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The Relationship Between the Hearing Distressing Voices Simulation and Changes in Empathy Among Master’s Students in Counseling

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The Relationship Between the Hearing Distressing Voices Simulation and Changes in Empathy Among Master’s Students in Counseling

A Dissertation

Submitted to the Graduate Faculty of the University of New Orleans in partial fulfillment of the requirements for the degree of

Doctor of Philosophy in Counselor Education

by

Jeffrey Strozier
B.S. Louisiana State University in Shreveport, 2002
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May 2018
Dedication

For my husband, Jim. You are my strength, my inspiration, and the love of my life.
Acknowledgement

Thank you to all of the students who participated in this study. On the weekend or after a long day, you showed up to support this project. You are who made this possible.

Thank you to my doctoral colleagues who supported me during every step of the process. One of the amazing things about this journey is the wonderful, life long friends I have made. You are all awesome!

Thank you to faculty who gave me space in their class to recruit participants. Thank you to Drs. Watson, Ebrahim, and Williams who went above and beyond in helping with participant recruitment.

Thank you to Nancy Little. Whenever I need something you are always there, always supportive, and always willing to help. I appreciate you so very much!

Thank you to my committee. Dr. Herlihy, your mentorship has meant so much to me. You supported my ideas and allowed me space to grow. I am a better counselor, researcher, and teacher today because of you. Dr. Watson, thank you for your support and encouragement. You asked questions that challenged and made me think more deeply, and I am a better counselor educator for it. Dr. Bonis, thank you for your patience and dedication. For a year and a half, we spent every Thursday evening together in a quantitative stats class. On most nights I was the last student to leave, staying behind to work problems. You always stayed behind and patiently worked with me until I ‘got it.’ I am a better researcher because of you.

Thank you to mom and dad. You are both always supportive and loving. Whenever I was feeling down or frustrated you both were there to listen. I love you both.

Finally, thank you to my husband, Jim. You support, encourage, and love. You make me smile and bring me happiness. I love you.
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Abstract

The purpose of this study was to test the hypothesis that the hearing distressing voices simulation training, *Developing Empathy for the Lived Experience of Psychiatric Disability: A Simulation of Hearing Distressing Voices* (HDVS), developed by Patricia E. Deegan, Ph.D., will affect counseling students’ empathy for clients diagnosed with schizophrenia, as measured by the Jefferson Scale of Empathy – Health Professions Students version (JSE-HPS). The experimental design was a quasi-experimental, one-group, pre-test/ post-test, and the Jefferson Scale of Empathy – Health Professions Students version was used to measure empathy. A total of 55 participants were drawn from a convenience sample of master’s counseling students from CACREP-accredited programs in southern Louisiana and Chicago, Illinois. A two tailed, paired samples t-test revealed that there was a significant difference (p<.05) between pre-test empathy scores ($M=116.11$, $SD=9.76$) and post-test empathy scores ($M=121.85$, $SD=8.9$). This study suggests the HVDS is an effective tool to assist counseling students with developing empathy, decreasing stigmatizing attitudes, and avoiding disempowerment and marginalization within the counseling relationship.

*Keywords*: auditory hallucinations, empathy, hearing distressing voices training, schizophrenia, serious mental illness, stigma, recovery model, counseling students
THE RELATIONSHIP BETWEEN THE HEARING DISTRESSING VOICES SIMULATION AND EMPATHY AMONG MASTER’S STUDENTS IN COUNSELING

CHAPTER ONE

INTRODUCTION

In Chapter One, an introduction is provided to the investigation of the influence on students in a master’s degree program in counseling of a hearing distressing voices simulation training on empathy for clients diagnosed with schizophrenia. The background, purpose, conceptual framework, research question, and significance of the study are presented. Additionally, limitations, delimitations, and assumptions of the study are identified. Finally, definitions of terms relevant to the study are presented.

Background

People with schizophrenia, a severe mental illness, frequently experience stigma, which is discrimination based on negative stereotypes of individuals with serious mental illness. Research shows stigma contributes to feelings of worry and low self-esteem, and it leads individuals with serious mental illness to avoid revealing their illness to others (Dickerson, Sommerville, Origoni, Ringel, & Parente, 2002). This phenomenon is a barrier to treatment and contributes to a high percentage of individuals with serious mental illness who either do not engage in treatment or do not follow through with treatment (Corrigan, 2004; Cramer & Rosenbeck, 1998). The importance of treatment cannot be understated, as treatment can effectively reduce symptoms and assist clients with developing coping and daily living skills (Samalin, Garnier, Auclair, & Llorca, 2016; Shergill, Murray, & McGuire, 1998). Further,
untreated serious mental illness contributes to episodes of homeless and incarceration (Ford, 2015).

Mental health providers are not immune from having stigmatizing attitudes about individuals with mental illness. Several researchers have explored stigmatizing attitudes among helping professionals including psychologists, occupational therapists, and physical therapists, as well as students of varying professions including nursing, police, social work, and public health. These researchers found widespread stigmatizing attitudes and demonstrated that exposure to individuals with serious mental illness, along with training, improves these attitudes (Eack, Newhill, & Watson, 2012; Peer, Warnecke, Baum, & Goriczny, 2015; Svensson et al., 2014). No research in this area regarding counselors or counseling students was found.

The prevalence of stigmatizing attitudes within helping professionals and students in the helping professions towards those with schizophrenia indicates a lack of empathy (Webb et al., 2016). Results of previous studies have shown that activities to increase empathy result in decreased levels of stigma towards individuals with a mental health condition (Baston et al., 1997; Naylor et al., 2009).

**Purpose of the Study**

The purpose of this study was to test the hypothesis that the hearing distressing voices simulation training, *Developing Empathy for the Lived Experience of Psychiatric Disability: A Simulation of Hearing Distressing Voices* (HDVS), developed by Patricia E. Deegan, Ph.D., will affect counseling students’ empathy for clients diagnosed with schizophrenia, as measured by the Jefferson Scale of Empathy – Health Professions Students version (JSE-HPS). The dependent variable was defined as changes in empathy among the participants.
In 1957 Carl Rogers published his “Necessary and Sufficient Conditions of Therapeutic Personality Change” which described the six conditions that must be met in order for therapy to be effective (Rogers, 1957). Rogers offered what he termed as a “theory of therapy, personality and interpersonal relationships, as developed in the client-centered framework” (Rogers, 1957, p.95). This article changed the direction of the counseling field, and the tenets of empathy that he described are prevalent in all modern theoretical orientations (Brown, 2007; Samstag, 2007).

Carl Rogers set out to describe a theory that addressed the possibility that there are “clearly definable and measurable” (Rogers, 1957, p. 95) conditions that are needed for therapy to be successful. Rogers (1957) identified six specific conditions that should be maintained over time. These conditions include elements related to this study, including that the counselor conveys unconditional positive regard, empathic understanding, and successfully communicates empathy (Rogers, 1957).

Roger’s description of empathy influenced how empathy is defined in this study. Rogers (1959) defined empathy as an ability “to perceive the internal frame of reference of another with accuracy as if one were the other person but without ever losing the ‘as if’ condition (p. 210).” This cognitive framing of empathy, versus an affective framing, holds relevance to the study. The definition of empathy utilized in the study is “a predominantly cognitive (rather than an affective or emotional) attribute that involves an understanding (rather than feeling) of experiences, concerns and perspectives of the patient, combined with a capacity to communicate this understanding, and an intention to help” (Hojat, 2016, p. 74). Roger’s description of empathy describes a cognitive attribute that is also mentioned in Hojat’s definition (Hill, 2007).
Further, the understanding and communicative elements of empathy described by Rogers are present in the definition utilized in this study (Rogers, 1957).

The potential significance of this study rested on the assertion that an increase in empathy leads to more positive treatment outcomes. Rogers was clear about the role empathy plays in creating therapeutic change and identified it as one of the six elements of therapy that must be present for therapeutic change to occur (Rogers, 1957). He wrote that empathy “seems essential to therapy” (Rogers, 1957, p. 99). Research in this area affirms that empathy is an essential element in positive client outcome (Brown, 2007).

Carl Rogers’ theory highlights the importance of empathy in the process of therapeutic change. Rogers’ description of empathy as including cognition, understanding, and communication are pillars of the operational definition of empathy that is utilized in this study. Further, Rogers’ assertion that client change requires empathy underpins the rationale for this study.

**Overview of Method**

This quantitative study utilized a quasi-experimental one-group pre-test/post-test design (Harris et al., 2006). Empathy was identified as the dependent variable and was measured by the JSE-HPS in both pre and post testing. Participants were given a pre-test followed by exposure to the independent variable, hearing distressing voices simulation, with the post-test occurring immediately after exposure to the independent variable. Pre-test and post-test scores were compared utilizing a paired samples t-test.

This design was selected for two reasons. First, participants were drawn from a convenience sample of master’s counseling students from CACREP-accredited programs. It was assumed that the small population and lengthy time commitment would make it difficult to
recruit enough participants for a control group. Second, benefits related to the training, including a potential increase in understanding and empathy for individuals who experience distressing voices, are the incentive for students to participate. A control group would remove the participation incentive, thereby reducing the likelihood of recruitment of a sufficient number of participants for a control group.

**Research Question**

One research question formed the basis for the study: Does exposure to the HDVS result in changes in counseling students’ empathy for clients diagnosed with schizophrenia, as measured by the JSE-HPS?

**Significance of the Study**

Research indicates that stigma towards individuals who have serious mental illness, including helping professionals, is a barrier to receiving care (Corrigan, 2004; Cramer & Rosenbeck, 1998). Results of research also suggest that helping professionals may find it difficult to empathize with a symptom that is outside of their own experience (Eack, Newhill, & Watson, 2012; Peer, Warnecke, Baum, & Goreczny, 2015; Svensson et al., 2014). This limited empathy, combined with social stigma, fosters an atmosphere in which individuals with serious mental illness are a doubly marginalized population. In this context, counselors should strive to avoid replicating within the counseling relationship the disempowerment and marginalization that clients with schizophrenia experience in their lives.

Empathy is a necessary component of counseling and is important in treatment outcomes (Halbur & Halbur, 2015). High levels of empathy contribute to positive client-clinician relationships (Hojat, 2016). Hojat (2016) cited numerous studies supporting the idea that positive client-counselor relationships contribute to positive client outcomes. Patient satisfaction along
with adherence to treatment also positively correlates to a positive client-counselor relationship (Hojat, 2016).

The four key components of empathy are that it is a cognitive attribute, and it includes the capacity to communicate, intention to help, and ability to understand a person’s experience (Hojat, 2016). I attempted to enhance counseling students’ understanding of auditory hallucinations through their participation in a comprehensive, experiential training developed by Patricia Deegan, Ph.D. The training provides a video presentation on the phenomenon of distressing voices and seeks to replicate auditory hallucinations. The training prompts participants to complete tasks that would typically be asked of a patient with schizophrenia. Several studies have shown that completion of this training by health care professionals and students correlates with positive changes in attitude towards those who experience auditory hallucinations and an increase in empathy (Bunn & Terpstra, 2009; Chaffin & Adams, 2013; Dearing & Steadman, 2008, 2009; Galletly, & Burton, 2011; Patterson, Goulter, & Weaver, 2014; Ward, 2015; Wieland, Levine, & Smith, 2014; Wilson et al., 2009).

It was hypothesized that exposing counseling students to the HDVS might assist them to understand what it is like to navigate society while experiencing auditory hallucinations. It was further hypothesized that this enhanced understanding might contribute to their increased empathy; an increase in empathy has been linked to a decrease in stigmatizing attitudes (Webb et al., 2016). Further, it was assumed that an observed increase in empathy could lead to a stronger therapeutic alliance, improved client compliance, and ultimately better treatment outcomes for patients with serious mental illness (Hojat, 2016).
**Limitations and Delimitations**

*Limitations*

This study contained several potential limitations. Pyrczak and Bruce (1998) define a limitation as “a weakness or handicap that potentially limits the validity of the results” (p. 57). The first limitation was possible participant attrition. Participants could choose to discontinue participation in the study if they felt overwhelmed by the experience. One participant chose to withdraw from the study due to feeling overwhelmed; however, participants were instructed that they could turn off the audio recording and continue participating in the study without informing the investigator. It is unknown if this occurred.

The second potential limitation was the possibility that confounding variables might affect the results of the study. The study did not control for variables such as race, ethnicity, year in the counseling program, work experience, or personally being diagnosed with a mental illness.

The instrument used in this study was a self-report scale. Participants may have answered questions based on assumptions or a desire to answer in a socially acceptable way (Miller, 2012). Thus, potentially biased participant responses were a third limitation of the study.

Participation was voluntary. Students who expressed interest in the study might have differed from those who did not. For this reason, the sample may not be representative of master’s counseling students who are currently attending a CACREP-accredited program.

*Delimitations*

Pyrczak and Bruce (1998) define delimitation as “a boundary to which the study was deliberately confined” (p. 57). This study will be delimited to master’s counseling students who are currently attending a CACREP-accredited program.
Assumptions

Pyrczak and Bruce (1998) defined an assumption as “something that is taken to be true even though the direct evidence of its truth is either absent or very limited” (p. 57). I assumed that each participant completed the training as instructed and responded truthfully to the questions asked in the JSE-HPS.

Definition of Terms

The following terms and definitions were utilized in the research study:

**Auditory hallucinations**
Subramanian, Burhan, Pallaveshi, and Rudnick (2013) define auditory hallucination as “the experience of sound in the absence of external perceptual stimuli” (p. 1). Auditory hallucinations are a common symptom of schizophrenia (APA, 2013).

