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Stigma towards adults with mental illness is both a longstanding and widespread phenomenon. Unfortunately, stigma towards adults with mental illness originates not only from the general population, but also from mental health professionals. There remain mixed ideas about the causes of stigmatization from mental health professionals and what factors might reduce this stigma. Some have suggested that increased contact and experience with adults with mental illness might help with shifting negative attitudes. Others have noted that education and training about mental illness might reduce stigma.

Since early research on stigma and mental health professionals, professional counselors have emerged as a type of mental health professional often working with adults with mental illness. Researchers who have examined mental illness stigma among mental health professionals, however, have primarily studied those in medical, occupational therapy, and case management fields or have studied samples obtained outside of the United States. In addition, aspects of professionalism and professional development, such as licensure status and clinical supervision, have not previously been explored empirically.

This study explored differences between mental health professionals in-training, non mental health professionals in-training, mental health professionals, and non mental health professionals. Factors such as professional orientation, licensure, supervision status, and length of time in the mental health field were examined as they related to

attitudes towards mental illness. Social distance attitudes were explored in order to investigate social distance as it related to attitudes towards adults with mental illness.

A total sample of 188 participants completed a demographic questionnaire, the Community Attitudes Toward the Mentally Ill, a Social Distance Scale, and the Marlowe-Crowne Social Desirability Scale. A 2-way MANOVA revealed that mental health trainees and professionals had less stigmatizing attitudes towards adults with mental illness than non mental health trainees and professionals. Professional orientation, however, had no significant effect on attitudes. A MANOVA revealed that professionals who were receiving clinical supervision had higher mean scores on the *Benevolence* subscale than professionals who were not receiving clinical supervision. A Multivariate Multiple Regression revealed that receiving clinical supervision accounted for a significant portion of the variance on the *Benevolence* subscale. A Pearson-Product Moment Correlation revealed a significant relationship between social distance and attitudes towards adults with mental illness.

AN INVESTIGATION OF ATTITUDES TOWARDS ADULTS WITH MENTAL ILLNESS AMONG MENTAL HEALTH PROFESSIONALS IN-TRAINING, NON MENTAL HEALTH PROFESSIONALS IN-TRAINING, MENTAL HEALTH PROFESSIONALS, AND NON MENTAL HEALTH PROFESSIONALS

by

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Approved by

Craig Cashwell
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To my parents, for teaching me how to be an advocate.

APPROVAL PAGE

This dissertation has been approved by the following committee of the Faculty of the Graduate School at the University of North Carolina at Greensboro.

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CHAPTER I

INTRODUCTION

Stigma has been defined as the negative effect of a label (Hayward & Bright, 1997) and a product of disgrace that sets a person apart from others (Byrne, 2000). Stigma towards adults with mental illness is both a longstanding and widespread phenomenon (Byrne, 2000; Crisp, Gelder, Rix, Meltzer, & Rowlands, 2000), and researchers seem clear that stigma still exists as a detrimental phenomenon in the lives of those diagnosed with a mental illness (Link, Yang, Phelan, & Collins, 2004; Link, Struening, Neese-Todd, Asmussen, & Phelan, 2001; Perlick et al., 2001). Further, authors have discussed a number of common stigmatizing attitudes towards adults with mental illness (Corrigan, 2004). Such attitudes include beliefs that adults with mental illness

- are dangerous and need to be avoided,
- are to blame for their illness,
- are weak in character, and
- are incompetent and need oversight and care.

In the last decade, there have been attempts to highlight to the general population the topic of stigma towards adults with mental illness. For instance, in his report (Executive Summary, U.S. Department of Health and Human Services, 1999), the U.S. Surgeon General spoke of the need to recognize stigma as a barrier within the field of

mental health. In fact, it was suggested that mental health care could not be improved without the eradication of mental health stigma. Mental health advocacy groups have developed campaigns aimed at erasing stigma. Examples include *StigmaBusters,* a group of the National Alliance on Mental Illness (NAMI) that searches popular media for stigmatizing portrayals of people with mental illness so that these can be excluded from the media. *In Our Own Voice* was established by the NAMI and was developed by consumers to educate the general population on mental illness through a contact program where adults with mental illness interact with audiences on the topic of mental illness. The *Elimination of Barriers Initiative*, a campaign developed by the Center for Mental Health Services, was used in eight pilot states to educate the public on stigma and mental illness. From this initiative, public service announcements to educate the public on mental illness were provided using radio, television, and print media (Corrigan & Gelb, 2006).

Along with the national programs that have highlighted stigma to the public, stigma has been explored in the professional literature as a barrier to recovery for adults diagnosed with a mental illness (Link et al., 2001; Perlick, 2001; Perlick et al., 2001; Sirey, Bruce, Alexopoulos, Perlick, Friedman, & Meyers, 2001). From this, a number of negative consequences of stigma related to mental illness, both internal and external, have been highlighted.

Internal consequences from stigma include decreases in self-esteem and increases in shame, fear, and avoidance (Byrne, 2001; Corrigan, 2004; Link et al., 2001; Perlick et al., 2001). For example, a person with a mental illness might anticipate a negative

response from society and develop unhealthy coping strategies such as withdrawing from interaction with others to avoid discrimination and rejection. External consequences of stigma related to mental illness include exclusion, discrimination, prejudice, stereotyping from others, and social distance (Byrne, 2001; Corrigan, 2004; Link et al., 2004).

Social distance, or a person's willingness to interact with a target person in various relationships (Link et al., 2004), has been documented in the literature as a negative consequence of mental illness. Authors outside of the U.S. have reported negative attitudes from the general population regarding social distance and adults with mental illness. Participants in Nigeria were unwilling to have social interactions with those with a mental illness. 83% reported that they would be afraid to have a conversation, 78% said that they would be upset or disturbed about working on the same job, 81% reported that they would not share a room, and 83% responded that they would feel ashamed if people knew that someone in their family had been diagnosed with a mental illness. Only 17% reported that they could maintain a friendship with a person with a mental illness (Gureje, Lasebikan, Ephraim-Oluwanuga, Olley, & Kola, 2005).

Further, adults who experience stigma are more inclined to be noncompliant with recommended mental health care and prescribed medications (Sirey et al., 2001). For example, persons diagnosed with a mental illness have been found to be more likely to adhere to a medication regimen when they perceived lower levels of stigma associated with their mental illness and discontinue medication when they fear stigmatization from others (Sirey et al., 2001).

It seems clear that stigma negatively impacts the lives of adults with mental illness (Byrne, 2001; Corrigan, 2004; Link, Phelan, Bresnahan, Stueve, & Pescosolido, 1999; Link et al., 2001; Perlick et al., 2001). First, persons with mental illness are sensitive to and influenced by the stigma and labels placed on them (Minkoff, 1987). In addition, according to labeling theory, persons with mental illness are said to internalize the label, resulting in a snowball effect in which the experience of the stigma itself increases upset feelings and, subsequently, strengthens the symptoms (Scheff, 1974; Socall & Holtgraves, 1992). A modification of labeling theory of mental illness posits that even if labeling does not directly create mental illness, negative labels engender self-devaluation and occasion the belief that others are devaluing (i.e., an overgeneralization of the label) so that the negative attitudes increase one's vulnerability to mental illness (Link, 1987; Link, Cullen, Struening, Shrout, & Dohrenwend, 1989).

Various factors combine to form stigma, including stereotype, prejudice, and discrimination. Corrigan (2004) differentiated between these and explained the differences. A stereotype is a belief one has about a group of people. An example of a negative stereotype might be "persons with mental illness are dangerous." Prejudice is agreement with the said stereotype, which results in an emotional reaction. Further, prejudice has been defined as an unfavorable opinion formed without just grounds or before sufficient knowledge (Merriam-Webster, 2008). An example of prejudice might be agreeing that persons with mental illness are indeed dangerous, causing an emotional reaction such as fear. Discrimination is the behavioral response that comes from

prejudice. An example might include avoiding a person with a mental illness because of the fear from the prejudice and the belief that the person is dangerous.

Researchers have investigated and substantiated that the general population stigmatizes the mentally ill (Crisp et al., 2000; Gureje et al., 2005; Lauber, Ajdacic-Gross, & Rossler, 2004; Levey & Howells, 1994; Link et al., 1999). Because of this, it is well documented that most of the general population is aware that stereotypes about mental illness exist (Levey & Howells, 1994; Link, 1987). Although not everyone agrees with the stereotypes, those who do agree are likely to act in a discriminatory manner (Corrigan, 2004). There appear to be a variety of factors that seem to contribute to stigma towards adults with mental illness. For example, researchers have found that people who have more knowledge about mental illness are less likely to have stigmatizing attitudes towards people with mental illness (Bairan & Farnsworth, 1989; Penny, Kasar, & Sinay, 2001; Pitre, Stewart, Adams, Bedard, & Landry, 2007). This suggests that education might improve attitudes about mental illness. Level of contact might also be an important factor to consider. Researchers (Procter & Hafner, 1991; Wallach, 2004) have found that exposure assists with reducing stigma towards people with mental illness, so that having interaction with the population has an impact on people's stereotypes, prejudices, and tendency to discriminate.

Unfortunately, stigma towards adults with mental illness originates not only from the general population, but also from mental health professionals. In fact, it has been suggested that stigma should be examined in a way that shifts the focus from the receiver of the stigma (clients diagnosed with a mental illness) to the people or institutions

contributing to the stigma, including mental health professionals and organizations (Sayce, 1998). When investigators have looked at mental health professionals' attitudes, it seems that professionals may harbor some of the same stigmas as the general population, in particular social distance (Lauber et al., 2004; Nordt, Rossler, & Lauber, 2006).

Recent research (Lauber et al., 2004) conducted outside of the United States highlighted that psychiatrists and the general population did not differ in their preferred social distance to people with a mental illness. Both psychiatrists and the general population indicated that the "closer" the distance, the more social distance they desired. The most social distance was reported when participants were asked if they would let a person with mental illness care for their child or marry into the family. In a similar study (Nordt et al., 2006), mental health professionals including, psychiatrists, psychologists, nurses, and other therapists (social workers, vocational workers) were compared to the general population. Psychiatrists desired the most social distance from adults with mental illness out of all the groups. Other mental health professionals desired lesser amounts of social distance than did psychiatrists: nurses, then other therapists, the general population, and psychologists, respectively. The authors warned that it would be simplistic to think that mental health professionals, even though they are considered experts in their field, have more positive attitudes towards adults with mental illness than the general public. The authors urged mental health professionals to investigate more closely their attitudes towards people with mental illness.

Authors have hypothesized about factors that contribute to stigmatizing attitudes among mental health professionals. Negative attitudes on the part of mental health professionals have been found to be associated with feelings of helplessness and futility among these professionals (Cohen, 1990). In addition, stigmatizing attitudes are associated with feelings of resistance from professionals towards providing services and treatment to clients (Cohen, 1990; Minkoff, 1987). The potential damaging consequences of stigma from mental health professionals warrants further investigation.

For example, Hromco, Lyons, and Kikkel (1995) and Minkoff (1987) suggested that negative attitudes might be the result of inadequate training about adults with mental illness, so that mental health professionals are not fully prepared to work with the population or setting before starting their career. It has been hypothesized that mental health professionals do not receive adequate support and validation to function successfully in this type of work (Minkoff, 1987). Further, stigma from mental health professionals may be a coping mechanism used to mask a fear of feeling unable to help clients (Cohen, 1990).

Early researchers (Cohen & Struening, 1962) highlighted that different mental health professionals and staff had varying levels and types of stigmatizing attitudes towards adults with mental illness, ranging from *authoritarianism* – the attitude that obedience to authority is necessary and that adults with mental illness are inferior, to *benevolence*- kind and paternal, supported by humanism and religion rather than science. In their effort to explore stigmatizing attitudes of mental health professionals and staff, they found that psychologists, psychiatrists and social workers had low scores on the

authoritarianism scale while mental health aides and kitchen personnel scored higher. Further, the authors found that psychologists scored low on *benevolence* while nurses and clerical personnel scored high.

Since these early studies, there remain mixed ideas about the causes of stigmatization from mental health professionals and what factors might reduce this stigma. Some (Procter & Hafner, 1991; Wallach, 2004) have suggested that increased contact and experience with adults with mental illness might help with shifting negative attitudes, so that having exposure to adults with mental illness would decrease negative attitudes. Others have noted that education and knowledge about mental illness might reduce stigma and negative attitudes towards those with mental illness (Bairan & Farnsworth, 1989; Penny et al., 2001). Overall, however, there is little consensus about both the causes and reduction of stigma among mental health professionals towards adults with mental illness.

Since early research on stigma and mental health professionals (Cohen & Struening, 1962), professional counselors have emerged as a type of mental health professional often working in settings with adults diagnosed with a mental illness (Hinkle, 1999). In fact, professional counselors have reported that they are seeing more clients in severe distress (Ivey, Ivey, Myers, & Sweeney, 2005). Although this subgroup of mental health professionals might work in the same professional settings as nurses, social workers, psychologists, and psychiatrists, the educational and training backgrounds of professional counselors include some noteworthy differences. Often, the formal training program for professional counseling is taught in schools of education rather than

schools or departments of psychology (Ivey & Van Hesteren, 1990). Further, relative to other mental health disciplines, professional counselors use an understanding of human development to inform their practice and work with clients (Hinkle, 1999; Ivey & Ivey, 1998; Ivey et al., 2005).

The counseling profession also promotes health and wellness when working with clients in distress. Although professional counselors increasingly do work with clients diagnosed with a mental illness (Ivey et al., 2005), the cluster of symptoms that comprise a diagnosis are considered and treated within a developmental rather than medical context. Further, relative to other disciplines, professional counselors tend to focus on strengths or ways to assist the client in a proactive and positive manner. Thus, this way of working also is referred to as strength-based (Ivey et al., 2005). The client–counselor relationship is collaborative and diagnoses are talked about and client input is encouraged. The client is viewed as the "expert" of her or his life rather than the professional counselor assuming such a role. Multicultural concerns are another hallmark of a professional counselor's work so that culture and ethnicity as well as power differentials related to race are considered with a client in distress (Ivey & Ivey, 1998).

The medical or, as it is sometimes called, psychological model emphasizes the mind and behavior and gives ultimate focus to the individual (Ivey & Van Hesteren, 1990). Differences in the medical and developmental models have been noted by various authors (Ivey & Ivey, 1998; Ivey et al., 2005; Ivey & Van Hesteren, 1990). The medical model suggests that mental health professionals look at the individual as the client and pay less attention to the family, culture, or environment of the individual. Within the

medical model, pathology rather than wellness is stressed. For example, if a client is experiencing signs of depression, a mental health professional might inquire about her or his symptoms in order to assess the level of depression. A professional counselor would do the same, but might inquire also about developmental or contextual concerns related to the etiology of the depression.

Traditionally, the mental health professional has been understood to be the expert who tells a client her or his diagnosis. It has been suggested by authors (Ivey & Ivey, 1998; Ivey et al., 2005) that within the medical model, little attention is given to cultural concerns of the client. For example, the criteria for mental illnesses are the same for all clients who are experiencing specific symptoms, despite racial or ethnic background. Further, family is not understood as central to working with clients since the core issues are conceptualized as existing within the client.

With these differences existing in education and training of professional counselors and other mental health professionals, the question arises as to what differences might exist between these professional groups in how they stigmatize clients diagnosed with a mental illness. Little is known, however, about how professional counselors, whose training is more oriented toward developmental and strength-based perspectives than other mental health professionals, might differ in their tendency to stigmatize persons diagnosed with a mental illness from persons trained with a medical model. Perhaps the emphasis on strengths and client wellness might lead professional counselors to be less stigmatizing toward adults diagnosed with a mental illness. On the other hand, because the training of professional counselors tends to emphasize mental

illness and pathology to a lesser extent than other training programs, such as psychology, it is possible that counselors are less knowledgeable about mental illness. Such a lack of knowledge has been hypothesized to increase the potential to stigmatize (Bairan & Farnsworth, 1989; Penny et al., 2001). This remains an empirical question that has, to date, been unexamined.

Purpose of the Study

In both the general population and among mental health professionals, there is more to be investigated regarding stigma and mental illness. Researchers who have examined mental illness stigma among mental health professionals have primarily studied those in medical, occupational therapy, and case management fields (Bairan & Farnsworth, 1989; Cohen & Struening, 1962; Murray & Steffen, 1999; Penny et al., 2001; Procter & Hafner, 1991) or have studied samples obtained outside of the United States (U.S.) (Gureje et al., 2005; Lauber et al., 2004; Ng & Chan, 2000; Nordt et al., 2006). Therefore, the purpose of this study is to examine stigma toward mental illness among a U.S. sample that includes professional counselors.

To provide a context for the results, comparison groups will be included. Graduate students and professionals who are not in human services areas will be sampled and compared to those who are in human services areas. Also of interest is how time in the field might impact attitudes by investigating those who are preparing for professional work in a mental health field (graduate students) and those who are experienced mental health professionals who work in direct care settings. There is no recent research in which professional counselors are included that looks at these populations regarding

stigma toward clients with mental illness. As such, to this researcher's knowledge, this will be the first study in which stigma towards mental illness among professional counselors has been considered empirically.

In addition, this research will look at mental health professionals who are preparing for work in the mental health field, specifically those who are currently in their mental health training programs, and those who have worked professionally in the mental health field for at least one year. Although this study will be cross-sectional and the potential exists for cohort effects, this will be a preliminary examination of how experience in the field may impact stigma towards adults with mental illness. Professionals will include counselors, psychologists, and social workers. This way, effects based on both discipline and experience can be considered. Non mental health professionals also will be included. Also, this study will examine what other factors, such as clinical supervision and licensure status, might contribute to stigmatizing attitudes.

Statement of the Problem

There is little consensus regarding what impacts stigmatizing attitudes. Scholars have implied that numerous factors might be involved in the attitudes of mental health professionals towards adults with mental illness, including contact and experience (Procter & Hafner, 1991; Wallach, 2004) and education and knowledge (Bairan & Farnsworth, 1989; Penny et al., 2001).

Primarily, however, researchers have examined those in the medical, occupational therapy, and case management fields (Bairan & Farnsworth, 1989; Cohen & Struening, 1962; Murray & Steffen, 1999; Penny et al., 2001; Procter & Hafner, 1991) and have not

considered samples of professional counselors. A study is needed that includes both students in and outside of mental health training programs. In addition, research is needed that investigates mental health professionals who are working in a mental health setting. By considering professional counselors, other mental health professionals, mental health professionals in-training, and by including students who are not in a human services profession, additional information not previously available in the professional literature will be gained. It is believed that this information may be useful, in particular, to educators who prepare professional counselors and similar mental health professionals.

In addition, there exists a need for a study that replicates and extends earlier studies (Cohen & Struening, 1962) comparing attitudes of different types of mental health professionals based on education and professional orientation. This type of investigation will highlight similarities and differences in professionals according to past training and professional identity. A noteworthy subpopulation of mental health professionals in mental health settings is professional counselors who may work in multidisciplinary settings with people diagnosed with a mental illness (Hinkle, 1999; Ivey et al., 2005). To date, however, researchers have omitted this group and focused on mental health professionals trained primarily within a medical model. Professional counselors are distinguishable in their training since underlying assumptions in counselor preparation include wellness, strength-based, and developmental perspectives of human behavior (Hinkle, 1999; Ivey & Ivey, 1998; Ivey et al., 2005). This noteworthy difference in training might be related to a difference in attitudes among this type of mental health professional.

Also, aspects of professionalism and professional development, such as licensure status and clinical supervision, have not previously been explored empirically. Researchers have assumed homogeneity of experience among mental health professionals that may or may not exist. Questions will be asked in the current study to examine the effects of licensure status and clinical supervision on attitudes toward mental illness.

Finally, in addition to the omission of professional counselors in the stigma and mental illness literature, the most recent studies on stigmatizing attitudes have been conducted outside of the United States, so a study within the U.S. will further the existing body of literature. In a recent study conducted in Switzerland, for example, researchers (Nordt et al., 2006) surveyed mental health professionals including psychiatrists, psychologists, nurses, and "other" therapists (including vocational workers, social workers, and physiotherapists). The authors found that the professionals did not have more positive attitudes than the general public towards adults with mental illness. In fact, psychiatrists had more negative stereotypes than the general population. The authors called on professionals to examine their negative attitudes in regards to mental illness. A similar investigation within the U.S. is warranted.

Research Questions

This study will address the following five research questions. Research questions will be analyzed based on quantitative data:

1. Is there a difference in attitudes toward mental illness between mental health professionals in-training, non mental health professionals in-training, mental health professionals, and non mental health professionals?

2. Is there a difference in attitudes toward mental illness between mental health trainees and professionals based on professional orientation (i.e., counseling, social work, and psychology)?
3. Is there a difference in attitudes toward mental illness between mental health professionals who hold a professional license and those who do not hold a professional license and those who are receiving clinical supervision and those who do not receive clinical supervision?
4. Among practicing mental health professionals, to what extent does years of experience, current clinical supervision, licensure, and professional orientation account for variance in attitudes toward mental illness?
5. Is there a significant relationship between attitudes and social distance toward adults with mental illness?

Need for the Study

Researchers who have focused on the stigmatizing attitudes of mental health professionals have tended to omit professional counselors (Bairan & Farnsworth, 1989; Cohen & Struening, 1962; Murray & Steffen, 1999; Penny et al., 2001; Procter & Hafner, 1991). In addition, research on stigma and the general population has been conducted using non-U.S. samples (Gureje et al., 2005; Lauber et al., 2004; Ng & Chan, 2000; Nordt et al., 2006). Since professional counselors come from distinct training programs that emphasize developmental perspectives and strength-based orientations (Ivey & Ivey, 1998; Ivey et al., 2005; Ivey & Van Hesteren, 1990), a study that investigates stigmatizing attitudes and includes professional counselors is warranted. If there are

noteworthy differences in the ways in which professional counselors view adults with mental illness, for example, this information can inform professional counselors and counselor educators and serve as an indication that counselor training is indeed unique in the way that professional counselors view clients, as previous literature has suggested (Ivey & Ivey, 1998; Ivey et al., 2005; Ivey & Van Hesteren, 1990). Since there is no literature to date that includes this subgroup, an exploratory investigation is warranted.

In addition, this study will examine how experience factors into attitudes of mental health professionals towards adults with mental illness and will illustrate whether or not experience is an important factor related to stigma. No studies have been located, to date, that investigate how experience might relate to stigmatizing attitudes in professionals who are preparing for the mental health field versus those who are more experienced. Although there is information regarding stigma and contact with adults and mental illness (Procter & Hafner, 1991; Wallach, 2004), the need remains to examine specifically those professionals in-training and those who are more experienced regarding their attitudes towards adults with mental illness. This information will add to the current literature by supplying information about factors that might influence stigmatizing attitudes – namely, experience, so that more can be known about stigma towards adults with mental illness and what might contribute to it.

Definition of Terms

Mental illnesses are medical conditions that disrupt a person's thinking, feeling, mood, ability to relate to others, and daily functioning (National Alliance on Mental Illness; NAMI, 2008).

Attitudes toward mental illness include authoritarianism, benevolence, social restrictiveness, and community mental health ideology (Taylor & Dear, 1981).

Mental health professional is someone who works in an inpatient or outpatient mental health center with a minimum of one year of experience and has a professional orientation of counselor, psychologist, or social worker.

Mental health professional in-training is someone who is enrolled in a mental health training program in at least her or his second year of study.

Non Mental health professional is someone who works in a setting other than the mental health field, such as business.

Non mental health professional in-training is someone who is enrolled in a graduate degree program other than a mental health training program, such as business.

Inpatient mental health center is a comprehensive treatment center for adults with mental illness that provides 24-hour psychiatric and medical services.

Outpatient mental health center is a comprehensive treatment center for adults with mental illness that provides psychiatric and medical services.

Stigma is the negative effect of a label (Hayward & Bright, 1997) or a sign of disgrace or discredit that sets a person apart from others (Byrne, 2000).

Stereotype is a knowledge structure one has about a group of people, for example "persons with mental illness are dangerous" (Corrigan, 2004).

Prejudice is agreement with the said stereotype and results in an emotional reaction. An example might be agreeing that persons with mental illness are indeed dangerous, causing an emotional reaction such as fear (Corrigan, 2004).

Discrimination is the behavioral response that comes from prejudice. An example might include avoiding a person with a mental illness because of the fear from the prejudice and the belief that the person is dangerous (Corrigan, 2004).

Brief Overview

This research study is organized in five chapters. Chapter 1 has briefly introduced the issue of stigma as it relates to mental health professionals and adults with mental illness and has highlighted the ways in which this study will assist in adding to the body of literature on stigma and mental illness. Chapter 2 presents a review of the literature specific to stigma and mental illness in both the general population and mental health professionals, consequences of mental illness stigma, and professional orientation as it relates to clinical practice. Chapter 3 includes the methodology for the study and explicitly states details such as participants, sampling procedures, sampling method, instruments, and statistical data analyses. The fourth chapter will include the results of the research and the fifth chapter will provide a summary and discussion of the results. In addition, limitations of the research and suggestions for future research in the area of stigma and mental illness will be presented in Chapter 5.

