learning how and when to refer. Figure 2.2 illustrates training objectives for RAs.

![Figure 2-2: Intended Process of Gatekeeper Training Interventions (Lipson et al., 2014).](image-url)
Figure 2.2 illustrates the process of gatekeeper trainings that teach knowledge and skills to RAs with the intent of not only changing attitudes toward mental health but also increasing positive behaviors, such as making referrals (Douce & Keeling, 2014; Lipson, Speer, Brunwasser, Hahn, & Eisenberg, 2014). Training that involves challenging stereotypes, debunking myths, and promoting self-reflection all provide for an empathic, nurturing milieu for students in times of need. In fact, colleges that utilize trainings addressing mental health stigma tend to see an increase in mental health services on campus (Watkins et al., 2011). RAs who received a three-hour training that focused on an overview of counseling services, crisis intervention strategies, and practice through role plays stated that the training was helpful to them and that they would appreciate more training as the academic year progressed (Brunson & McKee, 1982). However, more training does not mean that RAs will be prepared to handle every crisis situation, nor should they be expected to do so (Dodge, 1990). An important part of RA training is to review university policies and procedures that detail specific instances, such as suicidal thoughts or behavior, when RAs should seek consultation from the counseling center or university administration.

2.5 Methods to Decrease Stigma

Confronting negative public attitudes is the key to combating mental health stigma (Schulze, 2009). The goals of reducing stigma are ultimately to prevent social exclusion and provide treatment access for those with mental health issues (Yamaguchi, Mino, & Uddin, 2011). A preventive view is best so as to stop stigma before it starts, using methods that break down the “us/them” mentality that promotes discrimination. According to Link and Phelan (2001), there are two principles to consider when
contemplating how to decrease stigma. Most important, the method must either address the attitudes and beliefs of stigma or limit the power of these attitudes and beliefs by changing foundations of the culture. Second, the method must be multifaceted and multilevel, meaning that it must address the many factors that contribute to stigma as well as the many societal levels on which stigma has permeated, such as public, perceived public, and self-stigma.

In order to effectively measure stigma, Corrigan & Shapiro (2010) developed several recommendations, including the following: select measures that reflect attitudes, emotions, knowledge, and behaviors; select measures that are not influenced by societal factors; evaluate pertinent demographic variables, such as socio-economic status, gender, and education; and consider raising the consciousness of the targeted group. Another factor to consider is including scenarios with diagnoses that will address both low and high controllability-perceived conditions (Boysen & Vogel, 2008) such as schizophrenia (a low controllability diagnosis) versus addiction (a high controllability diagnosis).

The ultimate goal of anti-stigma interventions is to reduce the level of mental health stigma that exists. However, there are several outcomes to these measures, including changing public attitudes, improving access, and supporting treatment for those in need (Bruce, Smith, Miranda, Hoagwood, & Wells, 2002). The challenge is to provide interventions that not only produce but also sustain the intended results. People tend to process information in a biased way; overcoming the effects of negative attributes is especially challenging to produce lasting effects (Boysen & Vogel, 2008). Tasks that help achieve the desired outcomes include identifying appropriate goals for the subjects being targeted and select appropriate intervention approaches that address the goals. Conducted
with these tasks and goals in mind, anti-stigma interventions can prove to be effective in reducing the negative attitudes and beliefs associated with mental health stigma.

Following are examples of anti-stigma campaigns and interventions found to be effective in reducing public, perceived public, and self-stigma.

2.5.1 Education

Educational interventions are the most common delivery of anti-stigma material. The purpose is to present facts in order for the public to make a better informed decision about mental health issues (Corrigan & Penn, 1999). Educational interventions include the presentation of facts and debunking myths through face-to-face instruction and media (e.g., books, videos, articles). However, they do not always produce the intended results. For example, videos can produce varying effects depending on content. In one study, videos produced less blame toward those with mental illness (Corrigan, Larson, Sells, Niessen, & Watson, 2007; Penn, Chamberlin, & Mueser, 2003) but did not change general attitudes or engender intent to interact with them (Penn et al., 2003).

In a study by Boysen and Vogel (2008), educational interventions promoted more positive attitudes in participants who already had positive attitudes and reportedly low stigma, and those with negative attitudes were more negative after the intervention. Again, this shows the difficulty in busting through the attributes that produce stigma, and that other interventions in combination with education may be necessary to combat the negative attitudes of mental illness. On the other hand, a meta-analysis of 72 articles showed that education had positive but small to medium (range of effect sizes $d =-.10$ to $.30$) effects on reducing stigma in samples of residents from 14 countries (Corrigan, Morris, Michaels, Rafacz, & Rusch, 2012). Another meta-analysis Yamaguchi et al.
(2011) studied 23 anti-stigma educational interventions with children, adolescents, and college-aged students that were comprised of information regarding causes of mental illness, treatment services, and characteristics of those with mental illness. The interventions primarily involved media delivery of information, such as videos and computer websites. Improvements were indicated by a change in mean from pre- to post-test or intervention and control group. Of those, 18 studies showed a significant improvement in knowledge. Attitudes were measured by 34 educational studies; results indicated that 27 of those studies found significant improvements in participants’ attitudes. One outcome that was not favorable was that despite the education presented, the level of dangerous attributed to those with mental illness remained high. In another study, a computer-assisted program was compared against book reading to evaluate changes in knowledge and education (Finkelstein, Lapshin, & Wasserman, 2008). Each addressed the cognitive, affective, and behavioral components of stigma. While both groups’ stigma was significantly reduced immediately following the training, only the computer-assisted group had effects that lasted after six months. Finally, Corrigan et al. (2001b) found that challenging myths and presenting facts improved negative attitudes of those with psychiatric disorders, including those illnesses with both high- and low-controllability factors.

It may be that different types of educational interventions produce varying effects on mental health stigma depending on who is being studied, the information provided, and the manner in which the information is disseminated. In fact, educational interventions that yield the best results are those that combine instruction with interactive discussion and that present the information in a positive and hopeful manner (Corrigan &
Penn, 1999). These interventions provide opportunities for questions, examples, and practice in helping those with mental health issues.

One of the most effective educational interventions targeted at RAs is gatekeeper training (Pasco, Wallack, Sartin, & Dayton, 2012). Because RAs are often the first to come into contact with students in crisis, they are often the best option for this intense training (Gould & Kramer, 2001). The aim is to enhance knowledge, skills, and attitudes toward mental illness in order to identify and respond to students in residence halls. Suicide intervention is a pivotal focus and has been shown to be an effective component of training (Cross, Matthieu, Lezine, & Knox, 2010). Research on RAs and other campus staff have demonstrated the effectiveness of gatekeeping training, not only in the enhancement of knowledge, skills, and attitudes, but also with the level of self-efficacy to address those students in need (Cross, Matthieu, Cerel, & Knox, 2007; Pasco et al., 2012).

However, there are limitations to gatekeeper training. Although RAs were taught the appropriate skills, many did not demonstrate behavior change with regard to addressing suicidal thoughts or referring students for further help (Pasco et al., 2012). Reasons for this limited outcome may be that the training was primarily didactic, and that other instruction methods that include empathic skill building, collaborative relationships, and listening skills should be incorporated to produce more effective change. This suggestion was mimicked in another study that found that gatekeeper training was effective in enhancing knowledge and self-efficacy, but did not translate into behaviors utilizing the skills they were taught (Lipson et al., 2014). However, an interesting finding in this study is that RAs were more likely to identify and seek treatment for themselves.
Regarding educational interventions, the results are mixed. Educational interventions must also benefit the participants in ways other than just educating them (Flowerman, 1947). To be effective, educational interventions should be understandable, enjoyable, attractive, and received favorably and free of discomfort.

### 2.5.2 Experiential Learning

With the improvements in technology, experiential learning offers a perspective that is different than that of education in a didactic or media form. “Learning-by-doing” is an effective method of reducing stigma since it combines knowledge with first-hand encounters (Mantovani, Castelnuovo, Gaggioli, & Riva, 2003, p. 390), thus enhancing interaction and engagement among the participants. Virtual reality (VR) is one form of experiential learning that combines enhanced knowledge and skills with personal experience (Mantovani et al., 2003). The goals of using VR with mental health professionals and paraprofessionals is to recreate the environment in which those with psychoses live, assist the providers in understanding their clients’ symptoms, and use the experience as an educational tool that enhances the classroom experience and compassionate responses (Banks et al., 2004). In the world of mental illness, VR can demonstrate to others the hallucinations, noise disruptions, and paranoia experienced by those with schizophrenia and other psychotic disorders. One caution is that of safety: some participants report side effects from exposure in the VR environments including eye strain, blurred vision, disorientation, and vertigo.

Although VR presents itself as a more interesting and hands-on method in which to decrease the stigma of mental illness, some results show the opposite to be true. Brown (2008) studied emotional reactions to simulations of auditory hallucinations and found
that negative attitudes increased while positive attitudes decreased. In another study, Brown (2010) found that implementing a brief hallucination simulation actually increased stronger attitudes toward mandated treatment for mental illness, decreased helping behaviors, and increased social distance from those with mental illness.

Probably the most common form of experiential learning involves role plays. The goals of role play include increasing learners’ empathy and skills, promote reflection of the experience and actions they took, and synthesize knowledge (Ballon, Silver, & Fidler, 2007). One form of improvisational role play involves actors playing characters with symptoms resembling those experienced through mental illness. Each actor has a different perspective as other actors around them help create environments that produce dissonance for the “clients.” This helps the actors realize that perceptions are different from reality and that misinterpretations often occur when those with mental illness cannot reconcile the two.

2.5.3 Protest

Protesting against negative stereotypes seems to have the least effect on mental health stigma. Protest attempts to attack stigma at its source: through social cognitions on a community level. They send the message to communities to stop believing the stereotypes and another message to the media to stop portraying those with mental illness in a negative light (Corrigan & Penn, 1999). While suppression does inhibit public scrutiny of mental illness, it does not always follow with a change in attitude. This occurs mostly because protest is a reactive approach meant to stop negative behaviors rather than a proactive approach to encourage positive ones. At times, these acts of protest can even backfire to make those with negative attitudes more indignant about their beliefs. In
a study comparing protest against proactive methods of intervention, protest performed the worst, displaying no significant effect on attitude change (Corrigan et al., 2001b).

2.5.4 Personal Contact

The intervention with the most evidence to support combating stigma is through contact: to intentionally and increasingly familiarize the target population with those who have mental illness (Salzer, 2012). The aim is to promote social inclusion among those with mental illness through the familiarity of the mainstream population at an individual or population level (Thornicroft et al., 2008). Familiarity with mental illness through contact can take several forms: learning about mental illness from someone who has it, knowing someone with a mental illness, having a personal relationship with a friend or family member with mental illness, or living in a community with those who have mental illness.

Most research in this area focuses on attitude change, as behavior change with these brief measures has not proven as long-lasting (Pinfold, Thornicroft, Huxley, & Farmer, 2005) possibly due to the time it takes to integrate new behaviors into one’s lifestyle. Krauss (1995) completed a meta-analysis of 88 studies focusing on attitude change affecting behavior and found that this relationship is stronger if the attitudes are stable, personally relevant, and directly experienced.

Effective contact interventions involve elements proposed by Allport (1954) including equal status among participants, intimate contact, institutional support for contact, work that focuses on cooperation rather than competition, and little difference between the person with mental illness and the stereotype. Interaction is also an important element; many studies with positive results incorporated a question and answer session.
According to Mann and Himelein (2008), “Intervention programs that include personal information about the individuals with mental illness, encourage discussion, and evoke empathy are more likely to succeed” (p. 548).

Educational face-to-face contact is more effective than contact via literature or video (Corrigan et al., 2007; Corrigan et al., 2012b). Videos featuring first-hand accounts of mental illness do not seem to have the same impact as meeting them in person, but do achieve better results than didactic educational interventions alone (Corrigan et al., 2007). Mann and Himelein (2008) found that a “humanizing” approach to teaching psychopathology, including focus on the individual as a person, was more effective than didactic learning alone (p. 547). Pinfold et al. (2005) found similar results when comparing attitude change with participants who knew someone with mental illness versus those who received an intervention using personal testimony. Those who received the intervention had the greatest and longest impact on mental health stigma.

Eisenberg et al. (2012a) studied university roommate assignments of students with and without mental health issues who were paired together and found that contact with a consumer actually increased stigma slightly among the nonconsumer roommates. However, those who had received mental health treatment rated their stigma toward their roommate lower. This indicated that familiarity and casual contact alone does not always promote a decrease in negative attitudes. It also helps confirm the position that stigma will be reduced when members are of equal status. Finally, in a review of retrospective and prospective contact approaches, most retrospective research (those where participants thought back to a time when they were in contact with someone who had mental illness)
yielded positive effects of reduced desire for social distance and reduced perception of
dangerousness, and most prospective research (those who were asked to complete
measures at the time of the contact) found some significant differences in improved
attitudes and more positive attributions toward those with mental illness. These results
should be interpreted with caution, as retrospective studies lack pre-testing and tend to
contain memory bias while prospective studies create an artificial environment that may
not be replicated in the real world.

As indicated above, personal testimony has been an effective method of contact
that has decreased mental health stigma. Involving consumers in these interventions can
have mutual benefits for the consumer as well as the participant (Pinfold et. al., 2003).
The participant gleans knowledge and understanding through a first-hand account of
someone with mental illness, and the consumer benefits through improved confidence in
speaking and advocacy for those with mental illness. A 10-minute presentation by
consumers diagnosed with depression and psychosis about their quality of life and
treatment regimen resulted in participants holding them less responsible and less in
control of their illness (Corrigan et al., 2001b). In other words, the participants recalled
more positive information about the life of the consumer.

Anti-stigma interventions of any kind aim to reduce key elements of stigma: the
negative emotions associated with how those with mental illness are viewed, the
perceived dangerousness of those with mental illness, the increased social distance placed
between the general population and mental health consumers, and the amount of avoidant
versus helping behaviors practiced by the general population. The intent is to reduce
discrimination; to change attitudes that lead to improved behaviors. In studies using
contact as the independent variable, negative emotions were reduced, including pity, anger, blame, and fear (Boyd, Katz, Link, & Phelan, 2010; Corrigan et al., 2007; Spagnolo et al., 2008). These results defined contact in various ways, from knowing someone with mental illness to personal testimonies as part of the intervention, and found similar results. According to Corrigan, Green, Lundin, Kubiak, and Penn, (2001a), “Members of the general public who have greater knowledge about or experience with mental illness are less likely to stigmatize, at least in terms of stereotypes and dangerousness” (p. 956).

In addition, decreased perception of dangerousness has been replicated in many studies using familiarity and contact as the independent variable (Alexander & Link, 2003; Corrigan et al., 2001a; Penn et al., 1994; Phelan & Link, 2004; Spagnolo et al., 2008). As a function of the results, these studies also saw a decrease in social distance among participants. It seems that once participants changed their attitudes about the level of dangerousness posed by those who have mental health issues, they no longer saw the need to distance themselves so much from them.

Although behavior change can take longer to materialize, thus study, there have been some initial positive results on behavior change occurring immediately following interventions involving personal testimony or acknowledging knowing someone with mental illness. Helping behaviors increased as a result of attitude change in two of the studies recently mentioned (Corrigan et al., 2003a; Spagnolo et al., 2008). Corrigan et al. (2007) found that participants watching a video of a person describing life with mental illness showed an immediate decrease in discriminatory behaviors of segregation and coercion and displayed empowering attitudes toward those with mental illness. Finally,
McConkey, McCormack, and Naughton (1983) found that adolescents who were introduced to consumers with mental illness not only accepted them but also began associating with them and helping them.

2.5.4.1 In Our Own Voice

One program that promotes personal testimony as an anti-stigma campaign is NAMI’s In Our Own Voice (IOOV). The program is a 90-minute program comprised of stories from consumers in recovery (i.e., not currently symptomatic) about the successes and challenges of having a mental illness. The program contains five discussion components: first experiences, acceptance, treatment, coping mechanisms, and successes / hopes toward the future. Each component is accompanied by a video at the start and discussion questions at the end of each segment. A shortened version of IOOV was tested against traditional classroom education using college students as subjects (Corrigan et al., 2010). Students in the IOOV group recalled more positive perceptions and information about the consumers while students in the classroom education model recalled more negative perceptions. IOOV as part of a larger conceptual model of interventions was also effective in reducing the stigma of older college students (Pinto-Foltz & Logsdon, 2009). Other constructs involved in the model include learning, persuasion, and stages of development.

2.5.5 Decreasing Self-Stigma

Public stigma often leads to self-stigma, the internalization of stigmatizing attitudes, which can result in noncompliance or nonparticipation in mental health treatment. Without proper intervention, responses to self-stigma have been to address the public stigma effect of labeling (Link, Mirotznik, & Cullen, 1991). Those with mental
illness can respond in secrecy, thus concealing their mental health issues; avoidance or withdrawal, which limits their social interactions; or education of others in hopes of changing their attitudes. Therefore, to eradicate stigma, self-stigma must be addressed in two ways: through interventions which alter the negative beliefs and attitudes of stigma and interventions which help those with mental illness cope with self-stigma and neutralize any additional public stigma that may reach them (Mittal, Sullivan, Chekuri, Allee, & Corrigan et al., 2012a).

