Graduate Students' Empathy and Attitudes: An Intervention Study

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Abstract

Mental illness impacts roughly 46.6 million Americans each year and can be highly stigmatized. Mental illness is a disruption of one or more domains of functioning (e.g., biological, psychological, sociocultural), caused by abnormalities in brain structures, chemical signaling, or functioning that leads to distress and functional impairments. Stigma is characterized by labeling, stereotyping, negative attribution, separation, status loss, and discrimination against those with mental illness by society. Stigma can impact those with mental illness in a process through which individuals and populations are devalued for possessing a negatively viewed attribute. Provider stigma is a phenomenon through which medical and behavioral health professionals perceive and respond negatively to individuals with stigmatized characteristics in the care setting. In contrast to stigma, empathy is a cognitive skill that involves understanding another individual's experiences and perspective, communicating this understanding, and expressing oneself in a manner aimed to prevent or diminish another's pain and suffering. Empathy is an important counterbalance to stigma for individuals with mental illness. Providers ability to experience and express empathy may decrease the likelihood of that provider holding stigmatizing beliefs towards mentally ill individuals. Provider empathy can also affect a patient's trust level, the formation of the provider-patient alliance, patient engagement in care, patient adherence to treatment, and the patient's subsequent medical and mental health utilization patterns. There is a need for students in health and human services disciplines to understand how empathy and attitudes toward mental illness can affect their practice.

This study aimed to evaluate empathy and attitudes towards mental illness among students across seven graduate programs while also examining relationships between empathy and attitudes regarding individuals with mental illness. A vignette-style virtual educational intervention was

used to educate students regarding situations that would help identify stigma as it relates to mental illness. The intervention consists of portrayals of individuals with mental illness or who have family members with mental illness, allowing them to experience vicarious, or secondhand, exposure to stigmatized individuals. The findings of this study support the reliability of the measures used to gather data. Empathic concern scores across disciplines were found to be relatively high at baseline and strongly correlated with positive attitudes' scores at both the preintervention and postintervention assessments. This is important because the cultivation of empathy during graduate and professional education and training has been associated with increased caring behaviors and empathetic care associated with students in a clinical setting.

Keywords: Empathy, stigma, mental illness, students, helping professions

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Chapter 1: Introduction

Empathy, compassion, and emotional intelligence are factors that are critically important for professional-consumer relationships in health professions (Fields et al., 2011; Hojat et al., 2011; Van Boekel, 2013). Empathy impacts the effectiveness of communication, trust, the therapeutic alliance, patient satisfaction, professional satisfaction, provider professionalism, interprofessional practice, and clinical outcomes (Boyle, et al., 2010; Fields et al., 2011; Hojat, 2007; Hojat, Veloski, & Gonnella, 2006; Reiss, 2010). Brené Brown (2018) has done extensive research on leadership, empathy, emotional intelligence, and value congruence (the ability to live according to one's identified core values). She stresses that in positions of power, as health care professionals often are, the ability to be non-judgmental, empathetic, and responsive are necessary traits; all of which require high emotional intelligence and self-awareness of inequitable preconceptions. However, according to many studies, some professionals and pre-professionals in the fields of health and human science lack the ability to use and experience empathy during their practice (Boyle et al., 2011; Reynolds, Day, Shafer, & Becker, 2018).

Other important factors for clinical efficacy are the attitudes of the professionals and pre-professionals. As such, individuals living with mental illness are often viewed negatively by society, and these perceptions and attitudes can also be held by human services professionals in both implicit and explicit forms (Brennan & McGrew, 2013; Harlak et al., 2008; Stier & Hinshaw, 2007). An example of implicit (unconscious or hidden) stigma includes the professional who avoids being in close quarters or in physical contact with an individual with a psychiatric diagnosis. An example of explicit (conscious and manageable) stigma includes the professional who use derogatory language in reference to individuals with mental illness when

communicating with peers, staff, or patients. A negative attitude, often created by misconceptions, misinformation, discrimination, and stigma and brought into the professional-consumer relationship can create a negative cultural environment as well as a negative care experience for the client.

Purpose

The purpose of this project was to explore empathy, stigma, and the effects of a video intervention on baseline scores among health and human services graduate students. Utilizing the Interpersonal Reactivity Index (IRI) and the Opening Minds Stigma Scale for Health Care Providers (OMS-HC), participants were assessed before and immediately following an online presentation of *Competent Caring*. *Competent Caring* is a presentation created by the National Alliance on Mental Illness (NAMI) and the Hospital Corporations of America (HCA) to educate and inform providers and healthcare professionals about the experiences of individuals with mental illness, was well as the experiences of their family members. Originally, the video was designed to educate professionals in the emergency room setting on the experiences of individuals with mental illness in that environment. However, the video has been used in many clinical and educational settings for diverse health and human service professionals since its inception.

Goals

- To assess the empathetic capacity and attitudes of participants across disciplines towards persons with serious mental illness.
- To compare baseline and post-intervention scores to determine the effectiveness of *Competent Caring* to influence the feelings and attitudes of helping-profession graduate

students across several health and humans services disciplines including nursing, social work, occupational therapy, physical therapy, and psychology.

- To evaluate correlations based on participants' demographics and disciplines of study, as well as between their reported capacity for empathy and attitudes measured pre- and post-intervention.
- To identify potential areas of improvement for the training of health and human services graduate students in the care of individuals with mental illness.

Hypotheses

Research has found that negative attitudes on the part of health professionals can negatively impact collaborative relationships between patients and professionals (Curtis & Harrison, 2001; Economou et al., 2019; Harangozo et al., 2014; Henderson et al., 2014; Peckover & Chidlaw, 2007; Van Boekel, 2010). In turn, difficulties in forging a trusting and therapeutic relationship may have an effect on feelings of self-esteem and empowerment of these patients, thus decreasing the chance of a treatment outcome that is positive in various ways (e.g., reluctance to disclose, failure to return for follow-up, non-adherence) (Curtis & Harrison, 2001). Professionals may also have a more avoidant approach to the delivery of healthcare. Professionals who demonstrate a more avoidant approach to healthcare delivery with patients having substance use disorders and other mental illnesses, tend to engage in shorter visits and show diminished personal engagement and express less empathy. The result of these attitudes can be suboptimal healthcare delivery to patients with substance use disorders due to a task-oriented versus person-oriented approach of health professionals when working with these patients (Peckover & Chidlaw, 2007; Van Boekel, 2010).

In accordance with existing research, it is hypothesized that students with the least amount of exposure to mental illness will have less empathy towards individuals with mental illness than students with more exposure. It is further hypothesized that students with the least amount of exposure to those with mental illness will also have more stigmatizing attitudes than students with more exposure. Furthermore, it is hypothesized that attitudes towards those with mental illness will improve after viewing a brief intervention as evidenced by changes in posttest measurement scores.

- H1: Students who self-report having no exposure to mental illness will have less empathy than students with exposure.
- H0: There is no association between exposure to mental illness and empathy in students.
- H2: Students will report increased empathy towards those with mental illness after viewing the video intervention.
- H0: There is no association between viewing a brief video intervention and students' levels of empathy towards those with mental illness.

Research Questions

- What are the relationships between empathy, attitudes, and perceptions in a diverse graduate student population?
- Does type of discipline impact levels of empathy, attitudes, and perceptions among the study population?
- Does a psychoeducational intervention involving narratives impact attitudes and perceptions of students of those with mental illness?

Importance of Study

The central importance of the study revolves around the finding that negative attitudes of health professionals may harm the empowerment of patients and, consequently, have an adverse impact on treatment outcomes and the self-esteem of patients (Curtis & Harrison, 2001; van Boekel, 2013). According to a classic study by Borge et al. (1999), more than half of individuals with chronic mental illness surveyed reported that healthcare providers were the most important people in their lives. In 2014, Harangozo and associates reported that 38% of individuals with mental illness experienced discrimination, stigma, and disrespect from mental healthcare providers. Patients who have reported greater perceived discrimination by health professionals and dissatisfaction with the treatment provided have been found to be less likely to see their treatment to completion (Brener et al., 2010).

Numerous studies, both classic and contemporary, have linked the behaviors and attitudes of mental health staff to quality of care and treatment outcomes (Brener et al., 2007; Economou et al., 2019; Gabbidon, 2013; Gras, Swart, Slooff, van Weeghel, Knegtering, & Castelein, 2015; Homqvist, 2000; Thornicroft, 2008). Ding and colleagues (2005) found that physicians who had more experience treating intravenous drug users were more likely to have favorable attitudes towards those individuals. As such, the extent to which clinicians unwittingly impose their prejudice and beliefs on patients with mental illnesses is unknown (Curtis & Harrison, 2001; Van Boekel, 2013).