CHAPTER II

REVIEW OF RELATED LITERATURE

In order to discuss mental illness stigma, it is important to consider both historical and current stigma as it exists towards adults with mental illness. Since mental illness stigma impacts mental health professionals as well, stigma as it relates to both adults with mental illness and mental health professionals is highlighted. There are various ideas about what might influence negative attitudes, including contact and experience with adults with mental illness and education and knowledge about mental illness. This review of the literature highlights research on these factors. Professional identity is covered since this might impact the way in which various mental health professionals are trained to conceptualize and treat mental illness.

Mental Illness Stigma in the General Population

Stigma can be defined as a negative effect of a label (Hayward & Bright, 1997), or a sign of disgrace or discredit that sets a person apart from others (Byrne, 2000). Stigma has been highlighted as an important influence on the lives of adults with mental illness. For instance, in his report (Executive Summary, U.S. Department of Health and Human Services, 1999), the US Surgeon General spoke of the need to recognize stigma as a barrier within the field of mental health. In fact, he suggested that mental health care could not improve without the eradication of mental health stigma.

There are a number of distinct constructs that comprise stigma. These include *stereotype*, *prejudice*, and *discrimination.* A *stereotype* is a belief held about a certain group of people. For example, believing that all people with a diagnosed mental illness are dangerous is a stereotype. *Prejudice* is an agreement with the stereotype that results in a negative emotional reaction, such as fear or anger (Corrigan, 2004). Further, prejudice has also been defined as an unfavorable opinion formed without just grounds or before sufficient knowledge (Merriam-Webster, 2008). *Discrimination* is the behavioral response to prejudice, which might include, for example, avoiding a person with mental illness (Corrigan, 2004).

There are several problematic stereotypes for adults with a mental illness that have been identified through factor analytic research (Brockinton, Hall, & Levings, 1993; Taylor & Dear, 1981). These stereotypes include beliefs that adults with mental illness are dangerous, should be avoided, and should have limited social interactions; that they are weak in character and that it is their fault that they have a mental illness; or that adults with mental illness are incompetent and unable to live independently.

It appears, then, that people form diverse attitudes towards adults with mental illness. More specifically, these attitudes have been labeled and defined in the literature (Cohen & Struening, 1962; Ng & Chan, 2000; Taylor & Dear, 1981):

- Authoritarianism – adults with mental illness are inferior and require coercive handling;
- Benevolence- a sympathetic view of adults with mental illness based on humanistic or religious principles;

- Social restrictiveness - people with a mental illness are dangerous and need to be avoided;
- Community mental health ideology – a "not in my backyard" attitude reflecting the belief that adults with mental illness should get treatment but not in my neighborhood;
- Mental hygiene ideology – a positive attitude that views mental illness as an illness like any other that can be treated;
- Interpersonal etiology – the belief that mental illness is a result of interpersonal experience, such as deprivation of parental love during childhood and that mental illness is a way to avoid these problems;
- Separatism – adults with mental illness are distinct and should be kept at a safe distance;
- Pessimistic Prediction – adults with mental illness are unlikely to improve;
- Stigmatization – mental illness is shameful and adults with mental illness should stay unknown;

History of Mental Illness Stigma Research

Researchers began looking at mental illness stigma in the 1950s by asking questions about how the general public perceives and reacts to adults with mental illness. In the 1950s, the general public defined mental illness in fairly narrow and rigid terms. Commonly, participants reported attitudes of fear and rejection towards those with mental illness. These early studies (Star, 1952; 1955 as cited in Phelan, Link, Stueve, & Pescosolida, 2000) included over 3,000 participants. People tended to equate mental

illness with psychosis. As such, they tended to respond to all people with a diagnosed mental illness as if they were psychotic. Nunnally (1961) found that people commonly referred to people diagnosed with a mental illness as *dangerous, dirty, worthless, bad, weak, ignorant,* and *insane*. Nunnally also reported that the public not only had negative views of adults with mental illness but also had negative views of mental health care providers who treated mental illness. When asked to evaluate mental health professionals, the public evaluated this group more negatively than professionals who treated physical illness. Thus, mental illness stigma extended beyond adults who have a mental illness and also included stigma toward professionals who treat those with a mental illness. That is, participants held negative views of anyone associated with mental illness, providers and consumers alike.

To investigate what changes have occurred in the general population over time, researchers (Phelan et al., 2000) replicated Star's (1950) research using The Mental Health Module of the 1996 General Social Survey. Results suggested that general perceptions about mental illness have broadened and the public now seems to define mental illness as more than just psychosis. The attitude still exists, however, that adults with mental illness are dangerous. In fact, perceptions that adults with mental illness are violent or frightening actually have *increased* since the 1950s study. In looking more closely, the increase was particularly true among those participants who viewed mental illness as psychosis. Across all participants, however, the researchers found that the proportion of people who described adults with mental illness as dangerous and violent increased approximately two and a half times since the 1950s. The authors concluded

that although the general public might understand mental illness in broader terms, the belief that adults with mental illness are to be feared because of violence and dangerousness remains prominent in the US general population (Phelan et al., 2000).

Present Day Stigma and Dangerousness

Others have looked more specifically at the topic of dangerousness and mental illness. Largely, empirical studies have documented that there is only a modest elevation in violence among adults with mental illness, and that only a minority of adults with mental illness are violent (Swanson, Holzer, Ganju, & Tsutomu Jono, 1990). Perceptions remain, however, regarding mental illness and dangerousness. In their study, Link et al. (1999) used a set of vignettes based on criteria from the DSM to assess recognition of a mental illness, beliefs about causes of mental illness, beliefs about the level of dangerousness of persons with a mental illness, and the amount of social distance people desired from persons with a mental illness. The authors surveyed 1,444 people using the General Social Survey. They included vignettes depicting people with schizophrenia, major depressive disorder, alcohol dependence, drug dependence, and a "troubled person" with sub-clinical presenting problems. An additional vignette was used that described a "normal person" with average troubles and stressors. This provided a baseline for interpreting results. Participants answered questions about potential causes, labels for the problem, perceived risk of violence, and willingness to interact with the person described in the vignette.

To see if participants viewed people in vignettes as dangerous, researchers asked how likely it was that the person in the vignette would be to do something violent to other

people. All of the mental disorders from major depression (33%) to cocaine dependence (87%) were believed to substantially increase the risk of violence. The vignette conditions were significantly associated with the beliefs about violence, and explained 27.6% of the variance in those beliefs.

Questions used to assess social distance asked whether the participant would move next door, spend time socializing, or establish and maintain friendships (Link et al., 1999). Participants wanted the most social distance from a person with cocaine dependence, followed by alcohol dependence, schizophrenia, and major depression. The vignettes explained 22.3% of the variance in attitudinal social distance, and each condition was significantly different from each other according to a Scheffe test. Thus, perception of dangerousness may be associated with a person's desire for social distance from a person with a mental illness. The authors discussed the association between mental disorders and perceived likelihood of violence and explained that if the symptoms of mental illness continue to be strongly connected to violence and with the desire for limited social interaction, adults with mental illness will continue to be stigmatized (Link et al., 1999).

The International Scope of Stigma

Mental illness stigma is found not only within the United States. In Hong Kong, for example, researchers (Ng & Chan, 2000) described the negative attitudes of adolescents towards those with mental illness, described how the general public regarded those with mental illness as dangerous and possibly violent, and investigated gender differences in stigma. Using a random sample of 388 secondary schools with students in

fourth and sixth form (which equates to academic grades ten and twelve in the U.S), a total of 2,223 students between the ages of 14 and 21 participated (880 boys and 1,343 girls). The researchers administered the Opinions about Mental Illness in Chinese Community Scale (OMICC), which uses a Likert scale with an agreement continuum. The six subscales measure attitudes towards mental illness and included *Benevolence* (a kindness orientation), *Separatism* (wanting to keep people diagnosed with a mental illness at a safe distance), *Stereotyping* (narrow assumptions based on diagnosis), *Restrictiveness* (doubtful views on the rights of people with mental illness), *Pessimistic Prediction* (the attitude that people diagnosed with mental illness are unlikely to improve), and *Stigmatization* (the idea that mental illness is shameful and that sufferers should keep their illness hidden from others).

Significant effects for gender were found for five of the six factors (all except separatism) (Ng & Chan, 2000). Boys scored lower on *Benevolence* but higher on *Stereotyping, Restrictiveness, Pessimistic Prediction, and Stigmatization.* In general, the authors concluded that boys had more negative attitudes toward people diagnosed with a mental illness than did girls, though both groups had negative attitudes. Secondly, the researchers highlighted that the public does not have a clear prejudice against people with mental illness since no one scale was more elevated. As far as specific attitudes, the junior boys were more restrictive than girls. Both junior and senior boys were more stereotyping and stigmatizing towards mental illness than girls (Ng & Chan, 2000).

In a study published in the *British Journal of Psychiatry* (Gureje et al., 2005), researchers examined mental illness stigma in Nigeria. They explained that although

stigma for those with mental illness exists in Nigeria, the level of stigma was unknown. Three states in southwestern Nigeria were used to get a sample of 2,040 individuals. Their research involved a stratified, multistage clustered probability sample of participants who were at least 18 years old. The researchers used a questionnaire that originally was developed to focus on both knowledge of and attitudes towards schizophrenia. The questionnaire was modified to measure attitudes of mental illness in general rather than schizophrenia alone. Beliefs about etiology of mental illness were measured, and most participants expressed that substance misuse could result in a mental illness. The second most common reason that participants reported as a cause of mental illness was evil spirits. Trauma, stress and heredity were other reasons. Only one in ten participants thought that biological factors could be a cause of mental illness. There was a prominent belief in supernatural causes, as 9% believed that God caused mental illness. Interestingly, 6% of participants believed that poverty caused mental illness.

Among respondents, attitudes about adults with mental illness were negative (Gureje et al., 2005). People with mental illness were believed to be mentally retarded, a public nuisance, and dangerous. Less than half of the participants believed that such people could be treated outside of a hospital and only 25% believed that they could work regular jobs. Poor knowledge about mental illness also was prevalent among the participants. The authors also examined social distance. Participants were unwilling to have social interactions with those with a mental illness - 83% reported that they would be afraid to have a conversation, 78% said that they would be upset or disturbed about working on the same job, 81% reported that they would not share a room, and 83%

responded that they would feel ashamed if people knew that someone in their family had been diagnosed with a mental illness. Only 17% reported that they could maintain a friendship with a person with a mental illness (Gureje et al., 2005).

This was the first large-scale investigation of knowledge and attitudes towards mental illness in sub-Sahara Africa (Gureje et al., 2005). The authors concluded that the belief that mental illness is caused by misusing drugs and alcohol may translate into people thinking that mental illness is self-inflicted and, as such, that the illness is deserved. Negative views were widely held about those with mental illness. Community based care did not seem to be a notion worth considering, since most believed that mental illness could only be treated in a hospital. For attitudes about interacting with people with mental illness, the closer the intimacy required, and the stronger the desire to keep a distance. For example, 83% of participants indicated that they could have a conversation with someone with a mental illness; however, only 3.4% of participants indicated that they would marry someone with a mental illness. The authors concluded that there is poor knowledge about the cause and nature of mental illness in Nigeria and that education is needed so that stigma towards those with a mental illness can decrease (Gureje et al., 2005).

Internal Consequences of Stigma

Negative impacts of stigma include consequences both internal and external to the adult diagnosed with a mental illness. Internal consequences include secrecy and shame, poorer social adaptation, and lower self-esteem (Link et al., 2001; Perlick et al., 2001). Link et al. (2001) examined the effect of perceived stigma on self-esteem, Participants

were randomly assigned to one of two conditions: an intervention created to facilitate coping with stigma and a control group. Seventy people, with a mean age of 41.3 with a standard deviation of 10.7, participated in the study. Most were white males. The most common diagnosis was schizophrenia followed by other nonaffective psychotic disorders, depressive disorders, bipolar disorder, and others. The authors used a version of Rosenberg's (1979) scale to measure self-esteem. A 12-item instrument that asked about feelings of failure, not being taken seriously, and feeling less intelligent measured perceived stigma. The authors presented descriptive results, regression analyses, and looked at interactions between the variables and stigma. Self-esteem and two different aspects of stigma, *perceptions of devaluation-discrimination* and *social withdrawal due to perceived rejection,* were measured. Participants were surveyed twice – once at the start of the study and again at 24 months. The two measures of perceptions of stigma predicted self-esteem at 24 months when extraneous factors were controlled. The authors concluded that mental illness stigma harms the self- esteem of adults with mental illness (Link et al., 2001).

Social adaptation also is negatively impacted by mental illness stigma. Adults with mental illness who anticipate discrimination and stigma often develop coping strategies such as withdrawing from social situations and interactions in order to avoid the rejection that they anticipate. Many adults with mental illness rely on their family rather than outside social supports for emotional or practical support. An implication of this is that the adult may have a limited amount of social contacts, which may further limit social adaptation. Researchers (Perlick et al., 2001) have evaluated the impact of

mental illness stigma with adults with bipolar disorder on social adaptation over time, both within and outside of the family. In their study, a sample of 264 persons over the age of 16 diagnosed with bipolar disorder and their families participated. Concerns about stigma were assessed using an eight-item scale that measured withdrawal as a coping mechanism to avoid rejection. Twelve items from the Beliefs about Devaluation-Discrimination Scale (Link et al., 2001) were used. An example of a statement that measured devaluation-discrimination was *Most people feel that entering a mental hospital is a sign of personal failure*. The authors measured withdrawal by asking participants to indicate how much they agreed with statements such as *After being in psychiatric treatment, it is a good idea to keep what you are thinking to yourself*. A social adjustment scale (SAS, Weissman, 1974) was used at baseline and at a seven-month follow up to examine social functioning over the previous three months.

Concerns about stigma significantly predicted adjustment at a seven-month follow up after symptom level, baseline functioning, and sociodemographic variables were controlled. Concerns about stigma at baseline were not a significant predictor of social adjustment at seven months on the SAS extended family subscale. Thus, participants who reported higher levels of concern about stigma at baseline had more impaired social functioning at follow up in interactions with persons outside of their family but not with family members (Perlick et al., 2001). As the authors predicted, those who had strong concerns about stigma at baseline showed greater impairment in their social and leisure functioning, even after controlling for symptom severity, baseline social adaptation, and sociodemographic characteristics (Perlick et al., 2001).

External Consequences of Stigma

Along with internal consequences of stigma related to mental illness, there are external consequences as well. While internal consequences might negatively impact adults with mental illness, external consequences impact both the consumer and mental health professionals. One noteworthy external consequence is medication adherence. In their research, Sirey et al. (2001) discussed that depression often is under- treated despite the availability of effective treatments. To investigate patients' perceived stigma and beliefs about illness and treatment as predictors of adherence to antidepressant drug therapy, the authors asked participants to report on perceived stigma, severity of illness, and beliefs about treatment. The authors predicted that individuals who had lower perceived stigma and higher self-rated severity of illness would be more adherent than those who tended to minimize the severity of their illness and report higher stigma.

A two stage sampling design was used to assess these factors, with three months in between interviews. Lower perceived stigma and higher self-rated severity of illness were associated with better adherence to the recommended medication regimen. Thus, adherence to antidepressant drug therapy was predicted by perceptions of the severity of illness and level of perceived stigma. The authors discussed that views and attitudes of the patient receiving care are central to understanding and supporting treatment adherence. Thus, perceived stigma has damaging external as well as internal consequences (Sirey et al., 2001).

Labeling Theory of Mental Illness Stigma

According to Labeling Theory of mental illness (Scheff, 1974), mental illness is a direct result of negative societal reactions. In other words, the person who is labeled as having a mental illness adopts the role of *mentally ill* as a response to others. This identity forms around the role of *mentally ill person* and then a stable mental illness develops. Once a person is labeled, the person is subjected to uniform responses from others. Behavior is crystallized and stabilized by a system of rewards and punishments that constrain the individual to the role of mentally ill adult. Once the person has internalized this role, he or she incorporates it into her or his central identity and the process is complete, resulting in chronic mental illness.

Many have criticized this theory, and others have modified it. Link et al. (1989) have developed a modified labeling theory that states that although labeling might not directly produce mental illness, it can lead to negative outcomes. Even if societal ideas about mental illness do not cause the mental illness, these reactions do engender self-devaluation and expectations of devaluation by others. These effects can then increase a person's vulnerability to mental illness. Socialization leads an individual to develop a set of beliefs about how people in society treat those with a mental illness. In addition, when adults with mental illness enter treatment, these beliefs take on new meaning, and the more that the person believes that he or she will be devalued and discriminated, the more he or she feels threatened about interacting with others.

Anti Stigma Campaigns

Many have realized the importance of addressing stigma in the lives of adults with mental illness. Aside from research designed to assist with decreasing stigma in the lives of adults with mental illness, advocacy groups work towards the same goal. Examples of such groups include the National Alliance for the Mentally Ill, the National Mental Health Association, and the World Health Organization. These groups have recognized advocacy as an important phenomenon to fight against mental illness stigma and have suggested that programs be developed that challenge prejudice and discrimination. One form of fighting stigma through advocacy efforts is with protest. *StigmaBusters*, a group of the National Alliance on Mental Illness (NAMI) is an example. This group searches popular media for stigmatizing portrayals of people with mental illness so that these can be excluded in the media. The campaign is targeted toward various forms of medias contribute to mental illness stigma (Corrigan & Gelb, 2006). When a disrespectful image is seen in the media, a member logs this portrayal and reports it to the central *StigmaBusters* office. When someone confirms that the portrayal was indeed stigmatizing, the member releases a stigma alert to other members and includes the name of the person in authority to whom members should send their complaints.

Education and contact are two other means by which advocacy groups attempt to eliminate mental illness stigma. *In Our Own Voice* was established by the National Alliance on Mental Illness and was developed by consumers to educate the general population on mental illness through a contact program where adults with mental illness interact with audiences on the topic of mental illness. *In Our Own Voice* is a 90-minute

standardized contact program that includes adults with mental illness who speak to audiences about the topic of her or his mental illness. The program is split into six distinct parts: introduction, dark days, acceptance, treatment, coping mechanisms, and success/hopes/dreams. Each section has a video segment lasting 10 minutes. Adults with mental illness who feel comfortable talking to a group of people present the whole program. A training program is included for any person wanting to participate.

Corrigan and Gelb (2006) discussed two studies regarding the *In Our Own Voice* campaign. The first was descriptive and examined 2,200 audience members' opinions about the amount and depth of information gleaned from the program. Approximately 75% of the participants reported learning "lots of information." Seventy percent rated the presentation as "excellent" in depth and scope. In another study, the authors surveyed 114 college students. Participants were randomly assigned to the *In Our Own Voice* (IOOV) contact program group or a control group. The control group learned about psychology as a career. Both groups completed a pre and posttest measure of knowledge, attitudes, and social distance and mental illness. Results showed significant interactions for all three variables, suggesting that compared with the control group, those who participated in the IOOV group showed significantly less stigmatizing attitudes (Corrigan & Gelb, 2006). Thus, this advocacy campaign involving education and contact appeared to lessen mental illness stigma.

Public service announcements serve as another way in which advocacy groups work to reduce stigma. The *Elimination of Barriers Initiative*, developed by the Center for Mental Health Services, was used in eight pilot states (California, Florida,

Massachusetts, North Carolina, Ohio, Pennsylvania, Texas, and Wisconsin) to educate the public on stigma and mental illness. From this initiative, public service announcements were made via radio, television, and print media to educate the public on mental illness (Corrigan & Gelb, 2006). The overall goals for this project included combating stigma and discrimination, reducing barriers to treatment, and building public support for recovery.

Mental Illness Stigma Among Mental Health Professionals

Improving mental illness stigma also involves the mental health professionals who provide care. Authors have suggested that in order to improve the mental health services that adults with mental illness receive, it is important to take a closer look at mental health professionals (Sayce, 1998). Further, Minkoff (1987) noted that focusing outside of mental health professionals – on other people, places, and things related to mental health care – fails to address the important role mental health professionals play in the challenges and pitfalls associated with mental health care, including stigma.

Unfortunately, stigmatizing attitudes exist among mental health professionals. Taking a closer look at the attitudes of mental health professionals is one way in which mental health care can be examined with the ultimate goal of decreasing mental illness stigma. When researchers have examined attitudes more closely, results have been disheartening. In early research (Mirabi, Weinman, Magnetti, & Keppler, 1985), 85% of professionals reported that the chronic mentally ill are not a preferred population to treat, 55% reported that most clinicians preferred to avoid adults with mental illness, and 65% believed that there were no satisfying professional rewards in treating this population.

Minkoff (1987) posited that these attitudes from mental health professionals might be linked to avoiding adults with mental illness in the general population, so that these attitudes of the general public are carried over into mental health care. Minkoff noted also the failure of the medical profession to provide adequate training and peer support for professionals to overcome specific affective and attitudinal barriers to working with adults with mental illness.

Still other scholars have explained that mental health professionals tend to think of some types of clients as *good clients*, those who are higher functioning, insightful, verbal, intelligent, and some types of clients as *bad clients*, those who are, for example, chronic and drug-addicted (Cohen, 1990). Challenging clients evoke negative reactions among mental health professionals and these negative reactions, conscious or unconscious, are barriers to adequate treatment of these clients (Cohen, 1990).

Early researchers (Cohen & Struening, 1962) assessed professionals working in two large psychiatric hospitals in order to see what attitudes existed towards people with mental illness. Professionals included in the research ranged from psychiatrists to paraprofessionals such as aides and staff such as kitchen personnel. Their research also served as a way to field test their instrument, The Opinions About Mental Illness Scale, which has been used extensively since. The factors that the authors developed, based on responses to the opinions questionnaire were *Authoritarianism* (belief that those with mental illness are inferior and require coercive handling) *Benevolence* (a moral, paternalistic, and sympathetic belief of mental illness), *Mental Hygiene Ideology* (belief that adults with mental illness are like normal people since mental illness is an illness like

any other), *Social Restrictiveness* (wanting to restrict adults with mental illness to protect society), and *Interpersonal Etiology* (belief that mental illnesses arise from interpersonal experiences, particularly from an absence of love and attention from parents and families).

Psychologists, psychiatrists, and social workers had low means on the *Authoritarian* scale, indicating less stigma, while kitchen personnel and aides scored high. For *Benevolence*, psychologists occupied the low extreme while nurses, special service workers, and clerical personnel had high scores. Aides and kitchen workers had the lowest means on the *Mental Hygiene Ideology* scale and social workers, psychiatrists, and psychologists had the highest means. Physicians scored the highest and psychologists the lowest on the *Social Restrictiveness* scale. Psychiatrists and psychologists had the highest means on *Interpersonal Etiology* while aides and kitchen workers scored the lowest. Overall, the authors noted that mental health professionals tended to score quite differently than aides and staff. For example, on both *Authoritarian* and *Benevolence,* professionals tended to have less of both of these attitudes than staff. Still, though, there was variation of attitudes between professional disciplines. For example, physicians and psychologists occupied the highest and lowest scores, respectively, on the *Social Restrictiveness* scale (Cohen & Struening, 1962).

Since this research, others (Murray & Steffen, 1999; Penny et al., 2001) have attempted to clarify how to interpret high and low scores on each of the factors by stating that favorable attitudes towards adults with mental illness are indicated by low scores on the *Authoritarianism, Social Restrictiveness,* and *Interpersonal Etiology* subscales and

high scores on the *Benevolence* and *Mental Hygiene Ideology* subscales. While most have agreed with this way of conceptualizing the factors as favorable or unfavorable, some (Bairan & Farnsworth, 1989) have questioned whether or not high scores on *Benevolence* should be considered favorable. Since this is a sympathetic, paternalistic understanding and views adults as children, there is ongoing debate over whether or not this is favorable.

More recently, similar studies have been conducted outside of the United States to investigate the attitudes of mental health professionals towards adults with mental illness. In one study Nordt et al. (2006) assessed the attitudes and knowledge of both mental health professionals and the general population in Switzerland. To explore attitudes, the authors used questions that asked about stereotypes, restrictions, and social distance towards adults with mental illness. To test participants' knowledge, the authors provided participants with a vignette and asked whether or not the person in the vignette was suffering with a mental illness.

The authors used 29 mental health centers that provided both inpatient and outpatient services. In a three-step sampling procedure, the researchers surveyed 518 psychiatrists, 2,250 nurses, and 320 other mental health professionals, including social workers and psychologists. The general population sample consisted of 1,737 adults ranging in age from 16-76 years. A random sample was gathered from the telephone directory. The first part of the questionnaire asked about attitudes towards people with mental illness. On a Likert type scale, participants rated their degree of agreement to statements describing adults with mental illness. The authors used adjectives and

stereotypes such as: *dangerous, weird, reasonable,* and *healthy*. To assess restrictiveness, participants were asked if and how individual freedoms (such as marriage and children) should be taken away from those with mental illness. In order to test knowledge, participants were given researcher created vignettes in which a person was diagnosed with major depression, schizophrenia, or a non-clinical struggle such as dealing with a challenging life event. Social distance was measured by using a social distance scale consisting of seven questions assessing the willingness to interact with the person in various social situations. An example included, *Would you be willing to have your children marry someone like the person in the vignette?* The authors used analysis of variance and a regression analysis to estimate the relationship between attitude scores and demographics.