Research that addresses methods to combat stigma divides the interventions into three groups: psychoeducation, disclosure, and peer support (Corrigan et al., 2014). Psychoeducation involves reviewing facts and is the intervention most often used (Mittal et al., 2012). It can be combined with therapeutic interventions, such as cognitive-behavioral therapy, to help restructure negative thoughts about mental illness that consumers have internalized. Other therapeutic measures include mindfulness and empowerment found in acceptance and commitment therapy. Disclosure involves group identification and a “coming out” process that decreases self-stigma by weighing the costs and benefits of disclosure (Corrigan et al., 2014). Peer support involves support and mentoring of consumers who have been through the challenges of mental illness and can speak to the benefits of treatment and their quality of life as a result. Although each group can be conducted independently, decreases in self-stigma have been more effective when combining interventions, thus addressing self-stigma through facts, attitudes, beliefs, and support (Mittal et al., 2012).

These interventions aim to improve the self-concept of those with mental health issues so that they will seek the help they need. Each of the interventions addresses self-
esteem and self-concept in its own way. Another theory that has proven effective in improving self-concept is self-affirmation theory (Lannin, Guyll, Vogel, & Madon, 2013). This theory proposes that individuals who possess positive attributes about themselves, such as competence, strength, and empowerment, will be able to negate threatening information that create a negative self-image (Steele, 1988). Lannin et al. (2013) studied the effects of self-affirmation theory through the use of a writing assignment and found a decrease in self-stigma, but only a small increase in willingness to seek help. Again, this result confirmed that interventions to reduce self-stigma should be multi-faceted and address more than just one aspect of self-stigma.

Other means of reducing self-stigma include familiarity with others. Vogel, Wade, Wester, Larson, and Hackler (2007) found that college students who knew someone who had sought treatment not only led to more positive attitudes about help-seeking, it also promoted positive expectations about treatment. As a result, motivation for resolving their issues increased as these students worked to decrease their symptoms and increase their opportunity for academic success.

2.6 Measures of Public, Perceived Public, and Self-Stigma

When considering the most appropriate anti-stigma measures, thought should be given regarding feasibility and access of the tool, ease of administration, and reliability and validity factors (Link et al., 2004). This section will review several instruments that measure public, perceived public, and self-stigma and have been utilized in research within the past 10 years. The efficacy of each instrument will be reviewed, and a more detailed analysis will accompany those instruments chosen for this study.

2.6.1 Measures of Public Stigma
2.6.1.1 Reported and Intended Behaviour Scale

The Reported and Intended Behaviour Scale (RIBS) was developed to assess past, current, and future discrimination among those with mental illness (Evans-Lacko et al., 2011). These behaviors are the results of stigmatized attitudes toward those with mental illness. The RIBS was adapted from the Star Social Distance Scale (SSDS), which was developed to improve upon the vignette-based stigma measures and incorporate relevant research on attitudes of social distance, the act of limiting contact either by proximity or casual or intimate relations (Star, 1952). The RIBS contains eight reported and intended behaviors among four contexts: living with, working with, living nearby, or continuing a relationship with someone with mental health issues. Items one through four are answered according to presence or absence of the situation, e.g., “Are you currently living with, or have you ever lived with, someone with a mental health problem?” while items five through eight are scored on a five-point Likert scale from strongly disagree to strongly agree, with the score of three indicating a neutral stance. The first four items were not included in the final scores.

The results of three empirical tests using participants between the ages of 25-45 demonstrate test-retest reliability after one week at .75 with a range of .72-.81. Internal consistency among items five through eight was calculated at .85. Strong consensus validity was found through ratings by mental health consumers and international researchers in mental health stigma.

Henderson, Evans-Lacko, Flach, and Thornicroft (2012) used the RIBS to conduct research on England’s Time to Change program, a program developed in 2009 to assess middle-class adults ages 25-45 on their attitudes toward people with mental health
problems. The purpose of their study was to determine if social desirability scores were influenced by type of interview method: either face-to-face or online. Results using the RIBS showed that all eight items were significantly correlated with social desirability ($r = .12$ to $0.13$, $p < .05$), suggesting that those who were interviewed face-to-face answered according to how they believed their interviewers would want them to answer, while those who responded online were more forthcoming with their answers. Although reliability and validity is acceptable, the RIBS was not selected for the current study due to its limited scope of behaviors, namely, social distance.

2.6.1.2 Attribution Questionnaire

The Attribution Questionnaire (AQ) is a measure designed to evaluate stereotypes about mental illness (Corrigan et al., 2003a). It is based on the attribution theory of stigma development in that it evaluates factors that stereotype mental illness from society’s perspective. There are three versions: the full questionnaire contains 27 questions that assess nine stereotypes (AQ-27), the short version contains one question from each of the nine factors (see below) that had the highest load when conducting factor analysis (AQ-9), and a version for children containing eight items (coercion is not included as a factor) (AQ-8-C; Corrigan, 2012).

The questionnaire provides a vignette about Harry, a man with schizophrenia. The questions were generated to evaluate nine stereotypes about people with mental illness: blame, anger, pity, help, dangerousness, fear, avoidance, segregation, and coercion. In the initial study using 21 items, results indicated high internal consistency among six scales (personal responsibility, pity, anger, fear, helping, and coercion/segregation) with a range of $0.70$-$0.89$ (Corrigan et al., 2003a). In a previous study leading to the creation of the AQ,
(Corrigan et al., 2002), path models of discriminatory behavior were conducted for the factors of responsibility and dangerousness. The chi-square value representing goodness of fit for dangerousness was statistically significant $\chi^2(38) = 131.2, p < .0001$, suggesting that fear of dangerousness was a primary attitude leading to discriminatory behavior. Although the results of these studies indicated that this is a useful tool to measure public stigma, it was not chosen for this study due to the limited nature of the vignette, namely, that “Harry” is diagnosed with schizophrenia, and no vignettes with other diagnoses were provided.

2.6.1.3 Opinions About Mental Illness Scale

The Opinions About Mental Illness Scale (OMI) is a 51-item questionnaire and was developed by Cohen and Streuning (1962) to determine attitudes about mental illness among professionals working in psychiatric hospitals. The scale contains five dimensions: authoritarianism, benevolence, mental hygiene ideology, social restrictiveness, and interpersonal etiology. It is scored using a six-point Likert scale, from “I totally agree” to “I totally disagree” (Arvaniti et al., 2009).

The OMI pilot study sampled professionals from two psychiatric hospitals (Cohen & Struening, 1962). Internal consistency for both samples was between .49-.82 with the exception of social restrictiveness, which tested at .21 and .23, respectively. These scores are considered low to moderate. However, the validity was calculated at .43-.89, which helped increase the reliability.

The OMI has several strengths that make it one of the most widely used instruments when measuring mental health stigma (Link et al., 2004). It provokes an emotional response from participants due to the complexity of the items, thus getting at
their true opinion and mindset about those with mental illness. The items also cover a
wide array of issues found to be associated with mental illness, such as labels,
stereotypes, status, discrimination, and separation into “us” and “them”, which provides a
more comprehensive assessment of attitudes. Finally, the OMI has been used in various
cultures and when assessing attitude change over time. A primary disadvantage is that it
was developed prior to deinstitutionalization; therefore, it does not take into account
participants’ attitudes about community mental health services and residential homes for
those with mental illness. It is for this reason that the OMI was not selected for this study.

2.6.1.4 The Community Mental Health Ideology Scale

Developed by Baker and Schulberg (1967), the Community Mental Health
Ideology Scale (CMHI) was developed to measure attitudes toward those with mental
illness and their treatment options in the community. It was at this time that
deinstitutionalization began, and with it a new ideological perspective of living with
those with mental illness, and no longer just caring for them.

Items were constructed with five foci (Baker & Schulberg, 1967). The first is a
population focus; mental health professionals have the responsibility to identify those
who do not seek as well as those who seek mental health treatment. The second is a
prevention focus; mitigating and countering harmful factors that can lead to mental
illness before it begins. The third is a treatment focus; treatment should focus primarily
on social adjustment to the community. The fourth is a continuity focus; uninterrupted
professional care should be integrated and provided to recipients as they move through
programs and services. The fifth is a focus on community involvement; all community
members help in caring and advocating for those with mental illness. The final instrument
contains 38 items, rated on a six-point Likert scale with responses from strongly agree to strongly disagree. Reliability was found to be quite high during the pilot study. Internal consistency was .94, split-half reliability was .95, and test-retest reliability at eight months was .92. Construct validity was found to be \( r = .55, p < .001 \) and criterion validity was found to be significant on the \( p < .001 \) level. While this instrument is considered reliable and valid in measuring attitudes toward mental health, it was not selected as an instrument for this study due to its lack of use in the past decades.

2.6.1.5 Community Attitudes Toward the Mentally Ill

The Community Attitudes Toward the Mentally Ill scale (CAMI; Taylor, Dear, & Hall, 1979) was created to address the lack of deinstitutionalization measured in the OMI (Link et al., 2004). At the time of its inception, deinstitutionalization was a priority focus in mental health treatment, and this “new development in the care and management of people with mental illnesses” was important to include in attitudinal assessments (p. 521). The intent was to discriminate between those who are in favor versus those who reject the idea of those with mental illness living in their community as well as having mental health treatment options within their community (Taylor & Dear, 1981).

The scales include 40 items, measuring three of the same constructs as the OMI (authoritarianism, benevolence, and social restrictiveness) as well as a fourth (deinstitutionalization) from the CMHI. Items are rated on a Likert 5-point scale from “strongly agree” to “strongly disagree”. Each construct contains 10 items. Only seven items originated from the OMI, including three from the authoritarianism scale, two from the benevolence scale, and two from the social restrictiveness scale. To test the reliability of the measure, a random sample of Toronto residents was stratified by three levels of
socioeconomic status and either city or suburb (n = 1,090) Internal consistency was found to be .68 for authoritarianism, .76 for benevolence, .80 for social restrictiveness, and .88 for community mental health ideology. Construct validity for the same sample was found to be in the range of $r = -0.63$ between authoritarianism and benevolence and $r = -0.77$ between social restrictiveness and community mental health ideology.

Themes of the authoritarianism scale consist of whether those with mental illness are easily recognized, if they should be hospitalized upon displaying symptoms, if they need custodial care, and if they are to blame for their illness (Taylor & Dear, 1981). Themes of the benevolence scale include whether public dollars should be spent on mental health care, willingness to advocate for those with mental illness, and whether those with mental illness deserve kindness and sympathetic attitudes from others. Social restrictiveness themes include whether those with mental illness are considered dangerous, whether others should maintain social distance from them, and whether they are unpredictable and should not be granted responsibility. Finally, themes of community mental health include whether it is best for those with mental illness to be part of a community, whether there is a positive or negative impact on neighborhoods that house those with mental illness, and the level of dangerous to the community.

Prior studies by Taylor et al. (1979) hypothesized that attitudes toward mental illness and those with mental illness are a function of personal characteristic and personal values. They also theorized that these characteristics would extend to attitudes toward community mental health treatment. For this reason, Taylor and Dear (1981) measured the scales against various personal characteristics such as age, gender, marital status, and number of children. Socioeconomic variables included education level, occupational
status of both the head of household and respondent, household income, and homeowner versus tenant status. Beliefs and values were measured using church attendance, religious denomination, and familiarity with mental illness through self or other involvement.

Age correlated strongly with all four scales at the $p < .001$ level, with older respondents having less sympathetic attitudes (authoritarianism: $r = .20$; benevolence: $r = -.18$; social restrictiveness: $r = .32$; community mental health ideology: $r = -.21$) (Taylor & Dear, 1981). Females were found to have more sympathy on all scales except social restrictiveness, which showed no difference between males and females (authoritarianism: $F = 2.65, p < .01$; benevolence: $F = -4.56, p < .001$; community mental health ideology: $F = -3.02, p < .01$). Marital status correlated strongly at the $p < .001$ level for all scales, with those who were married or widowed reporting less sympathetic attitudes than those who were single, separated, or divorced, partly due to the age variation of these groups. Those with children birth to 18 years old indicated a less sympathetic at the $p < .01$ level for authoritarianism, benevolence, and social restrictiveness and $p < .001$ level for community mental health ideology than those with children greater than 18 years of age. To summarize, results found that respondents who were married, had children, identified as male, and older were less sympathetic to those with mental illness than their counterparts.

Regarding socioeconomic status, those with higher levels of education and who hold higher-level occupations are more sympathetic than those with less education and entry or lower-level occupations on all four scales ($p < .001$). Homeowners have less sympathetic attitudes than those who rent ($p < .001$), and those with a higher household
income have less sympathetic attitudes than those who have a lower income on authoritarianism \((r = -0.11, p < .001)\) and restrictiveness \((r = -0.06, p < .01)\).

With respect to those variables that measure belief and values, those who have familiarity with mental health care have more sympathetic attitudes toward mental illness than their counterparts on all four scales \((p < .001)\). Those who attend church have less sympathy on all four scales: \((p < .01)\) for benevolence and community mental health ideology; \((p < .001)\) for authoritarianism and restrictiveness. However, those who noted affiliation with a particular religion have more sympathy on the authoritarianism \((p < .001)\) and benevolence scales \((p < .01)\). Overall, the relationships between these variables and the scales are what are predicted in theory and in previous studies \(\text{(Taylor & Dear, 1981)}\). To summarize, the authors found evidence to support their hypotheses in that demographics influence attitudes of mental illness, with those who live a more traditional lifestyle (married, children, homeowner, less formal education, church attender) were less sympathetic than those who were more nontraditional (single, rent, highly educated, not religious). Men and older respondents were also less sympathetic than females and younger respondents. Household income was the least effective predictor of mental health attitudes.

In recent years, the CAMI has been used to study both professionals and nonprofessionals of the mental health field. Chambers et al. (2010) studied nurses’ attitudes toward mental illness in both inpatient and community facilities in five European countries. They found some variance, but overall attitudes were positive, especially among women \((F = 8.20, p < .001)\) and senior level nurses \((F = 6.00, p < .001)\), with differences attributed to cultural and social norms within each country.
Finkelstein et al. (2008) studied anti-stigma interventions with 193 graduate students over the course of six months. Two interventions were used: reading materials consisting of information on psychiatric diagnoses and stigma from the World Health Organization along with two research journal articles and a computer-based education using the Computer-assisted Education system (CO-ED) with similar content as the reading materials created collaboratively by the University of Maryland and St. Petersburg State University. The curriculum addressed cognitive, emotional, and behavioral components of stigma. Using the CAMI as one of the measures, scores directly following the computer-assisted intervention demonstrated positive attitudes among those with mental illness in all subscales ($p < .0001$). Scores in the reading group were elevated to a lesser degree ($p < .0001$). A six-month follow up showed continued positive attitudes from those who received the computer-assisted intervention, while only the authoritarianism scale remained elevated in those who received the reading intervention. These results not only demonstrate the use of the CAMI as an anti-stigma measure, but also shows the effectiveness of an interactive intervention over passively reading information.

In another study, Hinkelman and Granello (2003) used the CAMI to study the effects of traditional versus hypergender (i.e., strong association) gender roles on attitudes of mental illness. Hinkelman and Granello’s results were similar to Taylor and Dear’s (1981) in that females were more sympathetic to males, but when controlling for hypergender, both males and females were less likely to be sympathetic on all four scales than those who did not identify as hypergender.
Overall, the CAMI was developed to measure attitudes toward community mental health and has been widely used in research both in the United States and European countries. The results of these studies demonstrate support for anti-stigma campaigns, particularly among males, community members, and newly established health care professionals. Due to its strong reliability and validity as well as use in research, this measure was selected for the current study.

2.6.2 Measures of Perceived Public Stigma

2.6.2.1 Perceptions of Stigmatization by Others for Seeking Help

The Perceptions of Stigmatization by Others for Seeking Help (PSOSH) was developed to measure the extent to which stigma prevents people from seeking mental health services (Vogel, Wade, & Ascheman, 2009). The stigma associated with this perception is that others will deem those with mental illness to be less socially acceptable (Vogel et al., 2006). Therefore, people who need services tend to avoid them in order to avoid the consequences of stigma (Corrigan 2004). In a culture where perceptions and social support influence decisions, creating this scale filled a gap that measuring public stigma did not provide (Vogel et al., 2009).

The scale consists of five items and is scored using a five-point Likert scale from 1 = Not at all to 5 = A great deal (Vogel et al., 2009). The instructions ask participants to consider having a problem they could not solve, and to what degree they would believe that others would judge them if they sought counseling, e.g., if they believe others would “react negatively to you” (p. 305). Pilot studies returned high reliability and validity scores (Vogel et al., 2009). Five samples of undergraduate college students were recruited for scale development and to test reliability and validity. All samples consisted
of both males and females and were representative of various ethnicities (European Americans, African Americans, Asian American, Latino/Latina Americans, multiracial Americans, and international students). Students consisted of freshmen through senior grades. The fifth sample consisted of students who were found to be experiencing clinical problems that affected their level of functioning.

Across all five samples, the results showed high internal consistency ($\alpha = .88$) and test-retest reliability across a three-week period ($r = .82$) as well as provided a good fit with data among college students. However, concurrent validity was measured against three different stigma models and scored between $r = .20$ and .37 at the $p < .001$ level. Factor analysis demonstrated discriminate validity between this scale and others measuring public and self-stigma. While these are less than optimal statistics, the advantage of using the PSOSH is the phrasing of the items, which takes a subjective view of stigma, i.e., the participant applies the situation to themselves, rather than an objective view as do the other measures in this category. For this reason, the PSOSH is selected for the study.

### 2.6.2.2 Stigma Scale for Receiving Psychological Help

The Stigma Scale for Receiving Psychological Help (SSRPH) was designed to measure perceptions of stigma by others when an individual considers psychological help (Komiya et al., 2000). The questionnaire consists of five items rated from zero (strongly disagree) to three (strongly agree). When tested on a sample of college students, internal consistency ($\alpha$) for the five items was .72. Support for construct validity was measured by testing it against the Attitudes Toward Seeking Professional Psychological Help: Short Form ($r = -.40$, $p < .0001$). As well, women scored lower than men, consistent with the
finding that more women seek treatment than men (Rule & Gandy, 1994; Topkaya, 2014). While reliability and validity are moderate, the items are worded objectively. In other words, the items do not ask the participants to consider themselves within the situation, e.g., “Seeing a psychologist for emotional or interpersonal problems carries social stigma” (Komiya et al., 2000, p. 140). It is for this reason that the SSRPH was not selected for the current study.

