EMPATHIC ACCURACY IN THERAPISTS

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Submitted to the

Faculty of the College of Arts and Sciences

of American University

in Partial Fulfillment of

the Requirements for the Degree of

Doctor of Philosophy

In

Clinical Psychology

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August 8, 2013

Date

2013

American University
Washington, D.C. 20016
For my nephew, Theodore, for always reminding me of the importance of joy.
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ABSTRACT

Research on self-disclosure has demonstrated many psychological and physical health benefits connected with openly discussing reactions to emotional material (Sloan, 2010). However, under ethical constraints, therapists are not at liberty to talk about the often highly distressing issues clients discuss with them. Occupational hazards that may result for therapists such as burnout and compassion fatigue have been explored in the literature. Though there is evidence therapists may become more adept at coping with these hazards with experience, Figley (1995) proposed that highly empathic individuals might be particularly at risk for compassion fatigue. However, there is little previous research devoted to measuring empathy in therapists to determine the connection between empathy and compassion fatigue. The current study compared empathy and compassion fatigue in therapists (beginning and advanced therapy trainees) and age and gender-matched laypersons (“nontherapists”) by self-report measures as well as a performance task where participants watched a pre-recorded video of a woman describing a traumatic experience and inferred her thoughts and feelings while their heart rate was measured. The inferred items were rated for accuracy and these items as well as heart rate were compared between participants to determine empathic accuracy. It was hypothesized that therapists would have greater scores on measures of empathy and compassion fatigue than nontherapists, and that advanced therapists would show greater empathic accuracy and compassion fatigue than beginning therapists. Results indicated there were no significant differences between groups on measures of empathy, and that nontherapists scored significantly higher on a measure of
compassion fatigue relative to therapists. Findings suggest that a high tolerance for exposure to emotionally distressing material may differentiate therapists from laypersons.
ACKNOWLEDGMENTS

First and foremost I would like to express my infinite gratitude and appreciation to my graduate advisor, Dr. David Haaga. Without his steadfast support, guidance, and wisdom this study would not have been possible. I would also like to acknowledge the American University College of Arts and Sciences for their generous financial support that allowed me to see my vision for this study come to its full potential. I feel very fortunate to have had the great pleasure of working with Ms. Lia Stern who so enthusiastically assisted with study recruitment and the daunting task of running participants in my absence from campus. I am also indebted to my colleagues and supervisors at the Boston VA, especially Dr. Brett Litz, whose mentorship and expertise has been an inspiration as I begin my path toward professional growth. On a personal note, I am eternally thankful for my cohort of fellow graduate students in clinical psychology at American University whose loyal friendship, respect, and encouragement have been crucial to my survival in graduate school. Finally and above all, I must express my gratefulness for my amazing family, friends and my partner whose love has guided me through every pursuit, large or small, and whose unwavering faith has provided the foundation necessary to help me work towards my goals each day.
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CHAPTER 1

INTRODUCTION

What type of person is drawn to a profession in which they spend their time at work talking with other people who are depressed, anxious, mentally ill, and traumatized? How can someone abstain from letting their own thoughts and feelings interfere with their ability to help someone in distress? Further, how can one be expected to contain a myriad of confessions they hear on a daily basis, without being able to share a majority of them? As any clinical psychologist will tell you- these questions represent sentiments that are typically expressed by those outside of the profession. The enigma associated with the desire to help others in distress and thus risking one’s own wellbeing has been observed in research settings as well. Strack and Coyne (1983) found that talking with a depressed individual for just fifteen minutes made participants (who were not psychologists) in turn feel depressed, anxious and hostile. From this perspective, there are many challenges that are unique to the profession of practicing therapy, and it might seem puzzling that any person would choose a line of work where one must remain emotionally stable while working with potentially distressing material. This also raises the question of which characteristics and skills are vital to success in this field.

In the realm of clinical psychology, “success” is typically measured by positive therapeutic outcomes, meaning that the symptoms endorsed by clients and patients improve as a result of the treatment. The research on therapist variables associated with good therapeutic outcomes highlights some specific knowledge and skills that improve with training (e.g. Mallinckrodt & Nelson, 1991) and some less tangible traits that tend to lead to good therapeutic outcomes. Undoubtedly, one of the most important factors in providing effective psychotherapy is empathy (Barlow, 2008). Though there is no empirical evidence that therapists are all highly
empathic individuals, empathy as a skill has been shown to be improved with training (Barone et al., 2005).