**Empathy**
This study utilized Hojat’s (2016) definition which defines empathy as “a predominantly cognitive (rather than an affective or emotional) attribute that involves an understanding (rather than feeling) of experiences, concerns and perspective of the patient, combined with a capacity to communicate this understanding, and an intention to help” (p. 74).
<table>
<thead>
<tr>
<th><strong>Recovery Model</strong></th>
<th>A mental health treatment model that supports clients as they reestablish “a new and valued sense of integrity and purpose within and beyond the limits of their disability” (Deegan, 1988, p.11).</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Schizophrenia</strong></td>
<td>“A chronic and severe mental disorder that affects how a person thinks, feels, and behaves. People with schizophrenia may seem like they have lost touch with reality” (National Institute of Mental Health, 2016, Definition section).</td>
</tr>
<tr>
<td><strong>Serious Mental Illness</strong></td>
<td>A currently diagnosable mental disorder meeting DSM 5 criteria that results in “serious functional impairment, which substantially interferes with or limits one or more major life activities” (National Institute of Mental Health, 2015, Serious Mental Illness).</td>
</tr>
<tr>
<td><strong>Stigma</strong></td>
<td>A negative stereotype that contributes to discrimination (Corrigan, 1999).</td>
</tr>
</tbody>
</table>
CHAPTER TWO

REVIEW OF THE LITERATURE

A review of the literature pertinent to the study is presented in this chapter. The purpose of this study was to test the hypothesis that the hearing distressing voices simulation training, *Developing Empathy for the Lived Experience of Psychiatric Disability: A Simulation of Hearing Distressing Voices* (HDVS), developed by Patricia E. Deegan, Ph.D., will affect counseling students’ empathy for clients diagnosed with schizophrenia, as measured by the Jefferson Scale of Empathy – Health Professions Students version (JSE-HPS).

Schizophrenia is a mental disorder that causes disruption in functioning in areas of social, occupation, and self-care which make it difficult for individuals with schizophrenia to function successfully within their community (Scanlan & Still, 2015). Auditory hallucinations are a hallmark diagnostic feature of schizophrenia, and for clients to be diagnosed with schizophrenia they must present with either delusions or hallucinations (APA, 2013). Individuals with schizophrenia endure stigma from the general public and health profession workers, and this stigma creates a barrier to receiving care (Corrigan, 2004; Eack, Newhill, & Watson, 2012; Peer, Warnecke, Baum, & Goreczny, 2015; Svensson et al., 2014).

Counselor empathy is a primary component of counseling, and is especially important when counseling individuals with serious mental illness as they seek to obtain treatment while managing stigma (Poremski, Whitley, & Latimer, 2016; Rogers, 1959). An inverse relationship between stigma and empathy has been shown to exist; when empathy goes up, stigmatizing attitudes go down (Webb, 2016). This study focused on empathy as a cognitive construct within
the counselor-client relationship that values understanding, communication, and willingness to help.

In this study, the HDVS was evaluated for its ability to affect empathy in counseling students. Participants underwent the hearing distressing voices training that included watching two videos about auditory hallucinations, undergoing a 45-minute hearing voices simulation, and participating in a group discussion about their experience. Ample evidence suggests that the HDVS increases empathy and decreases stigmatizing attitudes (Bunn & Terpstra, 2009; Chaffin & Adams, 2013; Dearing & Steadman, 2008; Dearing & Steadman, 2009; Galletly, & Burton, 2011; Patterson, Goulter, & Weaver, 2014; Ward, 2015; Wieland, Levine, & Smith, 2014; Wilson et al., 2009).

This chapter is divided into four primary sections: history of treatment of mental illness in the United States, schizophrenia, empathy, and HDVS. The first section details the history of treatment for individuals with mental illness in the United States and identifies current trends in treatment. The second section, schizophrenia, reviews the following: diagnostic criteria, auditory hallucinations, stigma as a barrier to treatment, and stigmatizing attitudes of helping professionals. The third section, empathy, explores the history of empathy’s definition, role in treatment and outcome, and empathy trainings. The fourth section, hearing distressing voices simulation, includes a brief sketch of the hearing voices simulation and research related to the training.

**History of Treatment of Mental Illness in the United States**

The modern history of how individuals with serious mental illness received treatment in the United States begins in 1773 when the Public Hospital for Persons of Insane and Disordered Minds located in Williamsburg, Virginia, admitted its first patient (Pan, 2013). The purpose of
this facility was to have a place to send people with serious mental illness who were a disruption to their community (U.S. National Library of Medicine, 2013). Over the next 70 years the number of similar facilities grew throughout the United States. Traditionally, these facilities subjected patients to inhumane conditions including being chained, beaten, and being left without heat or clothing (Public Broadcasting Service, 2002).

In 1841 Dorothea Dix, a Boston schoolteacher, visited the East Cambridge Jail (Pan, 2013). She observed the inhumane conditions in which patients were confined and committed the rest of her life to advocacy for patients in institutional facilities, helping to establish 110 psychiatric hospitals (U.S. National Library of Medicine, 2013). In 1887 New York World reporter Nellie Bly, as part of an assignment, committed herself to the Women’s Lunatic Asylum in New York. Her resulting article, “Ten Days in a Mad-house,” revealed horrific conditions for the patients and prompted continued calls for institutional reform (Pan, 2013).

The early 20th century saw several significant events in the treatment of clients with serious mental illness. In 1907 Indiana became the first state to implement sterilization laws allowing the state to sterilize people who are mentally ill against their wishes. Thirty states followed Indiana’s lead in enacting these laws and by 1940, 18,552 individuals had been sterilized under these laws (Pan, 2013). In 1936, the first prefrontal lobotomy was performed followed by the introduction of electroshock therapy, a process of injecting electric current into the brain, in 1938 (Pan. 2013). In 1946, President Truman signed the National Mental Health Act, the purpose of which was to accelerate advances in the treatment of individuals with serious mental illness. The act provided direction and funding to the National Institute of Mental Health with the goal of developing treatments to prevent and manage serious mental illness (Lowry, 1949).
In 1952 chlorpromazine, or Thorazine, was discovered. The Food and Drug Administration approved chlorpromazine in 1954, making it the first medication approved for the treatment of psychotic symptoms (Pan, 2013). This ushered in a new era of treatment for individuals with serious mental illness (Carpenter & Davis, 2012). Chlorpromazine became widely used and resulted in many patients being discharged from institutions. “At that time, the number of state hospital beds had been rising progressively in the United States. After the introduction of chlorpromazine the number of beds for schizophrenia decreased steadily. The large state hospitals, some exceeding 15,000 beds, were downsized or disappeared” (Carpenter & Davis, 2012, p. 1168).

The following years saw several political acts that facilitated changes in treatments for people with schizophrenia. The Community Mental health Act of 1963, signed by President John F. Kennedy, the passage of Medicaid in 1965, and the Mental Health Systems Act of 1980 signed by President Jimmy Carter each helped to create an environment that fostered community based treatments and helped to move more patients out of mental hospitals (Pan, 2013).

In 1981 the Omnibus Budget Reconciliation Act repealed the Mental Health Systems Act of 1980. The result was a 30% decrease in federal mental health spending (Pan, 2013). Deinstitutionalization, along with cuts in mental health spending, left many individuals with serious mental illness without treatment. Many of these individuals found themselves homeless as a result and entrance into the criminal justice system became commonplace. In the United States, over 400,000 individuals with mental illness are incarcerated (Ford, 2015). It is estimated that 25 – 40% of people who are mentally ill will be incarcerated during their lifetimes. The Cook County jail, in Chicago, is now the largest mental health hospital in the U.S. (Ford, 2015).
Current Trends in Treatment

During the 1990s, a movement to transform the United States mental health system began. The goal of this movement was to develop a system based on recovery-oriented principles (Anthony, 1993). Deegan (1988) described the recovery model as one that reestablishes “a new and valued sense of integrity and purpose within and beyond the limits of the disability; the aspiration is to live, work, and love in a community in which one makes a significant contribution” (p. 11). Anthony (1993) described the process of recovery from mental illness as:

A deeply personal, unique process of changing one’s attitudes, values, feelings, goals, skills, and/or roles. It is a way of living a satisfying, hopeful, and contributing life even with limitations caused by illness. Recovery involves the development of new meaning and purpose in one’s life as one grows beyond the catastrophic effects of mental illness.

(p. 15)

Growing emphasis on community-based treatments, combined with a shift to a recovery-oriented philosophy, has set the stage for how services are now being delivered to individuals with serious mental illnesses, including schizophrenia. Recent court rulings such as the Williams consent degree in Illinois have given individuals trapped in the Institutes of Mental Disease (IMD) system, a system of nursing homes that primarily treat mental illness, a path to independence and have led to increased funding for community-based supports (Illinois Department of Human Services, 2011). According to Flannery, Adams, and O’Connor (2011), components now seen as essential to community mental health treatment are “acute and emergency response, community continuing care services, assertive rehabilitation teams, and partnerships with general practitioners and other human services agencies” (p. 49). Prison
officials are also recognizing their role in delivering mental health services and incorporating community mental health concepts into their programs (Kupers, 2015).

**Schizophrenia**

**Diagnostic Criteria**

In 2013 the American Psychiatric Association (APA) published the 5th edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM5; American Psychiatric Association, 2013). The manual establishes the diagnostic criteria for schizophrenia and seeks to assist clinicians in making a diagnosis by providing more clarity within the diagnostic criteria than its predecessor, the DSM IV (Reddy, Horan, & Green, 2014).

In the DSM5, it is stated that, “the characteristic symptoms of schizophrenia involve a range of cognitive, behavioral, and emotional dysfunctions, but no single symptom is pathognomonic of the disorder” (APA, 2013, p. 100). The primary component of the diagnostic criteria is the presence of active symptoms. The category of active symptoms includes delusions, hallucinations, disorganized speech, grossly disorganized or catatonic behavior, and negative symptoms. In order for a diagnosis to be made, a client must present with two or more active symptoms for at least one month, and one of the active symptoms must be delusions or hallucinations (APA, 2013). Overall, symptoms must persist for at least six months and include one month of active symptoms (APA, 2013).

A diminished level of functioning in a major area of life including interpersonal, occupational, or self-care is an additional criterion for the diagnosis of schizophrenia (APA, 2013). Individuals with schizophrenia struggle with developing and maintaining relationships and obtaining employment (Campellone, Fisher, & Kring, 2016; Robertson et al., 2014; Taskila
et al., 2014). These features can be disabling and may make it difficult for individuals with schizophrenia to function successfully within their communities (Scanlan & Still, 2015).

The lifetime prevalence of schizophrenia among the general population is 0.3% - 0.7% (McGrath, Saha, Chant, & Welham, 2008). Of individuals diagnosed with schizophrenia, approximately 53 – 75% present with auditory hallucinations (Chaffin & Adams, 2013; Pandarakalam, 2016).

**Auditory Hallucinations**

An auditory hallucination is defined as “the experience of sound in the absence of external perceptual stimuli” (Subramanian, Burhan, Pallaveshi, & Rudnick, 2013, p. 1). Auditory hallucinations “are vivid and clear, with the full force and impact of normal perceptions, and not under voluntary control” (APA, 2013, p. 87). Auditory hallucinations “are usually experienced as voices, whether familiar or unfamiliar, that are perceived as distinct from the individual’s own thoughts” (APA, 2013, p. 87). Auditory hallucinations may have a variety of causes and are not limited to individuals diagnosed with mental illness (Prerost, Sefcik, & Smith, 2014). For example, auditory hallucinations may be caused by middle or inner ear damage, partial seizure, and epilepsy (Prerost, Sefcik, & Smith, 2014). Prerost, Sefcik, and Smith (2014) cited evidence that 10% of men and 15% of women experience auditory hallucination at some point in their lives. For this reason auditory hallucinations are viewed as occurring within a continuum with distress, frequency, and content being areas of clinical interest when assessing auditory hallucinations.

Auditory hallucinations are present in several mental disorders including but not limited to schizophrenia, bipolar I disorder, major depressive disorder with psychotic features, and posttraumatic stress disorder (Waters, 2010). Schizophrenia was the main focus of this study for
three reasons. First, an individual must be experiencing either delusions or hallucinations to receive a schizophrenia diagnosis (APA, 2013). This makes auditory hallucinations a primary diagnostic component of schizophrenia. Second, the prevalence rates of those who experience auditory hallucinations are much higher in schizophrenia than in other disorders (Waters, 2010). Auditory hallucinations occur in 53-75% of individuals diagnosed with schizophrenia (Chaffin & Adams, 2013; Pandarakalam, 2016) versus 20-50% in bipolar disorder, 10% in major depressive disorder with psychotic features, and 40% in posttraumatic stress disorder (Waters, 2010). Finally, persistent auditory hallucinations are present in 25% of individuals with schizophrenia (Pandarakalam, 2016) and are linked to distress, disruption in functioning, and increased chance of suicide (Pandarakalam, 2016; Scanlan & Still, 2015). The diagnostic component of auditory hallucination in schizophrenia, along with the higher prevalence rates and related distress and dysfunction, provide the rationale for schizophrenia as the focus of this study.

Effective treatments are available including medications and therapy; however, stigma serves as a barrier to receiving treatment (Corrigan, 2004; Cramer & Rosenbeck, 1998; Samalin, Garnier, Auclair, & Llorca, 2016). Current medications have been shown to reduce distress, suicide, and homicide (Pandarakalam, 2016). Individuals with schizophrenia are at an increased risk of suicide (Pandarakalam, 2016). Approximately 40-50% of individuals with schizophrenia experience at least one episode of suicidal ideations, and 4-13% of those with schizophrenia die from suicide (Kasckow, 2012). “Suicidal behavior is sometimes in response to command hallucinations to harm oneself or others” (APA, 2013, p. 104).