2.6.2.3 The Self-Stigma of Mental Illness Scale

The Self-Stigma of Mental Illness Scale is considered the initial measurement tool designed to measure perceived public stigma (Corrigan et al., 2006). It builds on Link’s (1987) process of perceived discrimination, which occurs when the label of mental illness is given to individuals, providing personal relevance to the stereotypes and discrimination of that label, and who then transform those beliefs into expectations of rejection. Corrigan et al. (2006) conceptualized this process as occurring in four phases: stereotype awareness, stereotype agreement, self-concurrence, and self-esteem decrement. The tool consists of 40 items: 10 for each scale. Participants are asked to rate items on a 1-9 Likert scale from Strongly Disagree to Strongly Agree. The short form (SSMIS-SF) consists of five items in each scale.

Internal consistency was tested on the original measure containing 60 items and the revised version containing 40 items. Results were found to be between .64 and .91 for each version and each scale. One-week test-retest reliability was calculated between .62 and .82. To measure construct validity, the SSMIS was correlated against several measures of self-efficacy and self-esteem and was found to have moderate negative correlations between -.05 and -.48. Not all were statistically significant findings.
Although an adequate measure of perceived public stigma, the SSMIS assumes that participants taking it have been either diagnosed or recognize that they have a mental illness. Therefore, it was not selected for this study.

2.6.2.4 Perceived Devaluation-Discrimination Scale

Developed by Link (1987), the Perceived Devaluation-Discrimination scale (PDD) was constructed to test the effects of labeling theory. In this preliminary study (Link, 1987), labeling was assessed by individuals’ expectations of being devalued and discriminated by others who have labeled them as “mentally ill”. Data were collected on community residents with and without a history of psychiatric treatment and psychiatric patients receiving treatment either inpatient or outpatient between 1980 and 1983. It was hypothesized that those who were labeled with mental illness would be less willing to seek help. Although the scale was primarily developed for those with mental illness, it can also be used with those who are experiencing issues that might cause them to seek counseling.

The questionnaire contains 12 items which are rated according to a six-point Likert scale. Initial testing showed internal consistency to be high ($\alpha = .78$). Much of the validity for the measure was comprised of face validity of the items. Construct validity was found to be adequate when comparing items to the author’s theory about labeling affects those with mental illness. Although this scale tests perceived public stigma, it was not selected for this study due to the structure of the items. Items were geared toward how the participants thought that others would perceive those with mental illness, not the participants themselves, e.g., “Most people would willingly accept a former mental
patient as a close friend” (p. 111) rather than “Most people would still consider themselves my friend if I sought mental health treatment”.

2.6.3 Measures of Self-Stigma

2.6.3.1 Self-Stigma of Seeking Psychological Help

The Self-Stigma of Seeking Psychological Help scale (SSOSH) was created by Vogel et al. (2006) to measure a respondent’s level of comfort when considering seeking professional psychological help. It is a 10-item scale; items are scored on a five-point Likert scale from “strongly disagree” to “strongly agree.” Total scores range between 10 and 50 with higher scores indicative of a greater concern that seeking help would result in negative consequences. An example of an item is “I would feel inadequate if I went to a therapist for psychological help” (p. 327).

Pilot studies using the SSOSH (Vogel et al., 2006) demonstrated high internal consistency at .91 and a two-month test-retest reliability estimate of .72. Additional studies of the SSOSH demonstrated high internal consistency among groups from various countries at .82 - .84 (Vogel et al., 2013a). To measure construct validity, three pilot studies using the SSOSH were measured against the Disclosure Expectations Scale (DES; Vogel & Wester, 2003) Anticipated Benefits and Anticipated Risks scales and the Social Stigma for Seeking Psychological Help (SSRPH; Komiya et al., 2000). Scores were positively correlated with the DES Anticipated Risks scale ($r = .47, .37, .30, p < .001$) and SSRPH ($r = .48, .46, p < .001$) and negatively correlated with the DES Anticipated Benefits scale ($r = -.45, -.40, -.32, p < .001$), which provides initial evidence of construct validity.
Criterion validity was measured by examining the correlations between the SSOSH with the Intentions to Seek Counseling Inventory (ISCI; Cash, Begley, McCown, & Weise, 1975) and Attitudes Toward Seeking Professional Psychological Help: Short Form (ATSPPH-SF; Fischer & Farina, 1995). Scores on the SSOSH were negatively correlated with both comparison scales (ISCI: $r = -.38, -.32, -.34, p < .001$; ATSPPH-SF: $r = -.63, -.60, -.53, p < .001$), lending initial evidence to support criterion validity. Although both reliability and validity are adequate for this study, it was not chosen due to the preference for the more extensively researched tool discussed in the following section.

2.6.3.2 Attitudes Toward Seeking Professional Psychological Help

The Attitudes Toward Seeking Professional Psychological Help (ATSPPH) scale was first developed to test respondents’ tendency to seek mental health services as a result of a crisis or long-term discomfort (Fischer & Turner, 1970). The questionnaire contains 29 items that focus on the participants’ willingness to receive treatment in various contexts, e.g., “I would feel uneasy going to a psychiatrist because of what some people would think” (p. 82). Items are scored on a four-point continuum, with total scores ranging between 0 and 87. Internal consistency for the initial version was calculated at .86. Test-retest reliability for time intervals of five days to two months was found to be between $r = .73$ at four weeks through $r = .89$ at two weeks. Through factor analysis, items loaded onto four factors: recognition of the need for help, tolerance for stigma, interpersonal openness, and confidence in the mental health provider (Fischer & Turner, 1970).
Fischer and Farina (1995) revised the scale, shortening it from 29 items to 10 items for ease of administration and to focus on constructs that they believed would interest most researchers. As a result, the items spanned two of the original constructs: openness to seeking treatment for emotional problems (OSTEP) and value and need in seeking treatment (VNST) (Elhai et al., 2008). Internal consistency of the items was measured at .84 (Fischer & Farina, 1995). Assigning equal weight to all items was found to be the same as weights corresponding to factor loadings, and with the ease of scoring, was determined to be the preferred scoring method. As with the original version, items were scored on a scale from 0-3, with a scoring range of 0-30. Test-retest reliability at one month was .80, and reliability between each version was .87.

Studies using the ATSPPH-SF found results that accurately predicted helping intentions among participants (Pheko, Chilisa, Balogun, & Kgathi, 2013). Students from the University of Botswana completed several stigma measures including the ATSPPH-SF. Results using multiple regression found the ATSPPH-SF reporting significant results at $B = .38$, $t = 7.58$, $p < .001$. Overall, measures indicated moderate intentions to seek counseling. In a cross-cultural comparison study of Western and Eastern cultures, it was found that Vietnamese and American college students scored similarly on the ATSPPH-SF, and thus had similar help-seeking attitudes, while Hong Kong reported lower help-seeking attitudes (Jubert, 2009). The ATSPPH-SF’s extensive use in research combined with its strong reliability and validity are reasons why it was chosen as the measure of self-stigma for the current study.
2.7 Summary

“Mental and behavioral health is a critical component of well-being for all students, and having a campus culture and learning environment that supports healthy minds is a core need deeply centered in the mission of every institution of higher education” (Douce & Keeling, 2014, p. 3). While the numbers of students with mental health issues continues to rise, their willingness to seek services has not. University staff and faculty across campus need to learn to recognize mental health issues and be open to referring students to treatment. RAs are in the unique position of knowing the students more personally than other staff, and with proper training, can be critical assets to students in their time of need. However, this will not likely occur unless RAs are compassionate, affirming, and sympathetic of mental illness. Interventions such as personal testimony, computer-assisted education, and specific programs such as *In Our Own Voice* have proven effective at lessening mental health stigma. There are several valid and reliable measures that can determine the impact of these interventions, such as the CAMI, PSOSH, and ATSPPH-SF.
Chapter 3

Methodology

3.1 Introduction

This chapter will provide an overview of the research method for this study. A detailed explanation of the research design including sampling methods will follow. The chapter will continue with a description of the instruments used and a detailed discussion of the procedures. Finally, the chapter will conclude with proposed research questions and an explanation of the data analysis that will be used.

3.2 Overview of Method

The purpose of this study was to determine if anti-stigma interventions produced differences in the level of mental health stigma in resident advisor attitudes toward mental health. The study used a modification of the Solomon four group design to determine if there were not only differences in mental health stigma as a result of the intervention, but also whether the pre-test predisposed participants toward a positive response. Participants were selected from the pool of resident advisors working in the residence halls at a large Midwestern university. Three measures were used to assess stigma levels: the Community Attitudes Toward the Mentally Ill scale (Taylor et al.,
to measure public stigma, the Perceptions of Stigmatization by Others for Seeking Help scale (Vogel et al., 2009) to measure perceived public stigma, and the Attitudes Toward Seeking Professional Psychological Help Short Form (Fischer & Turner, 1970) to measure self-stigma. Data were analyzed using paired samples and independent samples t-tests to determine if there were differences within groups and between groups, respectively.

3.3 Research Design

In an experimental design, the process of pre- and post-testing helps to guard against between-subject variation, but limits the influence of the pre-test on participants exposed to the intervention (Michel & Haight, 1996). In a traditional pre-test – post-test design, it is possible that the pre-test influences the results in that the participants are predisposed to the content of the experiment, also known as premeasurement sensitization (Michel & Haight, 1996). This may lead to favorable answers that may otherwise not be selected by changing the participants’ attitudes or perception of the training material (Solomon, 1949). Therefore, the Solomon four group design allows for multiple participant groups to determine if there are true differences as a function of the intervention. The Solomon four group design has the potential to measure interactions among participants that affect attentional, attitudinal, and perceptual factors that may impact the results of a study (Solomon, 1949). It also helps to guard against weaknesses provided by a simple pre-test – post-test design (Kumari, 2013). The design also allows for data analysis within and between groups to gauge more accurately the influence of the intervention. A traditional Solomon four group design contains two control groups, one with a pre-test and one without, in addition to two groups that contain interventions, one
with a pre-test and one without. A traditional Solomon four group design can be illustrated as follows:

Group 1: \( R \quad O_1 \quad X \quad O_2 \)

Group 2: \( R \quad O_3 \quad O_4 \)

Group 3: \( R \quad X \quad O_5 \)

Group 4: \( R \quad O_6 \)

However, there are limitations to the Solomon four group design (Kumari, 2013). The primary limitation is in the complexity of the design. A traditional design requires four groups including a control group. Additional time and resources are needed to conduct research using all four groups. It is not ethical to withhold an intervention that has proven effective; however, the intervention in this study could not be delayed due to the training schedule. As such, all participants received the intervention. Other limitations affecting the use of only groups one and three of the design include the exclusion of control groups (groups two and four) which might further strengthen the hypothesis that the intervention had an effect and test for premeasurement sensitization. As such, modifications to the Solomon four group design have been introduced. Among these modifications include the Separate-Sample Pretest-Posttest Design 12c (Campbell & Stanley, 1963). Design 12c controls for threats to internal validity such as testing regression toward the mean, selection, and mortality. In addition, it controls for the following threats to external validity: interaction of testing and the intervention, interaction between selection and the intervention, and reactive arrangements. The advantage of using the Separate-Sample Pretest-Posttest Design over the Solomon four group design is that all of the participants receive the intervention.
In this study, groups one and three were used to determine whether the interventions had a direct impact on mental health stigma rather than influence of the pre-test measure, whereby $R =$ randomization of the pre-test, $O_1 =$ pre-test observation, $X =$ intervention, $O_2 =$ post-test observation with pre-test, and $O_3 =$ post-test observation without pre-test.

Group 1: $R O_1 X O_2$

Group 3: $R X O_3$

3.4 Description of Participants

The participants for this study were RAs employed by the Office of Residence Life at a large Midwestern university during the 2016-2017 academic year. RAs are currently enrolled undergraduate students in at least their second year of school, and are over the age of 18. Requirements for the RA position include full-time enrollment. They can be from diverse backgrounds and declare any major of study. They live on site with students in the residence halls. Some are hired for multiple years. As such, many have been previously trained in procedures on how to address mental health issues with students and likely have experience in identifying and referring students to counseling services. Of the 97 RAs recruited, 94 agreed to participate (96.9%). Forty identified as male (42.6%), 53 identified as female (56.4%), and one (1.1%) preferred not to identify gender. The average age was 20.31 (SD = 1.15, range = 18 – 24). Ethnicity was as follows: one identified as Asian (1.1%), 11 identified as Black/African American (11.7%), two identified as Native Hawaiian/Other Pacific Islander (2.1%), 73 identified as White (77.7%), and seven preferred not to identify (7.4%). Sixty-one RAs are returning to the position (64.9%) while 33 RAs are new to the position (35.1%).
Regarding class standing, one RA identified as a first-year student (1.1%), 24 identified as second-year students (25.5%), 25 identified as third-year students (26.6%), 25 identified as fourth-year students (26.6%), 13 identified as fifth-year students (13.8%), and six preferred not to identify (6.4%).

3.5 Sampling Procedures

Participants were recruited from the pool of RAs working in the residence halls at a large Midwestern university. The study was conducted during training offered by the Office of Residence Life prior to the fall semester. All RAs were required to attend this training. Therefore, the sampling method utilized was one of convenience. Convenience sampling involves a selection of inclusion that is easiest to obtain (Bernard, 2013). While designing the study, the author reached out to administrators in the Office of Residence Life to explain the purpose and method of the study. Due to the strong research regarding the interventions, it was decided that all RAs would have access to the interventions and decide for themselves whether to be part of the study. Therefore, this training provided an appropriate forum to obtain an adequate sample size.

3.6 Instrumentation

Instruments were researched and selected for their ability to answer the research questions. Three instruments were used to measure dimensions of mental health stigma: one for public stigma, one for perceived public stigma, and one for self-stigma. A description of each of the measures including psychometric properties follows.

3.6.1 Public Stigma

3.6.1.1 Community Attitudes Toward the Mentally Ill
The Community Attitudes Toward the Mentally Ill scale (Taylor & Dear, 1981) includes 40 items, measuring authoritarianism, benevolence, and social restrictiveness, and community mental health ideology. Authoritarianism consists of items that measure whether those with mental illness are responsible for their symptoms and need to be cared for in institutional settings. Benevolence measures attitudes of kindness and sympathy for those with mental illness, and whether care should be funded with public dollars. Social restrictiveness measures whether those with mental illness are considered dangerous and should be shunned by society. Finally, community mental health ideology measures attitudes of whether those with mental illness should live in neighborhoods and be part of a community. Each construct contains 10 items and are rated on a Likert 5-point scale from “strongly agree” to “strongly disagree”. Higher scores indicate higher levels of public stigma. Internal consistency was found to be .68 for authoritarianism, .76 for benevolence, .80 for social restrictiveness, and .88 for community mental health ideology (Taylor & Dear, 1981). Construct validity for the same sample was found to be in the range of $r = -.63$ between authoritarianism and benevolence and $r = -.77$ between social restrictiveness and community mental health ideology (Taylor & Dear, 1981).

### 3.6.2 Perceived Public Stigma

#### 3.6.2.1 Perceptions of Stigmatization by Others for Seeking Help

The Perceptions of Stigmatization by Others for Seeking Help (PSOSH) was developed to measure the extent to which stigma prevents people from seeking mental health services (Vogel et al., 2009). In other words, it measures the perception that those with mental illness have of how others perceive those with mental illness, and whether that perception of others prevents them from seeking help for their own illness. The scale
consists of five items and is scored using a five-point Likert scale from 1 = Not at all to 5 = A great deal (Vogel et al., 2009). Higher scores indicate more perceived stigma. The instructions ask participants to consider having a problem that might require counseling, and if they believe others would respond negatively to receiving counseling.

In a study involving five samples of undergraduate college students, the PSOSH was used to test reliability and validity (Vogel et al., 2009). Across all five samples, the results showed high internal consistency (\(\alpha = .88\)) and test-retest reliability across a three-week period (\(r = .82\)). Concurrent validity scored between \(r = .20\) and \(r = .37\) at the \(p < .001\) level. The PSOSH was selected for this study due to the phrasing of the items in that the participant considers whether they would receive mental health treatment regardless of what others may think of mental illness.

3.6.3 Self-Stigma

3.6.3.1 Attitudes Toward Seeking Professional Psychological Help

The Attitudes Toward Seeking Professional Psychological Help (ATSPPH) scale measures self-stigma (Fischer & Turner, 1970). The questionnaire focuses on the participants’ willingness to receive treatment for various mental health concerns and measures whether they have internalized attitudes of public mental health stigma. Items are scored on a four-point continuum, with total scores ranging between 0 and 87. Internal consistency for the initial version was calculated at .86. Test-retest reliability for time intervals of five days to two months was found to be between \(r = .73\) at four weeks through \(r = .89\) at two weeks.

Fischer and Farina (1995) shortened the scale from 29 items to 10 items for ease of administration and completion and to focus on two constructs that they believed most
affected help-seeking behaviors: openness to seeking treatment for emotional problems (OSTEP) and value and need in seeking treatment (VNST) (Elhai et al., 2008). Internal consistency of the items was measured at .84 (Fischer & Farina, 1995). Items were scored on a scale from 0-3, with a scoring range of 0-30. Higher scores indicate more favorable attitudes toward treatment. Test-retest reliability at one month was .80, and reliability between each version was .87. This study used the shortened version for the sake of time.