Theoretical Foundations

Attribution Theory attempts to explain how people make sense of the world, construct meaning, make inferences, or perceive others by attributing beliefs, feelings, or intent to events and the actions of others (Corrigan, Markowitz, Watson, Rowan, & Kubiak, 2003). According to Attribution Theory, stigmatizing beliefs and attitudes are formed through a cognitive-emotional

process in which individuals view a deviation from the norm, such as an undesirable event, result, or condition, and attempt to determine the "what," "how," and "why" of the experience (Weiner & Magnusson, 1988). These determinations are reached through the assignment of controllability, stability, and causality.

Controllability is the degree to which the individual is responsible for the event, condition, or disability versus uncontrollable environmental factors or biology (Corrigan et al., 2003; Weiner, 1995). A person who is perceived to have a high level of control is more likely to be seen as responsible for the undesirable event, condition, or disability. The person is, therefore, more likely to be stigmatized. Stability is defined as the degree to which a condition, in this case mental illness, is expected to respond to treatment over time (Corrigan et al., 2003; Weiner, 1995). The higher the stability, the less likely the condition is likely to change due to external or internal factors. A person who is perceived as having a high level of stability in an illness is viewed as less likely to respond to treatment interventions and is therefore more likely to be stigmatized.

This, in turn, informs that individual's understanding of a person's level of responsibility, or causality, for that illness, as well as the likelihood that they will recover (Corrigan et al., 2003; Weiner, 1995). According to the theory, these cognitive inferences lead to emotional reactions that include pity or anger, which can influence behaviors such as help (if pity is felt) or punishment (if anger is felt).

When the general public views people with mental illnesses as having more control and more stable conditions, they are perceived as being less deserving of help and more deserving of punishment compared to individuals with a physical disability such as a birth defect or traumatic injury (Corrigan et al., 2000; Weiner et al., 1988). This is especially true for individuals with a

problem with drug addiction, as they have often been found to be perceived by the public as being the most negative in terms of controllability. In contrast, those with mental retardation been perceived to be the most negative in terms of stability and more deserving of assistance and empathy (Chan et al., 2005; Corrigan et al., 2000).

There appear to be three approaches that show promise to reduce stigmatizing behaviors in the public. These include education, protest, and contact (Corrigan, 2006; Corrigan & Watson, 2002). Educational strategies have been shown to induce moderate effects and have been aimed to dispel common myths regarding mental illness by presenting facts and information. These strategies have been moderately successful because they are infrequently used, reducing the size of the effects (Corrigan, 2006). Also, it should be considered that the quality of the educational content differs from people and environments, thus making it further unclear whether more frequent or long-term educational strategies would yield more robust effects.

The second strategy has been to protest, meaning a group advocates for those being discriminated against in the media or by society by highlighting the injustices perpetrated against the target group (Corrigan, 2006; Corrigan & Watson, 2002). In this case, protests against the stigma toward mentally ill individuals may include chastisement and moral arguments. However, protest strategies do not yield robust effects, and can even worsen the perception of the public (Corrigan, 2006). Finally, contact is a strategy that has been found to be the most effective because it employs a combination of direct interaction as well as educational opportunities (Corrigan & Watson, 2002; Couture & Penn, 2003). The destigmatizing effects of direct interaction and contact are augmented when said contact happens on a regular basis. It is vital to examine the social context in which individuals are being perceived. For example, attitudes

about persons with mental illnesses are more positive in the context of a work environment than in romantic and dating contexts (Chen et al., 2002).

Chapter 2: Review of Literature

Search Strategy

The database search included the Cumulative Index to Nursing and Allied Health Literature (CINAHL), Google Scholar, PsycARTICLES, PsycINFO, PubMed, and ScienceDirect using the following keywords: empathy, empathetic attitudes, provider stigma, human services professionals, helping professionals, psychoeducation, psychoeducational intervention, attitudes, mental illness, and health outcomes. The studies included in the search were restricted to English language journal articles, peer-reviewed journals, studies that focused on adult populations, and articles that were available in full text.

Empathy and the Brain

Empathy is the perception of the emotional state of others, that responds in the excitation of corresponding emotions of the observer, and when one then shares an emotional state with another person (Eisenberg, 2000; Hoffman, 2001). Empathy allows us not only to simulate the affective state of another internally but also their cognitive mental state, which, in turn, provides insight into that person's actions. As such, empathy refers to our ability to take another person's cognitive perspective and to understand another individual's needs, intentions, and experiences (Decety & Jackson, 2004; Preston & de Waal, 2002).

Studies suggest there are two neurobiological routes through which the brain processes empathy. These are termed top-down processing and bottom-up processing. Top-down processing occurs in the "mentalizing-network" structures of the brain controlled by the prefrontal cortex areas that are engaged and responsible for perspective-taking (Kilroy & Aziz-

Zadeh, 2017; Miller & Cohen, 2001). This is also known as theory of mind (ToM). Bottom-up processing, which takes place in the prefrontal cortex's sensorimotor regions (i.e. mirror neuron system or MNS) is achieved by mirroring the representation of another person that allows us to share the emotional state of others. Put differently, we replicate another's actions onto our motor system, cognitively and affectively putting ourselves "in their shoes" (Kilroy & Aziz-Zadeh, 2017).

Stigma in Mental Health

To understand the impact of stigma on individuals with mental illness, first it must be understood how stigma is created. Hing (2016) explains that the "in" group applies beliefs to another social group that categorizes it as "them," resulting in distancing from "us." As explained previously, internal versus external causation of the condition or characteristic of focus determines if the "out" group receives pity or help from the "in" group. The resulting stigma justifies "us" to hold negative or positive views towards the group and impacts both groups' behaviors (Hing, 2016).

The impact of stigma on individuals with mental illness has been widely reported in the health and social science literature. There are wide-reaching adverse effects concerning stigmatized individuals and social labeling. This includes living with discrimination or being exposed to stigma, which can have adverse effects on the feelings and internal thoughts of those with mental illness.

Classic literature has shown that individuals facing stigma also have barriers to maintaining employment, relationships, housing, and good health outcomes (Brown & Bradley, 2002; Corrigan et al., 2000). Stigmatized individuals have fewer opportunities for social interaction, which often results in isolation and symptoms of depression or symptoms of

depression (Pyne et al., 2004). Because of substandard housing, reduced economic prosperity, and a myriad of other disadvantages, there are often other poor outcomes, such as adverse physical health, in individuals with mental illness (Fleischhacker, Meise, Günter & Kurz, 1994; Leucht, Burkard, Henderson, Maj & Sartorius, 2007; Major & O'Brien, 2005).

According to Link and Phelan (2014), those with higher symbolic social standing can exploit, dominate, or benefit by keeping those with socially undesirable traits "in" their designated groups or place, "down" in a lower social tier, or "away" from those who do not carry the designated trait—in this case, mental illness. Those who stigmatize, create and sustain a hierarchical relationship with those having mental illness. There exists a mostly hidden power differential that is reinforced through social norms, organizational or structural stigma (i.e., laws, procedures), and in individual interactions, as well as during professional encounters. Since individuals who are stigmatized do live with discrimination, biases, inequities, and exclusion, the consequences can be social isolation, self-stigmatizing beliefs, and segregation. Social isolation and self-stigmatizing beliefs are associated with poor mental health, poor physical health, low self-esteem, high substance misuse rates, lower academic achievement, and less life satisfaction (Corrigan et al., 2003; Major & O'Brien, 2005). Furthermore, according to Harangozo et al. (2014) and Henderson et al. (2014) stigma is a significant barrier to being treated for mental health, contributing to a self-perpetuating cycle of illness, isolation, and disability.

Stigma in Health and Human Services

Studies have shown that health and human services providers may have stigmatizing attitudes towards people with mental illnesses consistent with those of the general public (Economou et al., 2019). Their interaction with the consumers and the public are likely to reinforce public stigma and self-stigma. Harangozo et al. (2014) reported that 17% of 777

individuals with mental illness reported being discriminated against by mental health professionals and more than a third had been disrespected. Economou and colleagues (2019) found that, while overall mental health professionals hold positive views of individuals with mental illness, this did not prevent professionals from wanting to keep some patients at a distance socially. Nor did it change a provider's tendency to view mental illness as a life-long disability that prevents those effected from leading productive personal lives.