The aim of this study is to gain a better understanding of the unique abilities that therapists possess in order to not only help others work through their issues, but to protect themselves emotionally while working with distressed individuals. This study will also measure the association between training with therapeutic skills in order to explore which aspects of conducting therapy are inherent to individuals who choose to pursue a career in clinical psychology, and which come mainly with training. The results of the study will begin to address whether there are certain abilities that exist in all therapists, regardless of experience, or if experience in the field helps therapists adapt more to the demands of the profession.

Background

Self-disclosure

In a 1986 study, Pennebaker and Beall discovered that college students who did not confide about recent traumatic or stressful experiences were more likely to encounter physical and mental health problems than those who wrote openly about their experiences. Since that study, many researchers have had similar findings about the health benefits of verbal self-disclosure in a variety of populations. Sloan (2010) wrote that the main benefits of self-disclosure found in the literature include improvement in academic performance, decrease in health care utilization and improved immune functioning, relative to those who were in non-disclosure control groups. In a meta-analysis of the self-disclosure literature, Frattaroli (2006) found that these benefits were greatest for individuals who had suffered recent trauma or were currently under very high stress, as compared with those who disclosed about less traumatic or non-emotional material. The greatest benefits are argued to come to those who disclose about both positive and negative life events (Gable, Reis, Impett, & Asher, 2004). Contrarily,
individuals who fail to disclose emotional information regularly may risk suffering from poor health outcomes.

Although there is a consensus that self-disclosure of emotion has many benefits for individuals, there remains to be a clear explanation as to why this occurs. Sloan (2010) reviewed four current theories surrounding this question in the literature. The first theory, *emotional inhibition* was posited by Pennebaker (1989) who theorized that when individuals self-disclose, this leads to a reduction in stress which in itself is beneficial to physical and mental health. Sloan wrote that while this theory may account for some of the positive effects of self-disclosure, there remains to be sufficient evidence that it can be linked with the full myriad of benefits that have been found. The second theory, *social support* links self-disclosure with social benefits. Self-disclosure with another person can serve to strengthen relationships when the person whom is disclosing is in turn disclosed to by the listener. Although this is a logical connection, Sloan wrote that it is still unclear as to how increased social support leads to all of the benefits associated with self-disclosure. Furthermore, this theory may not pertain to individuals who have little social support or few close relationships to begin with. Third, *cognitive adaptation* is based on Janoff-Bulman’s (1992) theory that when stressful or traumatizing events occur, individuals feel that their organizational schema or worldview is challenged, and that individuals must re-organize their core beliefs when such events occur. This theory posits that expression via self-disclosure helps individuals to organize negative experiences and re-integrate the experience with the individual’s sense of self and thus produces the observed benefits. However, there is a lack of evidence that this theory holds for individuals who have experienced trauma. Finally, the *exposure* theory proposes that self-disclosure serves to de-couple a conditioned stimulus and an unconditioned stimulus so that a fear response (conditioned response) no longer occurs when an
individual is repeatedly exposed to the traumatic material. Although there has been evidence of self-disclosure being effective in treating posttraumatic stress symptoms, this model relies on the presence of pathological fear in the individual. Sloan argues that although each of these theories about possible reasons for the found benefits of self-disclosure of emotional material, there is not enough convincing evidence for any of the theories to stand apart from the others when attempting to explain the benefits of self-disclosure.