3.7 Variables

The following is a listing of the variables included in this study.

3.7.1 Demographic Variables

- Age: Continuous variable in years over 18.
- Ethnicity: 1 = American Indian / Alaskan Native; 2 = Asian; 3 = Black / African American; 4 = Native Hawaiian / Other Pacific Islander; 5 = White.
- Gender: 1 = Male; 2 = Female; 3 = Transgender.
- Returning RA: Dichotomous variable (0 = Returning; 1 = Not Returning).
- Year in College: 1 = 1st year; 2 = 2nd year; 3 = 3rd year; 4 = 4th year; 5 = 5th year.

3.7.2 Independent Variables

- Education: A 20-minute discussion of facts and myths regarding mental health.
- Personal testimony: A 20 – 30 minute panel discussion conducted by volunteers who have experienced mental health symptoms, treatment, and stigma attached to their illness.

3.7.3 Dependent Variables
- Public stigma: The act of endorsing stereotypes against a marginalized group (Corrigan, 2004). Public stigma is measured using the CAMI (Taylor et al., 1979). The CAMI consists of 40 items rated on a five-point Likert scale from “strongly agree” to “strongly disagree” and consists of four subscales: authoritarianism, benevolence, social restrictiveness, and community mental health ideology.

- Perceived public stigma: The extent to which a person views how the public marginalizes an undesirable group (Corrigan, 2004). Perceived public stigma is measured using the PSOSH (Vogel et al., 2009). The scale consists of five items and is scored using a five-point Likert scale from 1 = Not at all to 5 = A great deal.

- Self-stigma: The internalization of mental health stigma, resulting in decreased self-esteem and self-efficacy (Watson et al., 2007). Self-stigma is measured using the ATSPPH-SF (Fischer & Farina, 1995; Fischer & Turner, 1970). The questionnaire contains 10 items that measure two factors: openness to seeking treatment for emotional problems (OSTEP) and value and need in seeking treatment (VNST). The instrument is scored on a four-point continuum, with total scores ranging between 0 and 30.

3.8 Procedures

The proposed procedures were submitted for review and approved by the Institutional Review Board (IRB) at The University of Toledo. Procedures are also compliant with ethical codes set forth by the American Counseling Association’s Code of Ethics (2014). Participants were fully apprised of the study including risks, benefits, and the right to withdraw from the study at any time.
Every academic year, the Office of Residence Life conducts extensive training for RAs including policies and procedures relevant to their positions prior to the start of the fall semester. This also included a presentation by the university’s counseling center that offers information on services offered to students with mental health issues. The training is required for all RAs. This study was conducted at the beginning of training to eliminate any influence from instruction or discussions during the course of the training.

All RAs were exposed to the interventions to allow for each to have the same opportunity to learn and interact. At the start of the intervention, all RAs were randomly provided a packet, introduced to the study, and offered the opportunity to voluntarily participate. Half of the packets contained a pre-test consisting of the three measurements. All of the packets included a post-test of the three measurements, a demographics form (Appendix A), and a consent form (Appendix E). Packets were numbered. The pre-tests and post-tests were color coded and labeled accordingly to prevent confusion. The primary researcher reviewed the information on the informed consent and asked those participating to sign it and return it to their packets. Those RAs with pre-tests were then be asked to complete the pre-test prior to the intervention while the others waited. RAs were then asked to place their completed pre-tests into their packet.

The interventions consisted of education about mental health and personal testimony from volunteers who were willing to speak about their experience, as both have been determined to be strong anti-stigma interventions (Salzer, 2012; Yamaguchi et al., 2011). Education consisted of comparing facts versus myths about mental illness (Appendix D). Personal testimony consisted of three volunteers with histories of anxiety
and depression, who spoke about their symptoms and road to recovery. Included in the
discussion was how public, perceived public, and self-stigma affected them and their
ability to cope with their illness. Anxiety and depression were issues selected specifically
for this intervention as they are the most likely to be experienced by college students
(Stevenson, 2010) and encountered by RAs.

Each intervention lasted between 20 and 30 minutes. RAs were asked to take the
post-test consisting of the three stigma measures and complete the demographic form.
They placed the completed forms in their packet. Packets were collected once
participants were finished. The total time for the intervention including informed consent
and the completion of the pre- and post-test was 90 minutes.

3.8.1 Personal Testimony

Volunteers for the personal testimony intervention were recruited from the local
NAMI chapter. The researcher was invited to a young person’s support group and
provided information on the study along with a consent form (Appendix F). Procedures
along with risks and benefits of volunteering were presented. Group members who
wished to volunteer provided contact information to the presenter who followed up by
phone to schedule an appointment. The appointment consisted of a discussion about their
experience with mental illness and comfort level regarding the presentation. Three
volunteers agreed to present during the intervention.

The presentation consisted of ten questions regarding their experience with mental
illness including how stigma affected their relationships, opportunities, and mental health
care (see Appendix C). Each volunteer provided as much information as they were
comfortable disclosing to the participants. Email exchanges between the volunteers and
the research finalized the answers to the questions which were printed and provided to
them as prompts during the presentation. Each of the three volunteers responded to the
questions in turn. No questions were permitted by the participants to allow for replication
of the study. For a summary of the volunteers’ answers, see Appendix D.

3.9 Statistical Hypothesis

General Research Hypotheses: Do anti-stigma interventions with RAs reduce
their mental health stigma?

Research questions 1 – 7 compare scores of those who took both the pre- and
post-test (Group 1) on each of the CAMI’s four domains, the PSOSH, and the two
domains of the ATSPPH-SF.

Specific Research Question 1: Do anti-stigma interventions decrease
authoritarianism in the RA population?

Specific Research Question 2: Do anti-stigma interventions increase benevolence
in the RA population?

Specific Research Question 3: Do anti-stigma interventions decrease social
restrictiveness in the RA population?

Specific Research Question 4: Do anti-stigma interventions increase community
mental health ideology in the RA population?

Specific Research Question 5: Do anti-stigma interventions decrease perceived
public stigma in the RA population?

Specific Research Question 6: Do anti-stigma interventions increase the openness
to seeking treatment for emotional problems in the RA population?
Specific Research Question 7: Do anti-stigma interventions increase the value and need in seeking treatment in the RA population?

Research questions 8 – 14 compare data between Group 1 and Group 2 to determine if the pre-test affected answers on the post-test.

Specific Research Question 8: Is there a difference in authoritarianism among RAs who were administered a pre-test versus those who were not?

Specific Research Question 9: Is there a difference in benevolence among RAs who were administered a pre-test versus those who were not?

Specific Research Question 10: Is there a difference in social restrictiveness among RAs who were administered a pre-test versus those who were not?

Specific Research Question 11: Is there a difference in community mental health ideology among RAs who were administered a pre-test versus those who were not?

Specific Research Question 12: Is there a difference in mental health perceived public stigma among RAs who were administered a pre-test versus those who were not?

Specific Research Question 13: Is there a difference in the openness to seeking treatment for emotional problems among RAs who were administered a pre-test versus those who were not?

Specific Research Question 14: Is there a difference in the value and need in seeking treatment among RAs who were administered a pre-test versus those who were not?

3.10 Data Analysis

The current study measured three dependent variables: public stigma, perceived public stigma, and self-stigma. A separate instrument that has been specifically designed
for each type of stigma was used to measure the dependent variables. Independent and paired samples t-tests were used to statistically analyze each of the dependent variables (Privitera, 2016). Independent samples t-tests were used to compare the means of two unrelated groups on a continuous, dependent variable. In this study, independent samples t-tests were used to compare means between the group of participants that took both the pre- and post-test and the group that only took the post-test to determine if there were differences in scores on each of the measures. Paired samples t-tests were used to compare two population means within the same group as a way of determining differences from time one to time two on each of the measures.

The researcher conducted power estimates (McNeil, Newman, & Kelly, 1996; Stevens, 1996) using conservative estimates and a sample size of 60. Power estimates provide the research an estimate of the Type II error rate for different size effects that may exist in the study’s sample. Cohen (1992) offered three levels of effect sizes ($f^2$) when comparing independent means in social science: small (.10), medium (.25), and large (.40). The researcher calculated a power estimate for each effect size. Based upon these findings, if there was a significant difference or relationship between students who saw a counselor and those who did not on the dependent variables and the effect size is small, power will be .58. If the effect size was at least medium power will be .93, and if the effect size is large, power will be .995. Therefore, the researcher is confident that if differences existed between counseled and non-counseled students on the tested variables, the statistical procedures and design employed in this study would have able to detect them if the effect size is medium (.25).
To avoid the dangers associated with multiple tests of significance, such as increased Type I error rate, the research employed two Bonferroni-type adjustments (Newman, Fraas, & Laux, 2000). This study required seven within-groups tests of significance and seven between-groups tests of significance. In order to spread the \textit{a priori} alpha level ($p < .05$) across the two groups of seven tests of significance, the researcher divided the $p < .05$ by seven to produce a per statistical test alpha of .0071.

3.11 Summary

The purpose of this study was to determine if anti-stigma interventions produce differences in the level of mental health stigma in resident advisor attitudes toward mental health. The study used a modification of the Solomon four group design, the Separate-Sample Pretest-Posttest Design 12c (Campbell & Stanley, 1963), to determine if anti-stigma interventions affect attitudes about mental health in a college resident advisor population. RAs will be selected from the pool of those available during a training. Random assignment will determine who receives a pre-test. The intervention was provided to everyone in the form of education and personal testimony. All participants took the post-test. Paired samples t-tests and independent-samples t-tests were used to determine whether statistically significant differences exist among and within the three dependent variables: public stigma, perceived public stigma, and self-stigma.
Chapter 4

Findings

4.1 Introduction

This chapter begins with a review of the sample and participants in this study. It then provides descriptive data regarding the instruments used in this study including internal consistency. Next, the research questions are answered using the appropriate statistical test, noting which results are statistically significant. Finally, effect sizes are provided to determine the magnitude of the difference for each of the measures. The chapter will conclude with a summary of the results.

4.2 Sample / Participants

Participants were recruited from the pool of RAs at a large Midwestern public university. Of the 97 RAs recruited, 94 agreed to participate (96.9%). Of the total participants, 40 identified as male (42.6%), 53 identified as female (56.4%), and one (1.1%) preferred not to identify. The average age was 20.31 (SD = 1.15, range = 18 – 24). Regarding ethnicity, one identified as Asian (1.1%), 11 identified as Black/African American (11.7%), two identified as Native Hawaiian/Other Pacific Islander (2.1%), 73 identified as White (77.7%), and seven preferred not to identify (7.4%). One RA identified as a first-year student (1.1%), 24 identified as second-year students (25.5%), 25
identified as third-year students (26.6%), 25 identified as fourth-year students (26.6%), 13 identified as fifth-year students (13.8%), and six preferred not to identify (6.4%).

Although RAs typically begin during their second year, it is possible for a student to begin the position while still in their first year if they do not have the number of credits to consider them second-year students. Sixty-one RAs are returning to the position (64.9%) while 33 RAs are new to the position (35.1%). Some of the returning RAs only had one semester of experience as they began during the second semester of the last academic year. Therefore, their experience was limited more than others who had at least one academic year of experience. Of the 94 participants, 46 were administered the post-test only (48.9%) and 48 were administered both the pre-test and the post-test (51.1%).

The graphs below illustrate the demographics of the participants.

Figure 4-1: Participant Gender
Figure 4-2: Participant Age

Figure 4-3: Participant Ethnicity
Figure 4-4: Participant Academic Standing

Figure 4-5: New vs. Returning RA
4.3 Descriptive Data

This study used three measures of stigma to determine whether anti-stigma interventions RAs’ were associated with attitudes toward mental health issues and treatment. The first instrument, the CAMI (Taylor et al., 1979), measured public stigma using four subscales to determine how they perceive those with mental health issues: authoritarianism, benevolence, social resistance, and community mental health ideology. The PSOSH (Vogel et al, 2009) measured perceived public stigma to indicate whether participants believed others might react negatively to them for seeking mental health treatment. Finally, the ATSPPH-SF (Fischer & Farina, 1995; Fischer & Turner, 1970) measured self-stigma using two factors to indicate whether participants would think of themselves negatively if they sought help for a mental health issue.

Sample means and standard deviations were calculated for each of the measurements for Group 1 and Group 2. Table 4.1 provides the mean, standard deviation,
and range of scores for those in Group 1 who completed both the pre- and post-test (between group measures). Table 4.2 provides the mean, standard deviation, and range of scores for those in Group 2 who completed the post-test only (within group measures).

Table 4.1: Descriptive Statistics of Measurements in Group 1

<table>
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<tr>
<th>Test</th>
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<th>Mean</th>
<th>SD</th>
<th>Range</th>
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<td>4.49</td>
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<tr>
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<td>4.13</td>
<td>11-29</td>
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<tr>
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<td>15-31</td>
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<tr>
<td></td>
<td>Time 2</td>
<td>48</td>
<td>20.08</td>
<td>4.15</td>
<td>11-35</td>
</tr>
<tr>
<td>CAMI Social Restrictiveness</td>
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<td>20.33</td>
<td>4.75</td>
<td>10-35</td>
</tr>
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<td></td>
<td>Time 2</td>
<td>48</td>
<td>17.50</td>
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<tr>
<td>CAMI CMHI</td>
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<td>21.31</td>
<td>5.85</td>
<td>10-37</td>
</tr>
<tr>
<td></td>
<td>Time 2</td>
<td>48</td>
<td>17.83</td>
<td>5.27</td>
<td>9-33</td>
</tr>
<tr>
<td>PSOSH</td>
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<td>9.38</td>
<td>4.14</td>
<td>5-21</td>
</tr>
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<td>47</td>
<td>8.83</td>
<td>4.27</td>
<td>5-21</td>
</tr>
<tr>
<td>ATSPPH-SF OSTEP</td>
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<td>3.02</td>
<td>2-14</td>
</tr>
<tr>
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<td>48</td>
<td>6.56</td>
<td>3.15</td>
<td>1-14</td>
</tr>
<tr>
<td>ATSPPH-SF VNST</td>
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<td>2.44</td>
<td>3-14</td>
</tr>
<tr>
<td></td>
<td>Time 2</td>
<td>48</td>
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<td>2.55</td>
<td>2-14</td>
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Table 4.2: Descriptive Statistics of Measurements in Group 2

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<th>Test</th>
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</thead>
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<td>4.09</td>
<td>12-29</td>
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<tr>
<td>CAMI Benevolence</td>
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<tr>
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<td>18.1</td>
<td>4.31</td>
<td>12-30</td>
</tr>
<tr>
<td>CAMI CMHI</td>
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<td>19.5</td>
<td>5.67</td>
<td>10-30</td>
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<tr>
<td>PSOSH</td>
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<td>10.11</td>
<td>4.47</td>
<td>5-20</td>
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<td>ATSPPH-SF OSTEP</td>
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<td>6.47</td>
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<td>ATSPPH-SF VNST</td>
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<td>9.02</td>
<td>3.54</td>
<td>0-15</td>
</tr>
</tbody>
</table>

Pre-test and post-test internal consistency estimates for the CAMI were measured on all four subscales. Authoritarianism was determined to have lower internal consistency (α = .64) at pre-test as well as post-test (α = .62) than what is generally accepted (Streiner
& Norman, 2008). Benevolence was determined to have low internal consistency at pre-test ($\alpha = .40$) and at post-test ($\alpha = .65$). Social resistance had high internal consistency at pre-test ($\alpha = .73$) but lower at post-test ($\alpha = .69$). Finally, community mental health ideology had high internal consistency at pre-test ($\alpha = .73$) and at post-test ($\alpha = .84$).

Internal consistency was also measured for the PSOSH and ATSPPH-SF at pre-test and post-test. The PSOSH was determined to have high internal consistency at pre-test ($\alpha = .90$) and post-test ($\alpha = .92$). During data analysis, it was discovered that calculating the internal consistency of the ATSPPH-SF using all 10 items resulted in a negative alpha ($\alpha = -.483$). A negative alpha usually occurs due to a coding error, small sample size, or low internal consistency (Taylor, 2013). Data coding was rechecked and it was confirmed that the coding process was accurate. The participant to item ratio was nearly 10:1 (Osborne & Costello, 2004). Previous researchers (e.g., Elhai et al., 2008; Fischer and Farina, 1995) reported that the ATSPPH-SF had two factors: openness to seeking treatment for emotional problems (OSTEP) and value and need in seeking treatment (VNST). As such, the present researcher elected to approach the ATSPPH-SF reliability problem by following suit and using these two previously identified factors. Subsequently, the OSTEP factor’s internal consistency reliability estimate was measured at $\alpha = .60$ at pre-test and $\alpha = .62$ at post-test. The VNST factor’s internal consistency reliability estimate was measured at $\alpha = .54$ at pre-test and $\alpha = .72$ at post-test. These estimates far exceeded the alpha for the ATSPPH-SF. Therefore, the original research question regarding self-stigma was divided into two questions.

4.4 Research Questions
This study used Campbell and Stanley’s (1963) “Separate-Sample Pre-test – Post-test Design 12c” (p. 42). This design involves within group (pre- and post-intervention) tests of significance and between groups (post-tests) tests of significance. The within group (pre- and post-intervention) tests of significance comprise research questions 1-7. The between group (post-tests) tests of significance are used to answer research questions 8-14.

Research questions 1-7 compared scores of those who took both the pre- and post-test (Group 1). Pre-test scores were compared with post-test scores on each of the CAMI’s four domains, the PSOSH, and the two domains of the ATSPPH-SF. Within groups paired-sample t-tests were calculated to compare Group 1’s mean scores on each of these variables. The following research questions and related tests of significance are detailed below.