The general public had more negative stereotypes than professionals. The general public also accepted restrictions toward people with mental illness to a higher degree than professionals. Mental health professionals did not differ from the general public, however, in how they endorsed the social distance items. The vignette with schizophrenia showed the highest level of social distance. The authors compared mean values of the negative stereotypes, ranging from 1 as the lowest to 5 as the highest, of each type of professional and the population. The groups included the following: psychiatrists, psychologists, nurses, other therapists (social workers, vocational workers), and the general population. Psychiatrists had the highest mean value (3.49). Nurses were next with a score of 3.41, then other therapists (3.39), the general population (3.38), and psychologists (3.33). Psychiatrists held significantly more negative attitudes than each of

the other groups (3.49, $p < .05$). One limitation of this research is that professional counselors were not included in the sample.

The authors noted that this study was the first to compare professionals to the general public regarding stereotypes and restrictiveness. The authors warned that it would be simplistic to think that mental health professionals, even though they are considered experts in their field, have more positive attitudes towards people with mental illness than the public. In addition, the authors noted other interesting findings. Both professionals and the general public reported wanting an equal amount of social distance towards the person in the depression and schizophrenia vignette. Professionals did indicate to a much lesser degree that adults with mental illness should have restrictions to rights such as voting or marriage. The public significantly accepted the restriction of the right to vote more than each professional group ($p < .01$). The authors concluded by urging mental health professionals to investigate more closely their attitudes towards people with mental illness. Further, this should be done before the general public can be educated and informed about mental illness stigma (Nordt et al., 2006). That is, it will not be possible to fully educate the public about mental illness stigma as long as mental health professionals hold many of these same stigmas.

Other researchers have compared one type of mental health professional to the general public. Lauber et al. (2004) compared psychiatrists to the general population in Switzerland. They hypothesized that contact and knowledge have significant influences on attitudes towards mental illness and hypothesized that psychiatrists would have a more positive attitude towards adults with mental illness and that psychiatrists would be more

in favor of community psychiatry or, in other words, integrating adults with mental illness into the community. A total of 90 psychiatrists agreed to participate and 786 other participants comprised the general population sample. Attitudes were measured by the Community Attitudes Towards Mental Illness (CAMI; Taylor & Dear, 1981) questionnaire and with vignettes. Social distance was measured using a social distance scale.

Lauber et al. (2004) reported that both the psychiatrists and general population had positive attitudes to mental health facilities in the community but that psychiatrists' attitudes were significantly more positive than that of the general population ($p < .001$). Additionally, psychiatrists and the general population did not differ in their preferred social distance to people with a mental illness. Both samples indicated that the "closer" the distance, then the less they agreed with the statement. The most social distance, for example, was reported when participants were asked if they would let a person with mental illness care for their child or marry into the family (Lauber et al., 2004).

Both psychiatrists and the general population wanted more social distance when the scenario involved more psychological closeness to a person with a mental illness. Although the psychiatrists in this study had favorable attitudes towards community psychiatry, they seemed to have different attitudes when psychological closeness was involved with an adult with mental illness. The authors suggested that mental health professionals be aware of these attitudes and seek to improve this so as not to negatively impact adults with mental illness (Lauber et al., 2004).

Along with comparing different types of mental health professionals to each other and mental health professionals to the general public, other mental illness stigma research has been conducted with mental health paraprofessionals. In particular, case managers' attitudes towards adults with mental illness have been examined. Murray and Steffen (1999) compared supportive and intensive case managers in order to examine similarities and differences in attitudes. These two types of case management are different in approach since supportive case managers provide service on a one-to-one basis while intensive case managers use a team approach towards interacting with adults. Fifty-eight participants from six different community agencies were recruited to take part in the study, with 29 intensive and 29 supportive case managers participating. A comparison group of 59 also participated resulting in a total sample of 117.

Participants took the Opinions About Mental Illness Scale (OMI; Cohen & Struening, 1962). The authors (Murray & Steffen, 1999) hypothesized that differences between the two types of case managers would emerge, specifically that intensive case managers would report less *Authoritarian* and *Socially Restrictive* attitudes than supportive case managers. The authors generated this hypothesis based on the fact that intensive case managers have more formal education, have more contact with clients, and work in more supportive atmospheres. The second hypothesis was that both types of case managers would be less *Authoritarian* and *Socially Restrictive* than the comparison group who had no contact with adults with mental illness.

First, the authors examined differences between the case management groups. They found differences in training, highest degree obtained, and years of school, with

intensive case managers being more highly trained than supportive case managers. The groups did not differ on years of experience with case management so this was not a confound (Murray & Steffen, 1999).

In addition to the normal five factors on the OMI, the authors developed a sixth scale, which they called the *Stigma* scale, that measured the belief that people with mental illness are different than normal people and need to be kept away from others. A MANOVA was run on the OMI scales for all participants and a between group difference was found ($p < .01$). Univariate tests were run and revealed significant effects ($p < .01$) for *Authoritarian, Social Restrictiveness, Interpersonal Etiology,* and *Stigma* scales ($p < .01$). Supportive case managers had significantly lower scores on *Social Restrictiveness* compared to intensive case managers and the comparison group. Results also showed that intensive case managers held more *Authoritarian* and *Socially Restrictive* attitudes than supportive case managers (Murray & Steffen, 1999).

These findings suggested that intensive case managers and the non-clinical comparison group were more similar than the two types of case management groups. The authors stated that, overall, the two types of case management groups seemed to differ in attitudes regarding adults with mental illness. Intensive case managers were not less *Authoritarian* or *Socially Restrictive* than supportive case managers. In fact, the intensive case managers scored higher on these scales, indicating *more Authoritarian* and *Socially Restrictive* attitudes. The author's second hypothesis was supported since the comparison group had higher scores on both *Authoritarian* and *Social Restrictiveness* scales. The authors noted that, upon close examination of the data, there were complex relationships

between client level of functioning, type of case management, and attitudes. Thus, although there are noteworthy differences in attitudes between all groups, a number of factors combined to impact these differences. As such, it would be too simplistic to state that one type of case management group had more or less stigmatizing attitudes towards adults with mental illness (Murray & Steffen, 1999).

Consequences of Mental Illness Stigma

One important consequence of mental illness stigma by mental health professionals is that clinicians are not able to provide effective treatment, impairing both client and professional. Minkoff (1987) highlighted specific challenges that exist for professionals who work with adults with mental illness. One of these is affective barriers for the mental health professional that hinders the professional's ability to provide effective treatment. Regardless of how the clinician has been previously trained and currently works with clients, it is important that an empathic connection is made. Making an empathic connection to adults with mental illness is, at times, very difficult for mental health professionals working with someone who may exhibit bizarre symptomology. Professionals may instead distance themselves from the client both intellectually and emotionally and, in so doing, compromise their ability to provide effective treatment.

Another affective response from clinicians that hinders effective treatment is feelings of hopelessness and despair. When confronted with a client who has a chronic and severe mental illness, clinicians might feel hopeless about the potential for change and success. Chronicity of mental illness lowers the expectation to "cure" adults. Acknowledging a poor prognosis for some adults' illnesses requires the mental health

professional to acknowledge her or his own limitations. Professionals may become frustrated and disappointed when their attempts fail. Frustration or impatience might lead to burn out and avoidance of chronic patients. In addition, clinicians might have difficulty setting appropriate goals for adults with chronic and severe mental illness. Successful outcome has been normed on the average population and might not be realistic for clients with a chronic mental illness (Minkoff, 1987).

Mirabi et al. (1985) reported that 83% of mental health professionals agreed that burnout, associated with feelings of helplessness and frustration, was common among those who worked with adults with mental illness. Even further, Minkoff (1987) noted that feelings of dislike or disgust towards patients arise when clinicians are used to working with verbal, intelligent, attractive, and insightful clients. Manipulative behaviors or noncompliance with medication regimens are other reasons why clinicians feel frustrated with clients. Feelings of discomfort also might impact professionals. Working with clients with severe and persistent mental illness often entails professionals having to shift the way in which they normally work, possibly adjusting their therapeutic stance depending on with whom they are working. All of the abovementioned feelings are barriers to effective treatment.

Contributing Factors of Mental Illness Stigma

There are a number of factors that might contribute to mental health professionals having stigmatizing attitudes towards adults with mental illness. These have been highlighted in the literature (Cohen, 1990; Minkoff, 1987) and include lack of specialized

training, lack of support and validation, and using stigmatizing attitudes as a way to cope with difficult work.

Lack of training is thought to influence attitudes. In an early study, Mirabi et al. (1985) surveyed mental health professionals on their opinions about adults with mental illness, training, and causes of attitudes, in order to identify and explore opinions. The mental health professions who participated in the study included psychiatrists, psychologists, social workers, caseworkers, and psychiatric nurses. Sixty-eight percent of participants reported that they believed that clinicians did not receive adequate training in caring for adults with chronic mental illness. Participants thought that training programs fall short in addressing the specific and detailed information about how to work with adults with chronic mental illness.

Minkoff (1987) asserted that training programs do not always include adequate contact with adults with mental illness. Adequate clinical exposure should include exposure to adults with a variety of presenting issues, allowing enough time to know each adult in sufficient depth to go beyond medication and case management. Training experiences also should allow enough time to try a variety of approaches with each patient, so that mental health professionals in-training can see how one intervention might work or not work with each type of client. Finally, training programs should include exposure to adults with mental illness in a setting where adequate treatment is provided and in which competent role models can model appropriate client care. Minkoff also noted that there is no formal curriculum for working with this population, and that supervision is another factor that might impact stigma. Further, Minkoff highlighted that

trainees often are taught how *not* to work with adults with mental illness rather than how *to* work with these adults.

Lack of support and validation appears to be another important factor related to stigma and mental health professionals. Minkoff (1987) stated that mental health professionals who work with chronic and severe mental illness who persevere despite the challenges and difficulties require and deserve support and appreciation for their work, but often receive neither one. Professionals in this line of work feel like an outsider in their profession – outside the mainstream of professional status, salary, and reputation. Similarly, Mirabi et al. (1985) found that mental health professionals often believe that they are not receiving adequate support. Sixty-three percent of the mental health professionals (psychiatrists, psychologists, social workers, case workers, and psychiatric nurses) they surveyed believed that there was a lack of rewards associated with working with adults with mental illness. Despite the fact that the chronically mentally ill population has the largest needs, and is the most challenging with which to work, mental health professionals who work with this population get little credit, status, or privilege (Minkoff, 1987). Further, interdisciplinary tension has been noted in the literature. Professionals from various disciplines may not support or validate each other in the different types of work they do with clients, thus adding to the lack of support and validation (Minkoff, 1987).

Cohen (1990) explored the notion of stigmatizing attitudes as a way of coping among mental health professionals. He noted that stigmatizing adults with mental illness might help professionals deal with feelings of helplessness when trying to assist these

clients. He explained that one way to address their feelings of helplessness is to train staff to deal with this population more effectively. Thus, if staff can view this group as challenging but treatable rather than challenging and untreatable, than stigmatizing attitudes as a way to cope with the challenge can be reduced.

Contact and Experience to Reduce Mental Illness Stigma

Contact and experience have been cited as a way to combat stigmatizing attitudes from professionals. To investigate how exposure impacted professionals in-training, Wallach (2004) tested hypotheses related to psychology students who had various levels of exposure to adults with mental illness. The author hypothesized that students who were taking the psychology class that gained experience working with patients during the class would change their attitudes the most, as compared to students without exposure who only took the course. A total of 113 psychology students participated in the study. Students were required to participate in an organized visit to a mental health hospital as part of the course. The students were given the opportunity to work on a volunteer basis with patients at the hospital. Of the total group of participants, 56 students chose to work in the hospital. 45 total chose to visit but not work in the hospital, and 12 did not visit. Participants were given the Opinions About Mental Illness (OMI; Cohen & Struening, 1962) in order to assess their attitudes two different times – at the start and finish of the course.

Three of the attitudes, *Benevolence, Mental Hygiene Ideology*, and *Interpersonal Etiology*, increased after groups had any contact with adults with mental illness. The hypothesis that increased exposure would improve students' attitudes was supported for

two factors – *Interpersonal Etiology* and *Social Restrictiveness*. For *Interpersonal Etiology*, both of the exposure groups – volunteering and visiting – had higher scores indicating decreased amounts of stigma. For *Social Restrictiveness*, volunteering was more important than only visiting or just taking the course. It seems that various degrees of contact are indeed effective in lessening mental illness stigma.

Wallach (2004) found that exposure and experience were important change agents and that working with adults with mental illness can help change attitudes. According to Wallach, the experience should be long enough to allow change to occur and it should be voluntary. Link and Cullen (1986) suggested, however, that any sort of contact could positively affect attitudes. In their research, people who reported having any type of contact, whether prolonged (working with adults with mental illness) or brief (visiting a mental hospital), had lower perceptions of dangerousness of adults with mental illness than people without contact.

In a similar study with psychiatric nursing students, Procter and Haffner (1991) investigated how contact affected attitudes toward adults with mental illness. Fifty-one second year, full-time nursing students completed an Attitude toward Treatment Questionnaire (ATQ; Caine, Wijesinghe, Winter, & Smail, 1982), the Wilson-Patterson Conservatism Scale (WPCS; Wilson & Patterson, 1968), a Defense Style Questionnaire (DSQ; Andrews, Pollock, & Stewart, 1989), and an open-ended questionnaire before and after their training program. Central to their training program was a one-week placement at a psychiatric hospital.

The ATQ included statements about psychiatric nursing and measured traditional medically-oriented attitudes such as *Patients should call nurses by their first name* and *It is important to have a ward organized by strict rules.* ATQ scores fell significantly after psychiatric hospital placement, indicating more progressive attitudes. The DSQ measured psychological defense mechanisms. An example is *Immature Defense,* which is measured by an item such as *As far as I'm concerned, people are either good or bad.* Mean scores on the DSQ were within normal limits before and after exposure, although men scored significantly higher than women on the *Immature Defenses* Scale immediately after placement.

The Open-Ended questionnaire was designed by the authors and asked participants to comment on their experience immediately after concluding the placement. Open-ended responses included mainly positive responses about the experience. Almost half of the participants expressed that they were surprised at the relaxed or informal feel of the hospital where they visited. Many reported that having personal interactions with patients at the hospital rapidly erased stereotypes and negative attitudes they previously had. Over 40% of nurses stated that patients who they met were much less aggressive or dangerous than they expected. The three most common responses from participants were feelings of surprise at the relaxed or friendly climate, feelings of surprise to find that adults with mental illness were normal people with an illness, and witnessing the positive effects of an interaction between a nurse and a consumer. Thus, it appeared that contact with adults with mental illness was helpful with the nursing students, based on both quantitative and qualitative measures (Procter & Hafner, 1991).

Education and Training to Reduce Mental Illness Stigma

While some have posited that contact might have an impact on mental illness stigma, others have examined how education about mental illness might affect students at various developmental stages (Bairan & Farnsworth, 1989; Penny et al., 2001; Pitre et al., 2007). Pitre et al. (2007) designed a program to assist children with forming more positive attitudes towards adults with mental illness. Through the use of puppets, the authors hoped to challenge stereotypes and negative beliefs while these were still developing. The authors hoped that the children exposed to a series of puppet shows would have less stigmatizing attitudes towards adults with mental illness than a non-exposed group of children. They also examined how previous exposure to mental illness, for example, having a family member with a mental illness, related to attitudes and hypothesized that baseline attitudes would be more positive for those children who had already been exposed to mental illness.

A total of 173 students (78 males, 95 females) participated in the study. They ranged in grades from grade 3 to grade 6. Prior to the start of the study, schools that were participating were assigned to either the control or experimental group. Groups received a pretest, a survey investigating attitudes, two weeks before the intervention. The intervention included a puppet show that depicted various mental illnesses including schizophrenia, dementia, and depression/anxiety. The puppet shows lasted approximately 45 minutes. The experimental group completed the post-test the day after the performance and the control group took the post-test two weeks after the pretest (Pitre et al., 2007). The refactored version of the Opinions About Mental Illness Scale (OMICC;

Ng & Chan, 2000) was used with participants. This instrument includes measures of *Benevolence*-kindly orientation toward people with mental illness, *Separatism*-emphasizes the distinctiveness of people with mental illness, thus keeping a safe distance, *Stereotyping*-fixed perception that views people with mental illness as having particular behaviors and patterns, *Restrictiveness*-perceives people with mental illness as a threat to society, thus social participation should be restricted, *Pessimistic prediction*-people with mental illness are unlikely to improve, and *Stigmatization*-mental illness is understood as shameful and sufferers should be kept away from others. The authors used graphics to depict the Likert-type scale choices for participants. These included a happy face to represent totally agree and a sad face to represent totally disagree.

The two groups did not differ at baseline on their factor scores on the OMICC (Ng & Chan, 2000), which suggested that the two groups were equivalent before the intervention. The authors used paired sample t-tests to interpret results. Following the intervention, the experimental group had significantly lower scores on *Separatism* ($p < .01$), *Restrictiveness* ($p < .005$) and *Stigmatization* ($p < .025$). The other three factors changed in the direction the authors predicted, since *Benevolence* increased, and *Stereotyping* and *Pessimistic Prediction* decreased. There were no significant changes in the control group scores. The authors concluded that education assisted children with changing attitudes towards mental illness in a favorable direction (Pitre et al., 2007).

Other researchers (Penny et al., 2001) have targeted undergraduate college students in order to investigate how education might impact attitudes of professionals in-training towards adults with mental illness. Undergraduate students preparing to go into a

healthcare field have been cited as avoiding mental health as a career specialty, and authors have posited that this might be due to negative attitudes toward those with a mental illness (Penny et al., 2001). The authors explored attitudes of occupational therapy students and the influence of occupational therapy education on these attitudes. First, the authors wanted to know whether attitudes were different towards adults with mental versus physical illnesses. Next, authors explored whether attitudes changed during occupational therapy education and, finally, whether academic coursework, Level I fieldwork (an introduction to clinical work consisting of observation of mental health professionals and interaction with adults with mental illness), or a combination of both, was most influential.

Participants included 45 undergraduate occupational therapy students in their junior year of college. The authors used two instruments, the Attitudes Towards Disabled Persons Scale-Form A (ATDP-A; Yuker, Block, & Campbell, 1962) and the Opinions About Mental Illness Scale (OMI; Cohen & Struening, 1962), to assess attitudes of students. The ATDP-A measures attitudes of mental and physical disabilities. Typically, high scores on the ATDP-A suggested a positive attitude towards a person with physical disabilities. The authors also assessed attitudes towards mental illness using the ATDPA-A by asking participants to respond to each item and consider the following mental illnesses– schizophrenia, bipolar disorder, and depression. The authors used the original five factors from the OMI to investigate attitudes toward mental illness.

Participants were given the scales three different times: at the start of the coursework, at the conclusion of the coursework, and after a 2-week fieldwork

experience. Coursework included two separate courses about both theoretical knowledge and skills for working in mental health. One of the courses included information about various disorders and both courses assisted students with learning how to successfully work with the population. The 2-week fieldwork experience was designed to give students the opportunity to observe and experience working with adults with mental illness. Participants did this for a total of 80 hours (Penny et al., 2001).

The authors used an ANOVA to test for differences and the data was further analyzed using a paired t-test. Significant differences were identified between the standard ATDP-A and mental illness ATDP-A scores ($p < .001$). Attitudes toward people with a mental illness were significantly less favorable than physical illness scores at pretest. Attitudes toward people with a mental illness did improve after coursework but remained less favorable than attitudes towards physical illness. No significant differences in physical illness attitudes were found when comparing pre and post-test scores. There were no significant changes in attitudes towards mental illness after fieldwork; however, ratings after fieldwork were more favorable than at the start of coursework (Penny et al., 2001).

A significant difference was found between the means of three of the five OMI factors: *Authoritarianism* ($p < .001$), *Social Restrictiveness* ($p < .001$), and *Interpersonal Etiology* ($p < .001$). These scores changed in a favorable direction after coursework. After fieldwork, a significant change occurred for two factors: *Social Restrictiveness* ($p < .01$) and *Interpersonal Etiology* ($p < .05$). Interestingly, scores on these factors moved in the

less favorable direction. After coursework and fieldwork, only A*uthoritarianism* remained significantly changed in a favorable direction ($p < .05$).

The authors discussed that students' attitudes were more favorable towards people with physical disabilities than people with mental disabilities at the start of coursework. Attitudes did become more favorable after coursework since three factors on the OMI changed in a favorable way- the participants viewed a person with mental illness as less dangerous, requiring less restrictions, and understanding biology as impacting the illness. The authors concluded that coursework was more important than fieldwork in assisting with improving attitudes towards mental illness. Finally, the authors noted that since attitudes towards mental illness were less favorable than attitudes towards physical illness throughout the study, these might be more difficult to change. It was suggested that coursework related to mental illness be incorporated into any curriculum for students going into the mental healthcare field as a way to combat attitudes (Penny et al., 2001).

In a related study exploring the impact of education on attitudes of professionals in-training, Bairan and Farnsworth (1989) investigated attitudes of nursing students before and after a course on psychiatric nursing. The ultimate aim was to encourage positive changes in attitudes of nursing students. The authors used the Opinions About Mental Illness Scale (Cohen & Struening, 1962) and hypothesized that scores on the *Authoritarian* and *Social Restrictiveness* subscales would decrease after completion of the course, and that scores on the *Benevolent*, *Mental Hygiene Ideology*, and *Interpersonal Etiology* subscales would increase after completion of the course.

The sample included a total of 185 nursing students who completed the Opinions About Mental Illness as a pre and post-test survey (OMI; Cohen & Streuning, 1962). The students were sophomores and none had prior psychiatric nursing coursework. The course consisted of five hours of didactic training and 15 hours per week of clinical experience for four weeks, followed by four weeks of adult general health didactic training. The course was one of six courses in the regular curriculum for nursing students. The course included experiential components and relied heavily on personal self-awareness and interpersonal relationships. These were stressed during experiences such as student and client interactions and student and staff interactions during the clinical experiences. The course also included more didactic instruction such as students developing nursing assessments and treatment plans.

Students took the OMI before the first class and then again at the end of the course on the last day of the class. Results were analyzed by looking at mean scores on the five factors. Of the five hypotheses, three were significant. Interestingly, one hypothesis was significant in the opposite direction. Scores for *Authoritarianism* decreased as hypothesized ($p < .001$), *Mental Hygiene Ideology* increased ($p < .001$) and *Social Restrictiveness* decreased ($p < .05$). Mean scores for *Interpersonal Etiology* and *Benevolence* decreased instead of the hypothesized increase, although only the decrease in *Benevolence* was significant ($p < .05$).

The authors (Bairan & Farnsworth, 1989) explained that the three significant changes in the expected direction indicated that the psychiatric nursing course was indeed effective in changing nursing students' attitudes in a positive direction towards adults

with mental illness. The students reduced their *Authoritarian* attitude, increased their belief about *Mental Health Ideology*, or the belief that mental illness is an illness like any other, and reduced their attitudes about *Social Restrictiveness*, or the attitude that persons with mental illness are a threat to the community and should have restrictions placed on them.

Upon conclusion of the research, the authors explored what might have contributed to the attitude changes in students. They concluded that it was most likely the combination of didactic and experiential components of the course, but were unable to parse this out due to the research design. The authors suggested several considerations for future research such as whether attitudes are stable over time, and whether behavioral changes follow attitude changes in students.

Still others (Hinkelman & Haag, 2003) have assessed undergraduate students' attitudes towards mental illness to explore how gender and adherence to traditional gender roles might impact attitudes toward mental illness. Eighty-two undergraduate students participated in the study. The majority were female (66%), Caucasian (84%), and between the ages of 18 and 21 (84%). They ranged from freshman to seniors. Students took the CAMI (Taylor & Dear, 1981) and the Hypergender Ideology Scale (HGIS; Hamburger, Hogben, McGowen, & Dawson, 1996). The HIGS measures traditional gender role adherence in both females and males using a Likert-type scale. High scores indicate increased traditional gender role adherence in both men and women. A sample question includes: *Most women need a man in their lives*. All participants were given both measures during a regularly scheduled course in which they were enrolled.

A Pearson correlation revealed a relationship between the HGIS score and the CAMI subscale scores. A MANOVA was run to look at biological sex as the independent variable, with the CAMI and HGIS scores as the dependent variable. MANOVA results showed that males had significantly less tolerable beliefs on the *Benevolence* and *Social Restrictiveness* CAMI subscales. Males were significantly more likely to have higher scores on the HGIS than females. When the high gender scores were controlled for, there was no significant effect on any CAMI subscale score based on participant sex. In general, males were less tolerant on two of the four CAMI subscales- *Benevolence* and *Social Restrictiveness*. Biological sex was not significantly related to tolerance when hypergender ideology was controlled for. Adherence to hypergender ideology rather than biological sex was related to attitudes about mental illness. Correlations revealed that hypergender scores were more likely to be *Authoritarian,* more *Socially Restrictive,* and less *Benevolent* toward a person with mental illness as well as having less tolerant beliefs about community mental health. Those with traditional gender roles are less likely to have positive attitudes. Thus, biological sex alone did not account for differences in attitudes; instead it was hypergender attitudes that related to attitudes towards mental illness.

Interdisciplinary Perspectives on Mental Illness

Professional identity also might impact the way in which mental health professionals view mental illness and work with clients. During graduate school training programs, trainees learn overall philosophies of their discipline, theoretical orientations, and study coursework that guide their clinical practice. Perspectives on mental illness are

part of this training. Theories of human behavior alter the way in which professionals work with clients and conceptualize presenting problems (Ivey et al., 2005). It is possible, then, that various disciplines of mental health services, including social work, psychology, and professional counseling, have distinct perspectives on people diagnosed with a mental illness.