Research on secondary social sharing of emotions points to the important role that self-disclosure plays in offering relief after exposure to emotionally loaded information. The theory behind secondary social sharing of emotions proposes that when individuals learn emotional material from another person, the individual in turn often feels the need to disclose that material to another (third party) person. Christophe and Rimé (1997) found that more “globally upsetting episodes” (p. 44) caused participants to feel more intense negative emotions, and the more negative the emotional reaction, the more likely the subject was to disclose it to another person later on. The authors theorized that this occurred because exposure to emotional material causes physiological arousal that may be uncomfortable for the individual. Thus, in order to provide relief the individual must share this information with another person. Christophe and Rimé theorized that this process occurred because emotional experiences of another person can only be processed by the individual verbally. They also posited that when learning about the emotional experiences of another person, an individual might feel that some aspects of themselves are being challenged or modified (akin to the cognitive adaptation theory described previously), and so they will share the experience with a significant other person in order to restore their original sense of self.
It is clear from this line of research that having the opportunity to share problems or any emotional material you have been subjected to with another person is both physically and psychologically beneficial. However, under ethical constraints, clinical psychologists are not at liberty to talk about the issues their therapy clients present to them with other people. It follows that practicing therapy might be associated with its own emotional or even health hazards—especially considering therapists are subjected to a barrage of negative emotions and experiences on a daily basis. Although one may argue that therapists are able to discuss their clients’ stories and their personal reactions in supervisory settings, it is unrealistic to expect that they are able to discuss every reaction they have to learning about those experiences. Without access to an outlet for this material, it is possible that a residual buildup of unshared material may cause physiological and emotional difficulties. It is important however, to consider that the literature on sharing of emotions has been conducted entirely on non-therapists. Given that it is their choice of profession and a primary requirement of such a career for which they receive training, therapists may react differently when exposed to difficult emotional material than non-therapists. Yet not all therapists are completely resistant to psychological difficulties resulting from repeated exposure to intensely negative emotions and experiences. Perhaps the most thoroughly researched concept related to the detrimental effects of working in the mental health field is burnout.

**Burnout**

Burnout is a concept that may pertain to any profession involving ‘people work’ and has generally been defined as the result of high demands on an individual’s emotional and intellectual resources. These high demands are evidenced by three main factors: emotional exhaustion, depersonalization, and reduced personal accomplishments (Freudenberger, 1975).
Some factors that may lead to burnout among therapists are unrealistic expectations for a client’s progress in the treatment, unresolved family of origin issues and high emotional involvement with clients (Clark, 2009). Unfortunately, the occurrence of burnout in therapists is not rare. Kahill (1986) estimated that about 10-15% of all mental health professionals will experience burnout in their careers. Ackerly, Burnell, Holder and Kurdek (1998) succinctly stated that “all therapists are susceptible to burnout.” Further, there seems to be no specific treatment that may help caregivers once they have been stricken with burnout (Clark, 2009).

Burnout can be dangerous to the careers of psychologists for whom it develops, as it is often highly detrimental to work performance, and in some cases may lead the individual to leave the field entirely. Taken together with Pennebaker’s (1993) findings that nondisclosure of emotional material can lead to problematic mental and physical issues, it is not surprising that burnout sometimes occurs for therapists. This may especially pertain to therapists who feel constrained by the necessary ethical requirements to keep clients’ stories to themselves. Although one may argue that therapists are able to discuss their client’s stories and their personal reactions in supervisory settings, it is unrealistic to expect that they are able to discuss every reaction they have to learning about those experiences. When clients’ stories are especially stressful or traumatizing, it seems to follow that being unable to disclose these accounts might lead to high levels of stress which may be unmanageable for those who are not properly equipped to handle such information.

Given that therapists are not able to discuss details of their clients’ struggles, it might be difficult to imagine that they can handle this professional responsibility at all. However, Collins and Long (2003) pointed out that many therapists are able to continue with such difficult work as a result of the feelings of satisfaction the work can provide if individuals are able to handle the
emotional load of the work. They surveyed healthcare workers volunteering for a Trauma Recovery Team, helping those traumatized by the 1998 Omagh bombings in Ireland and found that workers who had lower levels of burnout also had higher levels of satisfaction in the work they were doing. The authors concluded that “compassion satisfaction” was an important protective factor against burnout; that is, the workers were able to cope with the demands of their work and avoid burnout not only because they were motivated to help others but were able to attain satisfaction from such work. Although Collins and Long found no significant differences in burnout scores across participants who had varying professions in the mental health field (e.g. social workers, nurses, psychotherapists), it could also be that since each participant had a different caseload, some may have had clients that were less challenging to work with, which may have left these participants with lower rates of burnout and more job satisfaction. In summary, though some protective factors such as compassion satisfaction may protect psychologists from burnout, emotional risks seem to be an inevitable part of utilizing empathy and other related skills to help individuals in distress.