Therapy-based interventions usually result in an improved ability to cope with distress related to auditory hallucinations (Pandarakalam, 2016; Shergill, Murray, & McGuire, 1998). Facilitating empathy in clinicians, thereby addressing stigmatizing attitudes of providers, may be
an effective approach to expanding access to life saving treatment. An increase in provider empathy has been shown to correlate with a decrease in stigmatizing attitudes as well as an increase in patient compliance (Hojat, 2016; Webb et al., 2016).

**Stigma as a Barrier to Treatment.**

Stigma is a negative stereotype that contributes to discrimination and marginalization of individuals with schizophrenia (Corrigan & Penn, 1999). Fear of stigma prevents disclosure of illness, creates worry, and lowers self-esteem (Corrigan, 2004). Practitioners and students in the helping professions have also been found to harbor stigmatizing attitudes towards those with serious mental illness (Eack, Newhill, & Watson, 2012; Peer, Warnecke, Baum, & Goreczny, 2015; Svensson et al., 2014). Results of several studies have shown that completion of experiential trainings by health care professionals and students correlates with positive changes in attitude towards those with serious mental illness and an increase in empathy (Bunn & Terpstra, 2009; Chaffin & Adams, 2013; Dearing & Steadman, 2008; Dearing & Steadman, 2009; Galletly, & Burton, 2011; Patterson, Goulter, & Weaver, 2014; Ward, 2015; Wieland, Levine, & Smith, 2014; Wilson et al., 2009). Further, an increase in empathy correlates with a decrease in stigmatizing attitudes (Webb, 2016).

The entertainment industry is partly responsible for the perpetuation of stigma due to the stigmatizing content it generates (Owen, 2012; Vahabzadeh, Wittenauer, & Carr, 2011). Media outlets routinely sensationalize crimes involving individuals with schizophrenia, giving attention that is out of proportion to the population and focuses on depictions of violent crimes (Vahabzadeh, Wittenauer, & Carr, 2011). Movies commonly characterize individuals with schizophrenia as violent, unsociable, and unpredictable (Owen, 2012). A fixture in horror films involves a character who is mentally ill and a “homicidal maniac” (Owen, 2012, p. 655).
Dickerson, Sommerville, Origoni, Ringel, and Parente (2002) studied 74 individuals with schizophrenia who participated in outpatient programs and found “that almost all participants reported some stigma experiences” (p. 151). The research team also found that these individuals “worry about being viewed unfavorably and avoid self disclosure about mental illness” (p. 151). As relates to the media, “a total of 43 percent of respondents in the current sample indicated that they found media accounts ‘offensive’ or ‘hurtful’ at least ‘sometimes’” (Dickenson et al., p. 151).

Research evidence suggests that a tendency exists for individuals with schizophrenia to not engage in treatment or not follow through with their treatment plan (Corrigan, 2004). Regier et al. (1993) found that 40% of individuals with serious mental illness do not seek treatment, and Cramer and Rosenbeck (1998) found that 40% of patients do not take psychiatric medications as prescribed. Stigma contributes to diminished self-esteem and avoidance of self-identification as mentally ill, and in the context of stigma these two phenomena are the primary threats to treatment (Corrigan, 2004).

Beyond the direct evidence that individuals with schizophrenia either do not seek or do not follow through with treatment due to stigma, it is important to examine the social effect of stigma as barriers to obtaining and following through with treatment. “Stereotype, prejudice, and discrimination can rob people labeled mentally ill of important life opportunities that are essential for achieving life goals” (Corrigan, 2004, p. 616). Employment, housing, fair treatment by the criminal justice system, and access to physical health care are all negatively affected by the impact of social stigma (Corrigan, 2004).

To summarize, social messaging contributes to stigma that has an adverse effect on individuals with schizophrenia, resulting in difficulties obtaining and following through with
treatment as well as difficulties engaging in society. These effects are harmful and limit a person’s ability to engage in effective recovery which “is described as a deeply personal, unique process of changing one’s attitudes, values, feelings, goals, skills, and/or roles. It is a way of living a satisfying, hopeful, and contributing life even with limitations caused by illness” (Anthony, 1993, p. 15).

**Stigmatizing Attitudes of Students in the Helping Professions**

Although medical and nursing students’ attitudes towards individuals who have schizophrenia have been investigated thoroughly, little research exists that explores attitudes of graduate students in other helping professions (Peer, Warnecke, Baum, & Goreczny, 2015). More specifically, a review of the literature yielded only one article that examined attitudes toward individuals with schizophrenia of counselors-in-training (Smith & Cashwell, 2010).

Findings of research studies exploring attitudes of graduate students suggest that students in the helping professions harbor stigmatizing attitudes. Peer, Warnecke, Baum, and Goreczny (2015) surveyed students within 113 psychology, occupational therapy, and physical therapy programs and found that across all disciplines students “perceived that people with schizophrenia feel more depressed, more anxious, more stressed, less satisfied with life, and having less self-efficacy than they themselves” (Peer, Warnecke, Baum, & Goreczny, 2015, p. 193). These findings appear to reflect stigmatizing attitudes.

Svensson et al. (2014) explored attitudes towards individuals with schizophrenia in 1101 students including those studying for the professions of nurse, police officer, social worker, occupational therapist, physiotherapist, physician, psychologist, and public health worker. The researchers found that “in five of the eight education programs the majority of students perceived people with schizophrenia as a danger to others” (Svensson et al., 2014, p. 314). The team also
found that “more than a third of the students in seven of the eight education programs were pessimistic about prospects of recovery” (Svensson et al., 2014, p. 314). These findings also reflect stigmatizing attitudes.

Whereas a body of research suggests that helping professionals and trainees harbor stigmatizing attitudes, results of research studies also suggest that helping professionals and trainees have less stigmatizing attitudes than the general population (Peer, Warnecke, Baum, & Goreczny, 2015; Smith & Cashwell, 2010). Smith and Cashwell (2010) found that this trend holds true when exclusively examining counselor trainee attitudes. Smith and Cashwell (2010) further found that counselor trainees’ attitudes and attitudes of members of other helping professionals are similar.

Stigmatizing attitudes among students in the helping profession are malleable. Familiarity with individuals with schizophrenia and exposure to information about schizophrenia is correlated with less stigmatizing attitudes among these students (Eack, Newhill, & Watson, 2012; Svensson et al., 2014). Further, completion of experiential trainings by health care professionals and students correlates with positive changes in attitude towards those with serious mental illness and an increase in empathy (Bunn & Terpstra, 2009; Chaffin & Adams, 2013; Dearing & Steadman, 2008; Dearing & Steadman, 2009; Galletly, & Burton, 2011; Patterson, Goulter, & Weaver, 2014; Ward, 2015; Wieland, Levine, & Smith, 2014; Wilson et al., 2009).

**Empathy**

Traditionally, empathy has been a difficult concept to define (Kurkjian & Banks, 1978). The absence of an agreed-upon definition has contributed to a lack of empathy research and makes it difficult to measure empathy and understand the role that counselor empathy plays in the counseling process. In this section, a brief history of the evolution of the definition of
empathy is presented, and empathy is defined as it relates to the proposed study. The role of empathy in treatment and outcome is then discussed. Finally, trainings in empathy are described.

**Defining Empathy**

“The notion of empathy in counseling is one that seems easily comprehensible until one attempts to define its properties” (Kurkjian & Banks, 1978, p. 634). This difficulty in defining empathy makes the construct seem ambiguous and impractical for research purposes (Basch, 1983). Validity of empathy measures has been questioned due to the lack of a clear, consistent operational definition (Wispe, 1986). “Needless to say, no concept can be subject to scientific scrutiny without an operational definition” (Hojat, 2007, p. 4).

Carl Rogers developed a definition of empathy that continues to be significant within the field of counseling. Rogers (1959, p. 210) defined empathy as an ability “to perceive the internal frame of reference of another with accuracy as if one were the other person but without ever losing the ‘as if’ condition.” This cognitive framing of empathy, versus an affective framing, holds relevance to the proposed study.

Several notable figures have studied empathy. Hogan (1969), Mehrabian and Epstein (1972), and Davis (1983) all developed instruments to measure empathy. The instruments utilize varying definitions of empathy as a basis for measurement. Hogan (1969) utilized a cognitive definition in which he described empathy as “the intellectual or imaginative apprehension of another’s condition or state of mind without actually experiencing that person’s feelings” (p. 308). Mehrabian and Epstein (1972) defined empathy as “a vicarious emotional response to the perceived emotional experiences of others” (p. 525), which aligns with an affective approach towards empathy. Davis (1983) conceptualized empathy as containing four constructs:
perspective taking, fantasy, empathetic concern, and personal distress. Taken together these four constructs represent both a cognitive and affective approach to defining empathy.

The evolution of empathy research forced researchers to confront the realization that, for research purposes, sympathy and empathy must be viewed as distinct constructs. Empathy began to be viewed as a cognitive process that “requires mental activities involved in acquiring and processing information for better understanding” (Hojat, 2016, p. 7), whereas sympathy began to be viewed as an affective process (Clark, 2010; Hoffman, 2000). More precisely, sympathy became defined as “an expression of concern or sorrow about distressful events in a person’s life” (Clark, 2010, p. 95).

When studying client care, the difference between empathy and sympathy is important. A primary component of sympathy is identification with a client’s emotions and this has been shown to interfere with client progress (Hojat, 2016). Further, “the underlying behavioral motivation in empathy is likely to be altruistic, but more likely to be egoistic in sympathy” (Hojat, 2007, p. 12).

Client care situations demand that the clinician make effective clinical judgments. Cognitive-based empathy aids clinicians in making clinical judgments whereas excessive emotion, sometimes seen in sympathy, could work to cloud clinical judgment (Hojat, 2007). The emotional component of sympathy may interfere with a clinician’s performance if the emotions become intense (Hojat, 2016). In counseling empathy is commonly employed whereas sympathy within the counselor-client relationship is frowned upon (Black, 2004).

For the purposes of the proposed study empathy will be defined as “a predominantly cognitive (rather than an affective or emotional) attribute that involves an understanding (rather than feeling) of experiences, concerns and perspectives of the patient, combined with a capacity
to communicate this understanding, and an intention to help” (Hojat, 2016, p. 74). The four primary components of this operational definition are cognition, understanding, communication, and intention to help (Hojat, 2016). Understanding within a clinical relationship is defined as “the ability to stand in a patient’s shoes without leaving one’s own personal space and to view the world from the patient’s perspective without losing sight of one’s own personal role and professional responsibility” (Hojat, 2007, p. 83). Communication is defined as an ability to convey to clients that the entirety of their concerns is understood (Hojat, 2007).

Empathy has long been identified as a key component to the counseling relationship; however, much debate exists about how to define and therefore measure empathy. Previous definitions included affective elements that in the context of client care could hinder clinical judgment. In this study, I utilized a cognitively based definition composed of four key elements including cognition, understanding, communication, and an intention to help.

**Role of Empathy in Treatment and Outcome**

Significant research exists regarding the role of empathy in the therapy process and outcome. This literature suggests that empathy is key in the development of the therapeutic alliance (clinician/patient relationship), fosters client satisfaction, builds trust, and contributes to adherence and compliance (Hojat, 2016).

Carl Rogers (1959) identified the therapeutic relationship between counselor and client as paramount in the counseling process and essential for counseling to be effective. According to Hojat (2016), substantial research indicates that low rates of clinician empathy have been linked to premature termination, higher rates of dropout and relapse, weak therapeutic alliance, and ultimately less client recovery. Hojat (2016) also asserted that substantial research links higher rates of clinician empathy to the clinician being viewed as more genuine by the client and to a
stronger therapeutic alliance. The overall high level of engagement seen in clinicians with higher empathy is the key element in better therapeutic outcomes (Hojat, 2016).

Trust is an important factor in whether people with serious mental illness engage in therapy services (Poremski, Whitley, & Latimer, 2016). Environmental elements such as frequent hospitalizations, contact with the criminal justice system, and homelessness help to break down trust in individuals with serious mental illness (Poremski, Whitley, & Latimer, 2016). “Empathy, respect, and communication contributed to satisfaction with services and helped rebuild and maintain trust” (Poremski, Whitley, & Latimer, 2016, p. 24). Empathy “is always beneficial to patient outcomes; thus attempts must be made to maximize empathetic engagement in patient care” (Hojat, 2016, p. 81).

Empathy Trainings

Experiential learning theory is a well-documented, evidence-based approach to teaching (Lisko & O'Dell, 2010). One specific experiential learning technique involves a simulated experience in which participants are exposed to conditions meant to simulate the experience of others. Researchers have demonstrated that undergoing the HDVS, a training that utilizes this learning technique, increases empathy in nursing and medical students (Bunn & Terpstra, 2009; Chaffin & Adams, 2013; Dearing & Steadman, 2008, 2009; Galletly, & Burton, 2011; Ward, 2015; Wieland, Levine, & Smith, 2014; Wilson et al., 2009). No research was found on using the HDVS with counselors or counseling students.
Hearing Distressing Voices Simulation

Components of the Simulation

Developing Empathy for the Lived Experience of Psychiatric Disability: A Simulation of Hearing Distressing Voices is a comprehensive training developed by Patricia Deegan, Ph.D. The training provides participants with an experience designed to simulate distressing voices and includes a video presentation, simulated experience, and discussion period. The goals of the training are to increase understanding and empathy for individuals who experience distressing voices as well as cultivate inspiration to make positive changes within the mental health profession.