Although internal issues with stigma remain in the health and human services industry, professionals can reduce their tendencies to apply stereotypes and stigma to others whether they are consumers or members of the general public. Education and contact, two strategies outlined in Attribution Theory, can be achieved when health and human services professionals provide educational opportunities and promote positive contact and increased direct interaction with individuals having mental illness (Economou et al., 2019; Reiss, 2018; Knolhoff, 2018). Other strategies to reduce stigma include investing time and effort into cultivating emotional openness, tolerance, and mindfulness through dialogue and an intentional application of empathy towards others (Yoganathan & Willis, n.d).

Stigma and Empathy

According to Yuan and colleagues (2018), intergroup contact experience is beneficial for reducing prejudice, and a similar relationship applies for contact and attitudes towards those with mental illness. One explanation is that experiences of contact, exposure, and engagement can assist individuals to understand the feelings and worldview of the stigmatized group. This results in enhanced empathy towards the stigmatized group, thus reducing prejudice (Pettigrew, Tropp, Wagner, & Christ, 2011).

Vaghee and colleagues (2018), studied the relationship between stigma and empathy in nursing students toward those with psychiatric disorders. The authors used the Jefferson Nurse's Empathy Questionnaire and the Kassam Opening Minds Scale for Health Care Providers to assess this relationship. The study sample consisted of 155 nursing students who were attending mental health training at a psychiatric hospital. The authors found an inverse relationship between the social responsibility of individuals with psychiatric disorders and empathy towards others. Congruent with the published work of Corrigan (2006) and Corrigan & Watson (2002), which states that educational strategies have demonstrated moderate success in dispelling myths about mental illness and reducing stigmatizing behaviors in the public. Educational interventions may be further considered as a means to promote empathy and reduce stigma in health and human services students.

Knolhoff (2018) examined the level of contact, employment in a mental health profession, and four measures of empathy, including macro perspective taking, cognitive empathy, self-other awareness, and affective response, as indicators to predict stigmatized attitudes. A convenience sample of 159 participants were included in the study. Participants completed an online survey that included a demographic section, the Day Mental Illness Scale (Day, Egren, & Eshelman, 2007), the Hackler Level of Contact Items (Hackler, 2011), and the Segal Interpersonal and Social Empathy Index (Segal, Cimino, Gerdes, Harmon & Wagaman, 2013). The results showed that women tend to have less stigma toward individuals with mental illness, compared with men. The results also demonstrated that the more empathy one has, the less stigmatizing attitudes one has towards individuals with mental illness. This research study demonstrated the importance of contact and empathy to positively influence stigmatizing attitudes. The researcher suggested that future research and programs to combat stigma towards

individuals with mental illness should focus on increasing the contact that providers have with these individuals. This, in turn, could increase the levels of empathy and help to identify ways to promote tolerance and acceptance, especially among men. The author further explained that increasing empathy could allow providers to be more tolerant of differences and focus more on supporting and aiding others in productive ways. The development of more acceptance and tolerance among the men would very likely reduce stigma (Segal, Cimino, Gerdes, Harmon & Wagaman, 2013).

Webb and colleagues (2016) examined stigmatizing attitudes of a general population of undergraduate students towards those with mental illness. The researchers created one vignette and assigned one of five psychosocial and health conditions to explain the behavior of the man therein: schizophrenia, bipolar, a "severe psychological disorder," Alzheimer's, or homelessness (Webb et al., 2016, p. 67). The 347 participants completed assessments of stigma, empathy, and adult attachment scales. The authors found that the highest levels of stigma concerned homelessness, and the lowest levels of stigma were associated with Alzheimer's disease. There was found to be a significant inverse relationship between empathy and stigma using correlational analysis. These results also suggest that empathy is a predictor of stigma. The results support previous findings of other researchers who advise that facilitating empathy might reduce negative attitudes towards a specific population or mental health condition (Economou et al., 2019; Naylor et al., 2019).

In a meta-analysis of 18 randomized controlled trials of empathy training with 1,018 participants, van Berkout and Malouff (2015) examined whether empathy could be taught. The authors found that empathy training programs were effective with a medium effect (g= .63). Moderator analyses indicated that four factors were statistically significant and were associated

with higher effect sizes. These included training health professionals and university students rather than other types of individuals. The trainees were compensated for their participation, using empathy measures to focus only on assessing and understanding the emotions of others, and feeling those emotions or commenting accurately on emotions. These also included objective measures being used rather than self-report measures. The researchers concluded that empathy training was effective, and that more experimental research was needed to evaluate the different types of training conditions and assessment.

This aforementioned literature is important to the current study because it provides a basis for the relationship between empathy and stigma toward individuals with mental illness. There appears to be an inverse relationship between empathy and stigma, in that as empathy increases, stigma decreases within the context of mental illness. Although these studies used different measurements and scales, it is hoped that these differences in stigma and empathy are detectable using the measurements selected for the current proposed study.

Carl Rogers

Throughout Carl Rogers' career as a clinical theorist, he defined what empathy meant on several occasions. An early definition appeared in 1959, in which he describes empathy as "perceiving the internal frame of reference of another with accuracy and with the emotional components and meanings which pertain thereto as if one were the person, but without ever losing the "as if" condition" (Goodman, 1991, p.192). This meant that empathy is the understanding of the client's thoughts and feelings as if from the client's perspective while at the same time keeping in close contact with one's own perspectives. Later in the 1980s Rogers became less cautious about the "as if" condition" and increasingly confident that the therapist should flow in and out of the worlds of the client and therapist. As one experiences others

through empathy, he or she loses the fear of becoming identified with the client. Second, Rogers emphasized moving into the client's private world and understanding it from her or his perspective, and also suspending judgments about it. Accordingly, the therapist can communicate these perceptions to the client, who hopefully then feels completely understood.

According to Goodman (1991), Carl Roger's 1980 definition differed from his 1959 definition in three important ways. First, Rogers no longer believed that empathy was a static state in which a client and therapist exist; instead, empathy is constantly changing and is a process of being in a particular moment in time. Secondly, Rogers emphasized moving into the client's private world without prejudice and suspending judgments about entering the client's world. Being able to move into the client's world from one's own is an essential component of the therapeutic process. This awareness is related to the idea of "unconditional positive regard." Third, empathy is also about sensing elements of the other person's world that has not yet been perceived by them. As such, empathy is not merely about perceiving the world of the client from her or his perspective. The client receives communication regarding the therapist's perceptions to the client through verbal and non-verbal means, thus making the client feel fully understood.

Rogers' views on empathy are still widely used among professionals who work with clients having mental illness. However, his views on empathy are also important to this research study because he explained how empathy is restorative for healing and promoting growth. It has been previously mentioned that social isolation is a consequence of stigma of those having mental illness. Rogers believed that empathy dissolves alienation because the client feels understood for the first time in a profound way and connected to another person as well (Goodman, 1991). The client no longer feels alone. Therefore, it is necessary to study one's capacity for empathy because there is a direct relationship between the stigma that a health and

human services professional holds and direct clinical outcomes of the client having mental illness. The current study is therefore theoretically aligned with Carl Rogers' model of empathy in the professional-consumer relationship.

Hildegard Peplau

In 1952, before Rogers became involved in research on empathy, the first psychiatric nurse, Hildegard Peplau, began researching the utility and meaning of empathy in nursing (Scott, 2011). She viewed the interpersonal exchanges between nurse and patient as phasic, client-centered, client-directed, and greatly dependent on communication, patterns, preconceptions (or misconceptions), and self-understanding in the client and the nurse. Therapeutic use of self, or the ability to foster a genuine connection that encompasses both the psychological and physiological traits of the other person, is one cornerstone of Peplau's Interpersonal Relations Theory (Peplau, 1991; Peplau, 1992). Peplau's theory also involved creating a therapeutic alliance, building trust, expressing empathy, utilizing humanity, and exercising humility as keystones for interpersonal relationships. Additionally, Peplau's work was not restricted to the nursing profession. She wrote on the importance of applying her theory to relationships between colleagues, care providers, and patients (Nystrom, 2007; Peplau, 1997).

Therapeutic Conditions

The literature on the necessary and sufficient conditions of therapeutic personality change are integral for research on empathy and mental health (Rogers, 1957). The following review details Rogers' strategy for cultivating empathy between client and therapist. Although Rogers uses the term therapist, his reference is relevant to the health and human services graduate students as well, because the student could have a professional relationship with a client having mental illness.