Social work, like many helping professions, is concerned with enhancing client welfare. The term client, however, may refer to the individual, family, community, or cultural system of which the individual client is a part. Social work training pays attention to the person-in situation so that there is a two-part focus. Social workers must understand both the client and her or his environment and how these relate to one another and cause a presenting problem. Social justice and power are two central topics in social work. Social workers have a commitment to social justice and human rights through the connection between people and their world (Forte, 2007; Mattaini, Lowery, & Meyer, 1998). Meyer (1993) described social work as having a central purpose of enhancing the adaptations among individuals, families, groups, communities and their particular environments. This central focus on person in environment is a unique construct to social work, despite the interdisciplinary skills and knowledge. There is a commitment to both personal troubles and public issues (Mattaini et al., 1998).

The graduate level social worker is different from a paraprofessional or bachelors level social worker since her or his job is not only to work with clients but also understand the client's presenting concerns and develop appropriate interventions that are based on this unique understanding (Forte, 2007). The major theories used by social

workers are one way to explore how this type of mental health professional might conceptualize clients. Forte (2007) discussed the approaches most frequently found in social work textbooks and taught to social work students. There are over forty theories typical to social work textbooks ranging from attachment theory and object relations to different types of systems theories including family systems, general systems, and social systems.

Forte (2007) also investigated the theories used most commonly by social workers by summarizing the findings of eight studies conducted between 1980 and 1994 that explored social workers' preferred theoretical orientations. The theoretical orientations most reported by social workers were psychodynamic theory, systems, and behavioral. Other theoretical orientations that participants indicated as preferred orientations were cognitive-behavioral, eclectic, and neo-Freudian (Forte, 2007). The author noted that each of these theoretical orientations provide a different framework for conceptualizing mental illness, so to say that social workers share a collective opinion based on a shared theoretical orientation would be difficult. It is unknown how the training unique to social workers might influence perspectives towards adults diagnosed with a mental illness.

Most often, graduate students in psychology are trained under a scientist-practitioner model. Since 1949, the scientist-practitioner model has been the most influential model of training in psychology (Tanner & Danielson, 2007). O'Sullivan and Quevillon (1992) reported that approximately 98% of the directors of doctoral programs in psychology noted that they subscribed to the scientist-practitioner model. The scientist-practitioner model has extended to other areas of professional psychology including

industrial, school, and counseling psychology (Aspenson & Gersh, 1993). The ultimate aim of the scientist-practitioner model is to train psychologists in the application of psychological practice while also providing them with skills and experiences necessary to produce research, identify as consumers of research findings relevant to practice, and possess necessary competence in empirical evaluation (Belar & Perry, 1992). This integration of research and practice is considered essential for the psychologist in-training (Drabick & Goldfried, 2000; Milne & Paxton, 1998; Stoner & Green, 1992).

In addition to the scientist-practitioner model of training, psychologists commonly use the medical model to conceptualize mental illness. The medical, psychological, or sometimes called disease model emphasizes the mind and behavior and gives ultimate focus to the individual (Ivey & Van Hesteren, 1990). The medical model suggests that mental health professionals look at the individual as the client. Within the medical model, pathology is stressed. For example, if a client is experiencing signs of depression, a mental health professional using the medical model inquires about her or his symptoms in order to assess the level of depression. Traditionally, the mental health professional has been understood to be the expert who tells a client her or his diagnosis. Within the medical model, little attention is given to cultural concerns of the client. For example, the criterion for mental illnesses is the same for all clients who are experiencing specific symptoms, despite racial or ethnic background. According to the medical model, family is not understood as central to working with clients since the core issues are conceptualized as existing within the client (Ivey & Ivey, 1998; Ivey et al., 2005).

The more extreme positions of the medical model view mental illness as the result of physiological, biochemical, or genetic causes. Mental illness is conceptualized as a behavioral manifestation of physiological dysfunction or physical condition (Heiden & Hersen, 1995). Some authors have explored why the medical model still exists with the presence of other theories in the psychology field such as psychoanalytic and humanistic orientations. Cockerham (1989) suggested factors that might contribute to the strong presence of the medical model, all which relate to the presence of psychiatry. First, psychiatrists conceptualize according to a medical model. Since psychiatrists go through medical training and are socialized in the medical community, working within the medical model is the norm. This way of working might trickle down to psychologists who work closely with psychiatrists. Secondly, the medical model defines mental disorders as conditions that can be assisted by psychotropic medications. This might influence why the medical model is strong in the field of psychology. Lastly, psychologists might be attempting to gain status within the medical community by adhering to a scientific approach rather than a more insight -oriented approach. There are biological and genetic explanations for many of the common psychological disorders. Medications to assist with symptoms are successful in reducing psychological symptoms. Examples include the role of heredity in many disorders and the success of medications with serious disorders such as schizophrenia.

The medical model has been said to rely on symptom relief rather than what might be causing the problem. Treatment is said to control rather than cure a disorder, relying on symptom relief rather than eliminating as much of the behavior as possible.

This is due to the belief (Cockerham, 1989) that it is possible to stabilize and return deviancy to the natural state of behavior rather than exploring social contributors to the behavior.

Professional counselors are another type of mental health professional who work with adults diagnosed with a mental illness (Hinkle, 1999). Although this group may work professionally in the same settings, the educational and training backgrounds of professional counselors is unique. Often, the formal training program for professional counseling is housed in schools of education rather than schools or departments of psychology (Ivey & Van Hesteren, 1990).

Professional counselors use a developmental model as a way to understand clients and inform practice (Ivey & Ivey, 1998; Ivey et al., 2005). For example, counselors might look at etiology of a mental illness as he or she works with a client. The counselor will still diagnose just as a psychologist does, but will also explore family history or social contexts. The developmental model looks at the presenting concern as possibly existing within the individual. Equally as likely, however, is the notion that distress could be coming from family or psychosocial issues in the client's environment or context. Pathology is not stressed when working with clients according to a developmental framework. Instead of focusing exclusively on symptoms, a counselor might focus instead on strengths or what has worked in the past for the client to overcome struggles (Ivey & Ivey, 1998; Ivey et al., 2005). Within this framework, counseling is understood as a collaborative relationship where diagnoses are talked about and client input is encouraged. The client is viewed as the "expert" of her or his life rather than the

counselor assuming such a role. In this approach, multicultural concerns are another hallmark of a counselor's work as the counselor strives to work with the client within the context of the client's culture and worldview.

Various authors (Dougherty, 2005; Hinkle, 1999; Ivey & Ivey, 1998) have written about the struggle professional counselors face with the task of diagnosing and incorporating the medical model into a developmental counseling tradition. Counselors want to establish themselves as focused on development and wellness, yet are expected to diagnose according to a medical model. Inevitably, counselors must diagnose clients since the ACA code of ethics (2005) states that counselors will provide an appropriate diagnosis of mental disorder. There are some counselor educators who believe that professional counselors should not diagnose and treat pathology (Hohenshil, 1993). Hohenshil also surveyed counselor educators and found that some believed that applying a formal diagnosis contradicts counseling's humanistic and developmental origins.

Until 2001, the Council for Accreditation of Counseling and Related Educational Programs (CACREP) standards did not require curricular experiences on diagnosis or the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR; American Psychiatric Association, 2000) (CACREP, 2001). Now, however, Community Counseling and Mental Health Counseling programs that are CACREP accredited must include curricular experiences in diagnosis. Some have suggested that the DSM serve as a starting point from which to conceptualize clients but urge counselors to use other frameworks to more fully understand and work effectively with clients (Ivey & Ivey, 1998; Ivey et al., 2005; Lyddon & Sherry, 2001).

Conclusion

In this chapter, a literature review covered historical and current stigma as it exists towards adults with mental illness was reviewed, both within and outside of the United States. Since mental illness stigma impacts mental health professionals as well, stigma as it impacts mental health professionals also was highlighted. Various ideas about what might assist with modifying negative attitudes, including contact and experience to adults with mental illness and education and knowledge were discussed. Professional identity also was addressed since this might impact the way in which various mental health professionals are trained to conceptualize mental illness. Because researchers historically have not included professional counselors in research on mental illness stigma, research is warranted that includes professional counselors.

CHAPTER III

METHODOLOGY

A review of the literature regarding stigma and mental illness was provided in Chapter II. Specific emphasis was given to stigma as it exists in the general population and among mental health professionals. Consequences of stigma on professionals and adults with mental illness were highlighted. Literature on professional orientation, training, and contact was reviewed. The purpose of this chapter is to delineate the research hypotheses, participants, procedures, instrumentation, and data analyses. In addition, a pilot study is described. Changes to the full study were made based on the pilot study and limitations of the research are explained.

Research Questions and Hypotheses

In chapter one, five major research questions were introduced. The following are those questions along with concomitant hypotheses.

Research Question 1: Is there a difference in attitudes toward adults with mental illness between mental health professionals in-training, non mental health professionals in-training, mental health professionals, and non mental health professionals?

Hypothesis 1: There will be a significant difference in attitudes toward adults with mental illness between mental health professionals in-training, non mental health

professionals in-training, mental health professionals, and non- mental health professionals.

Research Question 2: Is there a difference in attitudes toward adults with mental illness between mental health trainees and professionals based on professional orientation (i.e., counseling, social work, and psychology)?

Hypothesis 2: There will be a significant difference in attitudes toward adults with mental illness between mental health trainees and professionals based on professional orientation (i.e., counseling, social work, and psychology).

Research Question 3: Is there a difference in attitudes toward adults with mental illness between mental health professionals who hold a professional license and those who do not hold a professional license and who are receiving clinical supervision and those who are not receiving clinical supervision?

Hypothesis 3: There will be no significant difference in attitudes toward adults with mental illness between mental health professionals who hold a professional license and those who do not hold a professional license and those who are receiving clinical supervision and those who are not receiving clinical supervision.

Research Question 4: Among practicing mental health professionals, to what extent does years of experience, current clinical supervision, licensure, and professional orientation account for variance in attitudes toward adults with mental illness?

Hypothesis 4: Years of experience, current clinical supervision, licensure, and professional orientation will account for a significant portion of the variance in attitudes toward adults with mental illness.

Research Question 5: Is there a significant relationship between attitudes and social distance toward adults with mental illness?

Hypothesis 5: There will be a significant negative relationship between *Authoritarianism* and *Social Restrictiveness* and social distance and a significant positive relationship between *Benevolence* and *Community Mental Health Ideology* and social distance toward adults with mental illness.

Participants

There are four samples of interest in this study. First, this research included a sample of graduate students who were enrolled in a graduate degree program at a midsized university in the state of North Carolina in disciplines other than human services. These graduate students comprised the non mental health professionals in-training group, and were enrolled in programs such as Library and Information Studies, Educational Research Methodology, and Business Administration, programs not affiliated with the training of mental health professionals.

A second group consisted of mental health professionals in-training (i.e., students) in the areas of counseling, social work, and psychology. These students were enrolled in master's level graduate training programs and were in at least their second year of graduate study. Three programs of each discipline (counseling, social work, and psychology) were used to recruit student volunteers. The programs were from midsized universities in the state of North Carolina. These students comprised the mental health professionals in- training group.

The third group of interest included mental health professionals with the professional identity of counselor, social worker, or psychologist who were working in the mental health field and had been employed as such for a minimum of one year. These participants self-identified as a professional counselor, psychologist, or social worker in order to qualify for participation in the study. The fourth group of interest included non mental health professionals. These were professionals who were working in a non mental health field such as business in the state of North Carolina. This group was reached via email using an alumni listserv obtained from a non mental health training program. Participants were asked to participate by taking the survey online via a link provided in the email. Professionals specified professional identity and setting, as well as other demographic information on a demographic survey.

The survey was sent to professional counselors, psychologists, and social workers whose email addresses were obtained from comprehensive statewide lists. Counselor email addresses were obtained from the Licensed Professional Counselors Association of North Carolina (LPCANC), psychologist email addresses were obtained from the North Carolina Psychological Association (NCPA), and social worker email addresses were obtained from the North Carolina listing from the National Association of Social Workers (NASW). A minimal total sample size of 100 was deemed necessary by G*Power general power analysis program (Faul, Erdfelder, Lang, & Buchner, 2007). An overall target sample size of 160 was used, however, so each of the eight groups (counselors, psychologists, social workers, professionals in a business field, counselors in-training, psychologists in-training, social works in-training, and non mental health graduate

students in-training) would have at least 20 participants. This sample size would allow for adequate power (0.80) in order to identify a moderate effect size (.50) (Cohen, 1988).

Instrumentation

The Community Attitudes Toward the Mentally Ill

The Community Attitudes Toward the Mentally Ill (CAMI; Taylor & Dear, 1981, Appendix A) was used to assess attitudes towards adults with mental illness. The CAMI is a 40 item self report survey that uses a 5-point Likert scale ranging from *strongly agree* to *strongly disagree*. Four scales are included on the CAMI: *Authoritarianism, Benevolence, Social Restrictiveness,* and *Community Mental Health Ideology*. The following are brief descriptions of each of the scales, or attitudes toward mental illness: *Authoritarianism* is obedience to authority is necessary and people with mental illness are inferior and demand coercive handling by others. An example of a statement measuring *Authoritarianism* is *As soon as a person shows signs of mental disturbance, he should be hospitalized. Benevolence* is defined as being kind and paternal, supported by humanism and religion rather than science. A statement on the CAMI that measures this attitude is *We need to adopt a far more tolerant attitude toward the mentally ill in our society.*

Social Restrictiveness involves beliefs about limiting activities and behaviors such as marriage, having children, and voting among people with a mental illness. A statement that measures *Social Restrictiveness* is *The mentally ill should be isolated from the rest of the community*. *Community Mental Health Ideology* assesses attitudes towards community mental health models. It is defined as a "not in my backyard" attitude toward adults with mental illness. Adults with mental illness should get treatment, but not in

close proximity to me. A statement that measures *Community Mental Health Ideology* is *It is frightening to think of people with mental problems living in residential neighborhoods.*

There are 10 statements for each of the four attitudes. The CAMI is scored by assigning values to each of the items. Five of the 10 items for each factor are reverse coded. Likert type responses (5 = "Strongly agree" to 1 = "Strongly disagree) are given to each question. Responses to each item of a subscale are added together to obtain one score for each factor, ranging from 10 to 50 for each factor. A mean score is then calculated for each total subscale score. Thus, attitudes are measured by mean item responses for each subscale. Evidence for internal consistency of the CAMI (Taylor & Dear, 1981) is clear for three of the four scales: *Community Mental Health Ideology* (α= .88), *Social Restrictiveness* (α= .80), and *Benevolence* (α= .76). Only the *Authoritarianism* subscale (α= .68) has proven problematic in past research. Cronbach alphas will be calculated for each of the subscales with the sample from this study, and subsequent analyses will be analyzed with caution if subscales do not have reasonable evidence of reliability.

The CAMI (Taylor & Dear, 1981) was developed from the Opinions of Mental Illness Scale (OMI; Cohen & Struening, 1962), which has been used extensively within and outside of the U.S. to measure attitudes toward mental illness (Hinkelman & Haag, 2003; Lauber et al., 2004; Link et al., 2004). Although the OMI is still used in research, some challenges exist with the instrument, namely its weak psychometric properties. Specifically, the OMI's scales have low alpha levels ranging from .29 to .39 for a scale

called *Mental Hygiene*, with the highest alpha levels ranging from .77 to .80 for the *Authoritarian* scale (Cohen & Struening, 1962; Ng & Chan, 2000). Although scholars (Ng & Chan, 2000) have refactored the OMI, little psychometric improvement was found. Many still use the OMI despite its low internal validity (Link et al., 2004). The CAMI measures the same attitudes as the OMI, with an additional scale measuring attitudes about community mental health. The CAMI is an instrument that is an attempt at a more contemporary version of the OMI as it updates some outdated language of the OMI, has higher psychometric properties, and includes a scale that measures the community mental health movement. Authors have successfully used the CAMI in recent research (Hinkelman & Haag, 2003; Lauber et al., 2004).

Social Distance Scale

Social distance is defined as a person's willingness to interact with a target person in various relationships (Link et al., 2004). This willingness was measured by using a modified version of a Social Distance Scale developed from the World Psychiatric Association Programme to Reduce Stigma and Discrimination Because of Schizophrenia (2001). Authors have used the modified version of this scale (Gureje et al., 2005, Appendix B) to assess social distance regarding attitudes toward mental illness in general. This is because the original scale assessed social distance towards persons diagnosed with schizophrenia, in particular. Six statements assess various levels of intimacy, the first question asking about willingness to have a conversation, *Would you feel afraid to have a conversation with someone who has a mental illness?* Statements assess greater levels of intimacy, for example the third question assessing willingness to

maintain a friendship, *Would you be able to maintain a friendship with someone who has a mental illness*?

The sixth question asks whether or not the participant would marry someone with a mental illness. Answers are given on a Likert-type scale ranging from definitely (1), probably (2), probably not (3), or definitely not (4). All items are scored as is, except items three and six are reverse coded. Item scores are added together to get a total social distance score, with high scores indicating less social distance and lower scores indicating more social distance. Although the scale has been used recently (Gureje et al., 2005) the psychometric properties of the instrument have not been documented in the literature. Thus, along with assessing social distance, part of the purpose of including the instrument in this study is to field test the instrument.

Marlowe-Crowne Social Desirability Scale

Social desirability is defined as an individual's need for approval (Leite & Beretvas, 2005). In order to ensure that participants were not answering the CAMI (Taylor & Dear, 1981, Appendix A) and Social Distance Scale (Gureje et al., 2005, Appendix B) in a socially desirable way and validate the attitudes captured by these instruments, the Marlowe-Crowne Social Desirability Scale (Crowne & Marlowe, 1960, Appendix C) was included during data collection. This instrument is the most commonly used social desirability bias assessment (Leite & Beretvas, 2005). There are 33 items on the scale, 18 are keyed as true and 15 as false. Certain items are very socially desirable but untrue for most such as, *Before voting I thoroughly investigate the qualities of all the candidates.* Other items are socially undesirable but true for most such as, *It is sometimes*

hard for me to go on with my work if I am not encouraged. To assess social desirability a correlation analysis was performed between scores on the CAMI and Social Distance Scale and the Marlowe-Crowne Desirability Scale. A low correlation between these scales would indicate that participants did not answer in a socially biased manner. A high correlation would suggest that participants may have answered in a socially desirable manner. The Marlowe-Crowne Social Desirability Scale has demonstrated strong reliability. The original authors obtained a Kuder-Richardson reliability coefficient estimate of .88 (Crowne & Marlowe, 1960).

Demographic Questionnaire

Along with completing the abovementioned instruments, participants completed a demographic questionnaire (Appendix D and E) specifically developed for this study. The questionnaire provided the researcher with information such as participants' personal characteristics (e.g., gender, age, ethnicity), professional characteristics (e.g., professional orientation, degree status, licensure status, clinical supervision status, years of professional experience, and terminal degree), and characteristics of work/internship environment (i.e., type of mental health facility). The demographic questionnaire included four open- ended questions about how the participant believed her or his views about adults with mental illness had been shaped. These questions are:

- *How has your formal education (degree programs) influenced your attitudes toward people with mental illness?*
- *How has your contact and experience with people with a mental illness influenced your attitudes toward mental illness?*

- *Aside from education, contact, and experience, what people or experiences have influenced your attitudes toward mental illness?*
- *Were you thinking of specific types of mental illness as you took this survey? If yes, which mental illnesses were you thinking of?*

These open- ended questions were not analyzed formally for the dissertation but were included for heuristic purposes.

Procedures

Prior to data collection, all aspects of the study were approved by the Institutional Review Board (IRB). The researcher contacted chairs of academic departments in North Carolina to request permission to send an email in order to recruit students via listservs. Department chairs indicated their support by signing a letter stating their endorsement of the recruitment of students. Potential participants were invited to respond to the survey via electronic email (Appendix O). The email had a link to the survey on SurveyMonkey, an online site for electronic survey research. To collect the sample of students in non-human services training programs, graduate students were contacted via listervs obtained from chairs from several non-human services departments at a mid-sized public university in the southeast. One midsized university in the southeast was used since there are adequate non mental health programs at this academic institution. Graduate students in human services majors (i.e., counseling, social work, and psychology) were contacted via listservs obtained from chairs of three counseling, social work, and psychology departments at universities in North Carolina. Only graduate students who were in at least in their second year of study were invited to participate.

Professional counselors, psychologists, and social workers were reached via email and asked to participate by taking the survey online. The survey was sent to potential professional counselors, psychologists, and social workers whose email addresses were obtained from comprehensive statewide lists. Counselor email addresses were obtained from the Licensed Professional Counselors Association of North Carolina (LPCANC), psychologist email addresses were obtained from the North Carolina Psychological Association (NCPA), and social worker email addresses were obtained from the North Carolina listing from the National Association of Social Workers (NASW). All identified potential participants were sent an e-mail soliciting their participation in the study. The e-mail included a link to an on-line survey that included the CAMI, the demographic questionnaire, and open-ended questions. A follow-up e-mail was sent one week after the original e-mail reminding participants to complete the survey. All responses were anonymous.

Data Analysis

After completion of the data collection period, all results were entered into SPSS 14.0 for Windows (SPSS, Inc., 2005) for data analysis. Analyses and hypotheses are located in Table 1. Prior to analyzing data to answer the research questions, descriptive statistics, examination of missing data, and reliability analyses were run for all variables. Research question 1 (Is there a difference in attitudes toward adults with mental illness between mental health professionals in-training, non mental health professionals in-training, mental health professionals, and non mental health professionals?) was analyzed using a 2 X 2 X 4 MANOVA (professional level [student verses professional] X status

[mental health verses non mental health] X Authoritarianism, Benevolence, Social Restrictiveness, and Community Mental Health Ideology). This analysis assessed for main effects based on professional level (student vs. professional), main effects based on status (mental health vs. non mental health), and possible interaction effects between professional level and status.

Research question 2 (Is there a difference in attitudes toward adults with mental illness between mental health trainees and professionals in various disciplines (i.e., counseling, social work, and psychology?) was analyzed 2 X 3 X 4 MANOVA (professional level [student vs. professional] X professional orientation [counseling, social work, or psychology] X *Authoritarianism, Benevolence, Social Restrictiveness, and Community Mental Health Ideology*). This analysis assessed for main effects based on professional orientation, main effects based on professional level (student vs. professional), and possible interaction effects between professional orientations and professional level.

Research question 3 (Is there a difference in attitudes toward adults with mental illness between mental health professionals who hold a professional license and those who do not hold a professional license and those who are receiving clinical supervision and those who are not receiving clinical supervision?) also was analyzed with a 2 X 2 X 4 MANOVA (professional licensure status X clinical supervision status X *Authoritarianism, Benevolence, Social Restrictiveness,* and *Community Mental Health Ideology*). The data analysis was conducted in order to consider the effect of licensure and clinical supervision on attitudes toward mental illness among mental health

professionals, as well as an interaction effect between licensure status and clinical supervision. Where MANOVA analyses yielded statistical significance, separate ANOVA tests were conducted.

Research question 4 (Among practicing mental health professionals, to what extent does years of experience, current clinical supervision, licensure, and professional orientation account for variance in attitudes toward adults with mental illness?) was analyzed using Multivariate Multiple Regression analyses. Research question 5 (Is there a relationship between attitudes and social distance toward adults with mental illness?) was analyzed using a Pearson Product-Moment correlation analysis. An alpha level of 0.05 was used for all statistical measures.

Table 1. Data analyses for Research Hypotheses

Hypothesis		IVs	Statistical Analysis	DVs
Hypothesis 1	There will be a significant difference in attitudes toward adults with mental illness between mental health professionals in-training, non mental health professionals in-training, mental health professionals, and non- mental health professionals.	Professional level and status	2 x 2 x 4 MANOVA	Authoritarianism Benevolence Social Restrictiveness Community Mental Health Ideology
Hypothesis 2	There will be a significant difference in attitudes toward adults with mental illness between mental health trainees and professionals based on professional orientation (i.e., counseling, social work, and psychology).	Professional orientation and status	2 x 3 x 4 MANOVA	Authoritarianism Benevolence Social Restrictiveness Community Mental Health Ideology
Hypothesis 3	There will be no significant difference in attitudes toward adults with mental illness between mental health professionals who hold a professional license and those who do not hold a professional license and those who are receiving clinical supervision and those who are not receiving clinical supervision.	Professional license and clinical supervision status	2 x 2 x 4 MANOVA	Authoritarianism Benevolence Social Restrictiveness Community Mental Health Ideology

Hypothesis 4	Years of experience, current clinical supervision, licensure, and professional orientation will account for a significant portion of the variance in attitudes toward adults with mental illness.	Experience, current clinical supervision, licensure, and orientation	Multivariate Multiple Regression Analysis	Authoritarianism Benevolence Social Restrictiveness Community Mental Health Ideology
Hypothesis 5	There will be a significant negative relationship between *Authoritarianism* and *Social Restrictiveness* and social distance and a significant positive relationship between *Benevolence* and *Community Mental Health Ideology* and social distance toward adults with mental illness.		Pearson Product-Moment Correlation Analysis	Authoritarianism Benevolence Social Restrictiveness Community Mental Health Ideology Social Distance

Pilot Study

The major purpose of the pilot study was to field test the CAMI (Taylor & Dear, 1981) and the demographic questionnaire, and to collect a small amount of data to analyze statistically. The following is a brief overview of the pilot study process including changes to the full study based on the process.