Research Question One asked: Do anti-stigma interventions decrease authoritarianism in the RA population? Authoritarianism was one of the subscales of the CAMI and measured attitudes such as blame, responsibility, and the belief that those with mental illness need constant care (Taylor, Dear, & Hall, 1979). A high score on authoritarianism indicated a high level of public stigma. A paired samples t-test was conducted to compare the amount of authoritarianism within public stigma from pre-test to post-test. There was a statistically significant difference in the scores from pre-test (M = 21.56, SD 4.49) to post-test (M = 17.56, SD = 4.13) conditions; \( t (47) = 8.514, p = .000 \). The sample’s score on authoritarianism decreased 4.0 points from pre- to post-test. The effect size (Cohen’s \( d \)) for this difference was .930, which is a large effect.
Therefore, the authoritarian score decreased from time one to time two following the intervention.

Research Question Two asked: Do anti-stigma interventions increase benevolence in the RA population? Benevolence was one of the subscales of the CAMI and measured kindness, sympathy, and willingness to advocate for those with mental illness (Taylor, Dear, & Hall, 1979). A high score on this domain indicated a high level of public stigma and nonbenevolence. A paired samples t-test was conducted to compare the amount of benevolence within public stigma from pre-test to post-test. There was a statistically significant difference in the scores from pre-test ($M = 21.77$, $SD = 3.59$) to post-test ($M = 20.08$, $SD = 4.15$) conditions; $t(47) = 3.802$, $p = .000$. The sample’s score on benevolence decreased 1.69 points from pre- to post-test. The effect size for this difference was $d = .41$ which falls between Cohen’s (1992) small and medium categorizations. Therefore, the benevolence score decreased from time one to time two following the intervention.

Research Question Three asked: Do anti-stigma interventions decrease social restrictiveness in the RA population? Social restrictiveness was one of the subscales of the CAMI and measured attitudes regarding whether those with mental illness are dangerous and should be kept at a distance (Taylor, Dear, & Hall, 1979). A high score on social restrictiveness indicated a high level of public stigma. A paired samples t-test was conducted to compare the amount of social restrictiveness within public stigma from pre-test to post-test. There was a statistically significant difference in the scores from pre-test ($M = 20.33$, $SD = 4.75$) to post-test ($M = 17.50$, $SD = 4.73$) conditions; $t(47) = 6.953$, $p = .000$. The sample’s score on social restrictiveness decreased 2.83 points from pre- to
post-test. The effect size for this difference was $d = .60$ which is in the medium range (Cohen, 1992). Therefore, the social restrictiveness score decreased from time one to time two following the intervention.

Research Question Four asked: Do anti-stigma interventions increase community mental health ideology in the RA population? Community mental health ideology, or the acceptance of deinstitutionalization, was one of the subscales of the CAMI and measured attitudes regarding whether those with mental illness would be accepted within a community. A high score on this domain indicated a high level of public stigma. A paired samples t-test was conducted to compare the amount of community mental health ideology within public stigma from pre-test to post-test. There was a statistically significant difference in the scores from pre-test ($M = 21.31$, $SD = 5.85$) to post-test ($M = 17.83$, $SD = 5.27$) conditions; $t(47) = 8.242$, $p = .000$. The sample’s score on community mental health ideology decreased 3.48 points from pre- to post-test. The effect size for this difference was $d = .63$ which is in the medium range (Cohen, 1992). Therefore, the community mental health ideology score decreased from time one to time two following the intervention.

Research Question Five asked: Do anti-stigma interventions decrease perceived public stigma in the RA population? Perceived public stigma is the perception of how an individual seeking help believes others would perceive them (Vogel et al., 2009). This construct was measured using the PSOSH. A high score on the PSOSH indicated a high degree of perceived public stigma. A paired samples t-test was conducted to compare the amount of perceived public stigma from pre-test to post-test. There was not a statistically significant difference in the scores from pre-test ($M = 9.18$, $SD = 4.31$) to post-test ($M =$
The sample’s score on perceived public stigma decreased .35 points from pre- to post-test. The effect size for this difference was $d = .08$ which is in the small range (Cohen, 1992). Therefore, the PSOSH score decreased from time one to time two, but was not statistically significant.

Research Question Six asked: Do anti-stigma interventions increase the openness to seeking treatment for emotional problems (OSTEP) in the RA population? OSTEP is the degree to which individuals are willing to seek mental health treatment for their own emotional problems (Elhai, et al., 2008). A high score on this factor indicated a high level of OSTEP and low level of self-stigma. This construct was measured using the ATSPPH-SF. A paired samples t-test was conducted to compare the amount of OSTEP from pre-test to post-test. There is no difference in the scores from pre-test ($M = 7.40$, $SD = 3.02$) to post-test ($M = 6.57$, $SD = 3.18$) conditions; $t (46) = 2.780$, $p = .008$. The sample’s score on OSTEP decreased .83 points from pre- to post-test. The effect size for this difference was $d = .267$ which is in the small range (Cohen, 1992). Therefore, the OSTEP score of the ATSPPH-SF remained the same from time one to time two.

Research Question Seven asked: Do anti-stigma interventions increase the value and need in seeking treatment in the RA population? VNST is a factor of self-stigma and defined as the degree to which general perceptions are made about mental health treatment (Elhai et al., 2008). A high score on this factor indicated a high level of VNST and low level of self-stigma. This construct was measured using the ATSPPH-SF. A paired samples t-test was conducted to compare the amount of VNST from pre-test to post-test. There was a statistically significant difference in the scores from pre-test ($M = 7.95$, $SD = 2.44$) to post-test ($M = 8.97$, $SD = 2.57$) conditions; $t (46) = -3.790$, $p = .000$. 

8.83, SD = 4.27) conditions; $t (46) = 1.643$, $p = .107$. The sample’s score on perceived public stigma decreased .35 points from pre- to post-test. The effect size for this difference was $d = .08$ which is in the small range (Cohen, 1992). Therefore, the PSOSH score decreased from time one to time two, but was not statistically significant.
The sample’s score on VNST increased 1.02 points from pre- to post-test, indicating more value and need for seeking treatment and was enough of a change to be considered statistically significant. The effect size for this difference was $d = -.407$ which is in the small range (Cohen, 1992). Therefore, the VNST score of the ATSSPH-SF increased from time one to time two following the intervention. Below is a summary of the results from the paired-sample t-tests on the first seven research questions.

Table 4.3: Summary Results of Paired-Sample T-tests within Group 1

<table>
<thead>
<tr>
<th>Test</th>
<th>Group 1</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>t</th>
<th>Sig.</th>
<th>d</th>
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</tr>
<tr>
<td></td>
<td>Time 2</td>
<td>48</td>
<td>17.56</td>
<td>4.13</td>
<td>8.514</td>
<td>.000</td>
<td>.93</td>
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<tr>
<td>Benevolence</td>
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<td>48</td>
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<td>3.59</td>
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<td></td>
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<td></td>
<td>Time 2</td>
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<td>4.15</td>
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Research questions 8-14 compared data between Group 1 and Group 2. Group 1 scores are compared with Group 2 scores on each of the CAMI’s four domains, the PSOSH, and the two domains of the ATSSPH-SF. Independent-sample t-tests were calculated to compare the means of the two groups. The following research questions and related tests of significance are detailed below.
Research Question Eight asked: Is there a difference in authoritarianism among RAs who were administered a pre-test versus those who were not? As mentioned, authoritarianism was one of the subscales of the CAMI. An independent samples t-test was conducted to compare authoritarianism within mental health public stigma between those who took the pre-test and those who did not. Equal variances were assumed as Levene’s test for equality of variances was not significant. There was not a statistically significant difference between those who took the pre-test (M = 17.56, SD = 4.13) and those who did not (M = 18.50, SD = 4.09) on this measure; $t (92) = 1.104, p = .272$. The magnitude of the difference between these two groups’ score on authoritarianism was small ($d = .23$) (Cohen, 1992). This finding, in combination with the within group results, suggests that the decrease in the within groups’ scores over time was not due to pre-test sensitization.

Research Question Nine asked: Is there a difference in benevolence among RAs who were administered a pre-test versus those who were not? As mentioned, benevolence was one of the subscales of the CAMI. An independent samples t-test was conducted to compare benevolence within mental health public stigma between those who took the pre-test and those who did not. Equal variances were assumed a Levene’s test for equality of variances was not significant. There was not a statistically significant difference between those who took the pre-test (M = 20.08, SD = 4.15) and those who did not (M = 20.32, SD = 4.31) on this measure; $t (92) = .278, p = .782$. The magnitude of the difference between these two groups’ score on benevolence was small ($d = .06$) (Cohen, 1992). This finding, in combination with the within group results, suggests that the decrease in the within groups’ scores over time was not due to pre-test sensitization.
Research Question Ten asked: Is there a difference in social restrictiveness among RAs who were administered a pre-test versus those who were not? As mentioned, social restrictiveness was one of the subscales of the CAMI. An independent samples t-test was conducted to compare social restrictiveness within mental health public stigma between those who took the pre-test and those who did not. Equal variances were assumed as Levene’s test for equality of variances was not significant. There was not a statistically significant difference between those who took the pre-test (M = 17.50, SD = 4.73) and those who did not (M = 18.10, SD = 4.31) on this measure; $t(92) = .651, p = .517$. The magnitude of the difference between these two groups’ score on social restrictiveness was small ($d = .13$) (Cohen, 1992). This finding, in combination with the within group results, suggests that the decrease in the within groups’ scores over time was not due to pre-test sensitization.

Research Question Eleven asked: Is there a difference in community mental health ideology among RAs who were administered a pre-test versus those who were not? As mentioned, community mental health ideology was one of the subscales of the CAMI. An independent samples t-test was conducted to compare community mental health ideology within mental health public stigma between those who took the pre-test and those who did not. Equal variances were assumed as Levene’s test for equality of variances was not significant. There was not a statistically significant difference between those who took the pre-test (M = 17.83, SD = 5.27) and those who did not (M = 19.50, SD = 5.67) on this measure; $t(92) = 1.475, p = .144$. The magnitude of the difference between these two groups’ score on community mental health ideology was small ($d = .31$) (Cohen, 1992). This finding, in combination with the within group results, suggests
that the decrease in the within groups’ scores over time was not due to pre-test sensitization.

Research Question Twelve asked: Is there a difference in perceived public stigma among RAs who were administered a pre-test versus those who were not? This construct was measured using the PSOSH. An independent samples t-test was conducted to compare perceived public stigma between those who took the pre-test and those who did not. Equal variances were assumed as Levene’s test for equality of variances was not significant. There was not a statistically significant difference between those who took the pre-test (M = 8.83, SD = 4.27) and those who did not (M = 9.89, SD = 4.66) on this measure; \( t(92) = 1.147, p = .254 \). The magnitude of the difference between these two groups’ score on perceived public stigma was small \((d = .24)\) (Cohen, 1992). This finding, in combination with the within group results, suggests that the decrease in the within groups’ scores over time was not due to pre-test sensitization.

Research Question Thirteen asked: Is there a difference in the openness to seeking treatment for emotional problems among RAs who were administered a pre-test versus those who were not? As mentioned, OSTEP is a factor of self-stigma. This construct was measured using the ATSPPH-SF. An independent samples t-test was conducted to compare OSTEP scores between those who took the pre-test and those who did not. Equal variances were assumed as Levene’s test for equality of variances was not significant. There was not a statistically significant difference between those who took the pre-test (M = 6.56, SD = 3.15) and those who did not (M = 6.47; SD = 3.51) on this measure; \( t(92) = -.122, p = .903 \). The magnitude of the difference between these two groups’ score on OSTEP was small \((d = -.026)\) (Cohen, 1992). This finding, in
combination with the within group results, suggests that the decrease in the within groups’ scores over time was not due to pre-test sensitization.

Research Question Fourteen asked: Is there a difference in the value and need in seeking treatment among RAs who were administered a pre-test versus those who were not? As mentioned, VNST is a factor of self-stigma. This construct was measured using the ATSPPH-SF. An independent samples t-test was conducted to compare VNST scores between those who took the pre-test and those who did not. Equal variances were assumed as Levene’s test for equality of variances was not significant. There was not a statistically significant difference between those who took the pre-test ($M = 8.95$, $SD = 2.55$) and those who did not ($M = 9.02$, $SD = 3.54$) on this measure; $t(92) = .100$, $p = .921$. The magnitude of the difference between these two groups’ score on VNST was small ($d = .02$) (Cohen, 1992). This finding, in combination with the within group results, suggests that the increase in the within groups’ scores over time was not due to pre-test sensitization. Below is a summary of the results from the independent sample t-tests on the second seven research questions.

Table 4.4: Summary Results of Independent Sample T-tests between Groups

<table>
<thead>
<tr>
<th>Test</th>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>$t$</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authoritarianism</td>
<td>1</td>
<td>48</td>
<td>17.56</td>
<td>4.13</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>48</td>
<td>18.50</td>
<td>4.09</td>
<td>1.104</td>
<td>.272</td>
</tr>
<tr>
<td>Benevolence</td>
<td>1</td>
<td>48</td>
<td>20.08</td>
<td>4.15</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>48</td>
<td>20.32</td>
<td>4.31</td>
<td>.278</td>
<td>.782</td>
</tr>
<tr>
<td>Social</td>
<td>1</td>
<td>48</td>
<td>17.50</td>
<td>4.73</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Restrictiveness</td>
<td>2</td>
<td>48</td>
<td>18.10</td>
<td>4.31</td>
<td>.651</td>
<td>.517</td>
</tr>
<tr>
<td>CMHI</td>
<td>1</td>
<td>48</td>
<td>17.83</td>
<td>5.27</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>48</td>
<td>19.50</td>
<td>5.67</td>
<td>.144</td>
<td>.144</td>
</tr>
<tr>
<td>PSOSH</td>
<td>1</td>
<td>47</td>
<td>8.83</td>
<td>4.27</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>47</td>
<td>9.89</td>
<td>4.66</td>
<td>.254</td>
<td>.254</td>
</tr>
<tr>
<td>OSTEP</td>
<td>1</td>
<td>48</td>
<td>6.56</td>
<td>3.15</td>
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</tr>
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</table>
The researcher began the chapter by describing the sample and participants used in the study. The descriptive statistics were provided for each of the measures, including mean, standard deviation, and range. Internal consistency was presented for each of the measures. Each of the research questions were answered, presenting both descriptive information and statistical calculations for each of the variables. Levels of significance and effect sizes were calculated to determine whether and to what degree the intervention had on the participants. Results showed that there were decreases in scores from time one to time two on all factors of the CAMI and PSOSH measures, indicating a decrease in stigma, though only the CAMI indicated statistically significant results. VNST scores increased significantly, indicating an increase in the value and need to seek treatment, while OSTEP scores decreased, indicating a decrease in the openness to seeking treatment for emotional problems. In addition, it is not likely that pre-test sensitization impacted participant’s answers on the post-test.

The final chapter will discuss the findings as they relate to mental health stigma. Results will be integrated into existing literature, and limitations of the study will be discussed. Finally, implications of the research and directions for further research will be presented.

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<td>1</td>
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<tr>
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<td>46</td>
<td>9.02</td>
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<td>.100</td>
<td>.921</td>
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### 4.5 Summary
Chapter 5

Discussion

5.1 Introduction

This chapter opens with a discussion of the literature used to justify this study. The researcher then summarizes the findings and integrates the results into the current literature. The implications of the findings are stated for the intended audiences, including college counseling center professional staff, residential services professional staff, and higher education administration. Next, the limitations of the study are identified and explained. The chapter concludes with suggestions for future research resulting from this study.

5.2 Background and Study Findings

Approximately 26% of the United States population meets criteria for at least one DSM-IV diagnosis every year (Kessler et al., 2005); three-fourths will be diagnosed by age 24 (Kessler et al., 2005). Many of these young adults will attend college, adding to the stress and symptomology of their mental illness. Many will not receive help for their issues.
Over 48% of college students reported stress that they could not control in more than three areas of functioning, namely academics, finances, and intimate relationships, respectively (American College Health Association, 2013). However, only a small percent (8.4%) reported that they received treatment for the stress associated with even one of those issues. In studies of counseling center utilization conducted between 2008 and 2014, researchers found that students with identifiable mental health issues sought treatment on average of 25% (Eisenberg et al., 2007; Eisenberg et al., 2011; Ziven et al., 2009). The highest reported percentage was 50% in 2008 (CCMH, 2014). During this same time, students reported increased levels of traumatic events and suicidal ideation from year to year (CCMH, 2014). It is the increase of mental health crises along with the steady percentage of students receiving help from year to year that can be interpreted as an underutilization of counseling services.

There are many factors that contribute to the underutilization of counseling services by college students. Many are not aware of such services on campus (Eisenberg, et al., 2007; Kitzrow, 2003) or do not understand the purpose of the services (Quinn et al., 2009). Students also believe that stress is a normal part of the college experience (Eisenberg et al., 2012c). Others are not able to recognize the point at which stress begins to impact their mental health (Eisenberg et al., 2012c; Hunt & Eisenberg, 2010; Quinn et al., 2009) and only seek services when the stress becomes severe (Quinn et al., 2009). Still others question whether the nature and severity of their symptoms would warrant counseling (Eisenberg et al., 2012c; Hunt & Eisenberg, 2010). Yet others do not seek out counseling due to lack of knowledge regarding its effectiveness, time, and insurance coverage or out-of-pocket finances (Eisenberg et al., 2007).
In studies on retention, students with mental health issues who engaged in
counseling services were more likely to be retained while those who did not receive
counseling were likely to drop out (Van Brunt, 2008). In one study of students who
utilized counseling services, approximately 20% of the 70% who stated that their mental
health issues affected their academic performance considered dropping out (Douce &
Keeling, 2014). Those who received counseling were retained at least one more semester
(Bishop & Brenneman, 1986; Illovsky, 1997; Wilson et al., 1997) and one study found
that students who received counseling were three times more likely to be retained than
those who did not (Lee et al, 2009).