First, participants view three videos that feature Dr. Deegan. The first video explores the phenomenon of hearing distressing voices including what individuals experience when they hear distressing voices. The second video offers insight and strategies for first responders, and the third video details how the mental health professional can assist individuals who experience distressing voices develop coping skills. The total run time for all three videos is approximately 55 minutes. Because first responders were not part of the study population, I excluded the second video when conducting this study.

Second, participants take part in the simulation experience. The simulation experience involves the utilization of a 45-minute audio recording meant to simulate distressing voices. The audio recording contains music, mumbling, bird sounds, repeating of random words, profanity, observations, demeaning statements, and command statements. In addition, the volume of the audio recording rises and falls throughout the simulation. Participants are instructed to wear headphones playing the audio simulation and visit four workstations during the simulation. The first workstation asks participants to engage in social interactions with individuals who are not
part of the training. Participants choose a card that prompts them to engage in social tasks including asking for directions to the student center or ordering coffee at the cafe. The second workstation simulates a cognitive testing center where participants are given three minutes each to complete a word find and a much more complex 7-digit number find. Workstation three simulates an emergency room interview with a psychiatrist where participants meet individually with a trainer who asks them 10 mental status questions including number recall, counting backward by sevens, listing Presidents of the United States, and proverb interpretation. A community day program is the final workstation and asks clients to fill out a work application and complete two origami projects.

It is important to note that the simulation portion of the training seeks to construct a role-play experience that closely resembles an ineffective community treatment facility. Trainers are instructed to create an overbearing, disempowering, empathy-devoid atmosphere for the participants through the use of scripts that utilize disempowering language and instructions that prompt overbearing behavior.

The final component of the simulation is a wrap-up discussion. The wrap-up discussion includes a group discussion facilitated by utilizing discussion questions located in the training toolkit manual. The manual suggests discussion topics centered on participants sharing their experiences, how they coped, and how the training may influence their work. The wrap-up session procedure as detailed above maintains fidelity to the training toolkit manual.

**Research Studies Using the Simulation**

A review of the literature yielded three qualitative studies that explored experiences of nursing students who underwent the hearing distressing voices training. Dearing and Steadman (2009) studied a convenience sample of 28 fourth-year nursing students. The students were split
into a control group that was exposed to an orientation and an experimental group that was exposed to both the orientation and HDVS. At the conclusion of the HDVS, participants in the experimental group were asked to write about their experience with focus on addressing feelings and physical effects during the simulation and how the experience will impact their work as nurses. An interpretive phenomenological approach was used to analyze the data. Intellectual knowing, described as “the participants related a direct and new sense of knowing about individuals who have voice-hearing experiences” (Dearing & Steadman, 2009, p. 178), was one of the major themes to emerge. This theme relates to the understanding component of the operational definition of empathy that was used in this study. Further, the authors noted that “almost every participant shared an increase in empathy for those individuals” (Dearing & Steadman, 2009, p. 179) who experience auditory hallucinations.

Wieland, Levine, and Smith (2014) also utilized a qualitative design to study the experiences of nursing students who underwent the HDVS. Researchers studied a convenience sample of 74 nursing students who each underwent the HDVS. Students were then asked to write a reflection about their experience. Naturalistic inquiry was utilized to analyze the data and resulted in the emergence of empathy as a theme. “Students gained greater levels of understanding, empathy, and patience” (Wieland, Levine, & Smith, 2014, p. 50). Further, the “simulation was described as life-changing” (Wieland, Levine, & Smith, 2014, p. 50).

Wilson et al. (2009) also conducted a qualitative study utilizing a narrative approach to study the experiences of 27 nursing students who underwent the HDVS. One of the themes that emerged from this study was “transformed through empathy” (Wilson et al., 2009, p. 11). One student stated, “I can empathize for these individuals, now more than ever, because I have experienced a small taste of how difficult life becomes when one has to continually be exposed
to such negative circumstances” (Wilson et al., 2009, p. 11). This reflection seems to identify a new understanding that relates to the definition of empathy utilized in this study.

Two mixed methods studies were found in the literature that examines nursing students’ response to the hearing distressing voices training. Chaffin and Adams (2013) used a self-report, 5-point Likert scale assessment to measure pre- and post simulation empathy of 67 nursing students. A paired samples t-test of the pre- and posttest means demonstrated “statistically significant improvement in self-rated empathy as a result of the Hearing Voices simulation” (Chaffin & Adams, 2013, p. e300). In addition, qualitative data were obtained from responses to a questionnaire. The questionnaire contained open-ended questions and was administered after the simulation. “The predominant feeling described by students was newly acquired empathy” (Chaffin & Adams, 2013, p. e301).

Dearing and Steadman (2008) also conducted a mixed methods study that used nursing students as participants. A sample of 94 nursing students was studied with 52 in the experimental group and 42 in the control group. Both groups underwent the training. The experimental group was exposed to the audio simulation during the training, and the control group was not. The Medical Condition Regard Scale was given as a pre- and post-test. Between groups there was no significant difference in pre-test scores. Post-test scores indicated significant differences between the groups. The experiment group demonstrated significant differences in attitudes around ability to develop a therapeutic relationship with individuals who experience auditory hallucinations and the benefits of treatment, in comparison to the control group. Schema analysis was used to identify themes from audio recordings of the focus groups. The experimental group identified feeling as though they were more understanding and empathetic after the training. Conversely,
“the control group did not experience the same level of learning and were left with an outsider’s view” (Dearing & Steadman, 2008, p. 65).

One quantitative study examining nursing students’ response to the HDVS was found. Ward (2015) utilized the Medical Condition Regard scale to measure nursing students’ attitudes pre- and post-simulation. The post-simulation mean was higher than the pre-simulation mean; however, this change was not statistically significant. Although no significant differences were found between pre- and post-test, participant comments logged by the research team supported an increase in understanding and empathy.

Medical students’ response to the HDVS was evaluated in two separate studies. Galletly and Burton (2011) conducted a one-group pre-test/post-test study with 87 medical students. The Attitudes to Mental Illness Questionnaire was administered prior to and after completion of the HDVS. A paired sample t-test was used to analyze the data and “showed a significant improvement in the students’ attitudes to people with schizophrenia following the workshop” (Galletly & Burton, 2011, p. 475).

Bunn and Terpstra (2009) studied 150 medical students using the Jefferson Scale of Empathy as the pre-test and post-test instrument. An experimental group of 100 medical students participated in the training while listening to the distressing voices audio simulation, and 50 medical students were assigned to a control group that underwent the training sans audio simulation. A paired samples t-test demonstrated a significant difference between pre-test and post-test scores of the experimental group. Further, a paired samples t-test of the control group showed no significant differences between pre-test and post-test scores.
Conclusion

Individuals with schizophrenia experience many challenges. A history of misunderstanding mental illness, along with inaccurate portrayals by the media industry, has partially contributed to stigmatization of individuals with schizophrenia. This stigma serves as a barrier to treatment and has been seen in individuals who work in helping professions. Empathy is linked to stronger therapeutic alliances, increased adherence and compliance, and overall increased positive outcomes, and an increase in empathy has been correlated with a decrease in stigmatizing attitudes.

An experiential training that simulates distressing voices has been linked to increases in empathy among nursing and medical students. No researchers have studied this training utilizing counseling students as participants. This study sought to fill this gap and assess if this training is effective at increasing empathy in counseling students, thereby potentially contributing to decreased stigmatizing attitudes and overall increased positive treatment outcomes.
CHAPTER 3

METHODOLOGY

Chapter three provides an overview of the methodology used in the study. The purpose of the study, research design, research question, hypothesis, variables, participants, and procedure are presented. The instruments are identified and discussed. Finally, the data collection procedure is reviewed.

Purpose of the Study

The purpose of this study was to test the hypothesis that the hearing distressing voices simulation training, Developing Empathy for the Lived Experience of Psychiatric Disability: A Simulation of Hearing Distressing Voices (HDVS), developed by Patricia E. Deegan, Ph.D. will affect counseling students’ empathy for clients diagnosed with schizophrenia, as measured by the Jefferson Scale of Empathy – Health Professions Students version (JSE-HPS). The dependent variable was defined as changes in empathy among the participants.

Research Design

This quantitative study utilized a quasi-experimental one-group pre-test/ post-test design (Harris et al., 2006). A quasi-experimental study is one in which participants are not assigned randomly, and a one-group pre-test/ post-test design involves utilization of one group (Creswell, 2014). This design was utilized in this study due to the nature of the sample being studied. First, participants were drawn from a convenience sample of master’s counseling students from CACREP-accredited programs. The small population and lengthy time commitment by participants would have made it difficult to recruit enough participants for a control group.
Second, benefits related to the training, including a potential increase in understanding and empathy for individuals who experience distressing voices, are the incentive for students to participate. Using a control group would have removed the participation incentive, thereby reducing the likelihood of recruiting enough participants for a control group.

**Research Question**

One research question was investigated:

Does completing the HDVS result in changes in counseling students’ empathy for clients diagnosed with from schizophrenia, as measured by the JSE-HPS?

**Hypothesis**

The following hypothesis was developed from the research question:

Exposure to the HDVS will result in a significant difference between pre-test and post-test empathy scores.

**Variables**

The independent (treatment) variable in this study was completion of the HDVS. The dependent variable was empathy. Empathy was measured by the participant’s score on the JSE-HPS. This instrument is a 20-item self-report assessment designed to measure empathy in students in health professions.

**Participants**

Participants were drawn from master’s-level counseling programs in the southern Louisiana and Chicago areas that were accredited by the Council for the Accreditation of Counseling and Related Educational Programs (CACREP). A total of 55 participants were drawn from the following universities: the University of New Orleans, Loyola University New Orleans,
Southeastern Louisiana University, Nicholls State University, Louisiana State University, Roosevelt University, Illinois Institute of Technology, and Adler University Chicago.

Drawing participants from students who were currently enrolled in a CACREP-accredited master’s counseling program in the southern Louisiana and Chicago areas was a delimitation of the study. Students in CACREP-accredited programs were studied to increase the generalizability of results to other CACREP programs. The geographical region was delimited to the southern Louisiana and Chicago areas due to practicality.

Procedure

Approval from the University of New Orleans Institutional Review Board was obtained prior to participant recruitment. Participants were recruited via listserv emails and in-class announcements after permission was obtained from listserv moderators and class instructors. Participants were informed that they were participating in a dissertation study that involved undergoing the HDVS training. The training was described to the participants including length and the three modules: an introduction, a simulation, and a wrap-up discussion session. Participants were also be informed that they would be asked to complete a short empathy survey both before the introduction session and after the wrap-up discussion session, as well as a brief demographic survey. Participants were further informed that the wrap-up session would be audio recorded and that all results would be kept confidential.

The experiment took place in several locations. The University of New Orleans was the primary location of the experiment. The experiment also took place at Loyola University New Orleans, Southeastern Louisiana University, and Thresholds Psychiatric Rehabilitation Center in Chicago, Illinois. Prior to participant recruitment each site was contacted to secure centrally located rooms for the simulation. A total of 2 – 4 rooms were used for each training. I conducted
the hearing distressing voices simulations in a group format with the assistance of 1 – 3 volunteers. Each group contained between 1 – 14 participants.

Written and verbal informed consent was obtained and each participant was given a numbered MP3 player. This number served as the participant ID and allowed for pairing of demographic survey, pre-test and post-test. Participants were instructed to write this number on each completed assessment. Participants then took the demographic survey and pre-test assessment. The Jefferson Scale of Empathy – Health Professions Students version (JSE-HPS) served as the pre-test assessment.

After completion of the pre-test assessment and demographic survey, participants experienced the introduction session, followed by the simulation, and finally the wrap-up discussion session as prescribed by the training. Each session lasted approximately 45 minutes with no breaks between sessions. In the introduction session, participants were introduced to the training utilizing the script contained in the training tool kit manual and were shown hearing voices video part one and part three; video two was excluded due to lack of relevance for this population. During the simulation session, participants were exposed to an audio recording that simulates auditory hallucinations via headphones. Wearing the headphones, participants engaged in activities at the four workstations prescribed in the training curriculum, which are social interaction, cognitive testing center, psychiatrist in an emergency room, and community day program. Training facilitators utilized the tool kit manual, including directions and scripts, to ensure fidelity to the training.

It is important to note that the simulation portion of the training seeks to construct a role-play experience that closely resembles an ineffective community treatment facility. Trainers are instructed to create an overbearing, disempowering, empathy-devoid atmosphere for the
participants through the use of scripts that utilize disempowering language and instructions that prompt overbearing behavior.

Wrap-up discussion was the final session and included a group discussion facilitated utilizing discussion questions located in the training toolkit manual. An audio recording of each discussion session was made to obtain participant statements about their experience. The recording was discussed prior to the beginning of the training, during informed consent. The manual suggested discussion topics centered on participants sharing their experiences, how they coped, and how the training may influence their work. The wrap-up session procedure as detailed above maintains fidelity to the training toolkit manual. For the purposes of this study, the wrap-up discussion also included debriefing, detailed below under ethical considerations.

At the conclusion of the wrap-up session participants were asked to complete the JSE-HPS as a post-test. Both the pre-test and post-test were administered using paper forms. I hand-scored the assessment using the algorithm supplied by the instrument developer. A peer then re-scored each assessment to ensure accuracy.