All student participants in the pilot study were recruited from one mid-sized public university in the southeastern U.S. Graduate students in non mental health training programs included students in Educational Research Methodology and Library and Informational Studies programs. Graduate students in mental health training programs were recruited from Counseling, Social Work, and Psychology departments. Mental health professionals were sampled using a snowball sample that began with mental health professionals known by the researcher. These personal contacts were asked to complete the survey and then forward the email with the survey link to other mental health professionals in southeastern states. Although the total sample size was 100, only 84 participants were used in the data analyses since not all respondents completed the entire survey. The sample was comprised of mainly female participants (83%). The majority of participants were Caucasian (88%), with the others identifying as African American (8%), Multiracial (1%), Asian Pacific Islander (1%) and other (2%). The largest group by age (28%) were between the ages of 26-30. The next largest group (24%) was between the ages of 21-25 and 12% of participants were between the ages of 31-35.

Seventy-six students comprised the student group. The group included mental health (n = 20) and non mental health students (n = 56). The 20 mental health students

were composed of four counselors in-training, 12 social workers in-training, and four psychologists in-training. Four of the 20 mental health students did not complete the survey in its entirety and were excluded from the statistical analyses. Of the mental health professionals (n = 16), six were professional counselors, four were social workers, and six were psychologists. Of the 16 total professionals, 12 completed the survey in its entirety.

An email invited participants to take the online survey with a link to the CAMI. In order to increase the likelihood of participation, the researcher replaced the name, depending on who the email was sent to, such as professional counselor, social work student, or graduate student for non mental health students. Because the email was sent to people via listservs and forwarded emails, a response rate could not be determined. The reliability of the CAMI was tested, yielding the following alpha levels for each scale: *Authoritarianism* (α= .43), *Benevolence* (α= .68), *Social Restrictiveness* (α= .73), and *Community Mental Health Ideology* (α= .71). These alphas are considerably lower than those found in previous research (Taylor & Dear, 1981), which raises some concern for the full study but may be, in part, due to the small sample size. Because the CAMI had previously demonstrated stronger psychometric properties than other measures (e.g., the OMI and the OMICC), the CAMI was used for the full study.

Research Question 1 yielded statistically significant results (Appendix F). Differences in attitudes toward adults with mental illness were found between mental health professionals in-training, non mental health professionals in-training, and experienced mental health professionals. A significant effect was found for

Authoritarianism F (2, 81) = 4.11, $p < .05$, *Benevolence F* (2, 81) =8.08, $p < .05$, and *Social Restrictiveness F* (2, 81) = 4.47, $p < .05$. No significant effect was found for *Community Mental Health Ideology F* (2, 81) = 1.45, $p > .05$. For the *Authoritarianism, Benevolence, and Social Restrictiveness* attitudes, mental health students differed from non mental health students, but professionals as a group were not significantly different from either mental health graduate students or non mental health graduate students. Post hoc comparisons (Appendix G) revealed that the significant difference was a result of the difference in mental health students and non mental health graduate students. A discriminant analysis (Appendix H) showed more specifically how the mental health graduate students were different from the non mental health graduate students. Of the three attitudes, *Benevolence* was the discriminant function most important in separating the two groups. Mental health professionals in-training had a higher median score than non mental health professionals in-training. This difference is graphically displayed in a boxplot (Appendix I).

Research Question 2 did not yield statistical significance (Appendix J). There was no difference in attitudes toward adults with mental illness between trainees based on professional orientation *Authoritarianism F* (2, 13) = .524, $p > .05$, *Benevolence F* (2, 13) = 2.97, $p > .05$, *Social Restrictiveness F* (2, 13) = .038, $p > .05$, and *Community Mental Health Ideology F* (2, 13) = .68, $p > .05$. Research Question 3 did not yield statistical significance (Appendix K). There was no difference in attitudes based on professional orientation *Authoritarianism F* (2, 9) = .909, $p > .05$ *Benevolence F* (2, 9) = .847, $p > .05$, *Social Restrictiveness F* (2, 9) = .508, $p > .05$, and *Community Mental Health Ideology F*

(2, 9) = .231, $p > .05$. Research Question 4 did not yield statistical significance (Appendix L). There was no difference in attitudes toward adults with mental illness between mental health professionals who held a professional license and those who did not hold a professional license *Authoritarianism F* (1, 10) = 4.16, $p > .05$, *Benevolence F* (1, 10) = .711, $p > .05$, *Social Restrictiveness F* (1, 10) = 1.54, $p > .05$, and *Community Mental Health Ideology F* (1, 10) = .98, $p > .05$. Research Question 5 did not yield statistical significance (Appendix M). There was no difference in attitudes toward adults with mental illness between mental health professionals who were receiving clinical supervision and those who were not receiving clinical supervision *Authoritarianism F* (1, 10) = 2.87, $p > .05$, *Benevolence F* (1,10) = 1.26, $p > .05$, *Social Restrictiveness F* (1, 10) = .054, $p > .05$, and *Community Mental Health Ideology F* (1, 10) = .001, $p > .05$. Research Question 6 did not yield statistical significance. Although total R^2 was .48, the overall model was non significant. F (4, 12) = 1.8, $p > .05$ due largely to the small sample size, so that the full study sample might yield significant results. Output from all pilot study data analyses is displayed in Appendices F-N.

Changes to Full Study

It was initially intended that only students enrolled in internship would be eligible to participate in the study, but due to low response rates and variations within training program structures for internship experiences, the pool was expanded to include all graduate students enrolled in a mental health training program who were in at least their second year of study. Some departments did not have a listserv of students enrolled in internship. For example, the psychology department could only send the email invitation

with the link to the survey to all psychology graduate students in the department. Although the demographic form for the pilot study included a question about status of internship, the demographic survey for the full study will include an additional question about year in the program In addition to this question, it will be specified in the email soliciting participants that the survey is only intended for students in their second year of study.

It came to this researcher's attention that school mental health professionals should be excluded from the full study since this type of mental health professional works with a non-adult population and thus may have different attitudes than those who work with adults. Only two participants in the pilot study worked at schools, one at an elementary and one at a high school. For the full study, was specified in the email soliciting participants that the survey was only intended for professionals who work with adults in non school settings.

There were several changes to the full study related to the use of SurveyMonkey. The format used in the pilot study allowed participants to choose multiple responses to each item on the CAMI. This was changed in the full study so that there was a forced choice format for each item of the CAMI. The intent of this was to help with participants skipping items and not completing the full survey. A concern mentioned by many participants in the pilot study was that there was no definition of mental illness supplied in the CAMI (Taylor & Dear, 1981). A definition of mental illness was, in fact, at the top of the questionnaire (Appendix A). It was assumed from the frequency with which this comment occurred that participants had difficulty seeing this definition or started the

survey without reading it. The location of the definition of mental illness was changed in the full study by putting it on a full page with no other wording to distract the participant. In addition, certain language was updated on the CAMI, for example the term "mentally ill" was changed to "adults with mental illness."

The two versions of the demographic forms for students and professionals were combined into one demographic form on SurveyMonkey. For the pilot study, if the participant indicated that he or she was a graduate student, then SurveyMonkey automatically skipped to the student version of the demographic survey. This caused some participants confusion. In order to avoid confusion for the full study, students received one version of the demographic survey and link while professionals received a different version. Results were merged once the data collection time period is over. In addition, the demographic form for the full study allowed participants to indicate his or her age in years rather than categorically, allowing for descriptive statistics for age rather than just categories.

For the full study, the researcher had SurveyMonkey filter completed surveys in order to assist with data analysis. Finally, the email soliciting participation for the pilot study indicated that the survey would take 20 minutes to complete. Based on feedback from pilot study participants, this was modified to indicate that the survey would take 15 minutes to complete.

A Priori Limitations

There are a number of possible limitations to this study, based on the pilot study. First, instrumentation threats exist. Students and professionals were using a self-report measure and might have felt reluctant to answer the questionnaire in an honest fashion. The topic is a sensitive one since it is looking at attitudes towards mental illness and social desirability may have affected responses. Second, although the instrument provided a definition of mental illness, there may still exist different understandings of what constitutes a mental illness. For example, there are various degrees of mental illness and participants might differ in attitudes depending on which mental illness is considered. Thus, while some participants might consider depression while taking the inventory, others might consider mental illness as a more serious diagnosis such as schizophrenia. Other internal threats to validity include psychometric properties of the CAMI (Taylor & Dear, 1981). Three of the four subscales have previous evidence in the literature of acceptable alpha coefficients: *Community Mental Health Ideology* (α= .88), *Social Restrictiveness* (α= .80), and *Benevolence* (α= .76). *Authoritarianism*, however, is not as psychometrically sound (α= .68). Data from the pilot study raised some concerns about internal consistency, especially the *Authoritarianism* scale. This may be an artifact of the fact that all participants were collapsed. One of the premises of this study was that the groups of participants may be heterogeneous with respect to their attitudes toward mental illness. For the full study alphas were considered not only for the full sample, but also separately for each group of participants. Thus, although the CAMI is the most

psychometrically sound instrument in the literature for measuring attitudes towards mental illness, it still may have some limitations that impacted the results of this study.

Also, history might have impacted the internal validity of the research. With recent incidents that have occurred involving mental illness, such as the violent act on the campus of Virginia Tech that involved ideas about mental illness and dangerousness, participants may have felt differently at the time of participation than they did before this incident. Also, the selection threat to internal validity might be important to consider with this study. Both professionals and students were pooled from southeastern states. These participants might differ from professionals and students pooled from a nationwide sample. In addition to geographic considerations, students were pooled from a limited number of different training programs. Training programs certainly vary due to things such as faculty professional identity, teaching style, and overall climate of a training program. This might have limited the generalizability of the results.

CHAPTER IV

RESULTS

In Chapter II, stigma as it exists towards adults with mental illness was explored. Stigma as it relates to both adults with mental illness and the mental health professionals who work with people diagnosed with a mental illness was highlighted. Various ideas about what influences negative attitudes, including contact and experience with adults with mental illness and education and knowledge about mental illness, was presented. Further, professional identity was reviewed since this might impact the way in which various mental health professionals are trained to conceptualize and work with mental illness. In Chapter III, the methodology of this study was delineated. In this chapter, results are presented. The sample is described, preliminary analyses including instrument descriptives and reliabilities and social desirability are presented, and the results of hypothesis tests are reported.

Description of Respondents

Of the 188 participants whose responses were included in the data analysis, 62.8% (n = 118) were female and 37.2% (n = 70) were male. The majority of respondents described themselves as Caucasian (89.4%, n = 168) with other participants identifying as African American (4.2%, n = 8), Asian Pacific Islander (2.1%, n = 4), Hispanic (2.1%, n = 4), Multiracial (1.1%, n = 2), and other (1.1%, n = 2). Respondents ranged in age from 21 years to 65 years (M = 39.63, SD = 13.23).

Professionals In-training

Seventy-eight students comprised the professionals in-training group. This group included mental health (*n*= 58) and non mental health professionals in-training (*n* = 20). They ranged in age from 21 to 53 years of age (*M* = 29.68, *SD* = 8.22). Of the mental health professionals in-training, 29.3% (*n* = 17) were counselors in-training, 34.5% (*n* = 20) were social workers in-training, and 36.2% (*n* = 21) were psychologists in-training. All of the non mental health professionals group (100%; *n* = 20) were business students. Counselors in-training ranged in age from 21 to 48 (*M* = 27.94, *SD* = 5.97). Social workers in-training ranged in age from 22 to 31 (*M* = 30.45, *SD* = 8.56). Psychologists in-training ranged in age from 21 to 32 (*M* = 24.29. *SD* = 2.72). Business professionals in-training ranged from 21 to 53 years of age (*M* = 36.05, *SD* = 9.19). Table 2 contains a summary of selected demographics of professionals in-training including gender, ethnicity, and other factors broken down by professional orientation.

Table 2. Selected Demographics of Professionals In- training

	Counseling		*Social Work*		*Psychology*		*Non MH*		*Total*	
	n	%	n	%	n	%	n	%	N	%
GENDER										
Female	12	70.6	17	85	16	76.2	5	25	50	64.1
Male	5	29.4	3	15	5	23.8	15	75	28	35.9
Total	17	100	20	100	21	100	20	100	78	100
ETHNICITY										
White	17	100	16	80	20	95.2	16	80	69	88.5
African American	0	0	1	5	0	0	2	10	3	3.8
Asian/Pacific Isl.	0	0	0	0	0	0	1	5	1	1.3
Hispanic	0	0	2	10	0	0	1	5	3	3.8
Multiracial	0	0	0	0	0	0	0	0	1	1.3
Other	0	0	1	5	1	4.8	0	0	1	1.3
Total	17	100	20	100	21	100	20	100	78	100
HIGHEST DEGREE										
Undergraduate	12	70.6	15	75	15	71.4	14	70	56	71.8
Masters	4	23.5	4	20	6	28.6	6	30	20	25.6
Doctoral	1	5.9	1	5	0	0	0	0	2	2.6
Total	17	100	20	100	21	100	20	100	78	100
INTERNSHIP STATUS										
Yes	17	100	16	75	11	52.4	NA	NA	44	74.1
No	0	0	4	25	10	47.6	NA	NA	14	25.9
Total	17	100	20	100	21	100	NA	NA	58	100
TYPE OF MENTAL HEALTH SETTING										
AO	2	11.8	5	31.3	2	16.7	NA	NA	9	20
AI	1	5.9	3	18.7	0	0	NA	NA	4	8.9
CO	2	11.8	2	12.5	2	16.7	NA	NA	6	13.3
CI	1	5.9	0	0	0	0	NA	NA	1	2.2
SA	1	5.9	0	0	0	0	NA	NA	1	2.2
F	4	23.4	2	12.5	0	0	NA	NA	6	13.3
Other	6	35.3	4	25	8	66.6	NA	NA	18	40.0
Total	17	100	16	100	12	100	NA	NA	45	100

Note. (1) Percentages may not add up to exactly 100 due to rounding and missing values.
(2) AO = adult outpatient, AI = adult inpatient, CO = child outpatient, CI = child inpatient, SA = substance abuse, F = family services.

Professionals

110 professionals made up the professionals group. Professionals ranged in age from 25 to 65 (*M* = 46.85, *SD* = 11.32). Of this group, 69.1% (*n* = 76) were mental health professionals. Among the mental health professionals, 31.6% (*n* = 24) were professional counselors, 26.3% (*n* = 20) were professional social workers, and 42.1% (*n* = 32) were professional psychologists. The non mental health professionals comprised 30.9% (*n* = 34) of the professional group sample. Professional counselors ranged in age from 27 to 61 (*M* = 45.42, *SD* = 10.79). Professional social workers ranged in age from 28 to 64 (*M* = 53.30, *SD* = 9.45). Professional psychologists ranged in age from 28 to 65 (*M* = 47.16, *SD* = 12.25). Non mental health professionals ranged in age from 25 to 64 (*M* = 43.76, *SD* = 10.62). The average age of professionals was approximately 17 years greater than the average age of professionals in training (*M* = 46.85, *SD* = 11.32 vs. *M* = 29.68, *SD* = 8.22). Mental health professionals ranged in years of mental health experience from one to 20 years (*M* = 14.32, *SD* = 6.25). Table 3 contains a summary of selected demographics of professionals including gender, ethnicity, and other factors broken down by professional orientation.

Table 3. Selected Demographics of Professionals

	Counseling		*Social Work*		*Psychology*		*Non MH*		*Total*	
	n	*%*	n	%	n	*%*	n	*%*	N	*%*
GENDER										
Female	20	83.3	20	100	19	59.4	9	26.5	68	61.8
Male	4	16.7	0	0	13	40.6	25	73.5	42	38.2
Total	24	100	20	100	32	100	34	100	110	100
ETHNICITY										
White	23	95.8	19	95	28	87.5	29	85.3	99	90
African American	0	0	1	5	3	9.4	1	2.9	5	4.5
Asian Pacific Isl.	0	0	0	0	1	3.1	2	5.9	3	2.7
Hispanic	0	0	0	0	0	0	1	2.9	1	0.9
Multiracial	0	0	0	0	0	0	1	2.9	1	0.9
Other	1	4.2	0	0	0	0	0	0	1	0.9
Total	24	100	20	100	32	100	34	100	110	100
HIGHEST DEGREE										
Undergraduate	0	0	0	0	0	0	2	5.9	2	1.8
Masters	19	79.2	19	95	3	9.4	31	91.2	72	65.5
Doctoral	5	20.8	1	5	29	90.6	1	2.9	36	32.7
Total	24	100	20	100	21	100	34	100	110	100
LICENSE										
Yes	23	95.8	20	100	32	100	NA	NA	75	61.8
No	1	4.2	0	0	0	0	NA	NA	1	38.2
Total	24	100	20	100	32	100	NA	NA	76	100
LICENSE TYPE										
LPC	23	100	0	0	2	6.3	NA	NA	25	26.7
LMFT	0	0	0	0	0	0	NA	NA	0	0
LCSW	0	0	20	100	0	0	NA	NA	20	26.7
PSYC.	0	0	0	0	30	93.8	NA	NA	30	40.0
Other	0	0	0	0	0	0	NA	NA	0	0
Total	23	100	20	100	32	100	NA	NA	75	100

RECEIVING SUPERVISION											
Yes		13	56.5	5	27.8	5	17.2	NA	NA	23	33.3
No		10	43.5	13	72.2	23	79.3	NA	NA	46	66.7
	Total	23	100	18	100	28	100	NA	NA	69	100
PROVIDING SUPERVISION											
Yes		15	62.5	16	84.2	24	75	NA	NA	55	73.3
No		9	37.5	3	15.8	8	25	NA	NA	20	26.7
	Total	24	100	19	100	32	100	NA	NA	75	100

Note. (1) Percentages may not add up to exactly 100 due to rounding and missing values. (2) AO = adult inpatient, AI = adult inpatient, CO = child outpatient, CI = child inpatient, SA = substance abuse, F = family services. (3) LPC = licensed professional counselor, LMFT = licensed marriage and family therapist, LCSW = licensed professional social worker, and PSYC = licensed psychologist.

Preliminary Analyses

Instrument Reliability

Participants completed a demographic questionnaire, the CAMI (Taylor & Dear, 1981), a Social Distance Scale (Gureje et al., 2005), and the Marlowe-Crowne Social Desirability Scale (Crowne & Marlowe, 1960). The CAMI is comprised of 40 items and has four subscales *Authoritarianism, Benevolence, Social Restrictiveness,* and *Community Mental Health Ideology*. All subscale reliability estimates for the CAMI were found to be within an acceptable range (α = .80 to .86) for conducting research (Heppner, Kivlighan, & Wampold, 1999), with the exception of the *Authoritarianism* subscale, which had an alpha of .62. The *Authoritarianism* subscale will be included in data analysis, but any results associated with this scale must be interpreted with caution because of this low alpha.

The Social Distance Scale has a total of six items. Psychometric properties of this instrument had not been reported in previous literature. The Social Distance Scale had

sufficient evidence of internal consistency with an alpha of .81. The Marlowe-Crowne Social Desirability Scale, with a total of 33 items, had acceptable evidence of reliability with an alpha of .85. The Cronbach's alpha coefficients and descriptive statistics for each construct in the CAMI, the Social Distance Scale, and the Marlowe-Crowne Desirability Scale are presented in Table 4.

Table 4. Reliability and Descriptive Statistics for Study Instrumentation.

Instruments	*Number of Items*	*Cronbach's Alpha*	*M*	*SD*
CAMI				
Authoritarianism	10	.62	20.81	4.20
Benevolence	10	.81	41.64	5.26
Social Restrictiveness	10	.80	20.22	4.84
CMHI	10	.86	36.62	5.72
Social Distance Scale	6	.81	19.67	2.81
Marlowe-Crowne Desirability	33	.85	13.26	6.30

Note. (1) CMHI = *Community Mental Health Ideology*. (2) *N* = 187 for *Authoritarianism*, *N*= 185 for *Benevolence*, *N* = 186 for *Social Restrictiveness*, *N* = 189 for *Community Mental Health Ideology* subscales. *N* =183 for SDS and *N* = 161 for Marlowe-Crowne Desirability Scale.

Social Desirability

In order to test the validity of participants' responses to both social distance and attitudes toward mental illness, the Marlowe- Crowne Desirability scale was used during data collection. By running correlations between the CAMI's four subscales, the Social Distance Scale, and the Marlowe- Crowne Desirability scale, it was possible to investigate whether participants were answering in a socially desirable manner. It has been suggested by authors (Leite & Beretvas, 2005) that a low correlation between the

Marlowe-Crowne Desirability scale and the scale of interest indicates honest responses, or low social desirability.

All correlations between scores on the Marlowe- Crowne, CAMI subscales, and the Social Distance Scale were low, with absolute values ranging from .11 to .23 (*Authoritarianism r* (186) = .20, $p < .01$; *Benevolence r* (186) = -.23, $p < .01$; *Social Restrictiveness r* (186) = .21, $p < .01$; *Community Mental health Ideology r* (186) = -.16, $p < .05$; Social Distance Scale *r* (186) = -.11, $p > .05$). From this, it is assumed that social desirability did not have a substantive role in participant responses and participants answered questions on the CAMI and the Social Distance Scale with a reasonable level of honesty.

Testing of Research Hypotheses

Research Question 1

Research question one was designed to investigate how mental health professionals in-training (counseling, social work, and psychology), non mental health professionals in-training, mental health professionals (professional counselors, professional social workers, and professional psychologists), and non mental health professionals differed in attitudes toward adults with mental illness. The intent of this question was to test the effect of trainee vs. professional, the effect of mental health vs. non-mental health, and possible interaction effects between the two.

A 2 X 2 X 4 MANOVA (professional level [student verses professional] X status [mental health verses non mental health] X *Authoritarianism, Benevolence, Social Restrictiveness,* and *Community Mental Health Ideology)* was used to investigate the

differences in attitudes toward mental illness. This analysis assessed for main effects based on professional level (student vs. professional), main effects based on status (mental health vs. non mental health), and possible interaction effects between professional level and status.

It was hypothesized that a difference would exist between the groups. Hypothesis 1 was partially supported. As presented in Table 5, the main effect for status (F (4, 181) = 14.73, $p < .05$, $\eta^2 = .33$) was significant. Univariate follow-up analyses indicated significant main effects for status on *Authoritarianism* ($F = 9.40$, $p < .05$), *Benevolence* ($F = 46.61$, $p < .05$), *Social Restrictiveness* ($F = 26.69$, $p < .05$), and *Community Mental Health Ideology* ($F = 28.07$, $p < .05$). Mental health trainees and professionals had lower mean scores on *Authoritarianism* than non mental health trainees and professionals (M = 2.02, SD = .376 vs. M = 2.22, SD = .494, respectively), higher scores on *Benevolence* (M = 4.33, SD = .400 vs. M = 3.79, SD = .606, respectively), lower scores on *Social Restrictiveness* (M = 1.90, SD = .381 vs. M = 2.30, SD = .591, respectively), and higher scores on *Community Mental Health Ideology* (M = 3.80, SD = .482 vs. M = 3.31, SD = .637, respectively). There was no significant main effect found for professional level and no interaction effect between professional level and status.

Table 5. Multivariate and Univariate F Tests for Professional Level and Status.

	Multivariate Analysis		Univariate Analysis			
Source	Θ	*F*	A *F*	B *F*	SR *F*	CMHI *F*
Level	.03	1.22	.45	1.74	.00	1.29
Status	.33	14.73*	9.40*	46.61*	26.69*	28.07*
Level x Status	.02	.98	.60	.53	.15	.40

Note. (1) Level = student vs. professional, Status = mental health vs. non mental health. (2) A = Authoritarianism, B = Benevolence, SR = Social Restrictiveness, and CMHI = Community Mental Health Ideology. (2) *DF* for univariate analyses = (1, 188). (3) * = $p < .05$.

Research Question 2

Research question 2 was designed to explore whether a significant effect existed for attitudes toward mental illness between mental health trainees based on professional orientation and mental health professionals based on professional orientation (i.e., counseling, social work, and psychology). The question allowed for a closer look at how professional orientation might account for differences in attitudes toward mental illness. It was hypothesized that there would be a significant effect for attitudes toward mental illness between mental health trainees and professionals based on professional orientation (i.e., counseling, social work, and psychology).

A 2 X 3 X 4 MANOVA (professional level [student or professional] X professional orientation [counseling, social work, or psychology] X *Authoritarianism, Benevolence, Social Restrictiveness, and Community Mental Health Ideology*) was used to investigate the differences in attitudes toward mental illness. This analysis assessed for main effects based on professional orientation, main effects based on professional level

(student vs. professional), and possible interaction effects between professional orientations and professional level. Research hypothesis 2 was not supported. Results indicated that there was no main effect for professional orientation (counseling, social work, and psychology) F (4, 126) = 1.71, p = .152. There was no main effect for professional level (student vs. professional) F (4, 125) = 1.06, p = .382, and no interaction between professional orientation and professional level F (4, 126) = 1.13, p = .348. Because the omnibus multivariate analysis was non significant, univariate follow-up analyses were not interpreted.