Emotional and social adjustments often affect retention rates more than
academics. In one study, students rated personal and emotional issues as more
challenging to overcome than academic issues (Martin, 2010). In another study, poor
emotional and social adjustment predicted dropout rates as well or better than challenging
academic issues (Gerdes & Mallinckrodt, 1994). Those who received counseling for
mental health issues reported the benefits as receiving support, having someone to listen,
and having someone to help deal with their fear of failure (Bishop & Walker, 1990). In
effect, students who were able to actively cope, prove resilient, and develop a sense of
belonging were more successful in college than students without those traits (Banyard &
Cantor, 2004; Shields, 2001).

Dropping out of college can affect a person’s livelihood. Former students may
have difficulty maintaining employment (O’Keefe, 2013) and living away from home
(Gerdes & Mallinckrodt, 1994). Unfortunately, the challenges of their mental health
issues do not go away. Just as they did not seek counseling services in college, they are
not likely to seek them in the community. Therefore, their inability to cope with their mental health issues continues to affect them throughout their lives.

Of the reasons that students do not receive mental health services, stigma is the key factor (Hogan, 2003). Stigma includes the negative labels, attitudes, feelings, and discriminatory behaviors toward a marginalized, socially unacceptable group of individuals (Corrigan & Penn, 1999; Link & Phelan, 2001; Martin, 2010; Peen & Martin, 1998; Vogel et al., 2006). It can be broken down into public, perceived, and self-stigma. Public stigma is defined as the attitudes and behaviors of a naïve public when they endorse prejudice against a stigmatized group (Corrigan, 2004). A person’s perception of how public stigma influences help-seeking behavior is often referred to as perceived public stigma (Corrigan, 2004). Self-stigma is how members of the stigmatized group see themselves as a result of internalizing the public stigma (Corrigan, 1998; Link, 1987; Link & Phelan, 2001). In other words, self-stigma is internalizing perceived public stigma.

Stigma impacts help-seeking behavior in that some with mental health issues believe their friends will think that they are “crazy” (McVicar, 2015). Most eventually seek treatment after an average of eight to nine years after symptoms began (Thornicroft, 2008). This delay could result in a lower quality of life, such as unemployment, homelessness, and psychiatric hospitalizations. As discussed above, college students with mental health issues who do not seek counseling drop out at higher rates than those who receive services. Their retention rates, involving academic, emotional, and social success, are lower than their counterparts. As a result, they cannot face the challenges brought on by mental health issues.
With the focus on retention rates, it is reasonable to focus on interventions that will help retain students, especially those with mental health issues who often drop out due to such issues. An effective method is to work with staff who come into contact with students on a frequent basis (Brunson & McKee, 1982). Resident Advisors (RAs) serve the dual role of peer and support provider in the residence halls. Their primary role is to assist students with the challenges of college life, including academics, social and relationship issues, and those issues that impact college success, such as mental health issues. As a support provider, RAs are trained to recognize the needs of students and to refer them to campus resources, including mental health services (Boswinkel, 1987). Training RAs should be focused on improving interpersonal skills in order to better recognize, address, and refer students who are in need (Bowman & Bowman, 1995). RAs should be able to differentiate those issues that they can address and those that need the attention of more qualified staff (Bowman & Bowman, 1995) and be familiar with services on campus to which they can refer (Boswinkel, 1987).

One form of training is through education. The purpose of educational interventions is to present facts so that participants understand and are able to make better informed decisions about mental health issues (Corrigan & Penn, 1999). Educational interventions include presenting facts versus myths either face-to-face or via media instruction. Several studies found positive change in mental health attitudes through the use of education (Boysen & Vogel, 2008; Corrigan et al., 2001b; Finkelstein, Lapshin, & Wasserman, 2008; Yamaguchi et al., 2011). In terms of delivery face-to-face contact is more effective than contact via literature or video (Corrigan et al., 2007; Corrigan et al., 2012b). Overall, educational interventions with the best outcomes present the information
in a positive way and combine education, discussion, and practice (Corrigan & Penn, 1999).

The intervention with the most evidence to support combating stigma is through personal contact with those who have mental illness (Salzer, 2012). The aim is to educate the public through personal stories from those with mental illness in order to promote social inclusion within the community (Thornicroft et al., 2008). Contact may take the form of personal testimony from those with mental illness, living in a neighborhood or community with those who have mental illness, or having a relationship with someone who has mental illness.

Effective contact interventions involve elements proposed by Allport (1954) including interaction via personal contact, emphasis on cooperation between those with and without mental illness, equal status among participants, and little difference between the person with mental illness and the stereotype. Individuals who are willing to interact with those who have mental illness, ask questions of their experience, and empathize are more open to reducing their stigma about mental illness (Corrigan et al., 2001b; Pinfold et al., 2003; Spagnolo, Murphy, & Librera, 2008). In addition, those with mental illness who are willing to disclose personal information related to their symptoms and how stigma has affected their opportunities produce more successful results in reducing stigma than those who do not divulge such information (Mann & Himelein, 2008).

Involving consumers in personal contact interventions can benefit those with mental illness as well as participants (Pinfold et al., 2003). While participants gain knowledge and understanding through personal interviews of those with mental illness, consumers benefit through advocacy for those with mental illness. A presentation by
those with mental illness about their quality of life and treatment resulted in participants’ attitudes improving about mental health; specifically holding them less responsible and accountable for their illness (Corrigan et al., 2001b). The consumers also benefitted by knowing that they helped to dispel myths and promoted advocacy of mental health treatment.

To measure attitudes of mental health stigma, the author researched several surveys designed to measure public stigma, perceived public stigma, and self-stigma. The instrument selected to measure public stigma was the Community Attitudes Toward the Mentally Ill (CAMI; Taylor, Dear, & Hall, 1979). The intent of the scale is to assess attitudes between individuals who are in favor of those with mental illness living, working, and receiving treatment in the community versus those who reject these ideas (Taylor & Dear, 1981). The scales include 40 items, measuring four constructs: authoritarianism, benevolence, social restrictiveness, and community mental health ideology (CMHI), also termed deinstitutionalization. Each construct contains 10 items that are rated on a Likert 5-point scale from “strongly agree” to “strongly disagree”.

The instrument selected to measure perceived public stigma was The Perceptions of Stigmatization by Others for Seeking Help (PSOSH; Vogel, et al., 2009) scale. The scale was developed to measure the extent to which public stigma prevents people from seeking mental health services (Vogel et al., 2009). The reasoning is that they will see that the public deems those with mental illness to be less socially acceptable, so will carefully consider being a member of that oppressed group (Vogel et al., 2006). Therefore, people with perceived public stigma will tend to avoid getting help in order to avoid the consequences of stigma (Corrigan 2004). The scale consists of five items
asking participants to consider having a problem and to what degree they believe they would be judged by others for seeking help (Vogel et al., 2009). The instrument is scored using a five-point Likert scale from 1 = Not at all to 5 = A great deal with higher scores indicating a higher level of perceived public stigma (Vogel et al., 2009).

The instrument selected to measure self-stigma was The Attitudes Toward Seeking Professional Psychological Help Short Form (ATSPPH-SF; Fischer & Farina, 1995; Fischer & Turner, 1970). The scale was intended to measure the tendency for those with mental health issues to seek services understanding the implications of public stigma (Fischer & Turner, 1970). The original questionnaire contains 29 items scored on a four-point continuum, with total scores ranging between 0 and 87. However, Fischer and Farina (1995) revised the scale, shortening it to 10 items for ease of administration and to focus on the two constructs that they believed would interest most researchers: openness to seeking treatment for emotional problems (OSTEP) and value and need in seeking treatment (VNST) (Elhai et al., 2008). Items were scored on a scale from 0-3, with a scoring range of 0-30. It was determined that this scoring method proved no different than scoring according to factor loadings, so was determined to be the preferred scoring method.

The purpose of the study was to determine if anti-stigma interventions produced differences in the level of mental health public, perceived public, and self-stigma in Resident Advisor attitudes toward mental health. In this study, public stigma is defined as the endorsement of stereotypes and practice of discrimination against those with mental illness (Corrigan, 2004) and includes the factors of authoritarianism, benevolence, social restrictiveness, and community mental health ideology (CMHI; Taylor, Dear, & Hall,
Perceived public stigma is the perception of public stigma and how one might be treated by others should he or she seek mental health services (Corrigan, 2004; Vogel et al., 2009). Self-stigma is defined as internalized public stigma (Corrigan, 1998; Link, 1987; Link & Phelan, 2001) and includes the domains of openness to seeking treatment and the value and need in seeking treatment (Elhai et al., 2008).

To accomplish this task, permission was gained by the Office of Residence Life to provide RAs with anti-stigma interventions of education and personal testimony to assess their attitudes of mental health issues and treatment. Participation was voluntary; however, all RAs received the interventions for the benefit of learning. All received packets; those choosing to participate were explained the risks, benefits, and confidentiality of the research and asked to sign a consent form. The research design involved a modification of the Solomon four group design called the Separate-Sample Pretest-Posttest Design 12c (Campbell & Stanley, 1963). This design protects against threats to both internal and external validity. Specifically, it controls for pre-test sensitization when there is no control group. Half the participants completed a pre-test measuring public stigma, perceived public stigma, and self-stigma. Following the pre-test, the researcher presented information on mental health issues from various websites that compared myths versus facts. Three volunteers then disclosed information about their experience with mental illness through personal testimony. Ten questions were asked of the volunteers; each of them answered the questions in turn. Finally, all of the participants completed the same three instruments as post-test measures to determine if the interventions had any effect on mental health stigma. A demographic form was also
completed asking for variables of age, gender, ethnicity, academic year, and whether they were a new or returning RA.

Descriptive statistics were conducted on each of the two participant groups: Group 1 completed the pre- and post-tests; Group 2 completed the post-test only. Descriptive statistics included mean, standard deviation, range, and internal consistency. Inferential statistics were used to determine if the interventions had an effect within and between groups. Paired samples t-tests were calculated on the differences in the means between time one and time two for Group 1 with each of the measures to determine if the interventions had an effect on mental health stigma. Independent-samples t-tests were calculated on the differences in the means between Group 1 and Group 2 with each of the measures to determine if the pre-test had a sensitization effect on participants when completing the post-test.

For the first research question, the author sought to identify whether anti-stigma interventions decreased authoritarianism in the RA population. Authoritarianism was defined as having an attitude of blame and responsibility and a belief that those with mental illness need constant care (Taylor, Dear, & Hall, 1979). A high score indicated a high level of authoritarianism. A paired samples t-test was calculated to determine the difference from time one to time two. The answer to the research question was “yes” in that the decrease in means from time one to time two indicated less authoritarianism and was statistically significant. The calculated effect size indicates that the decrease in authoritarianism scores from pre-test to post-test was large.

The second research question posed whether anti-stigma interventions increased benevolence in the RA population. Benevolence measured attitudes of kindness,
sympathy, and advocacy (Taylor, Dear, & Hall, 1979). A high score indicated a low level of benevolence. A paired samples t-test was calculated to determine the difference from time one to time two. The answer to the research question was “yes” in that the decrease in means from time one to time two indicated more benevolence and was statistically significant. The calculated effect size indicates that the decrease in benevolence scores from pre-test to post-test was in the small to medium range.

The third research question was asked to determine whether anti-stigma interventions decreased social restrictiveness in the RA population. Social restrictiveness was defined as having attitudes that those with mental illness are dangerous and should be kept at a distance (Taylor, Dear, & Hall, 1979). A high score indicated a high level of social restrictiveness. A paired samples t-test was calculated to determine the difference from time one to time two. The answer to the research question was “yes” in that the decrease in means from time one to time two indicated less social restrictiveness and was statistically significant. The calculated effect size indicates that the decrease in social restrictiveness scores from pre-test to post-test was in the medium range.

For the fourth research question, the author sought to identify whether anti-stigma interventions increased community mental health ideology (CMHI) in the RA population. CMHI, or the acceptance of deinstitutionalization, measured whether those with mental illness would be accepted within a community (Taylor, Dear, & Hall, 1979). A high score indicated a low level of CMHI. A paired samples t-test was calculated to determine the difference from time one to time two. The answer to the research question was “yes” in that the decrease in means from time one to time two indicated more CMHI and was statistically significant. The calculated effect size indicates that the decrease in
community mental health ideology scores from pre-test to post-test was in the medium range.

The fifth research question asked whether anti-stigma interventions decreased perceived public stigma in the RA population. Perceived public stigma is the perception of how those seeking help believe others perceive them (Vogel et al., 2009). A high score indicated a high level of perceived public stigma. A paired samples t-test was calculated to determine the difference from time one to time two. The answer to the research question was “no” in that the decrease in means from time one to time two indicated less perceived public stigma but was not statistically significant. The calculated effect size indicates that the decrease in perceived public stigma scores from pre-test to post-test was in the small range.

The sixth research question asked whether anti-stigma interventions increased the openness to seeking treatment for emotional problems in the RA population. OSTEP is the willingness to seek mental health treatment (Elhai, et al., 2008). A high score on OSTEP indicated a high level of OSTEP and low level of self-stigma. A paired samples t-test was calculated to determine the difference from time one to time two. The answer to the research question was “no” in that the decrease in means from time one to time two indicated less OSTEP and more self-stigma. The calculated effect size indicates that the decrease in OSTEP from pre-test to post-test was in the small range.

The seventh research question asked whether anti-stigma interventions increased the value and need in seeking treatment in the RA population. VNST is the degree to which perceptions are made about mental health treatment (Elhai et al., 2008). A high score on this factor indicated a high level of VNST and low level of self-stigma. A paired
samples t-test was calculated to determine the difference from time one to time two. The answer to the research question was “yes” in that the increase in means from time one to time two indicated more VNST and less self-stigma and was statistically significant. The calculated effect size indicates that the increase in VNST from pre-test to post-test was in the small range.

The eighth research question asked if there was a difference in authoritarianism among RAs who were administered a pre-test versus those who were not. An independent samples t-test was conducted to compare authoritarianism between Group 1 and Group 2. The answer to the research question was “no” in that there was no statistically significant difference between Group 1 and Group 2 means in authoritarianism. Combined with the within group results, this suggests that pre-test sensitization was not the reason for the decrease in the within groups’ scores over time on authoritarianism.

The ninth research question asked if there was a difference in benevolence among RAs who took the pre-test versus those who did not. An independent samples t-test was conducted to compare benevolence between Group 1 and Group 2. The answer to the research question was “no” in that there was no statistically significant difference between Group 1 and Group 2 means in benevolence. Combined with the within group results, this suggests that pre-test sensitization was not the reason for the decrease in the within groups’ scores over time on benevolence.

The tenth research question asked if there was a difference in social restrictiveness among RAs who took the pre-test versus those who did not. An independent samples t-test was conducted to compare social restrictiveness between Group 1 and Group 2. The answer to the research question was “no” in that there was no
A statistically significant difference between Group 1 and Group 2 means in social restrictiveness. Combined with the within group results, this suggests that pre-test sensitization was not the reason for the decrease in the within groups’ scores over time on social restrictiveness.

The eleventh research question posed whether there was a difference in community mental health ideology among RAs who were administered the pre-test versus those who were not. An independent samples t-test was conducted to compare CMHI scores between Group 1 and Group 2. The answer to the research question was “no” in that there was no statistically significant difference between Group 1 and Group 2 means in CMHI. Combined with the within group results, this suggests that pre-test sensitization was not the reason for the decrease in the within groups’ scores over time on CMHI.

For the twelfth research question, the author asked whether there was a difference in the amount of perceived public stigma among RAs who were administered the pre-test versus those who were not. An independent samples t-test was conducted to compare PSOSH scores between Group 1 and Group 2. The answer to the research question was “no” in that there was no statistically significant difference between Group 1 and Group 2 means in perceived public stigma. Combined with the within group results, this suggests that pre-test sensitization was not the reason for the decrease in the within groups’ scores over time on perceived public stigma.

For the thirteenth research question, the author asked whether there was a difference in the amount of openness to seeking treatment for emotional problems among RAs who were administered the pre-test versus those who were not. An independent
samples t-test was conducted to compare OSTEP scores between Group 1 and Group 2. The answer to the research question was “no” in that there was no statistically significant difference between Group 1 and Group 2 means in OSTEP. Combined with the within group results, this suggests that pre-test sensitization was not the reason for the decrease in the within groups’ scores over time on OSTEP.

For the fourteenth research question, the author asked whether there was a difference in the amount of value and need in seeking treatment among RAs who were administered the pre-test versus those who were not. An independent samples t-test was conducted to compare VNST scores between Group 1 and Group 2. The answer to the research question was “no” in that there was no statistically significant difference between Group 1 and Group 2 means in VNST. Combined with the within group results, this suggests that pre-test sensitization was not the reason for the increase in the within groups’ scores over time on VNST.

Overall, scores on the four factors of the CAMI demonstrated significant results in the reduction of public stigma. Authoritarianism and social restrictiveness decreased while benevolence and CMHI increased, confirming the hypothesis that anti-stigma interventions decrease mental health stigma. In addition, pre-test scores did not influence post-test scores on any of the four factors, lending more credit to the idea that the anti-stigma interventions had a positive effect on attitudes of public stigma.

Regarding perceived public stigma, scores on the PSOSH between time one and time two decreased, but did not produce statistically significant results, lending to the idea that the interventions did not have an impact on perceived public stigma. Once again, pre-test scores did not influence post-test scores, but without statistically
significant findings, this information is not relevant regarding perceived public stigma. However, it does contribute to the evaluation of the research design.