The first condition details the specifics of a minimal relationship in which psychological contact occurs between two people. The second condition describes the state of the client, in which the client is in a phase of incongruence, being vulnerable or anxious. Rogers (1957) describes incongruence as being a basic construct within a larger theory. “It refers to a discrepancy between the actual experience of the organism and a self-picture of the individual insofar as it represents that experience” (p. 96).

Furthermore, Rogers explains that when the individual has no awareness of incongruence within, the individual is vulnerable to disorganization and anxiety. As such, some experiences may make the incongruence obvious to the individual all at once and render them unable to deny this threat to their previously unexamined or ignored beliefs. In this state, a tension occurs known as anxiety. The individual may not be consciously aware, yet subconsciously they are aware of the tension and the context of a threat. This anxiety is seen as a contradiction to the individual’s self-concept. In the third condition, it is the responsibility of the therapist to ensure he or she integrates him/herself into the experience of the individual during this time of incongruence. In Rogers’ (1957) words:

> “[t]he third condition is that the therapist should be, within the confines of this relationship, a congruent, genuine, integrated person. It means that within the relationship he is freely and deeply himself, with his actual experiences accurately represented by his awareness of himself. It is opposite of presenting a facade, either knowingly or unknowingly (p. 57).”

Regarding the fourth condition, Rogers describes “unconditional positive regard” as the extent to which the therapist experiences a warm acceptance of every part of the client’s experiences. This can also mean caring for or demonstrating compassion towards the patient but

not in a way that is possessive or in a way that satisfies the personal needs of the therapist. Empathy is the fifth condition that therapists must achieve, which includes an innate understanding of the client's awareness of her or his own experience. As it relates to the current study, this is the most important condition to initiate healing in the client. It is relevant because in order to fully measure empathy in health and human services graduate students, one must understand how one clinically facilitates empathy in a professional-consumer relationship.

Rogers (1957) specifies that when the world of the client is clear to the therapist, he or she can both communicate an understanding of what is clearly known to the client and can also highlight subtexts in the narrative of the client's life that are appropriate and helpful. The author indicates that penetrating empathy is important for therapy, which is summed by four points:

- "The therapist is well able to understand the patient's feelings.
- The therapist is never in any doubt about what the patient means.
- The remarks fit just right with the patient's mood and content.
- The therapist's tone of voice conveys the complete ability to share the patient's feelings (Rogers, 1957, p. 57)."

The sixth and final condition is the client's perception of the therapist, in which the client perceives the acceptance and empathy that the therapist experiences with him or her. According to Rogers, unless the communication of these attitudes has occurred, such attitudes don't exist in the client's mind, and the therapeutic process cannot be initiated given these conditions. It is important to note that this process is facilitated by the extent to which the behaviors and words are perceived congruently or harmoniously by the client and the therapist. In summary, Rogers lists six conditions that are necessary to initiate constructive personality change in a client. There are many implications for the current study, as health and human services students will likely at

some point be involved in a therapeutic relationship with a consumer or client who has a state of incongruence. It is also likely that these students will also encounter clients with mental illness. In both scenarios, it is relevant for them to have an understanding of the interpersonal factors, such as empathy, associated with therapeutic relationship-building with clients. These concepts are in-line with Peplau's therapeutic use of self.

As it relates to the current study, it is essential to understand how Carl Rogers facilitates empathy in the client-professional relationship in order to properly review the literature of empathy and mental health. The current study measures a student's capacity for empathy because there is a direct relationship between the stigma that a health and human services professional holds and direct clinical outcomes for the client having mental illness. Therefore, the study follows the model laid out by Carl Rogers as it relates to empathy within the professional-consumer relationship.

Chapter 3: Methodology

Design, Population, and Location

This project is a non-experimental, correlational research project. Oversight for this project was provided by Radford University School of Nursing. The principal investigator is Virginia Weisz PhD, WHNP. No outside sponsors or funding is sought or received in order to execute this research project. The population of interest is Masters and Doctorate-level students in nursing, social work, psychology, occupational therapy, physical therapy, and music therapy programs at Radford University and Radford University Carilion (RUC). The survey and presentation will be administered virtually to Radford University and RUC students online through the Radford University's Qualtrics program account.

Psychoeducational Intervention

Competent Caring is a knowledge contact intervention created by the National Alliance on Mental Illness (NAMI) and the Hospital Corporation of America (HCA). Originally created to educate emergency room staff about culturally appropriate emergency care for individuals with mental illness, the video was designed to increase intergroup contact, improve mental health literacy, and facilitate a reduction in stigma toward mentally ill individuals among healthcare professionals. *Competent Caring* utilizes personal narratives presented by patients and family members of patients with mental illness. Given the option between an extended or abridged version of *Competent Caring*, this researcher chose the 15-minute abridged version. This was done with the intent to decrease the amount of time necessary to complete the survey and intervention. It was hoped that this would positively impact willingness of graduate health and human services students to participate and reduce attrition rates.

Recruitment

Opportunity sampling was used, meaning that all graduate students in the targeted majors were eligible and encouraged to participate. Email letters informing deans and departmental heads of the targeted programs of the upcoming research project were sent via Radford email system (see Appendix A). This was done to allow time for departments to ask questions before they are asked to allow their students to participate. Several weeks after this introductory letter, a second email requesting cooperation was sent to the deans and directors (see Appendix B). Electronic recruitment messages (see Appendix C) regarding participation in the email-delivered questionnaire which were dispersed to students via department heads. All components of the survey and intervention were contained within a single entity.

The option to participate in a prize raffle was presented at the end of the survey. Participants were able to submit their email in a way that did not track or associate their

information with their completed questionnaire. This information was kept separate from survey materials in a computer file on a secure drive accessible only to the investigators. All personal email information was promptly deleted of by the investigator once all winning participants collected their prizes.

Informed Consent and Confidentiality

Prior to the online questionnaire and psychoeducational intervention, informed consent was obtained for voluntary entry into the study. A letter of consent prefaced the survey (see Appendix D). Consent was implied by the participant continuing beyond the consent. Participants were asked to give explicit agreement to participate in the screen following the consent letter (see Appendix E). A paper copy of the informed consent form on Radford University letterhead was also made available upon request (see Appendix F).

Data Collection, Security, and Storage

Prior to the presentations and data collection, the researchers obtained Institutional Review Board (IRB) review and approval from the Radford University IRB as a research study. The survey was open for data collection between July 2020 and October 2020. The survey was tentatively planned to end once a sufficient number of responses were received: that would be an estimated 20 individuals per disciplinary group or 130 individual responses total. Data collection was stopped short of this goal, however, related to low response rates and other unforeseen circumstances to be discussed later.

The risk to participants participating in this project was not dissimilar to the risk participants faced in day to day life. Participant anonymity was assured because no identifying information was collected except for the optional raffle which was not associated with

respondents' survey submissions. Online copies of the surveys have been stored in password protected computers of the faculty advisor and the student. All data will be stored for three years.

Measurement Instruments

Demographics. Demographic questions pertaining to age, race, program of study, and experience with mental illness were included in the pre-test. To help with statistical analysis, participants were asked for the number of clinical course hours completed during their programs. As previously stated, contact has been shown to decrease negative attitudes and misconceptions regarding mental illness and inclusion of this information allowed researchers to draw inferences about this specific population. In addition to academic contact, a question regarding personal contact with individuals having mental illness was utilized. Research has shown that social contact may have a greater impact on stigmatizing attitudes towards mental illness than professional or academic contact can yield (Henderson et al., 2014).

Interpersonal Reactivity Index. Numerous tools are available to measure empathy and emotional intelligence, but for the purposes of this study the Interpersonal Reactivity Index (IRI) was selected. The IRI is a 28-question, Likert scale psychometric tool with four subscales: empathetic concern (EC), perspective taking (PT), personal distress (PD), and fantasy (F). The scores for each scale range from zero to 28 and are intended to be used as a continuous, not categorical, measure of each dimension (Konrath, 2013).

The EC subscale measures for the participants' feelings of compassion towards others in distress, or their emotional empathy. The PT subscale measures the propensity for seeing another's viewpoint, or cognitive empathy. The PD subscale applies an inward focus and measures the ability to respond to others' distress. The F subscale utilizes fictitious but plausible characters to assess relational empathy (Davis, 1983; Konrath, 2013).