Compassion Fatigue

One such risk that has received increasing attention in the research is compassion fatigue (CF; Figley, 1995). Also known in the literature as Secondary Traumatic Stress Disorder (STSD), CF is defined as a psychological state of “tension and preoccupation” where the individual experiences symptoms similar to post-traumatic stress disorder (PTSD) that occurs following exposure to traumatizing material presented by a client. The term compassion fatigue is often used in place of STSD, as it is thought to be less stigmatizing (Figley, 1995). The symptoms of CF involve re-experiencing of the primary survivor’s traumatic event, avoidance or numbing in response to reminders of the event, and persistent arousal (Jenkins & Baird, 2002).
As a consequence, the therapist with compassion fatigue may experience a reduced ability and/or desire to help others who are in distress.

Although closely related and often studied in conjunction with one another, burnout and compassion fatigue are each unique, distinct constructs (Boscarino, Figley & Adams, 2004). While burnout is caused by long-term emotional exhaustion related to “involvement in emotionally demanding situations” (Pines & Aronson, 1988), CF can theoretically occur instantly after a single exposure to traumatic material (Figley, 1983). Fortunately, it has been posited that once it has been recognized, CF is a much more treatable condition than burnout (Figley, 2002). Though no treatment studies to date have been conducted, Figley (2002) has suggested that treatment for compassion fatigue should consist of psychoeducation, desensitization to the traumatic stimulus via exposure, and bolstering social support. Among the protective factors against development of compassion fatigue, experience in the field seems to be the most important factor. Cross-sectional studies have similarly found that the longer mental health professionals have been working in the field, the less likely they are to suffer from CF (Sprang, Clark & Whit-Woosle, 2007). This finding suggests that therapists learn strategies over time that protect them from the emotionally vulnerable aspects of this work. However, these findings may have also come about as a result of a dropout or attrition effect- that is therapists who are more prone to CF are more likely to leave the field. Therefore, studies surveying older mental health professionals are less likely to find high occurrences of CF in these samples.

Resiliency

Given the psychological difficulties that may arise for therapists working with distressed individuals, the literature on resiliency has focused on identifying factors that help therapists become less prone to outcomes such as burnout and compassion fatigue, and more likely to have
a long and satisfying career. Resiliency has been defined as the ability to remain “energized by the process of practicing therapy” (Clark, 2009). Marriage and Marriage (2005) found that most trainees in the mental health field reported feeling stressed about their patients and often worried about patients outside of work. Ackerly et al. (1998) surveyed practicing psychotherapists nationwide, and found that younger therapists experienced higher levels of emotional exhaustion (one of the three main factors of burnout) than their older colleagues. They suggested that over time, psychotherapists learn ways to conserve their emotional energy which protects them from burnout. Further, Cunningham (2003) theorized that although working with distressed clients may indeed be “initially upsetting”, clinicians usually adapt to this work by developing effective coping strategies that go beyond conservation of emotional energy.

In a qualitative study of experienced family therapists, Clark (2009) found some coping strategies endorsed by resilient practitioners included maintenance of clear boundaries with patients, having resolved family of origin issues, supportive peer relationships, and good self-care strategies such as outside hobbies. Clark also found that resilient therapists incorporated their work into their own sense of self, and felt the work they did was an important part of who they were as individuals. Clark suggested that it appeared the resilient clinicians “had always had this attunement to a degree” but also reported that they focused on this skill and nurtured it as their experience in the field grew. The consensus in the literature that resilient therapists are older and more experienced suggests that there are certain skills therapists possess that tend to improve with time and experience. Perhaps it is the exposure to work with distressed individuals which uniquely allows a majority of therapists to improve these skills and be less prone to burnout or compassion fatigue and thus better able to help patients.
Empathy

The therapist skill that is most often linked with positive therapeutic outcome is empathy (Marangoni, Garcia, Ickes, & Teng, 1995). Although definitions of empathy vary in the literature, most are close to the definition given by one of the main authors in this area of research. Ickes (1993) wrote that empathy consists of three main components: empathic understanding, empathic expression, and empathic communications. Figley (1995) observed that individuals who are both highly empathic and are repeatedly exposed to emotionally traumatic material (i.e. therapists) are in turn more susceptible to compassion fatigue. However, it may be that that same empathic tendency may be what makes therapists so skilled at working with individuals who are in distress. As Goleman (1995) described, empathy is an ability that “distinguishes the most tactful advisors…the most electable politicians…the most successful teachers, and the most insightful therapists.” Empathy is typically thought of as a personality trait of which individuals possess varying degrees, though it remains unclear in the literature whether therapists indeed possess higher trait empathy than those who do not choose to enter the mental health field. Perhaps there is little research on trait empathy in therapists because in the context of the psychotherapy literature, empathy is viewed mainly as a specific skill, rather than a personality trait. In a sample of therapist trainees, Barone et al. (2005) found evidence that empathic skill improves with training and experience. It might be assumed that individuals with high trait empathy will in turn have higher empathic skill, though the link between trait empathy and empathic skill remains unclear.