Regarding self-stigma, OSTEP decreased between time one and time two, meaning that participants increased their self-stigma by decreasing their willingness to seek treatment for emotional problems. However, the results were not statistically significant, so this outcome is not conclusive. On the other hand, VNST increased from time one to time two, indicating a decrease in self-stigma and increase in participants’ general sense of value and need in seeking treatment. However, these results were also not statistically significant. In fact, the poor reliability suggests that it is unclear what construct was being measured in the study; therefore, the validity is also questionable. It may be that some items were not interpreted as pertaining to someone with mental health issues but as general statements of mental health treatment. Pre-test scores did not influence post-test scores, but this information is only relevant in that it can contribute to the evaluation of the research design.

While only the CAMI produced significant findings, it is encouraging to know that pre-test scores did not impact post-test scores in any of the measures. PSOSH and VNST scores trended in the right direction for decreases in stigma, but did not produce results that were significant and could determine that the interventions had an impact on mental health stigma. It could be that participants were already receptive to mental health treatment should they need it and were not impacted by the interventions except to confirm what they knew about themselves and their willingness to get treatment.

To summarize, training the RAs about public, perceived public, and self-stigma through education and personal contact with those who have mental illness saw an
improvement in their attitudes of public stigma, or how they perceive others with mental illness, in areas of responsibility, blame, social distance, advocacy, sympathy, and acceptance. There was also improvement in the degree of value they place on the need for treatment should they experience mental health issues. However, there was not an improvement in attitudes of perceived public stigma, or the amount of stigma they believe others would have toward them if they sought mental health treatment. There were also no improvements in their openness to seek treatment for emotional problems for themselves.

The improvements on these traits are within the small to medium range, with a large effect seen in the decrease of authoritarianism, or the amount of blame and responsibility people have for those with mental illness. Considering that the total time spent in the study was 90 minutes, and the total time of the actual intervention was 40 minutes, these findings are a good start to promote anti-stigma attitudes through continued training and exposure to mental health issues. In addition, the researcher is confident that the change in scores on each of the variables was not due to pre-test sensitization of completing the instruments prior to the interventions. In replications of this study, it is not likely that pre-testing will need to be part of the research design.

Finally, while the researcher is encouraged by the results, making further assumptions should be addressed with caution due to the fact that the instruments used did not perform as well as hoped.

Over and above the research questions, there are other observations that should be noted. Of the 94 RAs who participated, 61 returned to the position (64.9%) while 33 were new to the position (35.1%). This implies that many of the RAs had previous training and
experience in mental health issues. In addition, it was not asked how many participants had personal knowledge and experience of mental health issues, either because family members, friends, or the participants themselves have a diagnosis or emotional issue. Therefore, it is impossible to know the extent to which RAs were predisposed to the knowledge of mental illness and whether that knowledge produced positive or negative attitudes toward mental illness prior to the study.

5.3 Integration of Findings into the Literature

The purpose of this study was to determine if anti-stigma interventions decreased the level of mental health stigma in Resident Advisor attitudes. Studies indicate that students are experiencing emotional and mental stress in greater numbers but are not seeking services at the same rate (CCMH, 2014; Eisenberg et al., 2007; Eisenberg et al., 2011; Gallagher, 2014; Ziven et al., 2009) which can be interpreted as an underutilization of counseling services. While there are many reasons for the lack of help-seeking, such as lack of recognition for the need, lack of perceived need, and believing that stress is a normal part of the college experience (Eisenberg et al., 2012c; Hunt & Eisenberg, 2010; Quinn et al., 2009), mental health stigma is the common factor.

In seeking to understand how stigma forms, researchers turn to attribution theory (Boysen & Vogel, 2008; Corrigan, 2000; Weiner, 1993). Attribution theory is a derivative of social cognitive theory which states that people categorize information through the influences of behavior, personal factors, and environment to explain their environment (Bandura, 1989; Corrigan, 1998). Attributes can be formed through an oversimplification to categorizing groups (Link & Phelan, 2001) such as using dichotomous traits. Others are formed through the social selection of traits deemed most
important to a culture. Overall, attribution theory helps determine whether those with mental illness should be rejected or accepted into the community.

Stigma can produce negative effects for college students with mental illness. Van Brunt (2008) found that students with mental health issues are at higher risk for dropping out. Their symptoms created problems with focus and concentration, completing assignments on time, attending class, and staying motivated (Eagan et al., 2014; Martin, 2010). However, students who received counseling were often successful in their academic performance and were retained in school (Bishop & Brenneman, 1986; Illovsky, 1997; Lee, at al., 2009; Wilson et al., 1997). In addition, students who were emotionally and socially adjusted to college were also retained, demonstrating that there are a variety of factors that lead to college success (Banyard & Cantor, 2004; Gerdes & Mallinckrodt, 1994; Shields, 2001).

Due to the ostracizing effects of stigma, the researcher sought to understand the impact of stigma and its effect on college students by studying university personnel with a high amount of contact with students. RAs have the responsibility of working and living with students to support their independence in the residence halls (Boswinkel, 1987; Brunson & McKee, 1982). They serve the dual role of peer and mentor, and with their responsibilities to the students, were the natural choice for this study. However, if RAs possess negative attitudes toward mental illness, it will impact their ability to recognize and help students with mental health issues who live on their floors. Presenting RAs with anti-stigma interventions would not only provide them with necessary information, but also hope to decrease any stigma they may have, thus increasing their willingness to help students in need of counseling services.
Interventions that are known to decrease stigma include education and personal testimony (Salzer, 2012; Yamaguchi et al., 2011). Most research using these interventions focus on attitude change, as behavior change tends to take longer to integrate into a person’s lifestyle (Pinfold, Thornicroft, Huxley, & Farmer, 2005). The purpose of education in presentation form is to present facts and dispel myths about mental illness (Corrigan et al., 2001b; Corrigan & Penn, 1999). Educational interventions with the best outcomes tend to be those that involve interactive discussion, provide opportunity for questions, and present the information in a positive and hopeful manner (Corrigan & Penn, 1999). The intervention with the most evidence to decrease stigma is personal testimony in a face-to-face setting (Corrigan et al., 2007; Corrigan et al., 2012b; Salzer, 2012). Contact with those who have mental health issues can promote social inclusion as others get to know them and become familiar with the realities of mental illness (Thornicroft et al., 2008). Mann and Himelein (2008) called this a “humanizing” approach which includes focusing on the individual as a person (p. 547). Overall, those who interacted with someone presenting personal testimony of mental illness had the greatest and longest attitude change regarding mental health stigma than simply knowing someone with mental illness (Pinfold et al., 2005).

In the present study, attitudes of public stigma decreased, suggesting that participants’ attitudes toward responsibility, blame, and social restriction decreased while attitudes and feelings of sympathy, kindness, and advocacy increased. According to Boysen & Vogel (2008), a main cause of mental health stigma is ignorance due to a lack of education and prejudicial beliefs. Research states that these negative beliefs lead to ideas that those with mental illness are dangerous, incompetent, and responsible for their
mental illness (Corrigan, 1998). In this study, these attitudes significantly decreased following the intervention while positive attitudes of advocacy and community increased.

Perceived public stigma is the view that seeking help for mental illness will lead to negative consequences (Link et al., 1989). Individuals who perceive receiving help as stigmatizing will avoid treatment in order to avoid the negative consequences that come with it. In one study, results found a direct relationship between perceived public stigma and stress, indicating that perceived public stigma may affect students getting the help they need (Britt et al., 2008). In the current study, there were no significant results in the amount of perceived public stigma among participants. However, with a possibility of scores between 5 and 25, with 25 as the highest, the actual range was between 5 and 21 with a mean of 9.38 at pre-test and 8.83 at post-test for Group 1, and the actual range for Group 2 was between 5 and 20 with a mean of 10.11. These findings indicate that perceived public stigma was not high to begin with, so the lack of significant decrease among participants does not indicate that they continue to have high perceived public stigma and that they would not seek treatment for mental health issues, but that their scores indicate that they may likely receive help for mental health issues without much concern for negative consequences.

Self-stigma is defined as the internalizing of public stigma (Corrigan, 2004; Eisenberg et al., 2009; Vogel et al., 2006). Those who experience self-stigma are aware of the negative beliefs and consequences in the form of stereotypes and discrimination and agree with these beliefs and that they deserve the negative attention. This leads to decreased self-esteem, demoralization, and decreased self-efficacy (Corrigan & Watson, 2002; Tucker et al, 2013; Vogel et al., 2013b). In the current study, the self-stigma
measure was used to determine whether participants would seek help if they developed mental health symptoms. The measure selected for the study (ATSPPH-SF; Fischer & Farima, 1995) was selected partly for the theoretical wording of the items in that participants did not have to identify with having a mental illness. Other reasons for selecting the measure included its strong reliability and validity scores when used in prior research. However, the current study encountered complications with the use of the ATSPPH-SF. Reliability was low, so it is unclear whether the instrument measured attitudes of self-stigma. Using the two factors of the ATSPPH-SF, results showed that the openness to seeking treatment for emotional problems did not demonstrate a significant difference while the value and need to seek treatment did show a significant difference. However, the authors of the instrument believed that both scales directly related to one another in that an increase in one would indicate an increase in the other (Elhai, et al., 2008). A closer look at the items on the instrument show that four of the five items on the OSTEP factor were phrased in the first person while all five items on the VNST factor were stated in the third person. The author explored the possibility that participants saw the value in getting mental health treatment (VNST) but were not ready to apply this belief to their needs (OSTEP) which could explain why VNST scores saw a significant increase from time one to time two while the decrease in OSTEP was minimal.

Overall, the researcher proposed that anti-stigma interventions would decrease in the three types of mental health stigma: public, perceived public, and self-stigma. Results indicate that public stigma scores decreased significantly as did the value and need for perceived treatment on the self-stigma scale. Perceived public stigma scores remained unchanged as did the openness to seeking treatment for emotional problems.
5.4 Implications

There are a number of implications based on the results of this study that apply to counseling center personnel, residence life staff, and university administrators. The findings supported the overall purpose to determine if anti-stigma interventions decrease mental health stigma in the RA population. While the researcher cannot draw causal evidence to support the claim, results indicate that many of the differences in stigma measures from time one to time two were statistically significant. Many of these changes were within a small to medium range while the decrease in authoritarianism demonstrated a large effect. It is necessary to clarify that these results only apply to RAs who participated in the study; the study does not generalize to other Residence Life personnel.

5.4.1 Counseling Center Staff

Results of this study have implications for counseling center staff on both client and campus levels. On the client level, it is well documented that students who possess self-stigma are less likely to engage in treatment (Corrigan et al., 2009; Lannin et al., 2015; Seligman, et al., 1968; Vogel et al., 2013b). Those who would like to engage in counseling may need additional support and encouragement. Inquiring about clients’ thoughts on mental health issues and treatment and using education as a means to engage them during the screening process may improve the likelihood that they will continue with treatment. It will also help them understand the purpose and expectations of counseling in terms of being a collaborative process that relies on mutual trust.

On a larger scale, counseling center staff can develop programs and initiatives that demonstrate these same concepts to students prior to making their initial appointment. Advertising the purpose and meaning of counseling services through
education, myth busting, and personal testimonies could encourage students to engage in services. With personal testimony, face-to-face interactions are preferred over video (Corrigan et al., 2007; Corrigan et al., 2012b), but do achieve better results than education alone (Corrigan et al., 2007). A combination of these interventions, used as classroom presentations, advertisements via website or social media, and mental health campaigns can reach many students across campus and promote help-seeking behavior. An added benefit is that it allows students to help others recognize when they also need help, known as the bystander effect.

Finally, counseling center staff often develop trainings geared toward professional or para-professional staff across campus. The RA training is one such training. Faculty and staff in all departments interact with students to a degree, and would benefit from recognizing the signs and symptoms of a mental health crisis. Incorporating education and personal testimony that de-stigmatizes mental illness into trainings across campus promotes treatment can help those who commute to campus as well as those who reside there.

5.4.2 Residence Life Staff

RAs were the participants for this study. However, all personnel within Residence Life can benefit from the results. All Residence Life staff can benefit from the interventions offered in this study regardless of their level of stigma. The information contained in the educational presentation as well as the personal testimonies not only serves to distinguish myth from fact, but also allows participants to empathize with students, which is a critical component of reducing stigma (Boysen & Vogel, 2008).
Residence Life supervisors can use this study to guide employee performance. It is known that people with a high level of public stigma discriminate against those with mental illness (Corrigan, 1998; Corrigan, 2004; Krupa et al., 2009; Link & Phelan, 2001; Sharac et al., 2010). When hiring for positions, supervisors can interview candidates on their thoughts surrounding mental illness and treatment. They can also incorporate attitudes toward mental illness into performance evaluations. Finally, supervisors can encourage staff to participate in mental health support initiatives on campus or in the community as part of their professional development.

5.4.3 University Administrators

Finally, the results of this study have implications for university administrators on all levels and in all divisions. University administration has a responsibility to all students. A large part of this responsibility is the retention of students from one year to the next. As counseling has a positive effect on retention rates (Illovsky, 1997; Lee et al., 2009; Wilson et al., 1997), data which demonstrate retention is useful in administrative planning and budget development (Bishop, 2010; Sharkin, 2004). Administrative planning may include both financial and professional training as administrators allocate dollars to counseling services and can advocate for training in mental health issues across campus. Resources may also be allocated to create wellness initiatives that promote self-care in all areas of health and work in combination with the medical centers on campus. Campaigns that promote holistic wellness can be incorporated throughout campus, including medical centers (changing the approach to wellness rather than medical), residence halls, student organizations, and the classroom. Using technology supported by the university is another way to invest resources and reach students. Integrating mental
health treatment into the culture of the university can decrease stigma and allow for open conversations about mental illness. Therefore, administrators who support the use of counseling services can likely see an increase in retention rates and student success. As demonstrated in the results of this study, brief anti-stigma interventions can affect attitudes toward mental illness and treatment. Promoting these interventions on campus through staff orientation, faculty senate meetings, student organizations, and even the board of directors can create a culture of acceptance for students with mental illness. Administrators with positive attitudes toward mental health treatment can trickle down to lower level management, front line staff and faculty, and students. This effect may not only help first- and second-year students remain in school, but also upperclassmen, whose attrition is not as high but can be affected by mental illness. It is a win-win for the university and its students.

5.4.4 Future Research

The researcher of this study has identified several suggestions for future research that may fill the gaps of the current research and contribute to the growing body of literature on mental health stigma. First, researchers may want to review the instruments and select those with higher internal consistency coefficients to ensure that the dependent variables are measured accurately. Although significant results were found with the CAMI and VNST of the ATSPPH-SF, other measures may demonstrate higher reliability, and thus validity, in the constructs they measure.

Regarding the variables within this study, future researchers may wish to eliminate self-stigma from the study as it would involve knowing whether participants currently have mental health issues, and this may be uncomfortable for them to disclose.
Future researchers may also wish to measure the effects of each of the interventions independently, as in this study it is not clear which one may have had a larger impact on the dependent variables. Finally, as it was assumed that all participants had some amount of stigma, future researchers may want to select or group participants based on pre-test scores to determine how much of a difference occurred in those with higher stigma.

Future researcher may wish to gather longitudinal data on the lasting effects of anti-stigma interventions. They may also wish to conduct research that studies behavior change resulting from improved attitudes. It is important to recognize that a change in attitude does not always lead to behavior change, nor does the attitude change always persist. Research designs that study persistence in positive change and subsequent behavior change will greatly strengthen the hypothesis that brief interventions can significantly reduce stigma and promote help-seeking behavior.

Finally, the researcher has suggestions regarding the research design. A true experimental design would test the impact of anti-stigma interventions and provide evidence for causality. However, research ethics may prevent this from happening for two reasons. First is the random assignment of RAs to experimental and control groups. While this is possible, it is not always feasible due to the amount of time that it would take to provide the training two times combined with the limited availability of dozens of RAs. Second is denying a treatment or intervention that could be effective to the control group. Although the design could involve two separate trainings, it is impractical and unlikely that this could occur with relative ease. In addition, while replication of the study is possible, the information provided during the personal testimonies may be interpreted differently when completing the post-test measures.
5.5 Statement of Limitations

5.5.1 Threats to Internal Validity

History refers to the occurrence of events that are unrelated to the intervention yet have an impact on the outcome measure (Onwuegbuzie, 2000). In this study, it is possible that participants had previous exposure to mental health issues, either as someone with mental health issues or whose family or friends have mental health issues. It is also possible that some RAs received prior training in mental health issues, either as a RA from a previous year or because they study mental health in their major.

Multiple-treatment interference occurs when the same participants are exposed to more than one intervention without testing the effects of the intervention prior to the next one (Onweugbuzie, 2000). Carryover effects from one intervention to the next may influence how the participants interpret the intervention and rate the outcome. In this study, two interventions were provided: education and personal testimony. Participants were only asked to complete the stigma measures following the completion of both interventions. It is possible that the effects of one intervention influenced participants’ attitudes in the next intervention.

In addition to the carryover effects from one intervention to the next, another limitation was the short time frame between the intervention and the post-test. While completing a post-test immediately following the intervention can determine the effectiveness of the intervention in the moment, it does not provide information on any lasting effects (Onweugbuzie, 2000). Completing the post-test immediately following the intervention may have contributed to the lack of significant effects on all measures as participants did not have time to consider the interventions before taking the test again.
Participant effects occur when participants are aware that they are contributing to a research study, and their results may reflect that awareness (Omwuegbuzie, 2000). In this study, it is possible that participants answered the items in accordance to how they think the researcher wanted them to answer in order to cast them in a better light than what they truly believed. Specifically, the Hawthorne effect and novelty effect could have influenced the participants’ level of attention to the interventions and attitude toward mental health.