The IRI has been used in a myriad of studies and been proven valid and reliable as a method for measuring applied empathy (Baldner & McGinley, 2014; Hojat & Gonnella, 2017; Hojat, Spandorfer, Louis, & Gonnella, 2011; Melchers, Montag, Markett, & Reuter, 2015). The IRI was found to be appropriate for this study due to the fact that it measures empathy as both an emotional and cognitive process. It also has validated applicability to non-health professionals compared with other scales that have been validated in general populations. Additionally, the scale has been shown to at least partially circumvent the effect of social desirability on self-reported assessments of empathy (Baldner & McGinley, 2014). The scale also has the utility to measure changes in empathy post-intervention, and is accessible (Hojat & Gonnella, 2017; Konrath, 2013). This tool is open access and requires no special permissions for use in its original form. The internal reliability of the tool ranges from .70 to .78 with test-retest reliability correlations between .61 and .81 (Davis, 1983; Konrath, 2013).

Opening Minds Stigma Scale for Health Care Providers. There are many scales that measure aspects of stigma against those with mental illness**.** This study requires a tool appropriate for a pre-test/post-test design project that is capable of making clear the correlation between empathy and stigma. The selected tool, the OMS-HC, is a 15-question, Likert scale tool with three subscales: social distance, attitude, disclosure and help-seeking (Kassam, Papish, Modgill, & Patten, 2012). Developed by Kassam et al. (2012) the tool is now an established part of program evaluations for the Mental Health Commission of Canada's efforts to reduce healthcare provider mental health stigma.

The social distance subscale aims to measure "one's desire to maintain distance from people with mental illness" (Kassam et al., 2012, p. 1). This desire is often rooted in stereotypes

regarding mental illness, especially when the illness is associated with dangerous behavior or not associated with the concept of mental health recovery. Recovery is:

> "a process which occurs when people with mental illness discover, or rediscover, their strengths and abilities for pursuing personal goals and develop a sense of identity that allows them to grow beyond their mental illness: (Kassam et al., 2012, p. 1).

The attitude subscale measures the negativity of emotional responses of healthcare professionals toward individuals with mental illness. The disclosure and help-seeking subscale measures the individual's willingness to acknowledge and share information regarding their own mental illness. The overall score for the 15-item OSM-HC scale ranges from 20 to 100 with 20 being the least stigmatizing and 100 the most. Each item has a minimal score of one and a maximum score of five.

Multiple studies have used this tool to measure changes in attitude and empathy before and after educational interventions. (Economou et al., 2019; Modgill et al., 2014; Vaghee et al., 2018). These studies have included a wide variety of health and human services professionals and students, further evidencing the tool's relevance to this project. The internal consistency of the OMS-HC's across healthcare provider groups ranges .66 to .78; test-retest effect size Cohen's d=0.28 (Kassam, Papish, Modgill, & Patten, 2012; Modgill, Patten, Knaak, Kassam, & Szeto, 2014). Additionally, the tool has the potential to decrease the impact of social desirability bias in the final results (Kassam, Papish, Modgill, & Patten, 2012).

Survey Readability. According to the Readability Formulas tool at http://www.readabilityformulas.com, the survey in its entirety receives a Flesch Reading Ease score of 73.7 (standard/average) and a Flesch-Kincaid Grade Level 7.4, or seventh grade reading level. After considering all the readability tools available through the website, the consensus

determination was that the tool was written at a seventh grade reading level and was fairly easy to read for children ages eleven through thirteen years old. Since the intended audience is college educated, it was decided that the literacy level was sufficient for the purposes of the project.

Chapter 4: Results

Response Rate

Surveys were completed between 7/13/20 and 8/20/20. All surveys were administered in English and all distribution channels were anonymous and online. A total of 55 graduate students in the college responded, 48 individuals consented to participate in the study, and 44 respondents took the pre-treatment IRI and OMS-HC. Twenty-six participants (47.3%) watched the video, 11 (20.0%) indicated that they did not want to watch the video, and 18 (32.7%) had missing responses. Twenty-three (41.8%) of the 55 respondents took the post-treatment IRI and 22 took the post-treatment OMS-HC. Twenty-two participants (40%) of the original 55 graduate student respondents completed the entire study.

Sample Characteristics

Demographics were analyzed for the 44 participants who took the pre-interventional IRI and OMS-HC. Most respondents (87.0%) identified as White or Caucasian, followed by Black or African American (8.7%), Asian (2.2%), and Other/Mixed (2.1%). Six (13.3%) respondents were male, 39 (86.7%) were female, and 10 (18.2 %) of participants did not identify a gender. Age was coded as an ordinal variable with four levels: 20-29, 30-39, 40-49, 50-59, and 60 or over. The majority of the respondents (77.1%) were in their twenties. The sample consisted of mostly White and female participants, but there was a diverse mix of disciplines.

Among respondents, the most frequent education track was Master of Occupational Therapy (MOT) (46.8%), followed by tracks in Communication Sciences (23.4%), Doctor of

nursing practice (DNP) (14.9%), Masters of social work (MSW) (10.6%), and Masters of science in Music (4.3%). The majority of the respondents (67.4%) had fewer than three years of healthcare experience and less than 500 academic clinical hours experience (82.2%). The vast majority of the respondents (87.0%) reported having received graduate training related to caring for individuals with mental illnesses with 37% receiving this training within the last two semesters. Additionally, respondents identified the following personal experiences with mental illness (Table 1).

Table 1.

Previous Experience with Mental Illness

Previous Experience with Mental Illness	
Family members affected by mental illness	70.9%
Personally experienced symptoms of mental illness	47.3%
Friends affected by mental illness	69.1%
Acquaintances affected by mental illness	38.2%
Worked with someone affected by mental illness	54.5%

All the participants reported that they wanted to increase knowledge about caring for those with mental illnesses. Baseline measures using the pre-treatment IRI were obtained for 44 of the 55 respondents, and post-treatment measures were obtained for 23 respondents. Forty of the 55 respondents took the pre-treatment OMS-HC, and 22 of the 55 respondents took the post-treatment OMS-HC. Pretest and posttest means for each subscale item (Table 2) and correlations (Table 3) of the tools are as follows:

Table 2.
Pretest and Posttest Means

	Pre-treatment average score (SD)	Post-treatment average score (SD)
Perspective Taking (IRI)	2.75 (.62)	2.84 (.66)
Fantasy (IRI)	2.41 (.67)	2.33 (.85)
Empathetic Concern (IRI)	3.23 (.52)	3.27 (.55)
Personal Distress (IRI)	1.64 (.72)	1.42 (.80)
Attitude (OMS)	1.90 (.61)	1.83 (.67)
Disclosure (OMS)	2.35 (.60)	2.39 (.78)
Social Distance (OMS)	1.81 (.59)	1.81 (.58)

The above scores are reported as item averages and not summative scores in order to adjust for missing data and the sample size. If reported as sums, the scores would have been artificially deflated and could have negatively impacted correlations.

Summary of Findings

All pretest and posttest measures were strongly correlated with one another (p=.001) (Table 3). Pearson's correlation coefficients (Table 4) and Spearman's rho (Table 5) were calculated to establish the intercorrelations between empathic concern and the OMS-HC subscales. For the OMS-HC, lower scores translate to more positive attitudes towards individuals with mental illness. In this study, higher levels of empathetic concern were strongly associated with lower scores on the OMS-HC indicating a medium to large effect size. At pretest, 24% of the variability in attitudes was accounted for by empathic concern; at posttest 53% of variability was attributable to empathic concern. Empathic concern was also significantly associated with social distance in three of the four Spearman's rho calculations with a smaller but still significant effect size. At pretest, 14% of variability in social distance was accounted for by empathic concern and 25% at posttest. Empathic concern scores did not statistically impact disclosure or help-seeking behaviors scores significantly, but higher levels of empathic concern were associated with higher scores in these OMS-HC subscales.

Table 3.

Empathetic Concern and OMS-HC: Pearson's r

	Pre-Test Empathic Concern	Post-Test Empathic Concern
Pre-Test Attitudes	-0.492**	-0.670***
Post-Test Attitudes	-0.523*	-0.726***
Pre-Test Disclosure	-0.238	-0.412
Post-Test Disclosure	-0.276	-0.448*
Pre-Test Social Distance	-0.373*	-0.437*
Post-Test Social Distance	-0.250	-0.504*

* $p < .05$
** $p < .01$
*** $p < .001$

Table 4.