**Ethical Considerations**

Care was taken to ensure that human subjects were protected from possible trauma associated with the experiment. Informed consent, both verbal and written, was one tool utilized for this purpose. During the informed consent procedure, I reviewed the purpose of the study, potential risks and potential benefits, and obtained permission to audio record the wrap-up session discussion. Potential risks included feeling overwhelmed during the simulation as well as fatigue and difficulty concentrating after the simulation. Potential benefits included an increased understanding of the experience of hearing distressing voices and an increase in empathy. Participants were informed that confidentiality would be maintained through anonymous
submission of completed pre-test and post-tests. Finally, participants were reminded throughout the training that their wellbeing is of primary concern and encouraged to attend to and take care of themselves.

The informed consent procedure also contained several statements recommended by the training. These statements were that individuals with a history of hearing voices should not participate in the simulation and that individuals should beware of potential distress and turn off the audio player if it becomes distressing. Further, the informed consent document stated that the participants could continue taking part in the workstations even if they chose to turn off their audio player. Participants were not required to inform the researcher if they choose to turn off the simulation and continue taking part in the workstations. It was communicated that it is unlikely that anyone will know that the audio was turned off and assurances were made that no questions will be asked if a participant decides to discontinue the training at any time.

Debriefing was provided in a group format during the wrap-up discussion. Debriefing was conducted verbally and included the purpose of the study and possible side effects of the training. Participants were informed that two free counseling sessions would be provided if they were to experience any distress. My contact information was made available to participants for access to a counselor provider list, follow-up questions, or for access to a summary of results.

**Instrumentation**

**Demographic Survey**

A demographic survey was used to describe the participants. Participants were asked to indicate their gender, age, and area of clinical emphasis including clinical mental health counseling, school counseling, community counseling, and marriage, couple, and family counseling. Participants were also asked to indicate if they had taken a diagnosis course and if
they had family members who have been diagnosed with serious mental illness. Completion of a diagnosis course indicates potential exposure to material about serious mental illness that may increase understanding, a component of empathy. Research also suggests that helping professionals may find it difficult to empathize with a symptom that is outside of their own experience (Eack, Newhill, & Watson, 2012; Peer, Warnecke, Baum, & Goreczny, 2015; Svensson et al., 2014). Having a family member diagnosed with serious mental illness indicates potential direct experience and may result in an increase in empathy as a result.

**Jefferson Scale of Empathy – Health Professions Students Version**

The generic version of the Jefferson Scale of Empathy (JSE) was developed to address the need for a valid instrument that could assess empathy of medical students in a patient care setting (Hojat, 2007). Revisions in this scale led to the development of three scales: the Jefferson Scale of Empathy – Student version (JSE-S) measures empathy among medical students, the Jefferson Scale of Empathy – Health Professions version (JSE-HP) measures empathy among physicians and other practicing health professionals, and the Jefferson Scale of Empathy – Health Professions Students version (JSE-HPS) measures empathy among students in health professions outside of medicine (Hojat, 2016). The Jefferson Scale of Empathy – Health Professions Students version (JSE-HPS) was used to measure empathy in this study.

Prior to the development of the JSE, “no psychometrically sound instrument was available to measure empathy among students and practitioners in the health professions” (Hojat, 2003, p. 28). To date, the JSE has been used in over 70 countries and translated into over 35 languages (Sidney Kimmel Medical College Center For Research In Medical Education and Health Care, nd).
The Jefferson Scale of Empathy – Health Professions Students version (JSE-HPS) was developed to address the desire to measure “orientation or attitudes towards empathy in patient care” (Hojat, 2016, p. 93) settings among “students in all health professions disciplines other than medicine” (Hojat, 2016, p. 93). The HPS version contains slight changes from the original scale in how the questions are worded, to be applicable to students in non-physician health professions. Examples of items are: “health care providers’ understanding of their patients’ feelings and the feelings of their patients’ families does not influence treatment outcomes,” “patients feel better when their health care providers understand their feelings,” “a health care provider’s sense of humor contributes to a better clinical outcome,” “I believe that emotion has no place in treatment of medical illness,” and “I believe that empathy is an important factor in patients’ treatment” (Hojat, 2016, p. 343).

**Rationale for instrument selection.** The Jefferson Scale of Empathy – Health Professions Students version (JSE-HPS) was selected rather than instruments traditionally used in health care studies to measure empathy such as Hogan’s Empathy Scale, Mehrabian and Epstein’s Emotional Empathy Scale, and Davis’s Interpersonal Reactivity Index (Hojat, 2007). Two primary factors made the JSE-HPS version suitable for this study. These factors are the context in which empathy is being measured and the definition of empathy. In this study, the aim was to measure empathy within the context of the relationship between student counselor, or health care provider, and client. Also, because the study investigated client care, it was preferable to utilize a definition of empathy that factors in cognitive and communicative elements of empathy (Hojat, 2007).

The JSE-HPS version was specifically designed to measure empathy within the context of a student counselor and patient/client relationship (Hojat, 2016). Hogan’s Empathy Scale,
Mehrabian and Epstein’s Emotional Empathy Scale, and Davis’s Interpersonal Reactivity Index do not frame questions in a way that specifically explores this health care relationship (Hojat, 2007). Instead, as these instruments were developed to use with a general population, the items are framed in a more general manner, which calls into question the validity of these instruments to explore the specific student counselor-patient relationship (Hojat, 2007).

In exploring client care it is preferable to focus on a definition of empathy that takes into consideration the cognitive and communicative aspects of empathy (Hojat, 2007). Therefore, the definition of empathy for this study was “a predominantly cognitive (rather than an emotional) attribute that involves an understanding (rather than feeling) of experiences, concerns and perspectives of the patient, combined with a capacity to communicate this understanding” (Hojat, 2007, p. 80).

The JSE-HPS measures empathy in a way that focuses on cognition, understanding, and communication (Hojat, 2016). Neither Hogan’s Empathy Scale, Mehrabian and Epstein’s Emotional Empathy Scale, nor Davis’s Interpersonal Reactivity Index were designed to explore empathy in a way that takes into account only cognitive aspects of empathy along with understanding and an ability to communicate understanding.

**Psychometric properties.** Hojat (2016) cited numerous studies reflecting the reliability and validity of the generic version of the JSE. Validity, including “face, content, construct, criterion-related, convergent, and discriminant” (Hojat, 2016, p. 83), is supported by the results of these studies. Reliability with regard to internal consistency and test-retest is also supported by data (Hojat, 2016). Further, findings on JES psychometric properties when administered to students in a variety of health care settings as samples demonstrates that the JSE-HPS version is
valid and reliable and suggests that its use with health professions students is appropriate (Hojat, 2016).

“Reliability refers to whether scores to items on an instrument are internally consistent (i.e., whether the item responses are consistent across constructs), stable over time (test-retest correlations), and whether there was consistency in test administration and scoring” (Creswell, 2014, p. 247). The instrument has good internal consistency with a 0.78 observed Cronbach’s alpha (Fields et al., 2011; Hojat 2016). Test-retest reliability coefficient after three months was observed to be 0.58 after three months and 0.69 after six months, indicating “that the scales scores are relatively stable over approximately 3-6 months” (Fields et al., 2011, p. 291). Consistency in administration and scoring were maintained by following the written directions for the instrument provided by the creator, the Sidney Kimmel Medical College at Thomas Jefferson University Center for Research in Medical Education and Health Care.

The Health Professions Student version has validity consistent with the generic version of the scale, and there is sufficient evidence in support of the validity of the JSE-HPS version (Fields et al., 2011; Hojat, 2016). Construct validity assesses whether an instrument measures what it claims to measure (Anastasi, 1976). Hojat (2016) utilized factor analysis to assess construct validity within the generic scale and found it to be “consistent with the multifaceted concept of empathy reported in the literature (p. 90). In a later study Fields et al. (2011) confirmed the face validity of the JSE-HPS version.

**Data Collection Procedures**

Paper versions of demographic, pre-test, and post-test instruments were administered. The demographic assessment, followed immediately by the pre-test, took place after informed consent and prior to the first session of the training. The post-test took place after completion of
the third session. Conducting the post-test immediately after the conclusion of the third session followed the design of previous studies and aided with comparison to current research (Bunn & Terpstra, 2009). Administration of the pre-test and post-test occurred in the same room in which the first and third sessions were conducted. Participants individually completed the assessments in the same small groups that participated in the simulation. Each assessment took approximately 5 – 10 minutes to complete; however, participants were given as much time as needed to complete each assessment (Hojat, 2016). A volunteer was posted outside the room in order to ensure an uninterrupted setting during administration of the assessments.

**Data Analysis**

The JSE-HPS was hand-scored utilizing the algorithm provided by the Center for Research in Medical Education and Health Care. A peer re-scored each assessment to ensure accuracy. Pre-test and post-test scores were cataloged and entered into IBM’s Statistical Package for the Social Science (SPSS) version 25 software. The demographic survey was utilized to report descriptive statistics of the sample. A paired samples t-test was utilized to assess if there were significant differences between pre-test and post-test scores. Selection of this statistic allowed for comparison with related research (Bunn & Terpstra, 2009).
CHAPTER 4

RESULTS

Chapter four provides the results of the study starting with a brief overview of the purpose of the study and method. Next, the characteristics of the sample, results of hypothesis testing, and ancillary findings are presented.

Purpose of the Study

The purpose of this study was to test the hypothesis that the hearing distressing voices simulation training, *Developing Empathy for the Lived Experience of Psychiatric Disability: A Simulation of Hearing Distressing Voices* (HDVS), developed by Patricia E. Deegan, Ph.D., will affect counseling students’ empathy for clients diagnosed with schizophrenia, as measured by the Jefferson Scale of Empathy – Health Professions Students version (JSE-HPS). The dependent variable was defined as changes in empathy among the participants.

Method

This quantitative study utilized a quasi-experimental one-group pre-test/post-test design (Harris et al., 2006). A total of 55 participants were drawn from master’s-level counseling programs that were accredited by the Council for the Accreditation of Counseling and Related Educational Programs (CACREP) and were located in the southern Louisiana and Chicago areas. Participants were recruited via listserv emails and in-class announcements after permission was obtained from listserv moderators and class instructors.
The experiment took place in several locations including the University of New Orleans, Loyola University – New Orleans, Southeastern Louisiana University, and Thresholds Psychiatric Rehabilitation Center in Chicago, IL. Participants from other Universities traveled to these sites.

The JSE-HPS was used to measure empathy among participants both before and after undergoing the HDVS. The JSE-HPS was designed to measure empathy within the context of a student counselor and patient/client relationship (Hojat, 2016). The JSE-HPS measures empathy in a way that focuses on cognition, understanding, and communication, and defines empathy as “a predominantly cognitive (rather than an emotional) attribute that involves an understanding (rather than feeling) of experiences, concerns and perspectives of the patient, combined with a capacity to communicate this understanding” (Hojat, 2007, p. 80).

The JSE-HPS was self administered by the participants using the paper format. The assessment uses a 7-point Likert scale to assess participants’ level of agreement with 20 statements such as: patients feel better when their health care providers understand their feelings, a health care provider’s sense of humor contributes to a better clinical outcome, patients value a health care provider’s understanding of their feelings which is therapeutic in its own right, empathy is a therapeutic skill without which a health care provider’s success is limited. Higher scores indicate a higher level of empathy.

After the participants completed the JSE-HPS pre-test assessment and demographic survey, they took part in the introduction session, followed by the simulation, and finally the wrap-up discussion session as prescribed by the training. Each session lasted approximately 45 minutes with no breaks between sessions. At the conclusion of the wrap-up session participants were asked to complete the JSE-HPS as a post-test. Both the pre-test and post-test were
administered using paper forms. I hand-scored the assessment using the algorithm supplied by the instrument developer. A peer then rescored each assessment to ensure accuracy.

Pre-test and post-test scores were cataloged and entered into IBM’s Statistical Package for the Social Science (SPSS) software version 25. The demographic survey was utilized to report descriptive statistics. A paired samples t-test was utilized to assess if there were significant differences between pre- and post-test scores.

**Characteristics of the Sample**

A demographic survey was administered to all 55 participants. The demographic survey requested information on participant gender, age, area of clinical emphasis, completion of or enrollment in a diagnosis course, having a family member with severe mental illness, having a close friend with severe mental illness, and name of the university in which the participant was enrolled. Responses to these items are detailed below.

**Gender**

Participants were prompted to select from the following options in response to the question: What is your gender? 1) Female 2) Male 3) Non-binary/ third gender 4) Prefer to self describe 5) Prefer not to say. Of the 55 participants, 46 identified as female (83%), 8 as male (15%), and 1 as non-binary/third gender (2%). This gender composition is similar to that of master’s students in CACREP counseling programs across the United States (CACREP, 2016). The CACREP Annual Report (2016) states that 83% of master’s students identify as female, 17% as male, and .05% as alternate.
Age

Participants were prompted to identify their age based on provided ranges. The following table (Table 1) shows the breakdown of participants by age.