Research Question 3

Research question 3 examined factors that might impact mental health professionals' attitudes toward mental illness, namely professional licensure status and clinical supervision. Specifically, research question 3 was intended to investigate differences in attitudes toward mental illness between mental health professionals who hold a professional license and those who do not hold a professional license, and those who are receiving clinical supervision and those who are not receiving clinical supervision. It was hypothesized that licensure status and supervision status wound not have a significant effect on attitudes toward mental illness.

A 2 X 2 X 4 MANOVA (professional licensure status X clinical supervision status X *Authoritarianism, Benevolence, Social Restrictiveness,* and *Community Mental Health Ideology*) was used to test this hypothesis. The data analysis was conducted in order to consider the effect of licensure and clinical supervision on attitudes toward mental illness among mental health professionals, as well as an interaction effect between

licensure status and clinical supervision. Because of a small sample of professionals who did not hold a professional license (n = 1), this factor was taken out of the data analysis. After this change to research question 3 due to sampling, a MANOVA was run to investigate clinical supervision and its effect on attitudes towards mental illness. A significant difference was found for professionals who were receiving clinical supervision F (4, 64) = 2.10, $p < .05$. Because of the significant results, post-hoc univariate analyses were run. These revealed that there was a significant difference between the groups on one of the four CAMI subscales, *Benevolence*. Mental health professionals who were receiving clinical supervision had higher mean scores on *Benevolence* than professionals who were not receiving clinical supervision (M = 4.46, SD = .345 vs. M = 4.21, SD = .371). Results of the multivariate and univariate analyses are presented in Table 6.

Table 6. Multivariate and Univariate F Tests for Supervision

	Multivariate Analysis		Univariate Analysis			
Source	Θ	*F*	A *F*	B *F*	SR *F*	CMHI *F*
Get Su	.13	2.10*	3.72	7.09*	3.51	0.52

Note. (1) Get Su = mental health professionals who are currently receiving clinical supervision. (2) A = Authoritarianism, B = Benevolence, SR = Social Restrictiveness, and CMHI = Community Mental Health Ideology. (2) *DF* for univariate analyses = (1, 69). (3) * = $p < .05$.

Research Question 4

Research Question 4 was designed to investigate how years of experience, current clinical supervision, licensure, and professional orientation would account for variance in mental health professionals' attitudes towards adults with mental illness. A Multivariate Multiple Regression analysis was conducted to answer this research question. Predictors were entered in the regression model using the enter method: experience, current clinical supervision, and professional orientation separately for each of the dependent variables, the four subscales of the CAMI. It was hypothesized that years of experience, current clinical supervision, licensure, and professional orientation would account for a significant portion of the variance in attitudes toward mental illness. Licensure status was left out of the analysis since there were unequal groups, with only one professional not having a professional license.

A significant amount of the variance was only accounted for one dependent variable. Current clinical supervision (receiving clinical supervision) accounted for a significant portion of the variance on the *Benevolence* subscale, $R^2 = .115$, $F\ (4, 67) = 3.18$, $p = .019$. Although a statistically significant portion of the variance in *Benevolence* was accounted for, the effect size was small ($\eta^2 = .115$), as the predictors accounted for only 11.5% of the variance in the *Benevolence* factor. For the other dependent variables, the predictors (years of experience, giving clinical supervision, licensure, and professional orientation) did not account for a significant portion of the variance and the effect sizes were low (*Authoritarianism* [$\eta^2 = .060$], *Social Restrictiveness* [$\eta^2 = .053$], and *Community Mental Health Ideology* [$\eta^2 = .00$]. Results are presented in Table 7.

Table 7. Regression Analysis

	R	R^2	F	Sig.
Authoritarianism	.34	.06	2.08	.094
Benevolence	.41	.115	3.18	.019*
Social Restrictiveness	.33	.053	1.94	.115
Community MH Ideology	.13	.00	.257	.904

Note. (1) A multivariate multiple regression yielded significant results, $\Theta = .77$, F (4, 22) = 4.25, $p < .05$. (2) $R^{2\,=}$ is an adjusted statistic. (3) CMHI R^2 correction (.00) was set to lower bound of R^2. Actual R^2 adjusted statistic = -.046.

Authoritarianism ($R^2 = .06$)

	B	Beta	t	Sig.
Years	.008	.121	.93	.356
Get Su	.261	.31	2.15	.035
Give Su	.246	.273	1.87	.066
Orientation	.044	.096	.750	.456

Benevolence ($R^2 = .115$)

	B	Beta	t	Sig.
Years	-.011	-.191	-1.51	.136
Get Su	-.353	-.45	-3.21	.002*
Give Su	-.278	-.33	-2.33	.023
Orientation	.024	.055	.441	.66

Note. Get Su coded 0 = yes, 1 = no in dataset.

Social Restrictiveness ($R^2 = .053$)

	B	Beta	t	Sig.
Years	.003	.051	.392	.697
Get Su	.259	.296	2.04	.045
Give Su	.227	.242	1.65	.104
Orientation	.06	.124	.97	.338

Community Mental Health Ideology (R^2 = .00)

	B	Beta	t	Sig.
Years	-.002	-.024	-.176	.861
Get Su	-.138	-.135	-.883	.38
Give Su	-.119	-.109	-.705	.484
Orientation	-.006	-.01	-.074	.941

Note. (1) Years = number of years in the mental health field, Get Su = mental health professionals who are currently receiving clinical supervision, Give Su = mental health professionals who are giving clinical supervision, Orientation = professional orientation (counselor, social worker, or psychologist). (2) Licensure not included in analysis due to unequal groups.

Research Question 5

This research question explored the relationship between attitudes and social distance toward adults with mental illness. All participants were analyzed as one group in order to look at the overall relationship. It was hypothesized that there would be significant negative relationships between the *Authoritarianism* and *Social Restrictiveness* subscales of the CAMI and Social Distance and significant positive correlations between *Community Mental Health Ideology* and *Benevolence* subscales and social distance toward adults with mental illness. This is because higher social distance scores indicate *less* social distance while higher mean scores on the CAMI indicate *more* of each attitude.

Research question 5 was analyzed with a Pearson Product-Moment correlation analysis. Hypothesis 5 was fully supported. There was a significant negative relationship between social distance and *Authoritarianism* r (186) = -.524, $p < .01$ and social distance and *Social Restrictiveness* r (186) = -.638, $p < .01$. There was a significant positive relationship between social distance and *Benevolence* r (186) = .513, $p < .01$ and social

distance and *Community Mental Health Ideology* r (186) = .598, $p < .01$. A Bonferonni correction was performed on p values and all were still statistically significant ($p < .01$). Correlations among the variables are presented in Table 8.

Table 8. Pearson Correlations Between Attitudes and Social Distance.

	1	2	3	4	5
1. Authoritarianism	1.00				
2. Benevolence	-.631**	1.00			
3. Social Restrictiveness	.652**	-.651**	1.00		
4. Community Mental Health Ideology	-.579	.553	-.751	1.00	
5. Social Distance Scale	-.524**	.513**	-.638**	.598**	1.00

Note. N = 188. ** Correlation is significant at the 0.01 level (2-tailed).

Summary

In this chapter, results of the current study were presented. The sample was described, preliminary analyses including instrument descriptives and reliabilities and social desirability were presented and results for hypotheses were reported. Hypothesis 1 was partially supported. Hypothesis 2 was not supported. Hypothesis 3 was partially supported, as was Hypothesis 4. Hypothesis 5 was fully supported. In the next chapter interpretations, practical implications, directions for research, and limitations of the findings are presented.

CHAPTER V

DISCUSSION

In this chapter, a brief overview of the study is provided, major findings are presented, potential interpretations of findings for mental health professionals, mental health professionals in-training, non mental health professionals and professionals in-training, and mental health educators are offered, and potential limitations of the study are presented. Recommendations for future research in the areas of mental illness stigma and factors related to this topic also are provided.

Overview

The major purpose of this study was to investigate attitudes of mental health professionals, mental health professionals in-training, non mental health professionals, and non mental health professionals in-training towards adults with mental illness. There existed a need for a study that replicated and extended earlier studies (Cohen & Struening, 1962) comparing attitudes of different types of mental health professionals based on professional orientation. This type of investigation would highlight differences in professionals according to professional identity. Also, considering the effect of licensure status and clinical supervision were unique contributions to the existing literature.

There was little consensus regarding what impacted stigmatizing attitudes.

Previous researchers had implied that numerous factors might be involved in the attitudes of mental health professionals towards adults with mental illness, including contact and experience (Procter & Hafner, 1991; Wallach, 2004) and education and training (Bairan & Farnsworth, 1989; Penny et al., 2001). Primarily, however, researchers had examined those in the medical, occupational therapy, and case management fields (Bairan & Farnsworth, 1989; Cohen & Struening, 1962; Murray & Steffen, 1999; Penny et al., 2001; Procter & Hafner, 1991) and had not considered samples including professional counselors. Since professional counselors are distinguishable due to underlying assumptions in counselor preparation including wellness, strength-based, and developmental perspectives of human behavior (Hinkle, 1999; Ivey & Ivey, 1998; Ivey et al., 2005), a current study was warranted to explore attitudes of this particular type of mental health professional towards adults with mental illness. This was the first study to date to include professional counselors in an investigation of attitudes towards adults with mental illness.

In addition to the omission of professional counselors in the stigma and mental illness literature, the most recent studies on stigmatizing attitudes were conducted outside of the United States (Gureje et al., 2005; Nordt et al., 2006). This study, conducted within the U.S., could further the existing body of literature.

Finally, aspects of professionalism and professional development, such as licensure status and clinical supervision, had not previously been explored empirically. Researchers have assumed homogeneity of experience among mental health professionals

that may or may not exist. Questions were asked in the current study to examine the effects of licensure status and clinical supervision on attitudes toward mental illness.

In response to these gaps in the literature, a study was designed that explored differences between various types of mental health professionals, mental health professionals in-training, non mental health professionals, and non mental health professionals in-training. Three different types of mental health professionals (counselors, social workers, and psychologists) were surveyed. Factors such as professional orientation, licensure, supervision status, and length of time in the mental health field were explored as they related to attitudes towards mental illness.

Additionally, social distance attitudes were explored in order to investigate social distance as it related to attitudes towards adults with mental illness. Although social distance and attitudes towards mental illness have recently been examined (Gureje et al., 2005; Link et al., 2004), the psychometric properties of the particular instrument used to assess social distance have not been documented. Thus, along with examining how social distance attitudes correlated with attitudes toward mental illness, a second purpose of including the instrument in this study was to examine the psychometric properties and provide empirical evidence of the internal consistency of this measure.

Results of the study were presented in chapter IV. Hypothesis 1 was partially supported. There was a significant main effect for status on attitudes towards adults with mental illness. Mental health trainees and professionals had less stigmatizing attitudes towards adults with mental illness on all the subscales of the CAMI when compared to non-mental health trainees and professionals. Hypothesis 2 was not supported. There was

no significant effect for attitudes toward mental illness between mental health trainees and professionals based on professional orientation (i.e., counseling, social work, and psychology). Hypothesis 3 was partially supported. There was a significant difference between professionals who were receiving clinical supervision and those who were not on the *Benevolence* subscale. Mental health professionals who were receiving clinical supervision had higher mean scores on *Benevolence* than professionals who were not receiving clinical supervision. Hypothesis 4 was partially supported. Current clinical supervision (receiving clinical supervision) accounted for a significant portion of the variance on the *Benevolence* subscale albeit with only a modest effect size. Hypothesis 5 was fully supported. There was a significant relationship between social distance and attitudes towards adults with mental illness. In this chapter, interpretations, significance, and implications of these findings are discussed.

Major Findings

There were a number of important findings from the current study. In the following section, an overview of these findings is presented. The implications for practice and training are discussed more fully later in the chapter.

Research Question 1

Research question one was designed to investigate how mental health professionals in-training (counseling, social work, and psychology), non mental health professionals in-training, mental health professionals (professional counselors, professional social workers, and professional psychologists), and non mental health professionals differed in attitudes toward adults with mental illness. The intent was to test

the main effects of level (trainee vs. professional), status (mental health vs. non-mental health), and possible interactions between the two. It was hypothesized that a difference would exist between the groups.

Hypothesis 1 was partially supported. An interesting finding that emerged from the analysis was the significant main effect for status (F (4, 181) = 14.73, $p < .05$, η^2 = .33). Univariate follow-up analyses revealed significant main effects for status on all of the four CAMI subscales: *Authoritarianism* (F = 9.40, $p < .05$), *Benevolence* (F = 46.61, $p < .05$), *Social Restrictiveness* (F = 26.69, $p < .05$), and *Community Mental Health Ideology* (F = 28.07, $p < .05$). Mental health trainees and professionals had lower mean scores on *Authoritarianism* (M = 2.02, SD = .376 vs. M = 2.22, SD = .494) and *Social Restrictiveness* (M = 1.90, SD = .381 vs. M = 2.30, SD = .591) than non mental health trainees and professionals. Further, mental health trainees and professionals had higher scores on *Benevolence* (M = 4.33, SD = .400 vs. M = 3.79, SD = .606) and *Community Mental Health Ideology* (M = 3.80, SD = .482 vs. M = 3.31, SD = .637) than did non mental health participants. There was no significant main effect found for professional level and no interaction effect between professional level and status.

In previous research, scholars explored mental health professionals' attitudes and found that professionals harbored some of the same stigmas as the general population (Cohen, 1990; Lauber et al., 2004; Nordt et al., 2006). Research question 1 replicated this type of research by comparing mental health students and professionals to non mental health students and professionals in order to investigate how attitudes towards adults with

mental illness differed between those having mental health training, education, and experience and those having none.

There was an effect for status, suggesting that mental health training, education, and experience occasioned more positive attitudes towards mental illness. Since mental health trainees and professionals seemed to have less stigmatizing attitudes towards adults with mental illness on all the subscales of the CAMI when compared to non mental health trainees and professionals, training programs and experience might have a positive effect on attitudes towards adults with mental illness – with both lessening negative attitudes and increasing positive attitudes.

While previous authors (Cohen, 1990; Lauber et al., 2004; Nordt et al., 2006) questioned whether or not mental health professionals were any different than non mental health professionals in attitudes, results of this study suggested that those involved in the mental field have more favorable attitudes. It seems that mental health education, training, and experience might assist with lessening stigma towards adults with mental illness. Further, results from this study suggest that those not associated with the mental health field still hold stigmatizing attitudes towards adults with mental illness. Unfortunately, sigma towards adults with mental illness may still exist as a longstanding and widespread phenomenon, as authors have suggested in previous literature (Byrne, 2000; Crisp, Gelder, Rix, Meltzer, & Rowlands, 2000).

Professional level, or student vs. professional, did not have a significant effect on attitudes towards mental illness. Previous research had conflicting results about factors that might assist with attitudes of mental health professionals towards adults with mental

illness, including contact and experience (Procter & Hafner, 1991; Wallach, 2004) and education and training (Bairan & Farnsworth, 1989; Penny et al., 2001). The main effect for status, along with the lack of a main effect for level and the lack of an interaction effect between level and status, suggests that experience may not play as important a role as education and training.

Research Question 2

Research question 2 was designed to explore whether or not a significant effect existed for attitudes toward mental illness between mental health trainees based on professional orientation and mental health professionals based on professional orientation (i.e., counseling, social work, and psychology). The question explored how professional orientation might account for differences in attitudes toward mental illness. It was hypothesized that there would be a significant difference in attitudes toward mental illness between mental health trainees and professionals based on professional orientation (i.e., counseling, social work, and psychology). Research question 2 was not supported. There was no main effect for professional orientation (counseling, social work, and psychology) F (4, 126) = 1.71, p = .152. There was no main effect for professional level (student vs. professional) F (4, 125) = 1.06, p = .382, and no interaction between professional orientation and professional level F (4, 126) = 1.13, p = .348.

Earlier studies had investigated how mental health professionals differed in attitudes towards mental illness (Cohen & Struening, 1962) and differences in attitudes towards adults with mental illness existed between professionals. More recent studies had

replicated this type of research (Nordt et al., 2006) however no study had included professional counselors.

Professional orientation did not seem to have an effect on attitudes towards mental illness. This may suggest that despite theoretical differences in training programs with conceptualization and treatment of mental illness, these differences in orientation might not result in differences in attitudes towards adults with mental illness. In particular, although counselors in-training have strength-based, developmental theories as a framework for working with adults with mental illness, they did not differ from other mental health professionals with attitudes towards this population.

The lack of significant differences between mental health trainees and professionals also might suggest that there is similarity in training and coursework across disciplines. For example, despite the strength-based wellness coursework that is unique to counselor training, coursework related to diagnosis and treatment for adults with mental illness, common to most mental health training programs, assists with lessening stigma towards adults with mental illness. Another possibility is that those who are drawn to helping professions (counseling, social work, and psychology) already have less stigma towards adults with mental illness upon entering into a mental health program.

Research Question 3

Research question 3 examined factors that might impact mental health professionals' attitudes toward mental illness, namely professional licensure status and clinical supervision. This question investigated differences in attitudes toward mental illness between mental health professionals who hold a professional license and those

who do not hold a professional license and those who are receiving clinical supervision and those who are not receiving clinical supervision. It was hypothesized that there would be no main effects based on licensure status and supervision status. The question considered the effect of licensure and clinical supervision on attitudes toward mental illness among mental health professionals, as well as an interaction effect between licensure status and clinical supervision. Because of a small sample of professionals who did not hold a professional license (n = 1), this factor was taken out of the research question. After this change to research question 3 due to sampling, only clinical supervision and its effect on attitudes towards mental illness was explored.

An interesting result that emerged from this analysis was the significant difference between professionals who were receiving clinical supervision and those who were not F (4, 64) = 2.10, $p < .05$. Post-hoc univariate analyses found that this difference between groups was found on the *Benevolence* subscale. Mental health professionals who were receiving clinical supervision had higher mean scores on *Benevolence* than professionals who were not receiving clinical supervision (M = 4.46, SD = .345 vs. M = 4.21, SD = .371).

Clinical supervision had not previously been explored in the literature as it related to attitudes towards adults with mental illness. This finding suggested that receiving clinical supervision is an important component of professional work once a mental health professional is in the mental health field. Since previous literature (Cohen, 1990; Minkoff, 1987; Mirabi et al., 1985) indicated that many mental health professionals feel hopeless or helpless and have negative attitudes towards adults with mental illness in

order to cope with and protect themselves from the challenges of working with adults with mental illness, clinical supervision might serve as an opportunity to give mental health professionals needed support and assist with lessening mental illness stigma. In particular, clinical supervision appears to assist with increasing *Benevolence*, or more kindly, positive attitudes towards adults with mental illness, so that being supervised while in the mental health field is associated with more favorable attitudes among mental health professionals toward mental illness.

Research Question 4

Research Question 4 was designed to investigate how years of experience, current clinical supervision, licensure, and professional orientation would account for variance in mental health professionals' attitudes toward mental illness. It was hypothesized that years of experience, current clinical supervision, licensure, and professional orientation would account for a significant portion of the variance in attitudes toward mental illness. Licensure status was left out of the analysis since there were unequal groups, with only one professional not having a professional license.

Hypothesis 4 was partially supported. Current clinical supervision (receiving clinical supervision) accounted for a significant portion of the variance on the *Benevolence* subscale, $R^2 = .072$, $F\ (2, 68) = 3.64$, $p = .032$. None of the other factors (years of experience, giving clinical supervision, or professional orientation) accounted for a significant portion of the variance on any subscale. Although statistically significant, *Benevolence* had a small effect size ($\eta^2 = .072$), accounting for approximately 7.2% of the variance in attitudes toward mental illness. Similarly, the predictors

accounted for limited amounts of variance in the other subscales, including *Authoritarianism* ($\eta^2 = .026$), *Social Restrictiveness* ($\eta^2 = .021$), and *Community Mental Health Ideology* ($\eta^2 = .022$). This highlights the importance, as does the findings for research question 3, of clinical supervision for mental health professionals' attitudes towards adults with mental illness. Clinical supervision might be an opportunity to give mental health professionals needed guidance and support while working with adults with mental illness. In particular, clinical supervision might assist with increasing more positive attitudes towards adults with mental illness, since those who were receiving clinical supervision had higher mean scores on the *Benevolence* subscale. Other factors, such as years of experience in the mental health field, giving supervision, and professional orientation do not appear to assist with increasing more positive attitudes or decreasing negative attitudes towards adults with mental illness.

Research Question 5

Although social distance and attitudes towards mental illness had been discussed recently in the literature (Link et al., 2004; Gureje et al., 2005), research question 5 explored both the relationship between attitudes and social distance toward adults with mental illness and the psychometric properties of a social distance scale. Previous researchers had not reported psychometric data on the social distance scale. The reliability analysis suggested that the social distance score had acceptable evidence of internal consistency with an alpha of .81.

All participants were analyzed as one group in order to look at the overall relationship between the CAMI subscale and the Social Distance Scale. It was

hypothesized that there would be a significant negative relationship between the *Authoritarianism* and *Social Restrictiveness* subscales of the CAMI and Social Distance and a significant positive correlation between *Community Mental Health Ideology* and *Benevolence* subscales and social distance toward adults with mental illness. This is because higher social distance scores indicate *less* social distance while higher mean scores on the CAMI indicate *more* of each attitude.

Hypothesis 5 was fully supported. There was a significant negative relationship between social distance and *Authoritarianism* r (186) = -.524, $p < .01$ and social distance and *Social Restrictiveness* r (186) = -.638, $p < .01$. There was a significant positive relationship between social distance and *Benevolence* r (186) = .513, $p < .01$ and social distance and *Community Mental Health Ideology* r (186) = .598, $p < .01$. Further, the Social Distance Scale demonstrated sufficient evidence of internal consistency ($\alpha = .81$).

This implies that social distance, or proximity, to adults with mental illness, is related to attitudes. For example, if a person has more positive attitudes towards adults with mental illness, he or she will tend to be more comfortable to work at the same place of employment or more easily maintain a friendship. Since authors (Link et al., 2001; Perlick et al., 2001) have indicated that adults with mental illness suffer many consequences from being diagnosed with a mental illness such as secrecy and shame, poor social adaptation, and lower self-esteem, having others in the population requiring less social distance and more positive attitudes might help with these negative consequences. This study did not look at different types of professionals and

professionals in-training, however, to investigate differences in social distance and attitudes.

Potential Limitations

Despite precautions taken to minimize threats to the internal and external validity of the study, there are several noteworthy limitations that potentially impacted the validity of the current study. Threats to internal validity included instrumentation considerations, namely the psychometric properties of the CAMI, self report research, and the breadth and depth of the definition of mental illness. There was also limited power in one subgroup of mental health professionals in-training due to a lower than expected response rate. The counseling student group (n = 17) might have impacted results, so that a larger counseling subgroup might have resulted in different outcomes. Threats to external validity included a history threat and a sampling frame that was limited to a narrow geographical region.

First, instrumentation threats existed. The psychometric properties of the CAMI (Taylor & Dear, 1981) were acceptable for only three of the four subscales. The original researchers (Taylor & Dear, 1981) found acceptable evidence of internal consistency for the *Community Mental Health Ideology* (α= .88), *Social Restrictiveness* (α= .80), and *Benevolence* (α= .76) subscales. The *Authoritarianism* subscale, however, has not been found to be as psychometrically sound (α= .68). Alpha coefficients for this study were similar, *Community Mental Health Ideology* (α= .86), *Social Restrictiveness* (α= .80), *Benevolence* (α= .81), and *Authoritarianism* (α= .62). The *Authoritarianism* scale's low coefficient raises concern and results related to this subscale must be interpreted with

caution. In particular, results from research question 1 that suggested that status (mental health versus non-mental health) had an effect on *Authoritarianism* attitudes must be viewed within the context of this psychometric limitation. Although the CAMI is the most psychometrically sound instrument in the literature for measuring attitudes towards mental illness, this limitation may have impacted the results of this study.

Students and professionals were using a self-report measure, which is by nature susceptible to bias (Heppner et al., 1999). Participants might have felt reluctant to answer the questionnaire in an honest fashion and answered in a more favorable manner. The topic is a sensitive one since it is looking at attitudes towards mental illness and social desirability may have affected responses. To protect against socially desirable responses, the Marlowe-Crowne Social Desirability Scale (Crowne & Marlowe, 1960) was used. It should be noted, however, that many of the participants were mental health professionals and professionals in-training, who might have been familiar with the Marlowe-Crowne scale. It is unknown how this might have impacted their responses on this instrument. Two participants, in particular, noted on the questionnaire that they recognized and were familiar with the Marlowe-Crowne Social Desirability Scale questions as a validity measure.

Another possible threat to internal validity was the definition of mental illness. Although the CAMI provided a definition of mental illness, different understandings of what constituted a mental illness were still present in this study. An open-ended question at the end of the instrument asked participants if they were thinking of specific mental illness as they took the survey. Participants' responses were quite varied, ranging from

mild depression and anxiety to schizophrenia and sexual offenders. Many commented that it was difficult to answer the questions on the CAMI due to the breadth and depth of mental illness. Some stated that their answers differed with varying levels of severity of mental illness. Attitudes towards mental illness might have been different for some participants, depending on the severity of mental illness they were considering while taking the inventory. Differences in attitudes depending on the mental illness could not be explored in this study, however, since the CAMI and Social Distance Scale asked only about an "adult with mental illness." This seems a limitation inherent in the stigma research.