Therapist Impact on Therapeutic Outcomes

Empathy is an important part of practicing therapy, yet there is no empirical evidence to suggest that therapists are particularly high in trait empathy. Research on empathy in therapists
has instead focused on how individual empathic skill varies and how this plays a role in therapeutic outcomes. In the 1950’s, Hans Strupp conducted a series of studies with practicing therapists with the aim of exploring the connection between therapists’ technique and their biographical variables (e.g. years of experience in the field, theoretical orientation, personal therapy). He compared therapists’ clinical opinions of videotaped psychotherapy clients and found that the responses of the therapists varied depending on both their personal attitude toward the client and their level of experience in the psychotherapy field (Strupp, 1993). Building on these findings, Strupp’s Vanderbilt I study (Strupp & Hadley, 1979) compared therapeutic outcomes of professional therapists with college professors who were rated as highly empathic. Although they found therapeutic outcomes were not significantly different based on who was conducting the therapy, findings did indicate that the therapists were better able to form a strong therapeutic alliance with their clients.

Given that empathy is an important factor in forming a strong therapeutic alliance, it can be suggested that the therapists in the study indeed had more empathic skill than the professors. The Vanderbilt II study (Strupp & Binder, 1984) further explored factors in the therapeutic relationship and revealed that even experienced therapists had difficulties in creating alliances with more ‘difficult’ patients, and that perhaps with more specialized training they may be able to overcome such difficulties. The researchers concluded that specialized training should lead to better therapeutic outcomes by specifically focusing on the therapeutic relationship, which can be interpreted to mean that psychotherapy training should focus on empathic skill. Strupp’s studies raised some interesting questions about the function of psychotherapy training, and indicated a need for further research on the role empathic skill plays in therapeutic relationships.
Other research on the therapeutic alliance has indicated that training improves certain skills. Mallinckrodt and Nelson (1991) had similar findings as Strupp and Hadley (1979) when comparing clients’ ratings of the therapeutic alliance among therapists at different levels of experience. They found that overall, therapists in their sample had equal client ratings of therapeutic alliance, though the more experienced therapists scored better on goal setting tasks. The researchers argued this was because less experienced therapists lacked the necessary technical skills. However an important setback of this study is that the researchers failed to measure the impact of therapist empathy and empathic skill on the therapeutic relationship. This is problematic as it indicates an assumption that empathy does not differ from therapist to therapist. Therefore it is clear that there is a great need for the literature to assess empathic skill specifically in therapists.

**Empathic Accuracy**

In the literature, empathic skill is objectively measured as *empathic accuracy* (EA), or the level at which individuals are able to scrupulously comprehend what another person is thinking or feeling and express this understanding from actually being able to feel what the other person feels, both emotionally and physiologically (Ickes, 1997). This reflects the necessity of having not only a capacity to understand the feelings of another individual, but to be objectively accurate in reflecting that understanding. This is particularly important in the therapeutic relationship. For instance, a therapist might feel that they understand the emotions their client is experiencing, but if they are inaccurate in their assessment and express this to the client, the therapist risks alienating the client. Such a misreading can compromise the therapeutic alliance, which is crucial to a positive therapeutic outcome (Dunkle & Friedlander, 1996). Interestingly, the literature in this area has found evidence that people tend to be poor determinants of their
own ability to be empathically accurate (Marangoni et al., 1995). The definition of empathic
accuracy varies among researchers, which is thought to contribute to the low reliability and
validity of self-report measures of empathic accuracy (Levenson & Ruef, 1992). As such, most
measures of EA utilized over the past few decades have been performance-based. Ickes (1993)
suggested that the most accurate way to measure EA is to “compare the content of a target
person’s actual thoughts and feelings with the content of the corresponding inferred thoughts and
feelings reported by the perceiver” (p. 591).