Empathic Concern and OMS-HC: Spearman's rho

	Pre-Test Empathic Concern	Post-Test Empathic Concern
Pre-Test Attitudes	-0.499**	-0.701***
Post-Test Attitudes	-0.564**	-0.711***
Pre-Test Disclosure	-0.219	-0.363
Post-Test Disclosure	-0.259	-0.344
Pre-Test Social Distance	-0.335*	-0.430*
Post-Test Social Distance	-0.285	-0.521*

* $p < .05$
** $p < .01$
*** $p < .001$

A one-way repeated measures ANOVA was conducted to examine the difference between empathic concern across pre- and post-viewing of the video. The results indicate that the change observed in empathic concern was not significantly different from what would be expected by chance, $F = 0.398$, $p = .534$, partial $\eta^2 = 0.018$. A one-way repeated measures ANOVA was conducted to examine the difference between attitudes about mental illness across pre- and post-viewing of the empathy video. The results indicate that the change observed in mental illness attitudes was not significantly different from what would be expected by chance, $F = 0.062$, $p = .806$, partial $\eta^2 = 0.003$.

A one-way repeated measures ANOVA was conducted to examine the difference between disclosure and help-seeking across pre- and post-viewing of the video. The results indicate that the change observed in disclosure and help-seeking was not significantly different from what would be expected by chance, $F = 0.896$, $p = .355$, partial $\eta^2 = 0.041$. A one-way repeated measures ANOVA was conducted to examine the difference between social distance across pre- and post-viewing of the empathy video. The results indicate that the change observed in social distance was not significantly different from what would be expected by chance, $F = 1.303$, $p = .266$, partial $\eta^2 = 0.058$.

Hypothesis Statement Analysis

Only one respondent reported no personal experience with mental illness. Almost three-quarters of respondents reported a family member affected by mental illness while more than half of participants had personal experience with mental illness. The average scores for all measures for those with experience with mental illness were not significantly different from the individuals without experience (Table 5). While this does not mean there was not a correlation, this analysis did not display a relationship. There was no significant change between pretest and posttest empathy scores following the intervention. This analysis did not display a relationship between the intervention and changes in levels of empathic concern.

Table 5.

Means and Mental Health History

Measure	Pre-Test Means		*t*	df	Sig.	Post-Test Means		*t*	df	Sig.
	No MH history	MH history				No MH history	MH history			
IRI Perspective Taking	2.77	2.74	0.142	42	.888	2.76	2.90	0.477	21	.638
IRI Fantasy	2.15	2.59	2.186	42	.034	1.87	2.63	2.246	21	.036
IRI Empathic Concern	3.14	3.29	0.931	42	.357	3.10	3.39	1.250	21	.225
IRI Personal Distress	1.49	1.74	1.141	41	.260	1.38	1.46	0.223	21	.826
OMS Attitudes	1.93	1.88	0.263	38	.794	2.02	1.69	1.124	20	.274
OMS Disclosure	2.45	2.28	0.887	38	.381	2.61	2.23	1.129	20	.272
OMS Social Distance	1.99	1.68	1.617	38	.114	1.98	1.71	1.074	20	.296

Chapter 5: Discussion

Observations

Baseline empathetic concern and attitudes toward individuals with mental illness among all surveyed graduate students in helping professions was largely positive. While this could be a reflection of self-selection bias for those who are more likely to have positive attitudes regarding mental illness, it is possible that this was due to the fact that almost all the participants had received training in the care of individuals with mental illness. Additionally, more than one-third of those having had education within the preceding two semesters. Those who have a personal or familial mental health history had higher scores on the IRI fantasy subscale (Table 5). It is possible that this difference in ability to imagine themselves in the position of another may have caused the video intervention to affect participants in different ways as well. This could mean if one had experience with a mental illness, the video could potentially lead to an increase in the ability to identify with characters. If you did not have experience with a mental illness, the video could potentially lead to a decrease in the reported ability to identify with characters.

An interesting finding was the lack of statistically significant differences between those with less than 500 clinical hours (more than three quarters of respondents), 500 or more clinical hours, less than 3 years of healthcare experience (more than half of respondents), and three or

more years of healthcare experience in any of the variables. One could assume that empathy would be positively correlated with increasing years of experience on the part of participants, however, statistical testing indicated that empathetic concern did not differ as a function of years of experience or clinical hours. It is possible that empathic concern did not differ in these groups because of the participants' own personal or familial experiences with mental illness since more than half of respondents did report such experiences.

This researcher found it interesting that only 16 of the 44 eligible respondents entered the gift card raffle. While the reasons for this could be myriad, one could speculate that the monetary incentive was not a determining factor among respondents in their decision to participate. Rather, taking into consideration that all respondents affirmed their desire to increase their knowledge about caring for those with mental illnesses, it seems likely that this incentive rather than monetary gain could explain participant motivation.

Limitations and Bias

The implementation of the project was originally planned to begin in early 2020. However, the pandemic spread of the coronavirus, also known as COVID-19, disrupted these plans. The first laboratory confirmed case in the United States occurred in January 2020 and quickly became widespread within communities (Morbidity & Mortality Weekly Report, 2020). In March 2020, the country declared a state of emergency (CDC, 2020a). As of October 30, 2020, there have been 8,834,393 laboratory confirmed cases of COVID-19 and 227,045 deaths in the United States with more developing each day (CDC, 2020b).

As a result of this virus, many states implemented preventative measures such as social distancing recommendations, cloth facial coverings requirements, and stay-at-home orders. Schools and universities ceased in-person instruction at the end of the 2019-2020 school year and

worked to convert to remote learning plans. The resulting and continued upheaval associated with transitioning learning programs to online formats has demanded the full attention of facilities, staff, faculty, students, and parents alike. Many schools remain closed to in-person learning even now in October 2020.

In an effort to decrease the risk of illness for students and faculty, Radford University made the decision to have an abbreviated summer semester with an altered schedule for the fall semester (Radford, 2020). The fall semester which would normally end in December has been condensed to now end in November. Implementation of this project began in July 2020, but the response rate was lower and slower than anticipated. Under these circumstances and with the uncertainty surrounding the continued impacts of the COVID-19 virus, the data collection period was abbreviated resulting in a smaller number of responses than originally planned.

Aside from the virus, several other factors must be taken into consideration when looking at the data. The sample small size negatively impacted the power of the study and limited the conclusions that could be reached regarding the proposed hypotheses. Due to the self-reported nature of data collection, this project was susceptible to biases related to self-perception and self-selection. The self-perception bias may have impacted the way in which participants answered the questions. The sensitive nature of the topic of mental illness and the perceived pressures of social desirability could have impacted said self-perceptions. The OMS-HC may have partially mitigated this bias with the use of negatively scored items and a demonstrated ability to circumvent social desirability, but the potential for this bias to impact results still exists. Self-selection bias related to the sampling techniques may have resulted in those with baseline positive attitudes and beliefs about individuals with mental illness being more inclined to participate in the survey.

Implications for Future Research

Recommendations for future research would include allowing more time for data collection in an effort to garner more responses. A sample of 88 individuals would have resulted in an effect size of 0.6 at a power of .80. A sample size of 132 (which is close to the original aim) would have resulted in an effect size of 0.5 at the same power. Shorter measurement tools that focus on one or two aspects of empathy could decrease attrition. Tools such as the Toronto Empathy Questionnaire (Spreng, McKinnon, Mar, & Levine, 2009) or the Empathy Assessment Index (Gerdes, Lietz, & Segal, 2011) are shorter but still operate from the perspective of empathy as an interpersonal process.

The timing of this project was planned in advance of the COVID pandemic and associated academic schedule changes. It is possible that starting data collection at a different period of time might have altered the number of responses received. Many of the programs surveyed did not hold summer classes. This likely contributed to low response rates in the early stages of data collection. Data collection at the start of a shortened fall semester was also not ideal because of the high probability of this being a high stress time for students in general due to COVID-related term changes. It is possible that delaying data collection until the following spring semester could have yielded different response rates.

Alternative or expanded sites for implementation should also be considered. For example, a large behavioral health hospital or hospital that provides behavioral healthcare in addition to medical care would be very interesting settings for a similar project. Additionally, inclusion of undergraduate students in the population of interest could yield a larger sample pool. Given the significant association of the IRI fantasy subscale and experience with mental illness, it would be worthwhile to explore the correlations between existing mental illness, direct experience with

mental illness, or lack thereof of experience and an individual's response to role-playing or vignette interventions such as *Competent Caring*.