Threats to the external validity of this study included a history threat and a sampling frame that was limited to a narrow geographical region. With recent incidents that have occurred involving mental illness and violent acts on college campuses in the U.S., participants may have felt differently at the time of participation than they did before these incidents. Heightened awareness about the topic of mental illness might influence some participants to respond in a less favorable way, particularly related to social distance, while others might have responded more favorably due to the recent incidents. Also, all participants were pooled from the state of North Carolina. These participants might differ from professionals and trainees pooled from a nationwide sample. In addition to geographic considerations, students were pooled from a limited number of different training programs. Training programs certainly vary due to factors such as faculty professional identity, teaching style, and overall climate of the training program. These considerations might have limited the generalizability of the results.

Implications

The implications of this study impact mental health professionals in-training, mental health professionals, and mental health educators. Implications also affect non mental health professionals in-training and professionals. Discussion of the implications is organized by research question. Research questions 1 and 2 are discussed together. Questions 3-5 are discussed separately.

Research Questions 1& 2

Research questions 1 and 2 explored the effects of status, level, and professional orientation of mental health professionals in-training, mental health professionals, non mental health professionals in -training, and non mental health professionals. Professional orientation was of particular interest in research question 2. Since professional counselors come from distinct training programs that emphasize developmental perspectives and strength-based orientations (Ivey & Ivey, 1998; Ivey et al., 2005; Ivey & Van Hesteren, 1990), this study investigated stigmatizing attitudes of a variety of mental health professionals including professional counselors. If there were noteworthy differences in the ways in which professional counselors viewed adults with mental illness, for example, results could inform professional counselors and counselor educators and serve as an indication that counselor training is indeed unique in the way that professional counselors view clients, as previous literature had suggested (Ivey & Ivey, 1998; Ivey et al., 2005; Ivey & Van Hesteren, 1990).

Despite theoretical differences in counselor training, there were no differences in attitudes of professional counselors and counselor trainees when compared to those in the

social work and psychology fields. This might suggest that although wellness and strength-based perspectives are unique to counselors, this theoretical framework does not manifest itself in different levels of stigma towards adults with mental illness.

Counselor educators might use this information and include other components in DSM-IV-TR, community counseling, or multiculturalism courses. In a DSM-IV-TR course, for example, a practicum or contact experience involving adults with mental illness in order to expose students to this population might be beneficial to students. Requiring that students volunteer at a community agency or homeless shelter in order to meet clients diagnosed with particular disorders might assist with attitudes. This exposure, along with strength-based theoretical perspectives, might assist counselors in-training with lessening stigma towards adults with mental illness.

Similarly, in a multiculturalism class, instructors can include adults with mental illness as one of the minority groups discussed in the course. This will encourage students to conceptualize adults with mental illness as a marginalized group suffering from stigma, stereotypes, and negative consequences. Allowing students a safe environment to discuss attitudes, assumptions, and stereotypes associated with adults with mental illness will allow them the opportunity to reflect on these feelings and thoughts with an ultimate goal of reducing stigmatizing attitudes.

The encouraging implications from results of research questions 1 and 2 for mental health educators are that mental health trainees and professionals as a group had less stigmatizing attitudes than those not associated with the mental health field. This

implies that mental health educators are already including course content and training that assists with attitudes towards adults with mental illness.

Results of research questions 1 and 2 also suggested that non mental health trainees and professionals had more stigmatizing attitudes than those associated with the mental health field. This implies that members of the general population still hold attitudes associated with mental illness that might result in internal and external consequences for adults with mental illness such as secrecy and shame, poor social adaptation, and low self-esteem (Link et al., 2001; Perlick et al., 2001). Mental health trainees and professionals can advocate for adults with mental illness in order to lessen mental illness stigma. These messages can be shared with the general population, those not associated with the mental health field, through groups such as the National Alliance for the Mentally Ill, the National Mental Health Association, and the World Health Organization.

Research Question 3

This question considered the effect of licensure and clinical supervision on attitudes toward mental illness among mental health professionals, as well as an interaction effect between licensure status and clinical supervision. Because of a small sample of professionals who did not hold a professional license (n = 1), this factor was taken out of the research question. After this change to research question 3 due to sampling, only clinical supervision and its effect on attitudes towards mental illness was explored. A significant difference was found for professionals who are receiving clinical supervision. The significant difference between the groups was found on one of the four

CAMI subscales, *Benevolence*. Clinical supervision, then, had a positive effect on attitudes towards mental illness.

It seems that clinical supervision for mental health professionals might serve as a valuable tool for support and coping for working with adults with mental illness. Mental health professionals who work in private practice, for example, might need to make supervision a part of their own routine and meet weekly or monthly with other mental health professionals who are in such a setting. Similarly, mental health professionals in community agencies might advocate for agency standards to include clinical supervision as part of a team meeting or other routine practice. For mental health educators, the importance of clinical supervision during clinical practice can be stressed while trainees are still in mental health training programs so that mental health professionals are entering into the field with this knowledge and training. Educators might also highlight and demonstrate various types of supervision formats such as group, triadic, or individual so that trainees are familiar with each type.

Finally, since supervision is part of most mental health training programs, trainees might have a chance during their degree programs to reflect on things such as attitudes, assumptions, and values towards adults with mental illness. Once trainees enter the mental health field, however, if clinical supervision is not a part of practice, then attitudes, assumptions, and values might not be explored. Based on this study's results, this type of reflection seems to assist with stigmatizing attitudes, thus suggesting that supervision is helpful to professionals as well as trainees.

Research Question 4

Length of time in the mental health field did not appear to effect professionals' attitudes towards adults with mental illness. Professionals who had clinical experience were not significantly different than trainees on attitudes toward mental illness. Similarly, giving supervision and professional orientation did not effect professionals' attitudes towards adults with mental illness. Current clinical supervision (receiving clinical supervision), however, accounted for a significant portion of the variance on the *Benevolence* subscale, $R^2 = .072$, $F\ (2, 68) = 3.64$, $p = .032$. This is consistent with results of research question 3 which suggested that clinical supervision affected mean scores on the *Benevolence* subscale.

Mental health professionals should advocate for the inclusion of supervision in their workplace. Educators who are training mental health professionals can stress the importance of clinical supervision to trainees preparing to enter the field and include supervision as part of mental health training. Also, mental health professionals might monitor how much supervision they are giving verses how much they are receiving themselves. Since many mental health professionals provide supervision to mental health trainees or those new to the field who are working towards becoming professionally licensed, professionals might find that they are giving supervision and not receiving any themselves. Similarly, length of time in the mental health field does not seem to effect attitudes towards adults with mental illness. These factors might be less important than receiving supervision for reducing mental illness stigma.

Research Question 5

Implications for research question 5 are related to the relationship between attitudes and social distance toward adults with mental illness. It seems that attitudes towards mental illness and social distance towards adults with mental illness are related. In this study, scores on the more negative attitude subscale of the CAMI, such as *Authoritarianism* and *Social Restrictiveness* were related to more social distance, while more positive attitudes on the CAMI such as *Benevolence* and *Community Mental Health Ideology* were related to less social distance. Mental health professionals of any type can begin to consider social distance as it relates to adults with mental illness. Similarly, mental health educators can include coursework and training about social distance in training programs. Such coursework and training might encourage trainees to explore their attitudes about proximity and closeness in relation to adults with mental illness. Because the professional literature makes arguments both for education and exposure as reducing stigmatization and social distance, educators might wish to expose students to persons with a range of mental illness during their training program. This notion of social distance might serve as an important element in raising awareness about values, stereotypes, and assumptions when preparing mental health professionals to begin a career in a mental health field.

Recommendations for Future Research

Recommendations for research are related to attitudes and social distance of mental health professionals, mental health professionals in-training, non mental health professionals and professional in-training towards adults with mental illness. Particular

attention is paid to instrumentation as well as professional orientation and clinical supervision.

Instrumentation

Although the CAMI is the strongest instrument to date for measuring attitudes towards mental illness, there are some noteworthy recommendations for future research related to this measure. First, the *Authoritarianism* subscale did not demonstrate sufficient internal consistency. This is consistent with previous findings and calls for this subscale to be reexamined and perhaps modified. Future researchers might need to investigate more closely the efficacy of this subscale. Next, while most (Cohen & Struening, 1962; Murray & Steffen, 1999; Penny et al., 2001) agree that the *Benevolence* subscale is a more positive attitude towards adults with mental illness, some (Bairan & Farnsworth, 1989) have questioned whether or not high scores on *Benevolence* should be considered favorable. Since this attitude is described as warm and kindly but also sympathetic and paternalistic, there is debate over whether or not this is favorable and desirable.

This discrepancy questions how best to interpret this subscale of the CAMI, since some might consider higher scores to be a favorable attitude while others might not. Future research might look more closely at this attitude in order to understand how best to interpret high and low scores. Another possibility is that the construct is curvilinear rather than linear, with extreme scores on either end being less desirable. This would have important implications for assessment of this construct.

Finally, the CAMI measures attitudes towards a wide variety of mental illnesses, thus making it difficult to consider what mental illness a participant is considering when answering questions on the instrument. Future research might include narrowing the CAMI by specifying a type of mental illness, for example unipolar depression, so that participants know toward which mental illness the instrument is measuring attitudes. Finally, the language of the CAMI was updated for this study so that language such as "the mentally ill" was modified to read "adults with mental illness." Future studies that use the instrument might consider this change in order to update the outdated terminology and reduce pathologizing and non-humanistic language in the CAMI.

In addition to future research directions related to the CAMI, there are several considerations for research related to social distance. First, this study served as a way to provide a preliminary analysis of reliability evidence for the Social Distance Scale (Gureje et al., 2005). Although the scale had been used in previous studies, no psychometric properties had been reported. This study provided evidence of reliability ($\alpha = .81$) that can be used in future research.

Also, this study looked at social distance attitudes of participants as one group in order to explore the relationship social distance had with attitudes towards mental illness. Future research studies can look more closely at various groups of professionals and their social distance attitudes based on a variety of factors to more fully understand the social distance construct. For example, professional orientation might be explored as it relates to social distance. Other factors such as receiving clinical supervision, giving clinical

supervision, licensure status, or length of time in the field might also be explored as they relate to social distance.

Professional Orientation and Clinical Supervision

Although this study intended to investigate differences in attitudes towards adults with mental illness according to professional orientation, no difference was found between the groups. This might have been due to a limited number of participants in each subgroup, particularly counseling professionals in-training (n = 17). Future research studies might focus solely on mental health trainees rather than professionals and trainees, with an aim of increasing within group sample sizes. Future research might examine mental health trainees before and after exposure to or training on adults with mental illness in order to explore attitudes related to mental illness in ways other than the use of self-report data.

Another direction for future research might be exploring whether or not mental health trainees already hold less stigma than the general population before starting a mental health training program. While previous studies explored attitudes towards mental illness before and after a single course during mental health training, thus assuming attitude changes were a result of the course, future research might survey students at the beginning of the training program, before starting any coursework, and at the end of training, in order to explore attitudes over time. If attitudes remain the same, this might imply that mental health students naturally possess less stigma and are drawn to helping professions. If this were the case, mental health training and coursework might not be as much of a contributor to lessening mental illness stigma as previously assumed.

Since clinical supervision status had an effect on benevolent attitudes towards adults with mental illness, future research might look more closely at how supervision impacts such attitudes. Group, triadic, or individual supervision, for example, might have different effects on attitudes towards adults with mental illness. In addition, whether or not the professional has had clinical supervision at all, or how often, during her or his career might be a related direction for future research, since this study only asked whether or not participants were receiving current clinical supervision.

Conclusion

The major purpose of this study was to investigate attitudes of mental health professionals, mental health professionals in-training, non mental health professionals and non mental health professionals in-training towards adults with mental illness. Factors such as professional orientation, licensure and supervision status, and length of time in the mental health field were explored as they related to attitudes towards mental illness. In addition, social distance attitudes were explored in order to investigate whether social distance was related to attitudes towards adults with mental illness.

The findings from the study provide empirical support for differences in attitudes towards adults with mental illness between mental health professionals and trainees and non mental health professionals and trainees, supporting the positive effect of mental health training and experience on stigmatizing attitudes. While there was no empirical support for differences in attitudes depending on professional orientation, differences did exist for professionals who receive clinical supervision, suggesting the positive effects of clinical supervision on attitudes towards adults with mental illness. In addition, this study

highlighted a relationship between social distance and attitudes towards adults with mental illness. Finally, empirical support was found for the internal consistency of a social distance measure aimed at measuring social distance as it relates to adults with mental illness.

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Appendix A: Community Attitudes Toward the Mentally Ill

The following statements express various opinions about mental illness and the mentally ill. Mental illnesses are medical conditions that disrupt a person's thinking, feeling, mood, ability to relate to others, and daily functioning. Please circle the response that most accurately describes your reaction to each statement. It's your first reaction, which is important. Don't be concerned if some statements seem similar to ones you have previously answered. Please be sure to answer all statements.

a. As soon as a person shows signs of mental disturbance, he should be hospitalized.

SA A N D SD

b. More tax money should be spent on the care and treatment of adults with mental illness.

SA A N D SD

c. An adult with mental illness should be isolated from the rest of the community.

SA A N D SD

d. The best therapy for many adults with mental illness is to be part of a normal community.

SA A N D SD

e. Mental illness is an illness like any other.

SA A N D SD

f. Adults with mental illness are a burden on society.

SA A N D SD

g. Adults with mental illness are far less of a danger than most people suppose.

SA A N D SD

h. Locating mental health facilities in a residential area downgrades the neighborhood.

SA A N D SD

i. There is something about adults with mental illness that makes it easy to tell them from normal people.

SA A N D SD

j. Adults with mental illness have for too long been the subject of ridicule.

SA A N D SD

k. A woman would be foolish to marry a man who has suffered from mental illness, even though he seems fully recovered.

SA A N D SD

l. As far as possible mental health services should be provided through community-based facilities.

SA A N D SD

m. Less emphasis should be placed on protecting the public from adults with mental illness.

SA A N D SD

n. Increased spending on mental health services is a waste of tax dollars.

SA A N D SD

o. No one has the right to exclude adults with mental illness from their neighborhood.

SA A N D SD

p. Having adults with mental illness living within residential neighborhoods might be good therapy, but the risks to residents are too great.

SA A N D SD

q. Adults with mental illness need the same kind of control and discipline as a young child.

SA A N D SD

r. We need to adopt a far more tolerant attitude toward adults with mental illness in our society.

SA A N D SD

s. I would not want to live next door to someone who has been mentally ill.

SA A N D SD

t. Residents should accept the location of mental health facilities in their neighborhood to serve the needs of the local community.

SA A N D SD

u. Adults with mental illness should not be treated as outcasts of society.

SA A N D SD

v. There are sufficient existing services for adults with mental illness.

SA A N D SD

w. Adults with mental illness should be encouraged to assume the responsibilities of normal life.

SA A N D SD

x. Local residents have good reason to resist the location of mental health services in their neighborhood.

SA A N D SD

y. The best way to handle adults with mental illness is to keep them behind locked doors.

SA A N D SD

z. Our mental hospitals seem more like prisons than like places where adults with mental illness can be cared for.

SA A N D SD

aa. Anyone with a history of mental illness should be excluded from taking public office.

SA A N D SD

bb. Locating mental health services in residential neighborhoods does not endanger local residents.

SA A N D SD

cc. Mental hospitals are an outdated means of treating adults with mental illness.

SA A N D SD

dd. Adults with mental illness do not deserve our sympathy.

SA A N D SD

ee. Adults with mental illness should not be denied their individual rights.

SA A N D SD

ff. Mental health facilities should be kept out of residential neighborhoods.

SA A N D SD

gg. One of the main causes of mental illness is a lack of self-discipline and will power.

SA A N D SD

hh. We have the responsibility to provide the best possible care for adults with mental illness.

SA A N D SD

ii. Adults with mental illness should not be given any responsibility.

SA A N D SD

jj. Residents have nothing to fear from people coming into their neighborhood to obtain mental health services.

SA A N D SD

kk. Virtually anyone can become mentally ill.

SA A N D SD

ll. It is best to avoid anyone who has mental problems.

SA A N D SD

mm. Most women who were once patients in a mental hospital can be trusted as baby sitters.

SA A N D SD

nn. It is frightening to think of people with mental problems living in residential neighborhoods.

SA A N D

Appendix B: Social Distance Scale

Please respond to the following questions by indicating: definitely (1), probably (2), probably not (3), or definitely not (4).

1. Would you feel afraid to have a conversation with someone who has a mental illness?
2. Would you be upset or disturbed about working at the same job with someone who has a mental illness?
3. Would you be able to maintain a friendship with someone who has a mental illness?
4. Would you feel upset or disturbed about rooming with someone who has a mental illness?
5. Would you feel ashamed if people knew that someone in your family has been diagnosed with a mental illness?
6. Would you marry someone with a mental illness?
7. Were you thinking of specific mental disorders as you provided responses to these questions ?
8. If yes, please indicate which mental disorders you were thinking of as you provided responses.

Appendix C: Marlowe-Crowne Social Desirability Scale

Listed below are a number of statements concerning personal attitudes and traits. Read each item and decide whether the statement is true or false as it pertains to you personally.

1. Before voting I thoroughly investigate the qualities of all the candidates.
True False

2. I never hesitate to go out of my way to help someone in trouble.
True False

3. It is sometimes hard for me to go on with my work if I am not encouraged.
True False

4. I have never intensely disliked someone.
True False

5. On occasion I have had doubts about my ability to succeed in life.
True False

6. I sometimes feel resentful when I don't get my way.
True False

7. I am always careful about my manner of dress.
True False

8. My table manners at home are as good as when I eat out in a restaurant.
True False

9. If I could get into a movie without paying and be sure I was not seen
I would probably do it.
True False

10. On a few occasions, I have given up doing something because
I thought too little of my ability.
True False

11. I like to gossip at times.
True False

12. There have been times when I felt like rebelling against people in authority
even thought I knew they were right.
True False

13. No matter who I'm talking to, I'm always a good listener.
True False
14. I can remember "playing sick" to get out of something.
True False

15. There have been occasions when I took advantage of someone.
True False

16. I'm always willing to admit it when I make a mistake.
True False

17. I always try to practice what I preach.
True False

18. I don't find it particularly difficult to get along with loud mouthed, obnoxious people.
True False

19. I sometimes try to get even rather than forgive and forget.
True False

20. When I don't know something I don't at all mind admitting it.
True False

21. I am always courteous, even to people who are disagreeable.
True False

22. At times I have really insisted on having things my own way.
True False

23. There have been occasions when I felt like smashing things.
True False

24. I would never think of letting someone else be punished for my wrong-doings.
True False

25. I never resented being asked to return a favor.
True False

26. I have never been irked when people expressed ideas very different from my own.
True False

27. I never make a long trip without checking the safety of my car.
True False

28. There have been times when I was quite jealous of the good fortune of others.
True False

29. I have almost never felt the urge to tell someone off.
True False

30. I am sometimes irritated by people who ask favors of me.
True False

31. I have never felt that I was punished without cause.
True False

32. I sometimes think when people have a misfortune they
only got what they deserved.
True False

33. I have never deliberately said something that hurt someone's feelings.
True False

Appendix D: Demographic Questionnaire for Professionals

Hello,
The following is a short survey to investigate your attitudes towards adults with mental illness. Please take a moment to fill out the following demographic questions before starting the survey.

1. What is your sex?

Female Male

2. How would you classify your race?

Caucasian/White
African American
Indigenous or Aboriginal Person
Asian/Pacific Islander
Hispanic
Latino
Multiracial
Other

3. What is your age?

21 years	30 years	39 years	48 years	57 years	More than 65
22 year	31 years	40 years	49 years	58 years	
23 years	32 years	41 years	50 years	59 years	
24 years	33 years	42 years	51 years	60 years	
25 years	34 years	43 years	52 years	61 years	
26 years	35 years	44 years	53 years	62 years	
27 years	36 years	45 years	54 years	63 years	
28 years	37 years	46 years	55 years	64 years	
29 years	38 years	47 years	56 years	65 years	

4. How many years have you been working in the mental health field?

Less than 1 year	9 years	18years
1 year	10 years	19 years
2 years	11 years	20 years
3 years	12 years	More than 20
4 years	13 years	
5 years	14 years	
6 years	15 years	
7 years	16 years	

8 years 17 years

5. What is the highest degree you hold?

High school
diploma
Undergraduate
degree
Masters degree
Doctoral
degree

6. What kind of mental health professional are you?

Counselor
Social worker
Psychologist
Other

7. Do you hold a professional license?

Yes
No

8. If yes, which professional license do you hold?

LPC
LMFT
LCSW
Licensed
psychologist
Other (please
list)

9. Are you currently *receiving* clinical supervision?

Yes
No

10. Do you/have you ever *provided* clinical supervision?

Yes
No

11. What type of mental health setting do you work in?

Adult outpatient
Adult inpatient
Child/adolescent outpatient
Child/adolescent inpatient
Substance Abuse
Family services
Other (please list)

12. How has/did your training in your terminal degree training program influence your attitudes toward mental illness?

13. How has your professional contact and experience with people diagnosed with a mental illness influence your attitudes toward mental illness?

14. Aside from professional education, contact, and experience, what people or experiences have influenced your attitudes toward mental illness?

Appendix E: Demographic Questionnaire for Students

Hello,

The following is a short survey to investigate your attitudes towards adults with mental illness. Please take a moment to fill out the following demographic questions before starting the survey.

1. What is your sex?

Female Male

2. How would you classify your race?

Caucasian/White
African American
Indigenous or Aboriginal Person
Asian/Pacific Islander
Hispanic
Latino
Multiracial
Other

3. What is your age?

21 years	30 years	39 years	48 years	57 years	More than 65
22 year	31 years	40 years	49 years	58 years	
23 years	32 years	41 years	50 years	59 years	
24 years	33 years	42 years	51 years	60 years	
25 years	34 years	43 years	52 years	61 years	
26 years	35 years	44 years	53 years	62 years	
27 years	36 years	45 years	54 years	63 years	
28 years	37 years	46 years	55 years	64 years	
29 years	38 years	47 years	56 years	65 years	

4. Which best describes the college or department that your current degree program is housed in?

Arts	Other, please list
sciences	
math	
business	
education	

nursing

5. What is the highest degree you hold?

High school
diploma
Undergraduate
degree
Masters degree
Doctoral
degree

6. Are you currently a psychology, counseling, or social work student?

Yes No

7. How has/did your training in your terminal degree training program influence your attitudes toward mental illness?

8. How has your professional contact and experience with people diagnosed with a mental illness influence your attitudes toward mental illness?

9. Aside from professional education, contact, and experience, what people or experiences have influenced your attitudes toward mental illness?

**For psychology, counseling and social work students:

10. If you are a psychology, counseling, or SW student, are you currently enrolled in an internship?

Yes No

11. If you are in an internship, what type of setting are you working in for your internship?

Adult outpatient

Adult inpatient
Child/adolescent outpatient
Child/adolescent inpatient
Substance Abuse
Family services
Other (please list)

12. Are you currently *receiving* clinical supervision?

Yes No

13. Is yes, who *provides* you with clinical supervision?

Counselor
Social worker
Psychologist
Other (please list)
Not sure

Appendix F: Pilot Study RQ1 MANOVA Results

Differences in Attitudes Toward Mental Illness Between Mental Health Professionals In-training, Non mental Health Professionals In-training, and Experienced Mental Health Professionals.