There are two standard performance-based research designs currently in use to measure
EA in individuals (Ickes, Gesn & Graham, 2000). The unstructured dyadic interaction paradigm
consists of two research participants viewing a videotape of their “spontaneous interaction”
which is filmed without their knowledge as part of the experimental procedure. While
participants watch the tape, they must make inferences as to what the other participant was
thinking or feeling during this interaction (Ickes & Tooke, 1988). The standard stimulus
paradigm involves a set of videotaped interactions, interviews, or therapy sessions which
participants view. Participants must state what they believe the target person in the tape was
thinking or feeling at several points throughout the tape, and then their answers are compared
with the actual thoughts and feelings reported by the target person at the same points throughout
the tape. Marangoni et al. (1995) found that empathic accuracy was stable for participants across
three different targets, providing evidence for the usefulness of the standard stimulus paradigm in
accurately measuring EA.

Physiological Measures of Empathy

Since the 1920’s, psychological researchers have been studying the actual physiological
effects of being exposed to emotional material (Buck, Savin, Miller & Caul, 1972). Researchers
have discovered that exposure to strong emotional material elicits changes in autonomic arousal that may be detected by measuring physiological activity such as heart rate, blood pressure, pulse transmission time to finger, and skin conductance level. There is a consensus that physiological measurements of EA to be the most compelling measure of this construct available; certainly more so than self-report or performance based measures alone (Marangoni et al., 1995).

Research combining both performance-based and physiological measures of EA has allowed researchers to understand empathy in a fascinating new light. In general, the findings in this area have demonstrated that individuals who are high in empathic accuracy tend to also be highly emotionally aroused upon listening to the emotional experiences of other people (Mehrabian & Epstein, 1972).

Research on the physiology of empathic accuracy has identified patterns in individuals with high, versus low empathic accuracy. Specifically, two major studies have addressed the connection between EA and autonomic activity. In a study published in 1992, Shortt and Pennebaker measured autonomic activity of participants (‘listeners’) while viewing videotaped interviews of Holocaust survivors (‘disclosers’). Researchers measured the physiological responses of the disclosers while they were telling their stories as well as self-report empathy of the listeners using the Epstein Feelings Inventory (Mehrabian & Epstein, 1972). After comparing the physiological responses of the listeners and disclosers, they found two patterns of physiological responses among listeners. The first pattern showed that physiological responses were similar to disclosers among the listeners who rated themselves as high versus low in trait empathy. Shortt and Pennebaker suggested this occurred perhaps because these listeners were actually feeling what the discloser was feeling, which they refer to as the “empathy hypothesis”. The other pattern they observed in listeners was that they became more anxious in response to
listening to the disclosers, labeled the “confronted-by trauma” hypothesis. The specific physiological measurements Shortt and Pennebaker (1992) utilized (similar to a majority of researchers measuring physiological linkages in empathy) were heart rate (HR) and skin conductance level (SCL). They found that SCL measured mainly behavioral inhibition, while HR measures somatic activity, and especially behavioral activation. In other words, “the SCL-inhibition link is important in explaining why individuals who ‘let go’ and disclose deeply personal and emotional material experience evidence drops in SCL and no changes in HR” (p. 168). Along with the previously reported findings about disclosure, it seems that the physiological benefits associated with disclosure might be related to an emotional and physical release of tension associated with containing emotional material.

Levenson and Ruef (1992) had similar findings when using a performance-based measure (standard stimulus paradigm) in addition to physiological measures (including measurements of HR and SCL) to determine empathic accuracy of participants who watched a video of a staged marital conflict. Consistent with Shortt and Pennebaker’s (1992) discovery, they found that participants with the highest empathic accuracy scores also experienced similar physiological patterns as target participants. This finding provides evidence for the argument that those who are highest in empathic accuracy are able to actually feel what another person is feeling, both psychologically and physiologically (i.e. a “shared state of physiology”). Levenson and Ruef further found that this physiological linkage was much stronger for accuracy regarding negative affect, than for positive affect. They theorized this was because negative emotions cause more highly arousing autonomic activity than positive emotions, and thus are more sensitive to physiological measures.
Current Study