Further studies demonstrating a link between these factors could contribute to future training and education efforts for the general public and healthcare professionals. Studies that explore the finding that graduate students tended to have overall positive attitudes towards individuals with mental illness and high empathic concern and compare them to healthcare professionals, other professions or programs of study, and the general public could be carried out. The strong desire among graduate students to learn more about caring for individuals with mental illness found in this study may serve as further impetuous to dedicate time and resources to further exploring these phenomena.

Implications for Practice

As previously stated, the central importance of this study was to assess, explore, and possibly improve the attitudes of health professionals who come into contact with individuals with mental illness. While a goal was to identify potential areas for improvement, this underpowered study could not fully assess the existing program structures. To undertake such a task was beyond the time constraints and budget of this study.

This researcher would suggest that it would be worthwhile for health professional programs to perform self-assessments regarding their current offerings on mental illness as well as the educational needs of their students in order to ensure emerging professionals have the knowledge and skill necessary to properly care for this very vulnerable population. This researcher also proposes that having a structured, consistent, and widely available repository of clinician resources regarding mental illness open to all disciplines and program levels would be greatly beneficial. This could consist of curated articles, links to reputable organizations, blogs,

and journals, assessment tools, and patient education materials and agreed upon by the various health and human services programs' faculty.

Conclusion

Mental illness is a complex, widely stigmatized condition. Prevalence and disability are very difficult to determine, diagnosis, and treat. When healthcare providers hold stigmatizing beliefs towards individuals with mental illness it can be difficulty to form therapeutic relationships. In this study of predominantly young, White females in their twenties from a variety of disciplines with varying levels of direct experience with mental illness and clinical exposure, it was found that empathy counterbalances the chances of health professional graduate students holding stigmatizing attitudes towards individuals with mental illness.

Clinical hours and years of healthcare experience were not found to be significant factors in determining attitudes towards mental illness nor levels of empathic concern in diverse disciplines. The IRI and the OSM-HC were sufficient for elucidating the intercorrelations between empathy and attitudes towards mental illness. A larger number of responses to this survey may have yielded different results regarding the effect of the chosen interventional video. Performed under more favorable circumstances, this project has the potential to inform future practice and research in the area of education about care for those with mental illness among graduate students in health and helping professions to a greater degree.

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Appendix A

From: Candis L. Halsted BSN RN

Subject: Research project collaboration request

Date: Saturday, February 29, 2020

Dear [Name of Dean or Department Head],

My name is Candis Halsted and I am a Doctoral Candidate in the Doctor of Nursing Practice program with a concentration in psychiatric-mental health at Radford University. I am reaching out to inform you of my upcoming research project. It is entitled *Graduate Student's Empathy and Attitudes: An Intervention Study.*

I believe that my principal investigator Virginia Weisz PhD, WHNP may have reached out to you about this project last year. This project is designed to explore the capacity for empathy towards individuals with mental illness in graduate students in health and human services disciplines at Radford University and Radford University Carilion. The pre-test/post-test, correlational, nonexperimental study will involve a short educational video intervention designed by the National Alliance for Mental Health. No personal information will be collected as part of this study. All responses will be completely anonymous.

We are now in the process of obtaining IRB approval and hope that you will consider allowing your students to participate once approved. No action is required from you at this time. If you would like more information about the study, please feel free to contact myself or Dr. Weisz. I will forward you more detailed information once the IRB has granted permission.

Thank you for your consideration.

Sincerely,

Candis L. Halsted BSN RN
PMHNP DNP Candidate
Personal: clhalsted@gmail.com
University: chalsted@radford.edu
Mobile: (540) 525-8608

Appendix B

From: Candis L. Halsted BSN RN

Subject: Research project collaboration request

Date: Sunday, March 1, 2020

Dear [Name of Dean or Department Head],

My name is Candis Halsted and I am a graduate in the psychiatric-mental health Doctor of nursing science program at Radford University. I am reaching out to you for your assistance with the execution of my DNP Project. The DNP Project is the nursing science's equivalent of the thesis or dissertation produced by other doctoral-level studies programs. I have a passion for and keen interest in decreasing the stigma surrounding mental illness, especially among behavioral health and healthcare professionals, and students in these professions.

Researchers and theorists have demonstrated an inverse correlation between the ability to feel and express empathy and stigmatizing attitudes. They have also inversely correlated stigma of those with mental illness with education and exposure to mental illness. This research is a non-experimental, correlational project to explore the capacity for empathy towards individuals with mental illness, in a cross-sectional sample of health and human services graduate students at Radford University.

The project will include a pre- and post-test which includes questionnaires to 1) evaluate empathy as both an emotional and cognitive process, and 2) measure attitudes towards mental illness and psychiatry among health and social care professionals. The educational portion will be a video presentation created by the National Alliance for Mental Illness. Please review this video at the following link: https://youtu.be/O8xOi2z09k4. It is hoped that the results of this study will contribute to an understanding of empathetic capacity and attitudes in students within multiple health disciplines. This is important because the cultivation of empathy during graduate and professional education and training has been associated with increased caring behaviors and empathetic care associated with students in a clinical setting.

Additional details of the project are as follows:

- Faculty/Mentor PI Name: Dr. Virginia Weisz PhD, WHNP
- Student Investigator: Candis Halsted BSN, DNP Candidate
- IRB protocol title: Graduate Student's Empathy and Attitudes: An Intervention Study
- Site: Radford University
- Permission to conduct study: pending expedited review of the IRB.

I truly believe that this project has great potential to a make difference in the practice of students in the health professions. I am asking for your collaboration and support in disseminating my project to the students in the [program/department]. I know that the inclusion of students in your field will add strength and value to the data. If you have any questions regarding the project please contact me at chalsted@radford.edu or my faculty Dr. Virginia Weisz at vweisz@radford.edu.

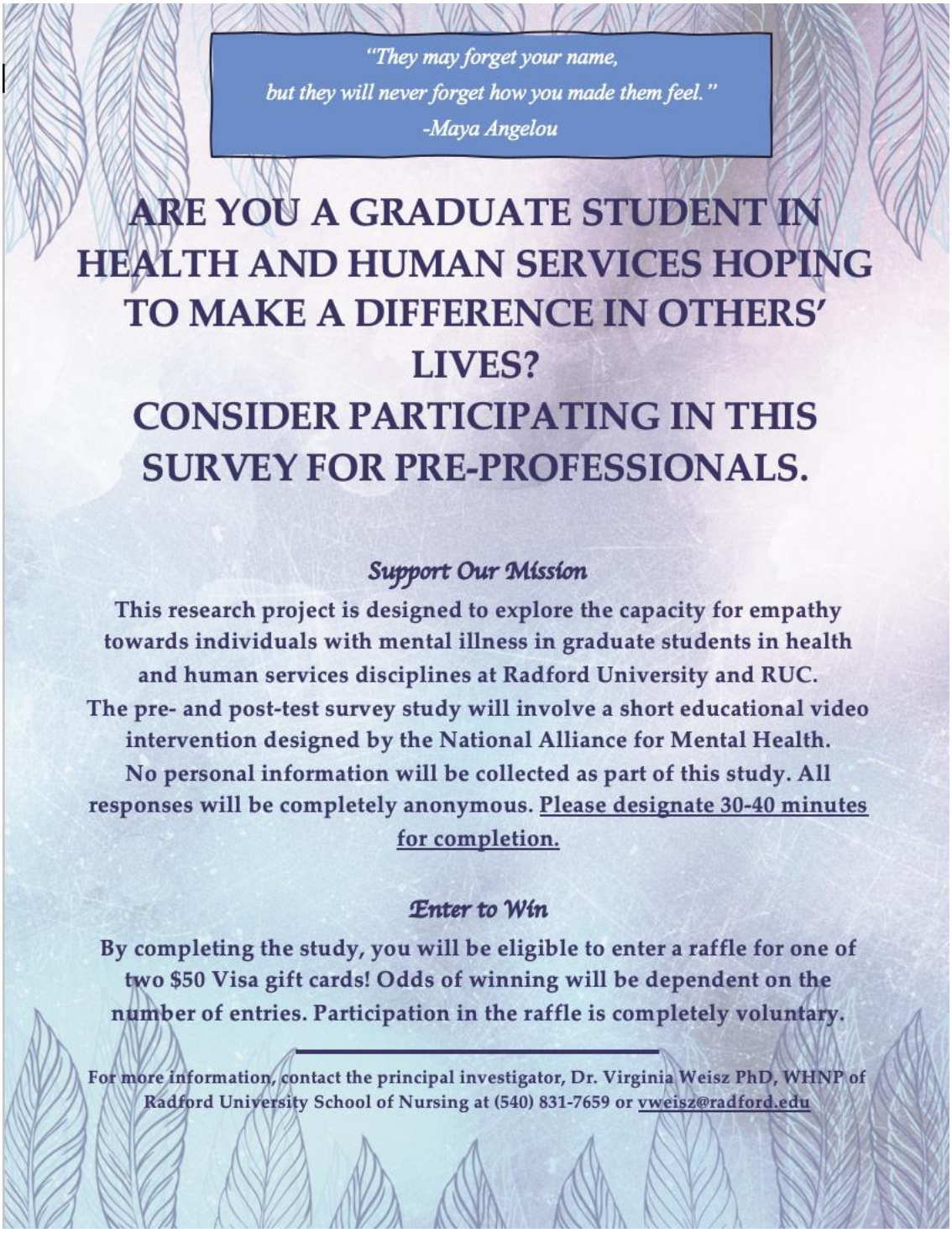
If you choose to allow your students to participate, I will require your agreement in writing. For your convenience, there is a template letter of consent attached to this email. You will be forwarded a copy of IRB approval once obtained.