Source	*DV*	*SS*	*df*	*MS*	*F*	*Sig*
Prof Cat						
	Authoritarian	.80	2	.40	4.11	.02*
	Benevolence	2.40	2	1.2	8.08	.001*
	Social Restrict.	1.43	2	.72	4.47	.014*
	Community MH	.53	2	.26	1.45	.242

Appendix G: Pilot Study RQ1 post hoc Results

DV		*(I) profcat*	*(J) profcat*	*Mean Difference*	*Std. Error*	*Sig.*	*Lower*	*Upper*
Authoritarianism	Tukey HSD	1.00	2.00	-.2536(*)	.08846	.014	-.4648	-.0424
			3.00	-.1917	.11917	.248	-.4762	.0929
		2.00	1.00	.2536(*)	.08846	.014	.0424	.4648
			3.00	.0619	.09927	.808	-.1751	2989
		3.00	1.00	.1917	.11917	.248	-.0929	.4762
			2.00	-.0619	.09927	.808	-.2989	.1751
	Scheffe	1.00	2.00	-.2536(*)	.08846	.020	-.4742	-.0330
			3.00	-.1917	.11917	.280	-.4889	.1055
		2.00	1.00	.2536(*)	.08846	.020	.0330	.4742
			3.00	.0619	.09927	.824	-.1856	.3095
		3.00	1.00	.1917	.11917	.280	-.1055	.4889
			2.00	-.0619	.09927	.824	-.3095	.1856
	Bonferroni	1.00	2.00	-.2536(*)	.08846	.016	-.4698	-.0373
			3.00	-.1917	.11917	.335	-.4830	.0997
		2.00	1.00	.2536(*)	.08846	.016	.0373	.4698
			3.00	.0619	.09927	1.000	-.1808	.3046

		3.00	1.00	.1917	.11917	.335	-.0997	.4830
			2.00	-.0619	.09927	1.000	-.3046	.1808
Benevolence	Tukey HSD	1.00	2.00	.4205(*)	.10914	.001	.1600	.6811
			3.00	.1896	.14703	.405	-.1615	.5406
		2.00	1.00	-.4205(*)	.10914	.001	-.6811	-.1600
			3.00	-.2310	.12247	.149	-.5234	.0615
		3.00	1.00	-.1896	.14703	.405	-.5406	.1615
			2.00	.2310	.12247	.149	-.0615	.5234
	Scheffe	1.00	2.00	.4205(*)	.10914	.001	.1484	.6927
			3.00	.1896	.14703	.439	-.1771	.5562
		2.00	1.00	-.4205(*)	.10914	.001	-.6927	-.1484
			3.00	-.2310	.12247	.176	-.5364	.0745
		3.00	1.00	-.1896	.14703	.439	-.5562	.1771
			2.00	.2310	.12247	.176	-.0745	.5364
	Bonferroni	1.00	2.00	.4205(*)	.10914	.001	.1537	.6874
			3.00	.1896	.14703	.603	-.1699	.5490
		2.00	1.00	-.4205(*)	.10914	.001	-.6874	-.1537
			3.00	-.2310	.12247	.189	-.5304	.0685
		3.00	1.00	-.1896	.14703	.603	-.5490	.1699
			2.00	.2310	.12247	.189	-.0685	.5304
Socialrestrictive	Tukey HSD	1.00	2.00	-.3268(*)	.11342	.014	-.5976	-.0560
			3.00	-.3542	.15280	.059	-.7190	.0106

		2.00	1.00	.3268(*)	.11342	.014	.0560	.5976
			3.00	-.0274	.12728	.975	-.3313	.2765
		3.00	1.00	.3542	.15280	.059	-.0106	.7190
			2.00	.0274	.12728	.975	-.2765	.3313
	Scheffe	1.00	2.00	-.3268(*)	.11342	.019	-.6096	-.0439
			3.00	-.3542	.15280	.074	-.7352	.0269
		2.00	1.00	.3268(*)	.11342	.019	.0439	.6096
			3.00	-.0274	.12728	.977	-.3448	.2900
		3.00	1.00	.3542	.15280	.074	-.0269	.7352
			2.00	.0274	.12728	.977	-.2900	.3448
	Bonferroni	1.00	2.00	-.3268(*)	.11342	.015	-.6041	-.0495
			3.00	-.3542	.15280	.069	-.7277	.0194
		2.00	1.00	.3268(*)	.11342	.015	.0495	.6041
			3.00	-.0274	.12728	1.000	-.3385	.2838
		3.00	1.00	.3542	.15280	.069	-.0194	.7277
			2.00	.0274	.12728	1.000	-.2838	.3385
CommunityMH	Tukey HSD	1.00	2.00	.2054	.12104	.213	-.0836	.4944
			3.00	.1458	.16306	.645	-.2435	.5352
		2.00	1.00	-.2054	.12104	.213	-.4944	.0836
			3.00	-.0595	.13583	.900	-.3838	.2648
		3.00	1.00	-.1458	.16306	.645	-.5352	.2435
			2.00	.0595	.13583	.900	-.2648	.3838

Scheffe	1.00	2.00	.2054	.12104	.243	-.0965	.5072
		3.00	.1458	.16306	.672	-.2608	.5525
	2.00	1.00	-.2054	.12104	.243	-.5072	.0965
		3.00	-.0595	.13583	.909	-.3982	.2792
	3.00	1.00	-.1458	.16306	.672	-.5525	.2608
		2.00	.0595	.13583	.909	-.2792	.3982
Bonferroni	1.00	2.00	.2054	.12104	.281	-.0906	.5013
		3.00	.1458	.16306	1.000	-.2528	.5445
	2.00	1.00	-.2054	.12104	.281	-.5013	.0906
		3.00	-.0595	.13583	1.000	-.3916	.2725
	3.00	1.00	-.1458	.16306	1.000	-.5445	.2528
		2.00	.0595	.13583	1.000	-.2725	.3916

Based on observed means.

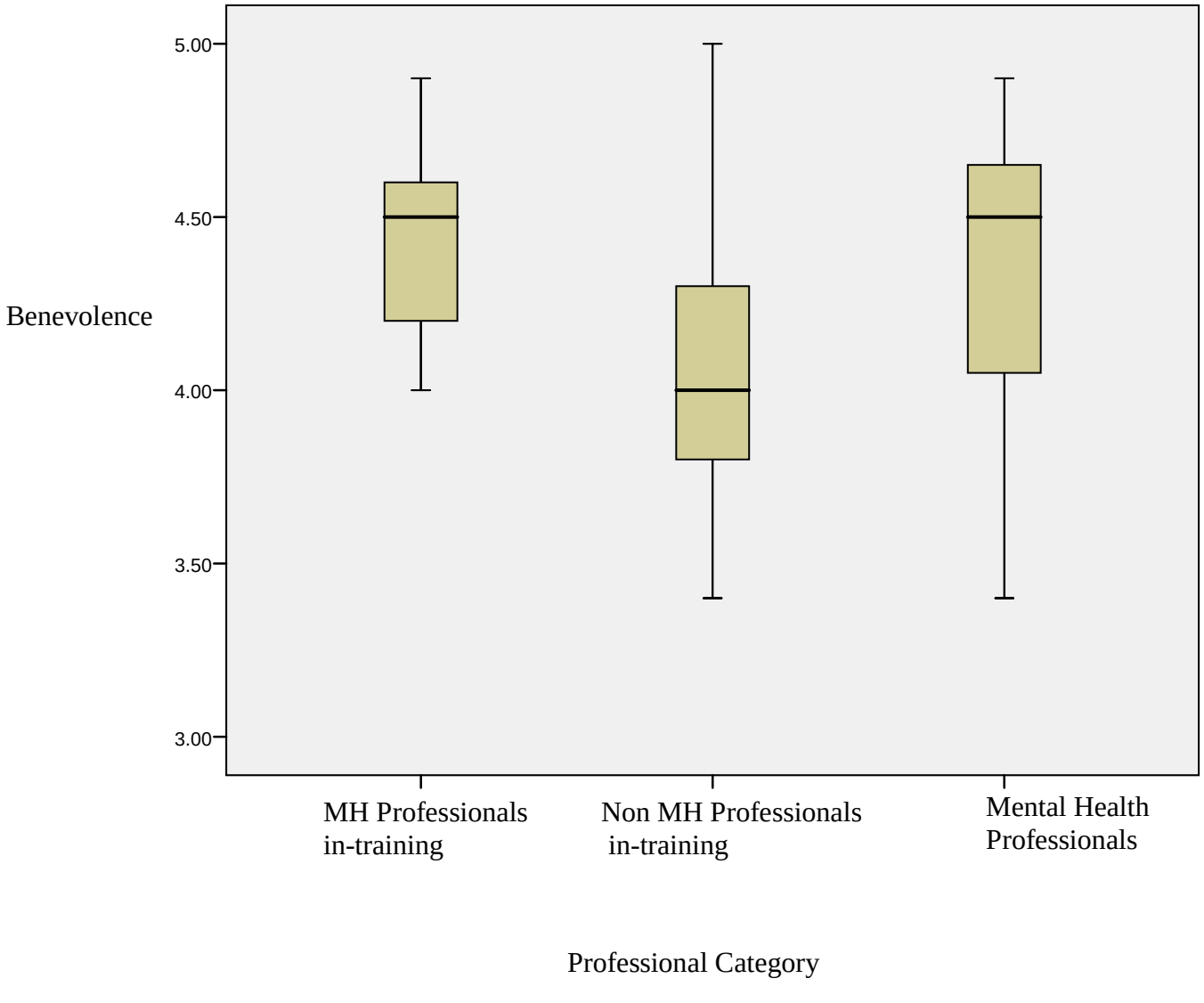
* The mean difference is significant at the .05 level.

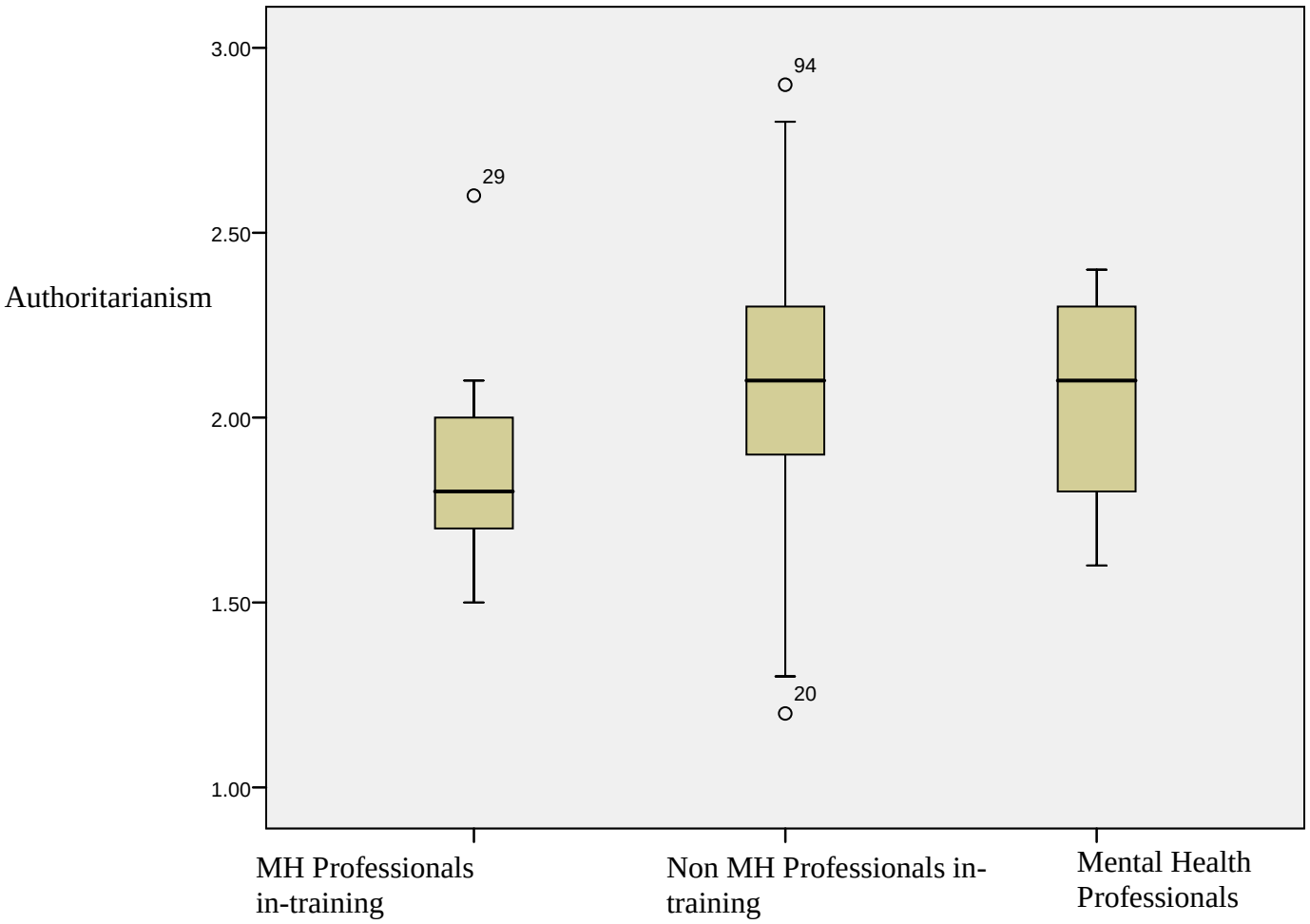
Appendix H: Pilot Study RQ1 Discriminant Analysis Results

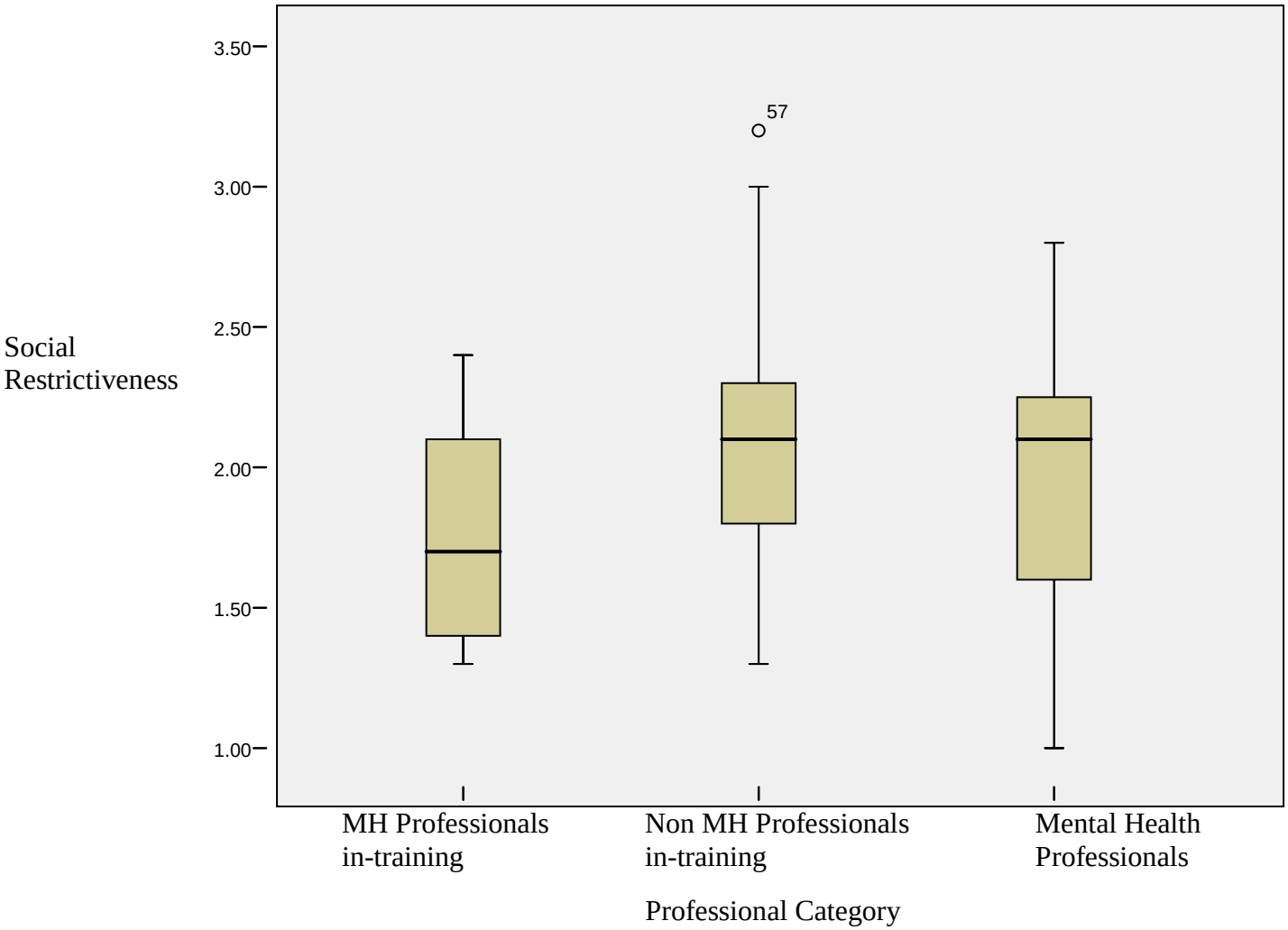
Pooled Within-Class Standardized Canonical Coefficients

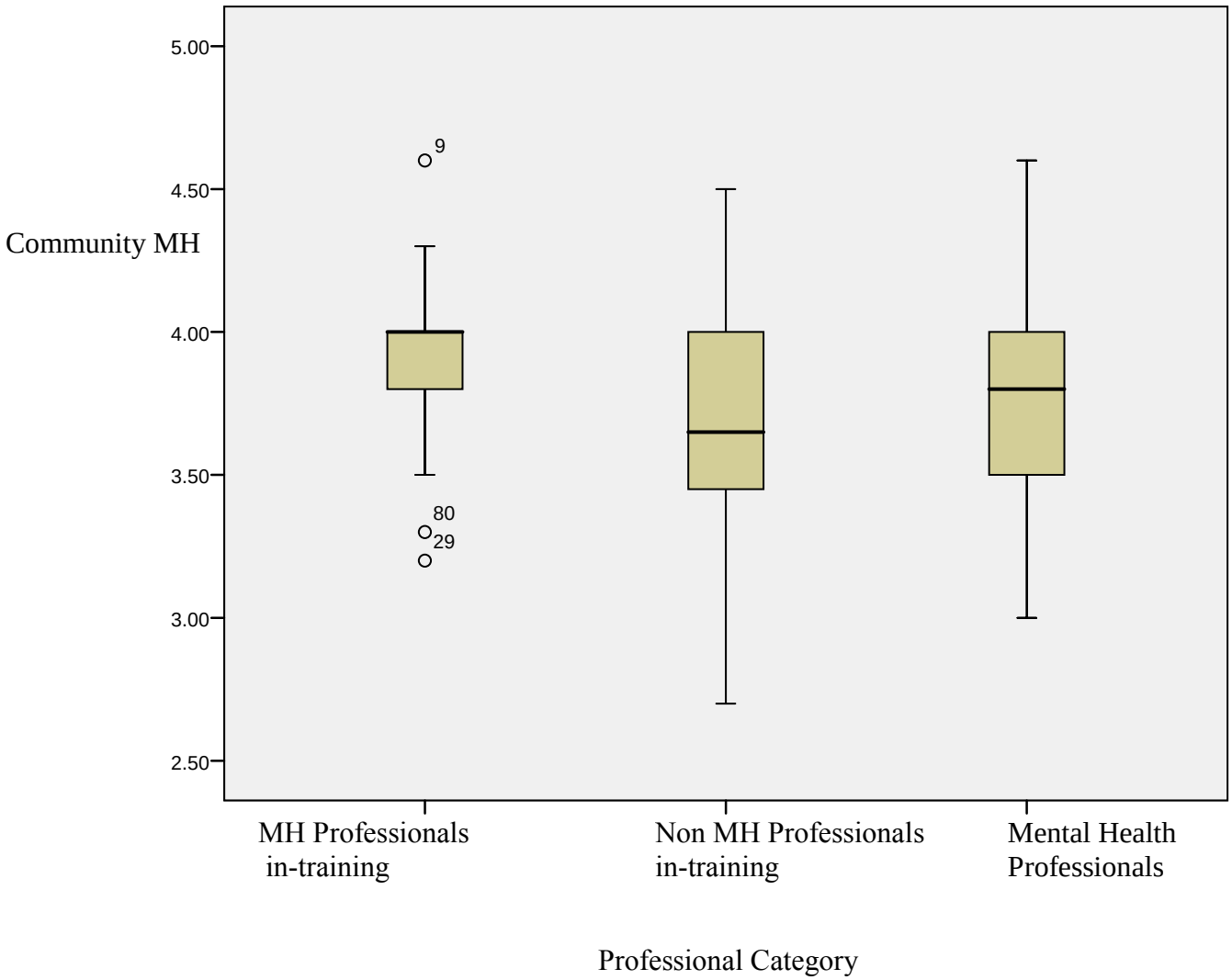
Variable	*Label*	*Can1*	*Can2*
Auth	Authoritarian	0.175127657	0.294443272
Benev	Benevolence	-0.835494251	0.846089628
Social	Social Restrict.	0.238378557	1.338735892
Community	Community MH	0.223084233	0.619266014

Appendix I: Pilot Study Boxplot of RQ1 Discriminant Analysis




Authoritarianism
3.00
2.50
2.00
1.50
1.00
94
29
20
MH Professionals in-training
Non MH Professionals in-training
Mental Health Professionals
Professional Category


Social Restrictiveness
3.50
3.00
2.50
2.00
1.50
1.00
57
MH Professionals in-training
Non MH Professionals in-training
Mental Health Professionals
Professional Category


5.00
4.50
4.00
3.50
3.00
2.50
Community MH
9
80
29
MH Professionals in-training
Non MH Professionals in-training
Mental Health Professionals
Professional Category

Appendix J: Pilot Study RQ 2 MANOVA Results

Differences in Attitudes Toward Mental Illness Between Trainees Based on Professionals Orientation (i.e., counseling, social work, and psychology)

Source	*DV*	*SS*	*df*	*MS*	*F*	*Sig*
MH Program						
	Authoritarian	.08	2	.04	.524	.60
	Benevolence	.36	2	.179	2.97	.087
	Social Restrict.	.01	2	.005	.038	.963
	Community MH	.15	2	.074	.681	.523

Appendix K: Pilot Study RQ 3 MANOVA Results

Differences in Attitudes Toward Mental Illness Between Mental Health Professionals Based on Professional Orientation (i.e., counseling, social work, and psychology)

Source	*DV*	*SS*	*df*	*MS*	*F*	*Sig*
Prof ID						
	Authoritarian	.02	2	.01	.097	.91
	Benevolence	.48	2	.242	.85	.46
	Social Restrict.	.26	2	.131	.732	.51
	Community MH	.73	2	.37	1.73	.23

Appendix L: Pilot Study RQ 4 MANOVA Results

Differences in Attitudes Toward Mental Illness Between Mental Health Professionals Who Hold a Professional License and Those Who Do Not Hold a Professional License

Source	*DV*	*SS*	*df*	*MS*	*F*	*Sig*
License						
	Authoritarian	.27	1	.27	4.16	.07
	Benevolence	.203	1	.203	.711	.42
	Social Restrict.	.250	1	.250	1.54	.24
	Community MH	.234	1	.234	.98	.35

Appendix M: Pilot Study RQ 5 MANOVA Results

Differences in Attitudes Toward Mental Illness Between Mental Health Professionals Who Are Receiving Clinical Supervision and Those Who Are Not Receiving Clinical Supervision

Source	*DV*	*SS*	*df*	*MS*	*F*	*Sig*
Supervision						
	Authoritarian	.203	1	.203	2.87	.121
	Benevolence	.340	1	.340	1.26	.289
	Social Restrict.	.010	1	.010	.054	.822
	Community MH	.000	1	.000	.001	.975

Appendix N: Pilot Study RQ 6 Regression Results

Amount of Variance in Attitudes Toward Mental Illness Explained by Years of Experience, Current Clinical Supervision, Licensure, and Discipline

Model	*B*	*t*	*Sig.*
Professional Experience	-.074	-.253	.807
Clinical Supervision	-.349	-1.09	.307
Licensure	.482	1.401	.199
Discipline	.458	1.58	.151

Note. Total R^2 = .48. Overall model was non significant. $F(4, 12) = 1.8$, $p > .05$.

Appendix O: Email soliciting participation

Hello _____:

I am writing to request your participation in a short survey to examine attitudes toward mental illness. I consider your response vital to the completion of this project and appreciate the time and effort this may require. If you agree to participate in the study, please visit the following address to take the questionnaire.

http://www.surveymonkey.com/s.aspx?sm=x2qPOnf8aST5xzzKjNOI2Q_3d_3d

Participation is voluntary and will require approximately 15 minutes of your time. You are free to exit the survey at anytime. There are no known potential risks to you as a participant and all efforts are being made to preserve anonymity of responses.

Thank you in advance for your willingness to contribute to research in the field of mental health. If you have any questions, please feel free to contact me at alsmi24@uncg.edu.

Sincerely,

Allison Smith

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Allison Smith, M.Ed, NCC
Doctoral Student
Counseling and Educational Development
University of North Carolina at Greensboro

Appendix P: Informed Consent

The University of North Carolina at Greensboro Consent To Act As A Human Participant

Project Title: An Investigation of Attitudes Towards Adults with Mental Illness Among Mental Health Professionals In-training, Non Mental Health Professionals In-training, Mental Health Professionals, and Non Mental Health Professionals

Project Director: Dr. Craig Cashwell and Allison Smith (doctoral student)

The purpose of this study is to explore attitudes towards mental illness You will be asked to respond to items via an online survey website. It is anticipated that this process will take approximately 15 minutes. There is no risk associated with this research. You may benefit from this study through the opportunity to reflect on your attitudes towards mental illness. The benefit to society is that this study will add to our knowledge about attitudes towards pople with mental illness.

It is important to the researcher that your responses remain confidential. Therefore, the researcher will request that Survey Monkey NOT attach your email or computer IP address to your survey responses - allowing your responses to this survey to remain anonymous. The data will be stored on the student researcher's computers and an external hard drive. All files will be password protected. The files will be maintained for 3 years following the closure of the project, at which point they will be erased. By indicating your agreement with this consent form, you agree that you understand the procedures and any risks and benefits involved in this research. You are also free to refuse to participate or to withdraw your consent to participate in this research at any time without penalty or prejudice; your participation is entirely voluntary. Your privacy will

be protected because you will not be identified by name as a participant in this project. The University of North Carolina at Greensboro Institutional Review Board, which ensures that research involving people follows federal regulations, has approved the research and this consent form. Questions regarding your rights as a participant in this project can be answered by calling Mr. Eric Allen at (336) 256-1482. Questions regarding the research itself will be answered by Dr. Craig Cashwell by calling 336-334-3427. Any new information that develops during the project will be provided to you if the information might affect your willingness to continue participation in the project. By indicating your agreement, you are affirming that you are 18 years of age or older and are agreeing to participate in the project described above. Please print a copy of this informed consent form for your records.