Table 1

*Age of Participants*

<table>
<thead>
<tr>
<th>Age</th>
<th>Participants</th>
<th>Percentage of Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 – 24</td>
<td>19</td>
<td>35%</td>
</tr>
<tr>
<td>25 – 27</td>
<td>14</td>
<td>25%</td>
</tr>
<tr>
<td>28 – 30</td>
<td>9</td>
<td>16%</td>
</tr>
<tr>
<td>31 – 33</td>
<td>5</td>
<td>9%</td>
</tr>
<tr>
<td>34 – 36</td>
<td>4</td>
<td>7%</td>
</tr>
<tr>
<td>37 – 39</td>
<td>1</td>
<td>2%</td>
</tr>
<tr>
<td>40 - 42</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>43 – 45</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>46 – 48</td>
<td>1</td>
<td>2%</td>
</tr>
<tr>
<td>49 – 51</td>
<td>1</td>
<td>2%</td>
</tr>
<tr>
<td>&gt; 51</td>
<td>1</td>
<td>2%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>55</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Approximately three-quarters of the participants were ages 20-30. A report issued by the National Center for Education Statistics (2016) reported that overall graduate school enrollment
of 20-39 year olds was 55% in fall 2015. It appears that the average age of the participants was younger than the average age of graduate students.

**Area of Clinical Emphasis**

Participants were prompted to select from the following options in response to the question: What is your area of clinical emphasis? 1) Clinical mental health counseling 2) School counseling 3) Community counseling 4) Marriage, couple and family counseling 5) Other. The following table (Table 2) shows the breakdown of participants by area of clinical emphasis.

**Table 2**

**Area of Clinical Emphasis**

<table>
<thead>
<tr>
<th>Area of Clinical Emphasis</th>
<th>Participants</th>
<th>Percentage of Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical Mental Health</td>
<td>42</td>
<td>76%</td>
</tr>
<tr>
<td>School Counseling</td>
<td>11</td>
<td>20%</td>
</tr>
<tr>
<td>Community Counseling</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Marriage, Couple, and Family</td>
<td>1</td>
<td>2%</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>2%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>55</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Approximately three-quarters of the participants identified with a clinical mental health emphasis. The CACREP Annual Report (2016) states that 48% of master’s in counseling students are enrolled in a clinical mental health emphasis. This sample may have had a higher percentage of participants with a clinical mental health emphasis because students planning to work in a clinical setting would be more interested in the subject of the experiment.
**Diagnosis Course**

Participants were prompted to select from the following options in response to the question: Have you completed or are you currently enrolled in a diagnosis course as part of your program? 1) Yes 2) No. The following table (Table 3) shows the breakdown of participant responses.

Table 3

<table>
<thead>
<tr>
<th>Diagnosis Course</th>
<th>Currently enrolled/ taken</th>
<th>Percentage of Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>25</td>
<td>45%</td>
</tr>
<tr>
<td>No</td>
<td>30</td>
<td>55%</td>
</tr>
<tr>
<td>Total</td>
<td>55</td>
<td>100%</td>
</tr>
</tbody>
</table>

The participants were divided relatively evenly in terms of having completed a diagnosis course. A one-sample t-test was conducted to compare the pre-test mean score on the JSE-HPS of those who are currently enrolled or have taken a diagnosis course (M=117.24, SD=10.99) and those who have not taken a diagnosis course (M=115.17, SD=8.68). The mean empathy score was 2.07 higher for students who are currently enrolled or have taken a diagnosis course. A statistically significant difference between the means was not observed; t(29)=-1.308, p>.05.

**Family Members and Friend**

Participants were prompted to answer two questions about family and friends. The first question asked participants to select from the following options in response to the question: Do you have an immediate family member or members who have been diagnosed with a severe
mental illness? 1) Yes 2) No. The following table (Table 4) shows the breakdown of participant responses. The second question asked participants to select from the following options in response to the question: Do you have a close friend who has been diagnosed with a severe mental illness? 1) Yes 2) No. The following table (Table 5) shows the breakdown of participant responses.

Table 4

*Family Members*

<table>
<thead>
<tr>
<th>Family member(s) diagnosed with severe mental illness</th>
<th>Percentage of Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>27%</td>
</tr>
<tr>
<td>No</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td>73%</td>
</tr>
<tr>
<td>Total</td>
<td>55</td>
</tr>
<tr>
<td></td>
<td>100%</td>
</tr>
</tbody>
</table>

Table 5

*Friend*

<table>
<thead>
<tr>
<th>Close friend diagnosed with a severe mental illness</th>
<th>Percentage of Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>36%</td>
</tr>
<tr>
<td>No</td>
<td>35</td>
</tr>
<tr>
<td></td>
<td>64%</td>
</tr>
<tr>
<td>Total</td>
<td>55</td>
</tr>
<tr>
<td></td>
<td>100%</td>
</tr>
</tbody>
</table>
The sample reported higher rates of severe mental illness among family and friends than general population statistics might suggest. Approximately one-quarter of the participants had a family member and one-third had a close friend who had been diagnosed with a severe mental illness. These percentages are surprising, given that 4% of the general population of adults have been diagnosed with a severe mental illness at some time in their lifetimes (National Institute of Mental Health, 2015), and 18.5% of the general population of adults experience mental illness a year (National Institute of Mental Health, 2015).

**University**

Participants were prompted to identify the university they are currently attending. The following table (Table 6) shows a breakdown of participants by university.

<table>
<thead>
<tr>
<th>University</th>
<th>Number of Participants</th>
<th>Percentage of Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>University of New Orleans</td>
<td>28</td>
<td>50%</td>
</tr>
<tr>
<td>Loyola University New Orleans</td>
<td>14</td>
<td>25%</td>
</tr>
<tr>
<td>Southeastern Louisiana University</td>
<td>5</td>
<td>9%</td>
</tr>
<tr>
<td>Illinois Institute of Technology</td>
<td>2</td>
<td>4%</td>
</tr>
<tr>
<td>Nicholls State University</td>
<td>2</td>
<td>4%</td>
</tr>
<tr>
<td>Roosevelt University</td>
<td>2</td>
<td>4%</td>
</tr>
<tr>
<td>Adler University (Chicago)</td>
<td>1</td>
<td>2%</td>
</tr>
<tr>
<td>Louisiana State University</td>
<td>1</td>
<td>2%</td>
</tr>
</tbody>
</table>
Participants were drawn from eight universities. The sample of universities represents large, medium and small universities. The sample also includes public and private universities as well as urban and rural universities. The diverse nature of these universities and the two distinct geographic regions in which they are located increases generalizability of the results, as results do not reflect the students or teaching of any one particular counseling program.

**Test of Hypothesis**

In this section the results of the data analysis are presented including a discussion of the hypothesis investigated.

**Research Question**

Does completing the HDVS result in changes in counseling students’ empathy for clients diagnosed with schizophrenia, as measured by the JSE-HPS?

**Hypothesis**

The hypothesis stated that exposure to the HDVS would result in a significant difference between pre-test and post-test JSE-HPS empathy scores.

**Statistical Results**

A two tailed, paired samples t-test revealed that there was a significant difference between pre-test empathy scores ($M=116.11$, $SD=9.76$) and post-test empathy scores ($M=121.85$, $SD=8.9$). The maximum score possible was 140 with higher scores indicating a higher level of empathy. The mean empathy score increased 5.74 after undergoing the training, from 116.11 pre-test to 121.85 post-test. A statistically significant increase in empathy scores was found after
undergoing the HDVS; t(54)=-5.712, p<.05. Therefore, the null hypothesis of equal pre-test and post-test means was rejected and the hypothesis was supported.

A post hoc analysis of the data was performed utilizing G*Power 3.1 software to determine effect size \( dz \). The effect size \( dz \) was calculated to be 0.77. The effect size represents a medium to large effect size (Cohen, 1988). Using this effect size with an alpha of .05 and a sample size of 55 G*Power 3.1 calculated the power as 0.99. Power is “the ability of a test to detect an effect of a particular size” (Field, 2013, p. 881). Any power above .8 is considered acceptable (Field, 2013).

Table 7

Paired Samples Statistics

<table>
<thead>
<tr>
<th></th>
<th>Minimum</th>
<th>Maximum (140 Possible)</th>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test</td>
<td>91</td>
<td>136</td>
<td>116.1091</td>
<td>55</td>
<td>9.75757</td>
<td>1.31571</td>
</tr>
<tr>
<td>Post-test</td>
<td>91</td>
<td>139</td>
<td>121.8545</td>
<td>55</td>
<td>8.90780</td>
<td>1.20113</td>
</tr>
</tbody>
</table>

Table 8

Paired Samples Correlations

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Correlations</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test &amp; Post-test</td>
<td>55</td>
<td>.684</td>
<td>.000</td>
</tr>
</tbody>
</table>
Table 9

Paired Samples Test

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
<th>Std. Error Mean</th>
<th>Lower</th>
<th>Upper</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test – Post-test</td>
<td>-5.74545</td>
<td>7.45907</td>
<td>1.00578</td>
<td>-7.76192</td>
<td>-3.72899</td>
<td>-5.721</td>
<td>54</td>
<td>.000</td>
</tr>
</tbody>
</table>

Ancillary Findings

The discussion session was audio recorded and analyzed to extract themes. The four themes identified were: 1) Frustration led to deeper understanding 2) Deeper understanding may shape how participants will work with clients 3) Self-perceived increase in ability to convey to clients that they are understood 4) Increased intention to help.

Frustration Led to Deeper Understanding

Participants shared experiences from the training that indicated an increase in understanding. The social task in particular stood out to the participants, and the following comments were made: “I didn’t want to talk to anyone… I tried,” “The voices discouraged me from wanting to talk to people,” “During social task I didn’t want to look at anyone. I felt ashamed.” Participants also shared how becoming frustrated with tasks led to a deeper understanding. One participant stated, “I felt stupid. I can see how your self-esteem would take a hit. I am usually really good at recall but could not do this.”

Deeper Understanding May Shape How Participants Will Work With Clients

Participants shared how their increased understanding will shape how they work in the future with clients who hear voices: “It’s easier to look at things from the client’s perspective
now. Especially for someone who has never counseled this could make it click… this is what empathy means and what putting yourself in other’s shoes means. This is not just something on paper. This is something you experience. Now when I have a client in front of me I can think ‘hey, I remember when I did that training and how I felt and that might be how they are feeling now,’” “This will change how I work with people who hear voices. My understanding was that people with schizophrenia are so different than people with less severe mental illness. I don’t believe that anymore. We have more in common than we have differences. This completely changed how I feel.”

**Increased Ability to Convey to Clients That They Are Understood**

Participants shared experiences from the training that indicated in increase in their perceived ability to convey to clients that the entirety of their concerns is understood or communicated. Participants stated: “Felt judged in the ER. That makes me want to reassure my clients if they struggle with questions especially if they have judgmental voices,” “I was really interested to hear about why you call it distressing voices and not auditory hallucinations,” “I see now how it’s important to engage with voice hearers,” “It was jarring to be talked to in an overbearing way. I can see how person first language is important.”

**Increased Intention to Help**

Many participants shared comments that indicated an increased intention to help. Some of the comments were: “It just reminded me to allow my clients to walk me through their experience, not to judge, not to put my bias on it, but to sit there in that space with them and help them find a way through what they are experiencing,” “I have a family member with Schizophrenia, and I advocate for him in my family. Now I feel like I need to be more conscious of myself and how I talk to and about him.”
Summary

A total of 55 master’s students in counseling from eight CACREP-accredited universities in southern Louisiana and the Chicago area participated in this study. The purpose of the study was to test the hypothesis that the HDVS would affect counseling students’ empathy. Participants completed a demographic survey and an empathy assessment prior to undergoing the HDVS. After the training participants completed a post-test empathy assessment.

A paired samples t-test was utilized to test the hypothesis. The t-test indicated a significant increase in empathy scores after completion of the training (p=.000). The calculated p-value indicates the probability of a Type I error, falsely rejecting the null hypothesis, as 0% (Field, 2013). These data support rejection of the null hypothesis and support the hypothesis that the HDVS increases counseling students’ empathy.

Effect size dz and power were both calculated for the study. The effect size is a “standardized measure of the magnitude of the observed effect” (Field, 2013, p. 79). The effect size dz (0.77) is interpreted as a medium to large effect size (Cohen, 1988). The calculated power (0.99) meets the standard required to avoid Type II error, not seeing a present effect, and shows that there is a 99% chance of detecting an effect if it does exist (Field, 2013).

A review of the discussion session audiotape revealed four themes. The themes identified were: 1) Frustration led to deeper understanding 2) Deeper understanding may shape how participants will work with clients 3) Increased ability to convey to clients that they are understood 4) Increased intention to help.
CHAPTER 5

DISCUSSION

Chapter five presents a discussion of the findings of the study. A brief overview of the study is presented. The hearing distressing voices simulation, results, ethical considerations, implications and recommendations, and limitations are discussed. Finally, recommendations for future research and counselor educators are presented.

Overview of the Study

A total of 55 students currently enrolled in CACREP-accredited master’s-level counseling programs participated in this quantitative study. A quasi-experimental one-group pre-test/post-test design (Harris et al., 2006) was used to test the hypothesis that the hearing distressing voices simulation training, Developing Empathy for the Lived Experience of Psychiatric Disability: A Simulation of Hearing Distressing Voices (HDVS), developed by Patricia E. Deegan, Ph.D., will affect counseling students’ empathy for clients diagnosed with schizophrenia. Empathy was identified as the dependent variable and was measured by the Jefferson Scale of Empathy – Health Professions Students (JSE-HPS) version in both pre and post testing. Participants completed a demographic survey and pre-test followed by exposure to the independent variable, HDVS, with the post-test occurring immediately after exposure to the independent variable. Pre-test and post-test scores were compared utilizing a paired samples t-test. Results indicated that there was a significant difference in the scores for pre-test (M=116.1, SD=9.76) and post-test (M=121.9, SD=8.9) conditions; t(54)=-5.712, p=.000. The calculated p value indicates the probability of a Type I error, falsely rejecting the null hypothesis, as 0%
(Field, 2013). The results support the hypothesis that the hearing distressing simulation experience increases counseling students’ empathy.