Thank you for your consideration of my request.

Sincerely,

Candis L. Halsted BSN RN
PMHNP DNP Candidate
Personal: clhalsted@gmail.com
University: chalsted@radford.edu
Mobile: (540) 525-8608

Appendix C


"They may forget your name,
but they will never forget how you made them feel."
-Maya Angelou
ARE YOU A GRADUATE STUDENT IN HEALTH AND HUMAN SERVICES HOPING TO MAKE A DIFFERENCE IN OTHERS' LIVES?
CONSIDER PARTICIPATING IN THIS SURVEY FOR PRE-PROFESSIONALS.
Support Our Mission
This research project is designed to explore the capacity for empathy towards individuals with mental illness in graduate students in health and human services disciplines at Radford University and RUC.
The pre- and post-test survey study will involve a short educational video intervention designed by the National Alliance for Mental Health.
No personal information will be collected as part of this study. All responses will be completely anonymous. Please designate 30-40 minutes for completion.
Enter to Win
By completing the study, you will be eligible to enter a raffle for one of two $50 Visa gift cards! Odds of winning will be dependent on the number of entries. Participation in the raffle is completely voluntary.
For more information, contact the principal investigator, Dr. Virginia Weisz PhD, WHNP of Radford University School of Nursing at (540) 831-7659 or vweisz@radford.edu

Appendix D

Graduate Students' Empathy and Attitudes

Survey Flow

Standard: Informed Consent (1 Question)
Standard: Informed Consent (1 Question)
Standard: Demographics (11 Questions)
Standard: IRI (2 Questions)
Standard: OMS-HS-15 (1 Question)
Standard: NAMI Video (1 Question)
Standard: IRI 2 (2 Questions)
Standard: OMS 2 (1 Question)
Block: Raffle (1 Question)

Branch: New Branch
If
If Would you like to be entered for a chance to win a prize? Yes Is Selected

EndSurvey: Advanced

Branch: New Branch
If
If Would you like to be entered for a chance to win a prize? No Is Selected

EndSurvey:

Page Break

Start of Block: Informed Consent

Q1
Radford University
Waldron College of Health and Human Services
School of Nursing

You are invited to participate in a research survey, entitled "Graduate Student' Empathy And Attitudes: An Intervention Study." You were selected as a possible participant because you are a graduate student in a discipline that is likely to include contact with individuals with mental illness. Please read this form and then ask any questions you may have before agreeing to be in the study if needed. Participation is completely voluntary. The study is being conducted by Candis Halsted, DNP candidate and Virginia Weisz PhD, WHNP of Radford University School of Nursing.

The purpose of this study is to evaluate the effectiveness of a video intervention created by a national mental health advocacy group and a large hospital corporation dedicated to educating medical professionals in the emergency room setting on the proper care and treatment of individuals towards mental illness. As part of this evaluation, you, the health and human services discipline graduate student, will complete a questionnaire assessing your knowledge of and attitudes towards individuals with mental illness.
This research requires you to complete an online questionnaire, view an educational video, and retake the questionnaire. We estimate that it will take 30 to 40 minutes of your time to complete the surveys and view the video. Please contact the principal investigator Dr. Weisz to discuss the survey.

Responses to this survey will remain anonymous with no recording of your email address, name, or IP address. The research team will work to protect your data to the extent permitted by technology. This study has no more risk than you may find in daily life or everyday use of the internet. If you decide to be in this study, and you feel any discomfort with some of the questions. Please feel free to skip that question and proceed with the remained of the survey. You may refuse to answer any of the questions, take a break or stop your participation in this study at any time. A limited number of faculty members on the research team will have access to the data during data collection.

There are no costs to you for being in this study. There is an opportunity for compensation in the form of an anonymous raffle of two $50 Visa gift cards. Your participation in the raffle is optional. Your participation may also enhance your knowledge about those with mental illness. It is hoped that your participation in the survey will contribute to the general knowledge base of health and human service disciplines on the knowledge and views pre-professional graduate students towards individuals with mental illness and how education could impact those views.

If you wish to withdraw from the study or have any questions, contact the investigator, Dr. Weisz, at (540) 831-7659 or vweisz@radford.edu. If you choose not to participate or decide to withdraw, there will be no impact on your grades/academic standing.

You may also request a hard copy of the survey from the contact information above.

This study was approved by the Radford University Committee for the Review of Human Subjects Research. If you have questions or concerns about your rights as a research subject or have complaints about this study, you should contact Dean Orion Rogers, Institutional Officer for Research, Artis College of Science and Technology, Radford University, jorogers@radford.edu, 1-540-831-5958.

Appendix E

Waldron College of Health and Human Services
School of Nursing

Cover Letter for Internet Research

You are invited to participate in a research survey, entitled *"Graduate Student' Empathy And Attitudes: An Intervention Study."* You were selected as a possible participant because you are a graduate student in a discipline that is likely to include contact with individuals with mental illness. Please read this form and then ask any questions you may have before agreeing to be in the study if needed. Participation is completely voluntary. The study is being conducted by Candis Halsted, DNP candidate and Dr. Virginia Weisz PhD, WHNP of Radford University School of Nursing.

The purpose of this study is to evaluate the effectiveness of a video intervention created by a national mental health advocacy group and a large hospital corporation dedicated to educating medical professionals in the emergency room setting on the proper care and treatment of individuals towards mental illness. As part of this evaluation, you, the health and human services discipline graduate student, will complete a questionnaire assessing your knowledge of and attitudes towards individuals with mental illness.

This research requires you to complete an online questionnaire, view an educational video, and retake the questionnaire. We estimate that it will take 30 to 40 minutes of your time to complete the surveys and view the video. Please contact the principal investigator Dr. Weisz to discuss the survey.

Responses to this survey will remain anonymous with no recording of your email address, name, or IP address. The research team will work to protect your data to the extent permitted by technology. This study has no more risk than you may find in daily life or everyday use of the internet. If you decide to be in this study, and you feel any discomfort with some of the questions. Please feel free to skip that question and proceed with the remained of the survey. You may refuse to answer any of the questions, take a break or stop your participation in this study at any time. A limited number of faculty members on the research team will have access to the data during data collection.

There are no costs to you for being in this study. There is an opportunity for compensation in the form of an anonymous raffle of two $50 Visa gift cards. Your participation in the raffle is optional. Your participation may also enhance your knowledge about those with mental illness. It is hoped that your participation in the survey will contribute to the general knowledge base of health and human service disciplines on the knowledge and views pre-professional graduate students towards individuals with mental illness and how education could impact those views.

If you wish to withdraw from the study or have any questions, contact the investigator, Dr. Weisz, at (540) 831-7659 or vweisz@radford.edu. If you choose not to participate or decide to withdraw, there will be no impact on your grades/academic standing.

You may also request a hard copy of the survey from the contact information above.

This study was approved by the Radford University Committee for the Review of Human Subjects Research. If you have questions or concerns about your rights as a research subject or have complaints about this study, you should contact Dean Orion Rogers, Institutional Officer for Research, Artis College of Science and Technology, Radford University, jorogers@radford.edu, 1-540-831-5958.

If you agree to participate, please proceed to the next section; otherwise, use the X at the upper right corner to close this window and disconnect.

Thank you for your consideration.