Sampling method can also affect validity. Sampling for this study was based on convenience rather than random selection. In addition, some of the students were returning for another year as a RA. Their previous training and experience may have influenced their answers on the instruments.

Instruments used in a study can affect internal validity in the fact that items may not measure what they intend to measure. In this study, while reported internal consistency among items was good (Elhai, et al., 2008; Fischer & Farina, 1995), the results of the paired samples and independent-samples t-tests revealed that the interventions did not affect the scores. Therefore, it is difficult to determine if it was the instrument or the interventions that were ineffective in this study. Because reliability was low, validity is also questionable. The internal consistency measured in this study suggests that it is not clear what the items were measuring.

5.5.2 Threats to External Validity

Population validity refers to the extent that the results are generalizable to the larger population (Omwuegbuzie, 2000). The population involved in this study was Resident Advisors. These are undergraduate students that are assigned to work with
students in Residence Life. Because of the specific nature of their work and student status, the results cannot be generalized to others working in Residence Life, such as graduate student assistants. Graduate students assistants may have responded to the interventions differently due to their experience working with students. Similarly, participants were recruited from one Midwestern university, so results might not generalize to other universities in other parts of the country which may employ a different population of students for RA positions. In addition, the results can only be generalized to this year’s population of RAs and not to RAs from previous years at the same institution.

Ecological validity refers to the extent that results can be generalizable in different settings and conditions (Omweugbuzie, 2000). For example, administrators at one institution may look for characteristics in RAs that promote empathy and altruistic behavior that other universities do not consider; therefore, RA attitudes on mental health stigma may be lower than RAs selected without these traits in mind. Like population validity, this study cannot be generalized outside of the university setting under study.

Temporal validity refers to the extent that results can be generalizable across time (Omweugbuzie, 2000). In this study, participants who answered items in a particular way may have done so for reasons other than the intervention, and on another day might answer differently. As with test taking, some days are better than others regarding mindset, mood, and attitude toward the task at hand.

Multiple-treatment interference can also be a threat to external validity (Omweugbuzie, 2000). Participants may be selected to participate in similar studies. More likely, there may have been RAs who were psychology, social work, or other social science majors and whose education influenced their level of stigma.
Another threat to external validity is in regard to how the intervention was carried out. Although specific instructions were written to promote replication, the individuals presenting with personal testimony of their mental health issues and treatment will be different from study to study, and the information they provide may also be different. This is an inherent risk, yet the research on the effectiveness of personal testimony is compelling and worthy of examination in this study.

Order bias refers to the order of the interventions. It is a threat to external validity due to the fact that findings largely depend on the order of the interventions (Omwuegbuzie, 2000). In this study, education was presented followed by personal testimony. Findings may not be able to be generalized if the order of the interventions is different.

Specificity of variables refers to the specific nature at which the results are derived. It is a threat to almost all research studies. In a research study, data is collected by specific participants, at a specific time, in a specific location, under a specific set of circumstances, using certain operational definitions of variables, and using specific instruments (Omwuegbuzie, 2000). In this study, the specific conditions under which the results were generated would need to be exactly replicated in order for the results to be generalized.

As mentioned above, instruments can affect validity in that the items may not measure what they intend to measure. If the instruments are a threat to internal validity, they are also a threat to external validity in that researchers cannot generalize the results. In this study, it does not appear that the items are measuring self-stigma in the way they were intended. Therefore, researchers using this measure should compare it against other
measures for construct validity. If construct validity is low, another measure of self-stigma should be used.

Finally, the last threat to external validity is that there was not a control group. Although using a modification of the Solomon four group design strengthened the likelihood that the pre-test did not influence mental health stigma, it does not strengthen the likelihood that the intervention alone is what influenced mental health stigma. Causal statements cannot be made. A control group would compare those who were provided the intervention versus those who were not, regardless of whether they took the pre-test, and provide more evidence for causality.

5.6 Summary

Anti-stigma interventions, including educational presentations and personal testimony, can impact aspects of mental health stigma. The current study showed significant differences in scores between time one and time two on factors of authoritarianism, benevolence, social restrictiveness, community mental health ideology, and the value and need to seek treatment. Perceived public stigma was unchanged, perhaps because RAs were willing to seek treatment prior to the study. Openness to seeking treatment also remained unchanged, possibly due to the low reliability of the instrument used to measure self-stigma. These results are useful to the university community, including counseling center personnel, Residence Life staff, and university administrators. Expanded trainings involving education and personal testimony can benefit university staff and faculty, anti-stigma questions can be used for screenings of Residence Life candidates, and an increase in counseling center services benefits university retention rates and student success. Future research includes a focus on each
intervention and use of more reliable instruments. Limitations include unknown participant exposure to mental health issues prior to the intervention and generalizability of the findings to other populations.
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Appendix A

Demographic Form

Directions: Please complete the following.

1. Age: __________

2. Gender:
   - Male
   - Female
   - Transgender

3. Ethnicity:
   - American Indian / Alaskan Native
   - Asian
   - Black / African American
   - Native Hawaiian / Other Pacific Islander
   - White

4. Year in College:
   - 1st Year
   - 2nd Year
   - 3rd Year
   - 4th Year
   - 5th Year
   - Graduate School

5. Are you a first time or returning RA?
   - First time
   - Returning
Appendix B

Interventions

Education

- 20 – minute presentation
  - Presentation from [http://www.who.int/features/factfiles/mental_health/en/](http://www.who.int/features/factfiles/mental_health/en/) : Read the 10 facts about mental health

Personal Testimony

Personal testimony will last 20 – 30 minutes. The researcher will meet with the individuals to review questions for discussion during the intervention. Individuals selected will be diagnosed with anxiety and/or depressive disorders. The researcher will ensure that the individuals are comfortable with self-disclosure. Topics include symptoms, treatment, and problems with stigma. Problems with stigma include how it has affected their relationships, employment, housing, finances, and physical health. Issues of well-being including self-esteem will also be discussed. For replication purposes, the intervention will not include participant questions.
Appendix C

Personal Testimony Questions

Name:  
Age:  
Gender:  
Ethnicity:  
Diagnosis:  
How long with diagnosis:  
Currently in treatment:  
How long in treatment all together:  

1. Please tell me a little about yourself – whatever you are comfortable sharing – in terms of your mental health issues, symptoms, and treatment.

2. Stigma can prevent people from seeking the help they need. They feel stereotyped and discriminated against, and are not afforded certain opportunities. Have you experienced such stigma? Please explain a time when you experienced stigma and the effects it had on your well-being.

3. Some believe that a mental illness is something that people can control or are responsible for having. What do you think about these opinions?

4. Some believe that mental illness is not the same as a physical illness. Do you agree? What are some of the similarities or differences that you see?

5. Some believe that having a mental illness makes it easy for others to tell them from “normal” people. Please tell me your thoughts on this.

6. Insurance should cover both physical and mental conditions fairly. Please tell me your opinion on this.

7. Some believe there are too many services dedicated to those with mental health issues. Please explain your experience in accessing services and any challenges you faced.
8. Some people believe that those with mental health issues cannot work as professionals or take public office. While there may be circumstances by which some are not able to work professionally, please tell me your thoughts on this.

9. Some think that those with mental health issues should not have the same rights as others. Please tell me your thoughts about this. Please explain any situations where your rights were violated as a result of your mental health issues.

10. Stigma can affect one’s ability to get help for themselves. They often deny their symptoms so as not to be seen as someone with mental health issues. Please explain whether or not and how difficult it was for you to begin treatment for your mental health concerns.
Appendix D

Summary Responses to Personal Testimony Questions

The three volunteers included two females, ages 20 and 21, and one male, age 25. All were diagnosed with either depression, anxiety or both. One female was also diagnosed with post-traumatic stress disorder. All were receiving treatment at the time of the intervention and had been receiving treatment since adolescence.

1. All volunteers had been diagnosed since early adolescence. They had been in treatment for many years including counseling and psychotropic medication. One volunteer abused substances as a way to self-medicate. All stated that they are able to manage their symptoms through treatment and agreed with one another that treatment and support were important to their recovery.

2. All volunteers agreed that stigma affected their ability to receive help and support. They agreed that school was often difficult as teachers and administrators did not understand their symptoms. One female was home-schooled due to the negative responses from school staff. They all lost friends who did not understand their illness. All volunteers had supportive parents.

3. All volunteers agreed that mental illness is not something that can be controlled, but people are responsible for their choices and behavior as a result of their mental illness. They believed that mental illness can affect anyone.

4. The volunteers stated that they are unsure if mental illness is exactly like mental illness, but agreed that it responds to medication and other treatments and so should be treated as such.

5. The volunteers stated that those who have mental illness do not look any different from those who do not have mental illness. One volunteer stated that she discovered her uncle had mental illness after she revealed her illness to her family. She said she would not have known unless someone told her.

6. The volunteers believed that insurance should treat mental illness the same as other medical conditions. One volunteer provided an example involving
medication in that his insurance denied medication that was effective in favor of another that was less expensive.

7. All volunteers agreed that access to services can be challenging. In finding providers, they all experienced delays in treatment and difficulty with insurance coverage.

8. All volunteers agreed that those with mental illness can work to their full potential. The two females were enrolled in college, and the male had accepted a job in forestry at the time of the presentation. They admitted that some days are hard for them, but they work hard to overcome their challenges.

9. None of the volunteers could recall a time when their rights were violated or that they were denied an opportunity as a result of their mental illness. They stated that those with mental illness have as much right to succeed in life as those who do not.

10. All volunteers stated that they were fortunate to have parents who helped them access treatment services. However, they understand that others have not been fortunate and stated that realizing that one has a mental illness is difficult and often takes time to seek help. One volunteer stated that no one wants to have mental illness, so it is difficult to accept.
Appendix E

Informed Consent Form

ADULT RESEARCH SUBJECT - INFORMED CONSENT FORM

The Effects of Anti-Stigma Interventions in Resident Advisors’ Attitudes of Mental Health on a University Campus

Principal Investigator: John M. Laux, Ph. D., Professor of Counselor Education, 419-530-4705
Stephanie McGuire Wise, MA, LPCC-S, Doctoral Candidate, 419-530-2250

Purpose: You are invited to participate in the research project entitled, The Effects of Anti-Stigma Interventions in Resident Advisors’ Attitudes of Mental Health on a University Campus which is being conducted at the University of Toledo under the direction of Dr. John Laux and Stephanie McGuire Wise. The purpose of this study is to investigate the effectiveness of anti-stigma interventions, namely education and personal testimony of mental health consumers, on attitudes of mental health within the Resident Advisor population.

Description of Procedures: This research study will take place during the fall Resident Advisor training and will take about 90 minutes to complete. You will be asked to participate in the interventions and complete surveys measuring various types of mental health stigma. Half of you will be asked to complete the surveys before the intervention as well as after. The other half will only complete the surveys following the intervention. The interventions include education about mental illness and two presentations by consumers of mental health services. Your participation is limited to listening as well as asking questions as time allows.

After you have completed your participation, the research team will debrief you about the data, theory and research area under study and answer any questions you may have about the research.

Potential Risks: There are minimal risks to participation in this study, including loss of confidentiality. Answering the surveys or listening to the interventions might cause you to feel upset or anxious. If so, you may stop at any time. You have the right to withdraw from this research if you become uncomfortable. Counseling or psychological support is available if you experience distress.
Potential Benefits: The only direct benefit to you if you participate in this research may be that you will learn about how experiments are run and may learn more about mental health and treatment. Others may benefit by learning about the results of this research. The investigators anticipate that this research will contribute to generalizable knowledge about interventions that may reduce mental health stigma. This knowledge is considered a benefit to others.

Confidentiality: The researchers will make every effort to prevent anyone who is not on the research team from knowing that you provided this information, or what that information is. The consent forms with signatures will be kept separate from responses, which will not include names and which will be presented to others only when combined with other responses. Although we will make every effort to protect your confidentiality, there is a low risk that this might be breached.

Voluntary Participation: Your refusal to participate in this study will involve no penalty or loss of benefits to which you are otherwise entitled and will not affect your relationship with The University of Toledo or any of your classes or your relationship with the Office of Residence Life. In addition, you may discontinue participation at any time without any penalty or loss of benefits. If you are under the age of 18, you are not eligible to participate in this study.

Contact Information: Before you decide to accept this invitation to take part in this study, you may ask any questions that you might have. If you have any questions at any time before, during or after your participation, or experience any physical or psychological distress as a result of this research, you should contact a member of the research team: Dr. John Laux / 419-530-4705; Stephanie McGuire Wise / 419-530-2250.

If you have questions beyond those answered by the research team or your rights as a research subject or research-related injuries, the Chairperson of the SBE Institutional Review Board may be contacted through the Office of Research on the main campus at (419) 530-2844.

Before you sign this form, please ask any questions on any aspect of this study that is unclear to you. You may take as much time as necessary to think it over.

SIGNATURE SECTION – Please read carefully

You are making a decision whether or not to participate in this research study. Your signature indicates that you have read the information provided above, you have had all your questions answered, and you have decided to take part in this research.

The date you sign this document to enroll in this study, that is, today’s date must fall between the dates indicated at the bottom of the page.

<table>
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<th>Name of Subject (please print)</th>
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<th>Name of Person Obtaining Consent</th>
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This Adult Research Informed Consent document has been reviewed and approved by the University of Toledo Social, Behavioral and Educational IRB for the period of time specified in the box below.

Approved Number of Subjects: ____________
Appendix F

Volunteer Consent Form

VOLUNTEER CONSENT FORM

The Effects of Anti-Stigma Interventions in Resident Advisors’ Attitudes of Mental Health on a University Campus

Principal Investigators:
John M. Laux, Ph. D., Professor of Counselor Education, 419-530-4705
Stephanie McGuire Wise, MA, LPCC-S, Doctoral Candidate, 419-530-2250

Purpose: You are invited to participate as a contributor in the research project entitled, The Effects of Anti-Stigma Interventions in Resident Advisors’ Attitudes of Mental Health on a University Campus which is being conducted at the University of Toledo under the direction of Dr. John Laux and Stephanie McGuire Wise. The purpose of this study is to investigate the effectiveness of anti-stigma interventions, namely education and personal testimony of mental health consumers, on attitudes of mental health within the Resident Advisor population.

Description of Procedures: This research study will take place during the fall Resident Advisor training on August 9th at 1:00 and will take about 90 minutes to complete. You are asked to participate in the interventions as a consumer of mental health services. The investigators are looking for two volunteers, each between the ages of 18-25, who are currently receiving mental health treatment for an anxiety or depressive disorder. Each volunteer will speak for 15-20 minutes about their experience as a consumer of mental health services, including any stigma they received or currently receive. Due to time and consistency of interventions, there will not be a question/answer period.

Your story is essential to the purpose of this study. Research shows that personal testimony from those receiving mental health services dramatically decreases mental health stigma and increases helping behaviors. As a volunteer, you can be assured that your story will help those in a position to help others on campus.

An investigator will coach you on the information to provide and will help write a “script” listing bullet points of information to disclose and rehearse your presentation. You will not be asked to disclose information that is uncomfortable to you.
The benefits to you include contributing to valuable research. You may also see this as an opportunity to advocate for yourself and others who receive mental health services. The risks include confidentiality. While confidentiality will be reviewed with participants, researchers cannot guarantee it. To that end, you may introduce themselves using an alias and discuss your treatment without naming agencies or providers.

To volunteer, please contact Stephanie McGuire Wise at 419.530.2426. I will initially meet with you to determine your level of comfortability with this process and schedule follow up meetings to develop your talking points. I am willing to meet with you at NAMI or at my office on UT’s Main Campus at Rocket Hall. I am willing to meet with you as many times as necessary for you to feel comfortable with your presentation.

If you know at this time that you are interested in participating, please print and sign your name below and provide your contact information. I appreciate your willingness to help with this research study.

_____________________________  ______________________
Print Name  Sign Name

____________________________
Phone Number
To: John Laux, Ph.D. and Stephanie McGuire Wise  
Department of School Psychology, Higher Education, Counselor Education & Supervision

From: Walter Edinger, Ph.D., Chair  
Patriaica Case, Ph.D., Vice Chair  
Wesley A. Bullock, Ph.D., Chair Designee  
Nilgun Sezginis, MPH, RHA, Chair Designee

Signed:  
Date: 06/09/16

Subject: IRB #201454
Protocol Title: The Effects of Anti-Stigma Interventions in Resident Advisors' Attitudes of Mental Health on a University Campus

On 06/09/16, the Protocol listed below was reviewed and approved by the Chair and Chair Designee of the University of Toledo (UT) Social Behavioral & Educational Institutional Review Board (IRB) via the expedited process. The Chair and Chair Designee noted that signed and dated consent is required prior to an individual taking part in this research. This action will be reported to the committee at its next scheduled meeting.

Items Reviewed:
- IRB Application Requesting Expedited Review
- Current IRB Approved Adult Informed Consent Form (version date 06/09/16)
- Current IRB Approved Data Collection Tool(s) (version date 06/09/16)
  - Demographics
  - Perceptions of Stigmatization by Others for Seeking Help
  - Community Attitudes toward the Mentally Ill
  - Attitudes toward Seeking Professional Psychological Help
- Current IRB Approved Explanation of Interventions (version date 06/09/16)

This protocol approval is in effect until the expiration date listed below, unless the IRB notifies you otherwise.

Only the most recent IRB approved Consent/Assent form(s) listed above may be used when enrolling participants into this research.

Approval Date: 06/09/16  
Expiration Date: 06/03/17

Number of Subjects Approved: 120

Please read the following attachment detailing Principal Investigator responsibilities.