**A Simulation of Hearing Distressing Voices**

The HDVS is a comprehensive training kit that provides the trainer with all of the items needed to conduct the training. The training kit contains the manual, documents for printing, three videos, and audio simulation recording. This study maintained fidelity with the manual in the administration of the training except for the exclusion of the second video. The first and third videos were shown to the participants while the second video was excluded. This study also utilized the provided documents for conducting the workstation activities.

A few participants experienced difficulties with their mp3 players. Some participants required assistance starting the mp3 player and setting the volume at a comfortable level. During the simulation several participants reported a malfunction with the mp3 player. These participants were provided with a new mp3 player and assisted with restarting the audio where it left off to ensure quick immersion back into the simulation. Strategies to manage this issue are reviewed in the recommendations section later in this chapter.

**Discussion of Results**

The results of the study support the findings of previous researchers who have used the HDVS to increase empathy in nursing and medical students (Bunn & Terpstra, 2009; Chaffin & Adams, 2013; Dearing & Steadman, 2008, 2009; Galletly, & Burton, 2011; Ward, 2015; Wieland, Levine, & Smith, 2014; Wilson et al., 2009). This study is the first to explore use of the HDVS with counseling students, and the results support its use to increase counseling students’ empathy towards individuals with schizophrenia.
Three studies with quantitative elements investigated the affect of the HDVS on nursing students (Chaffin & Adams, 2013; Dearing & Steadman, 2008; Ward, 2015). Each of these studies utilized a similar pre-test/post-test design as the current study, with Dearing and Steadman (2008) also utilizing a control group. Results of all but one of these studies demonstrated statistically significant changes in pre-training and post-training test scores. Although Ward (2015) found no significant difference between pre-test and post-test scores, the post-simulation mean was higher than the pre-simulation mean, and participant comments logged by the research team supported an increase in understanding and empathy.

An understanding of how the HDVS increased counseling student empathy can be gained by exploring participant experiences. Quotes from participants in this study reflect themes related to empathy that were also identified in five previous qualitative studies of nursing students who underwent the HDVS (Chaffin & Adams, 2013; Dearing & Steadman, 2008, 2009; Wieland, Levine, & Smith, 2014; Wilson et al., 2009). Dearing and Steadman (2009) identified intellectual knowing as a major theme in their study. Intellectual knowing is defined as “the participants related a direct and new sense of knowing about individuals who have voice-hearing experiences” (Dearing & Steadman, 2009, p. 178) and relates to participants acquiring a deeper understanding, an element of two of the themes identified in this study: frustration led to deeper understanding, and deeper understanding may shape how participants will work with clients. A deeper understanding was also found in participant quotes offered by Dearing and Steadman (2008), Wieland, Levine, and Smith (2014), and Wilson et al. (2009).

The above nursing student studies support findings from this study that the HDVS increases empathy and is a valuable learning tool. Chaffin and Adams (2013) reported that newly acquired empathy was the primary feeling reported by participants. Dearing and Steadman
(2008) reported that their experimental group also identified feeling more empathetic after undergoing the HDVS, whereas the control group did not demonstrate the same response. Finally, Wieland, Levine and Smith (2014) reported that participants described the HDVS as life changing.

Of particular note, Bunn and Terpstra (2009) conducted a similar study using the Jefferson Scale of Empathy to measure pre-training and post-training empathy in 150 medical students. The use of the Jefferson Scale increases the comparability of this study to Bunn and Terpstra’s (2009) study. In their study, a paired samples t-test demonstrated a significant difference between pre- and post-test scores of the experimental group.

Participants in Bunn and Terpstra’s (2009) control group underwent the entire HDVS but were not exposed to the audio recording during the simulation portion of the training. A paired samples t-test of the control group showed no significant differences between pre-training and post-training scores. The present study did not utilize a control group, for reasons described in chapter three. Bunn and Terpstra’s (2009) control group results suggest that empathy does not increase with the passage of time or with enrollment in a training program for helping professionals. This finding increases confidence in the results of studies that did not utilize control groups.

The findings of this study also have implications for the conceptual framework discussed in Chapter 1. Rogers (1957) identified six specific conditions that should be maintained over time in order for therapy to be successful. Among these conditions are empathetic understanding and successfully communicating empathy. These two elements are also present in the definition of empathy utilized by the JSE-HPS and consequently this study. Ancillary findings of this study identify an enhancement in these conditions for the participants, including frustration led to
deeper understanding, deeper understanding may shape how participants will work with clients, and self-perceived increase in ability to convey to clients that they are understood.

Characteristics of the sample were assessed using a demographic survey to determine gender, age, area of clinical emphasis, and the university in which the participant was enrolled. Gender distribution of the sample is almost identical to the gender distribution of master’s students in CACREP counseling programs across the United States (CACREP, 2016). Participants were drawn from eight diverse universities in two distinct geographical locations. The gender distribution and diverse nature of the universities participants were drawn from lends credibility to the generalizability of the results to the larger population of master’s in counseling students.

The age of the sample, however, is younger than the average age of graduate students in the United States. The sample also had a higher percentage of participants with a clinical mental health emphasis (76%) than that of the larger population of master’s counseling students (48%) (CACREP, 2016). While the age distribution is younger than the general population of graduate students in the US, it is difficult to make a determination with regard to the generalizability to master’s in counseling students due to a lack of data regarding age of master’s in counseling students. The higher percentage of students enrolled in a clinical mental health emphasis could pose problems for generalization to all master’s in counseling students and may suggest that generalizability be contained to students with a clinical mental health emphasis.

The sample reported higher rates of severe mental illness among family and friends than general population statistics might suggest. During administration of the demographic survey some participants asked for clarification about the meaning of “severe mental illness.” I prompted them to interpret this how they saw fit. Due to the ambiguity of the question,
participants may have defined severe mental illness to include diagnoses that an experienced clinician would deem moderate. This could be due to past difficult experiences caring for or being concerned about a family member or friend with mental illness. These past struggles may influence perceptions of severity, or it is possible that persons with these experiences might be more likely to choose a counseling career.

**Ethical Considerations**

One concern about the HDVS is the possibility of adverse events during the simulation portion of the training. Several participants identified frustration and difficulty focusing: “I felt frustrated. I found myself fighting with the voices,” “I was very distracted especially trying to recall information in the ER setting. It made me feel dumb... the voices got in the way,” “I felt dumb and frustrated during the numbers.” Frustration and difficulty concentrating were also identified among participants in all five of the qualitative studies reviewed (Chaffin & Adams, 2013; Dearing & Steadman, 2008; Dearing & Steadman, 2009; Wieland, Levine, & Smith, 2014; Wilson, Azzopardi, Sager, Gould, Conroy, Deegan, & Archie, 2009).

Fatigue also seems to be a common experience among participants. Participants in four of the five qualitative studies reviewed reported fatigue (Chaffin & Adams, 2013; Dearing & Steadman, 2008; Dearing & Steadman, 2009; Wilson, Azzopardi, Sager, Gould, Conroy, Deegan, & Archie, 2009). Wilson et al. (2009) suggested that the fatigue experienced is related to the amount of energy required to concentrate on cognitive tasks while listening to the audio. One participant in this study stated, “I found it disturbing at times. Especially when it was quiet. I feel tired.” Although fatigue and difficulty concentrating were identified through qualitative analysis, Chaffin and Adams (2013) noted positive effects of the HDVS. They observed during the next clinical interaction that participants were “more focused and showed extreme kindness and
patience when interacting with psychiatric patients” (p. e320). Further, participants “were more relaxed” (p. 320) within the clinical setting. Participants in this study also reported positive effects of the HDVS. Participants stated: “It reminded me to have patience,” “It’s easier to look at things from the client’s perspective now,” “I’ll take away a greater understanding of what clients experience.”

Although participants consistently spoke of the powerful and sometimes uncomfortable nature of the study, they were able to identify and utilize coping skills to manage feelings during the simulation. One participant stated, “I found it disturbing and distressing. The origami helped me calm down. I think the tactile stimulation was calming.” Another participant stated “I went over to the (social task) and as I was walking there I got so anxious. I tried to do a breathing exercise and it was helpful.” Further, study participants were offered two free counseling sessions if they experienced an adverse reaction to the HDVS. No participants requested the counseling sessions. This suggests resiliency among the participants and adds to the literature the finding that, although students may feel uncomfortable during the simulation, the negative effects were minimal.

**Implications and Recommendations**

The results of the study demonstrate that the HDVS has a significant effect on counseling students’ empathy towards individuals who experience auditory hallucinations. The findings support the use of the HDVS in the education of future counselors.

Although some apparent barriers to the implementation of the HDVS exist, including time, technology, space, volunteers, and ethical considerations, the results of this study along with the results of previous research suggest that the increase in empathy due to the HDVS may
outweigh any difficulties created by these potential barriers. The HDVS was overwhelmingly supported by the participants.

As the researcher, I initially had concerns about the length of the HDVS; however, comments such as “even though it is a long training faculty should use it in their classes” indicate that the length of the HDVS was not concerning to the participants. I also had concerns about whether the videos shown during the introduction session enhanced the experience. Participants responded positively to the videos, and during discussion they shared that the videos were instrumental in increasing understanding and facilitating hope. Participants stated: “I really enjoyed the videos. I wrote down some of the coping skills she suggested,” “The videos were really helpful,” “To hear that people recover was powerful.” It is recommended that in future trainings consideration should be given to showing all three videos regardless of participant population due to the lack of concern about training length, the impact of the videos, and the generalizable nature of the content to all helping professionals.

Technology is another potential barrier to utilization of the HDVS. I utilized individual mp3 players for the simulation portion of the training. The cost and time required to purchase and maintain the mp3 players may be prohibitive for some. Ideally, the audio simulation could be uploaded to the trainees’ personal devices for the simulation; however, copyright concerns arise with allowing participants to take ownership of the recording by loading it to their personal devices. It is recommended that in the future an app be developed that would give trainees access to the simulation audio recording on their personal devices during the training only.

Some participants reported that their mp3 player stopped working during the simulation. In most of these instances this was due to participants’ perception of what to expect from the recording rather than a malfunction of the mp3 player. The recording increases and decreases in
volume throughout the simulation. During the lower volume portion of the recording some participants with a low mp3 volume setting misinterpreted this as a malfunction because they were not hearing anything. It is recommended that trainers point this out prior to the simulation. It is further recommended that trainers encourage participants to use the first several minutes of the simulation recording, where the volume is constant, to set the volume to the higher end of their comfort range. Participants should still be able to hear and carry out a conversation.

Obtaining space and volunteers to administer the HDVS could also present difficulties. The HDVS requires at least two group-size rooms and one smaller room, and at least one volunteer per room. It is important to note that trainers should be coached and familiarized with the training scripts prior to conducting the HDVS. Participants indicated that exposure to skilled trainers who were able to create a disempowering environment, per the training toolkit manual, made a difference in the quality of their experience. Participant stated: “Trainers were mean and cold… it allowed me to tap into what clients might experience,” “Trainer was so cold, and I’m not used to that.”

Ethical considerations are the final potential barrier to utilization of the HDVS. Consistent with findings in previous research, participants experienced fatigue, frustration, and feeling overwhelmed. At the same time, participants expressed that this experience furthered their understanding of what it is like to hear distressing voices, and they utilized coping skills during the HDVS to manage feelings of discomfort. No student accessed free counseling sessions as a result of an adverse event.

**Limitations**

This study contained several limitations. The first anticipated limitation was participant attrition. Participants could choose to discontinue participation in the study if they felt
overwhelmed by the experience. One participant chose to withdraw from the study due to feeling overwhelmed. Additionally, participants were instructed that they could turn off the audio recording and continue participating in the study without informing the investigator. It is unknown if this occurred.

A second limitation is that confounding variables might have affected the results of the study. The study did not control for variables such as race, ethnicity, year in the counseling program, work experience, or personally being diagnosed with a mental illness.

The instrument used in this study was a self-report scale. Participants may have answered questions based on assumptions or a desire to answer in a socially acceptable way (Miller, 2012). Thus, potentially biased participant responses were a third limitation of the study.

Participation was voluntary, and students who expressed interest in the study might have differed from those who did not. Approximately three-quarters of the participants were enrolled in a clinical mental health emphasis, which is higher than the 48% enrollment rate for clinical mental health emphasis in CACREP programs (CACREP, 2016). For this reason, the sample may not be representative of all master’s counseling students who are currently attending a CACREP-accredited program.

**Recommendations for Future Research**

Future researchers might focus on further exploration of counseling students’ response to the HDVS. A research design utilizing a control group, as well as controlling for confounding variables, would increase confidence in the results. A longitudinal study utilizing the JSE-HPS could be constructed to see if the training results are lasting. In such a study, the JSE-HPS could be administered to first semester students after they complete the HDVS, and the JSE-HPS could be re-administered during their practicum experience. Further, a qualitative study could be
implemented to develop further insight into how and why the HDVS increases counseling students’ empathy.

The effect of the HDVS on volunteer trainer assistants who have not themselves undergone the training is another area for potential research. Statements made by trainer assistants during the discussion session revealed that they were also positively impacted by merely assisting with conducting the HDVS. For example, one volunteer stated, “Was interesting watching expressions. I could see the frustrations. Your faces let on to what you were experiencing.” Another shared that, “It’s powerful to hear you voice what people with schizophrenia actually experience. As a trainer this was a really powerful experience.”

Additional research recommendations center on using a similar pre-test/post-test design to develop evidence in support of experiential learning experiences used in training master’s students in counseling. The JSE-HPS could be used to measure student empathy prior to and after completion of practicum and internship. The instrument could also be used to measure changes in empathy related to coaching experiences, role-plays, or any other experiential learning exercises.

A final research recommendation is to explore the use of the JSE-HPS in the admissions process. A study could be constructed to investigate if empathy scores are able to predict future performance of master’s-level counseling students. The JSE-HPS has the potential to help in streamlining the admissions process and to serve as an additional gatekeeping tool.

**Recommendations for Counselor Educators**

The results of the study provide support for use of the HDVS in the training of counseling students. A goal of the diagnosis class should be to increase students’ empathy for clients with severe mental illnesses; however, having taken the diagnosis course did not make a difference
with regard to pre-test empathy scores. A lack of change in empathy after completing a diagnosis course could mean that counseling students are not developing an understanding of the client’s experience.

If diagnosis courses are not increasing students’ understanding of the client’s experience and therefore not increasing empathy, counselor educators should re-examine how the class is being taught. The findings of the present study support integration of the HDVS into training curriculum for students in the clinical mental health track and would fit well into a diagnosis course. One participant stated: “I took the diagnosis class and you can know what a diagnosis is but this experience gives context and makes it a lot more clear as to what the experience is like.” Further, CACREP requires that programs use evidence-based outcome measures, and using the HDVS to deliberately increase empathy might be helpful in the CACREP accreditation process.

**Conclusion**

Stigma towards individuals with severe mental illness, including schizophrenia, is a systemic societal issue and contributes to discrimination and marginalization (Corrigan & Penn, 1999). It is evident in our social messaging and affects our housing, employment, criminal justice, and health care policies. Stigma contributes to diminished self-esteem and avoidance of self-identification as mentally ill and contributes to a high percentage of individuals with serious mental illness who either do not engage in treatment or do not follow through with treatment (Corrigan, 2004; Cramer & Rosenbeck, 1998).

Previous research has shown that mental health providers have stigmatizing attitudes towards individuals with serious mental illness (Eack, Newhill, & Watson, 2012; Peer, Warnecke, Baum, & Goreczny, 2015; Svensson et al., 2014). These stigmatizing attitudes are a barrier to receiving care (Corrigan, 2004; Cramer & Rosenbeck, 1998), and they indicate a lack
of empathy among mental health providers (Webb et al., 2016). This lack of empathy is a threat to the counseling process, and it negatively influences therapeutic alliance and ultimately treatment outcomes (Brown 2007; Hojat, 2016; Rogers, 1957).

Counselor educators should strive to decrease stigma and cultivate empathy among their students. Further, counselor educators should assist students with developing tools to avoid replicating within the counseling relationship the disempowerment and marginalization that clients with schizophrenia experience in their lives. This study suggests the HVDS is an effective tool to meet these goals. The HDVS assists counseling students with developing empathy through a cognitive process that simulates the experience of functioning in the world with auditory hallucinations. This study demonstrated that counseling students had a better understanding of the client’s experience and thereby an increased level of empathy after completing the HDVS. This increase in empathy will result in a decrease in stigmatizing attitudes among counseling students and increased trust, client satisfaction, therapeutic alliance, adherence and compliance among their clients. Ultimately, more positive treatment outcomes will likely be produced.
References


Appendix A

Demographic Survey
Demographic Survey

Participant ID Number: ________________________

1) What is your gender?

Female

Male

Non-binary/ third gender

Prefer to self describe

Prefer not to say

2) What is your age?

20 – 24

25 – 27

28 – 30

31 – 33

34 – 36

37 – 39

40 – 42

43 – 45

46 – 48

49 – 51

> 51

3) What is your area of clinical emphasis?

Clinical mental health counseling

School counseling

Community counseling

Marriage, couple and family counseling
4) Have you completed a diagnosis course as part of your program?
   Yes _____
   No _____

5) Do you have family members who have been diagnosed with a severe mental illness?
   Yes _____
   No _____

6) Do you have a friend who has been diagnosed with a severe mental illness?
   Yes _____
   No _____
Appendix B

Informed Consent
Informed Consent

Thank you for agreeing to participate in this study. The following form outlines information relevant to this study including investigator’s name, purpose of the study, description of what your participation will involve, possible risks and benefits, and what to do in case of injury related to your participation in this study. The form also includes information relevant to the simulation.

Please read each item thoroughly. This form will also be reviewed verbally prior to the start of the study.

1. Jeff Strozier, who is a doctoral candidate in Counselor Education and Supervision at the University of New Orleans, has requested your participation in a research study at the university you attend.

2. The purpose of the research is to test the hypothesis that the hearing distressing voices simulation will affect counseling students’ empathy for clients diagnosed with schizophrenia.

3. Your participation will involve completing a three-part training. The first part involves watching two videos that describe the experience of hearing voices and how to work with individuals who hear voices. The videos will take a total of 45 minutes to watch.

The second part is a 45-minute hearing distressing voices simulation. During the simulation you will be asked to wear audio headphones and listen to a simulation of auditory hallucinations. The audio simulation contains music, mumbling, bird sounds, repeating of random words, some profanity, observations, demeaning statements, and command statements. While listening to the audio you will be asked to visit four workstations that will allow you to engage in tasks such as social interactions, mock psychiatric interview, and cognitive tasks.

The final part of the training involves a 45-minute group discussion of your experience. The discussion portion of the training will be recorded for data collection purposes.

You will be asked to complete a brief demographic survey prior to the first part of the training. You will also be asked to complete an additional brief survey prior to the first part and after the final part of the training. The survey contains 20 items and takes approximately 6 minutes to complete.

The total time commitment is approximately 3 hours. Your participation is completely voluntary and you may withdraw at any time with no penalty.

4. There are foreseeable risks or discomforts to you if you agree to participate in the study. The possible risks and discomforts include fatigue, frustration, difficulty concentrating, and feeling overwhelmed. The following recommendations and information are intended to reduce these risks:
It is not recommended that people with a history of hearing voices participate in this study.

It is recommended that you turn off your audio player if you feel distressed.

You may continue to participate at the workstations and in the discussion if you choose to turn off your audio player and no questions will be asked regarding your decision to turn off the audio player.

Two free counseling sessions will be provided to individuals who experience significant distress or harm from their participation. If you wish to use these counseling services, contact Jeff Strozier at jstrozie@uno.edu for a list of providers.

5. There are no feasible alternative procedures available for this study.

6. The possible benefits of your participation in the research are an increased understanding of the experience of hearing distressing voices and an increase in empathy.

7. The results of the research study may be published but your name or identity will not be revealed. In order to maintain confidentiality of your records, Jeff Strozier will not maintain a list of participants and will delete any email correspondence with participants. Further, participants will not be asked to place any personally identifying information on assessments.

8. You will not be paid for your participation.

9. Any questions you have concerning the research study or your participation in it, before or after your consent, will be answered by:
   Dr. Barbara Herlihy
   University of New Orleans
   2000 Lakeshore Dr.
   184 EDCU Bldg.
   New Orleans, LA 70178
   Phone: ELCF Department 504-280-7386

10. In case of injury, if you have questions about your rights as a subject/participant in this research, or if you feel you have been placed at risk, you can contact the Chair of the Human Subjects Institutional Review Board, Dr. Ann O’Hanlon, at 504-280-3990.

11. This form explains the nature, demands, benefits and any risk of the project. By signing this form you agree knowingly to assume any risks involved. Remember, your participation is voluntary. You may choose not to participate or to withdraw your consent and discontinue participation at any time without penalty or loss of benefit. In signing this consent form, you are not waiving any legal claims, rights, or remedies. A copy of this consent form will be given (offered) to you.
Your signature below indicates that you consent to participate in the above study and agree to be audio recorded during the discussion portion of the study.

_____________________________________________  ________________________  _____________
Subject's Signature                         Printed Name                          Date

_____________________________________________  ________________________  _____________
Other Signature (if appropriate)              Printed Name                          Date

13. "I certify that I have explained to the above individual the nature and purpose, the potential benefits and possible risks associated with participation in this research study, have answered any questions that have been raised, and have witnessed the above signature."

14. "These elements of Informed Consent conform to the Assurance given by the University of New Orleans to the Department of Health & Human Services to protect the rights of human subjects."

15. "I have provided (offered) the subject/participant a copy of this signed consent document."

_____________________________________________  ________________
Signature of Investigator                         Date
Appendix C

IRB Approval Letter – Initial
IRB Approval - Initial

University Committee for the Protection of Human Subjects in Research
University of New Orleans

Campus Correspondence

Principal Investigator: Barbara Herlihy
Co-Investigator: Jeff Strozier
Date: March 31, 2017
Protocol Title: The Relationship Between the Hearing Distressing Voices Simulation and Empathy Among Master's Students in Counseling
IRB#: 02Mar17

Your proposal was reviewed by the full IRB. The group voted to approve your proposal pending that you adequately address several issues. Your responses to those issues have been received and you have adequately addressed all of the issues raised by the committee. Your project is now in compliance with UNO and Federal regulations and you may begin conducting your research.

Please remember that approval is only valid for one year from the approval date. Any changes to the procedures or protocols must be reviewed and approved by the IRB prior to implementation. Use the IRB number listed on this letter in all future correspondence regarding this proposal.

If an adverse, unforeseen event occurs (e.g., physical, social, or emotional harm), you are required to inform the IRB as soon as possible after the event.

Best of luck with your project!
Sincerely,

Robert Laird, Ph.D., Chair
Committee for the Protection of Human Subjects in Research
Appendix D

IRB Approval Letter – Modification
IRB Approval – Modification

University Committee for the Protection of Human Subjects in Research
University of New Orleans

Campus Correspondence

Principal Investigator: Dr. Barbara Herlihy
Co-Investigators: Jeffrey Stozier
Date: August 25, 2017
Protocol Title: The Relationship Between the Hearing Distressing Voices Simulation and Empathy Among Master’s Students in Counseling
IRB#: 02Mar17

Your modification request was eligible for expedited review as the modification did not change the potential risk to the participants. The change in the recruitment strategy of Master’s students in the Chicago area has been approved as it uses the same strategies as have been previously approved.

Please remember that approval is only valid for one year from the approval date. Any changes to the procedures or protocols must be reviewed and approved by the IRB prior to implementation.

If an adverse, unforeseen event occurs (e.g., physical, social, or emotional harm), you are required to inform the IRB as soon as possible after the event.

I wish you much success with your research project.

Sincerely,

Ann O’Hanlon, Chair
UNO Committee for the Protection of Human Subjects in Research
Appendix E

Hearing Distressing Voices Simulation Receipt
Thank you for your purchase!
Hi Jeffrey We're getting your order ready to be shipped. We will notify you when it has been sent out.

Order summary

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Subtotal                                        $350.00
Shipping                                        $7.00

Total                                            $357.00 USD
Appendix F

Hearing Distressing Voices Simulation MP3 Player Receipt
Thank you for your purchase!

Hi Jeffrey, we’re getting your order ready to be shipped. We will notify you when it has been sent out.

View your order or Visit our store

Order summary

| Hearing Voices: Basic Preloaded Mp3 Players × 30 | $300.00 |

| Subtotal                                                                 | $300.00 |
| Shipping                                                                | $14.25  |

| Total                                                                    | $314.25 USD |
Appendix G

Jefferson Scale of Empathy – Health Professions Student Version Receipt
JSE INVOICE

CRMEHC
Center for Research in Medical Education and Health Care
Thomas Jefferson University
1615 Walnut Street, Suite 319 Curtis
Philadelphia, PA 19107-5883
215-555-5458 fax: 215-923-6039

Order ID: 10540

Invoice Date: 4/18/2017
Order Date: 4/18/2017
Contact Name: Jeffrey Strozler
Ship Via: Fed Ex 3-day
Contact ID: 1680
Est. Ship Date: 4/19/2017

Bill To:
New Orleans, LA 70122
USA
Ph: 312-513-4430

Ship To:
New Orleans, LA 70122
USA

FORMS SERVICES

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Sales Tax: $0.00
Order Total: $725.00
Total Payments: $725.00
Total Due: $0.00

Shipping/Handling charges vary by location and order weight

WE ACCEPT ONLY CHECKS.
Please make check payable to "THOMAS JEFFERSON UNIVERSITY"
Send payment to above address. Attn: Shire Carroll

THANK YOU FOR YOUR ORDER!
PAID IN FULL

Wednesday, April 19, 2017
Vita

Jeffrey Strozier was born in Shreveport, Louisiana and graduated with a Bachelor’s degree in Psychology from Louisiana State University in Shreveport in 2002. While enrolled at LSUS, Jeffrey was twice elected President of the Student Government Association and was awarded student leader of the year in 2003. He moved to Chicago, IL after graduating from LSUS and enrolled in the Masters in Clinical Professional Psychology program at Roosevelt University where he graduated with a Master of Arts in 2007. Jeffrey’s specialization is in working with adults with serious mental illness and substance use disorders. He provided community based counseling services to individuals with serious mental illness for 9 years while working at Thresholds Psychiatric Rehabilitation Centers in Chicago, IL. He then moved to New Orleans to enroll in the Ph.D. in Counselor Education and Supervision program at the University of New Orleans. Jeffrey received a UNO doctoral fellowship, served on the Louisiana Mental Health Counselors Association board of directors, presented at local and regional conferences, co-taught classes at the University of New Orleans and the University of Malta, and won third place in the ACA ethics competition during his time at UNO. He is currently licensed as a Clinical Professional Counselor in the state of Illinois.