Shortt and Pennebaker (1992) wrote that “[f]urther research is necessary to gain a fuller understanding of the consequences of providing a listening ear and interacting with persons with traumatic experiences as well as a clearer understanding of the mechanisms and processes at work” (p. 177). Indeed, given the vast and fascinating body of research on empathic accuracy, the dearth of literature on different measures of empathic accuracy involving samples of therapists seems surprising. Taken together with the previously reported findings that empathy is idiosyncratic to personal characteristics, a study measuring empathic accuracy in therapists compared with non-therapists seems warranted. Findings from such comparisons may provide insight as to whether individuals choose to pursue a career in clinical psychology because they are particularly empathic individuals. The impact of experience in the field will be measured by comparing group differences between trainees in clinical psychology at different points throughout their training career. Further, this study will aim to determine if higher empathy is associated with higher compassion fatigue, as proposed by Figley (1995). The current study utilized performance based (derived from Marangoni et al.’s 1995 standard stimulus paradigm) and physiological measures of empathic accuracy as well as self-report measures of empathy and compassion fatigue to determine group differences.

Hypothesis #1

The first aim of the current study was to determine whether therapists were higher in trait empathy than nontherapists. It was expected that since empathy is such an important aspect of conducting therapy that therapists would score higher on a self-report measure of empathy than nontherapists. It was also expected that beginning and advanced therapists would show no differences in a self-report measure of empathy, as trait empathy was expected to be a major
factor that contributed to career selection for these individuals and should not have differed based on level of training.

Hypothesis #2

Empathy was also measured by objective (performance and physiological) measures of empathic accuracy, to determine if therapists possessed greater empathic skill than nontherapists, which may also help to elucidate the question of why therapists choose this line of work. It was hypothesized that the advanced therapists would score higher in objective measures of empathy than beginning therapists, and that therapists would score higher than nontherapists, as the literature suggests that empathic skill improves over time with training (Barone et al., 2005).

With regard to physiological measurements of empathic accuracy, it was hypothesized that therapists would demonstrate more significant, positive correlations on physiological measures and that nontherapists would demonstrate mainly significant, negative correlations on these measures. This hypothesis was based on the expectation that therapists would score higher on a measure of trait empathy, as the literature has demonstrated highly empathic individuals seem to show similar physiological responses to individuals they interact with (Mehrabian & Epstein, 1972). Additionally, it was expected that advanced therapists, due to having more experience reacting calmly to emotional material being elicited from another person, would demonstrate more significant, positive correlations on physiological measures than beginning therapists.

It was expected that therapists’ physiological patterns in response to listening to a person describe an emotionally distressing scenario would demonstrate patterns in heart rate more closely resembling Shortt and Pennebaker’s (1992) “empathy hypothesis”, whereas nontherapists were expected to resemble the pattern described by the “confronted by trauma” hypothesis. It
was expected that nontherapists may react to listening to another person describe emotional material by in turn becoming anxious. Additionally, it was expected that advanced therapists, due to having had greater exposure to emotional material being elicited from another person while in the role as a therapist, would more closely resemble the empathy hypothesis, whereas beginning therapists would demonstrate physiological patterns analogous to the “confronted by trauma” hypothesis.

**Hypothesis #3**

Figley (1995) has suggested that individuals and particularly therapists who are highly empathic may be especially susceptible to emotional risks of exposure to distressed individuals in clinical settings such as compassion fatigue. The current study explored this theory by comparing compassion fatigue among participants following exposure to a person describing distressing emotional material. Given the hypothesis that therapists would be higher in trait empathy, it was expected that therapists would endorse higher compassion fatigue than nontherapists. Clark (2009) found that therapists who were less resilient to the emotional risks of the profession were younger and less experienced than resilient therapists. Therefore among the therapist group, it was expected that beginning therapists would score higher in compassion fatigue than advanced therapists.

**Hypothesis #4**

To test Figley’s (1995) theory that being high in empathy leads individuals to be more prone to compassion fatigue, self-report empathy and state compassion fatigue measures for the whole sample were correlated. It was hypothesized that there would be a significant, positive correlation between self-report empathy and compassion fatigue.
Hypothesis #5

Finally, it was hypothesized that therapists would show higher scores on a self-report subjective measure of anxiety following exposure to distressing emotional material than non-therapists. Evidence in the research suggests that highly empathic individuals become highly emotionally aroused from witnessing others in emotional distress (Mehrabian & Epstein, 1972), which might also translate to higher feelings of anxiety while watching a person describe a traumatizing scenario. It was hypothesized that beginning therapists would score higher on an anxiety measure following exposure than advanced therapists, as it was expected that therapists with more experience gained an ability to remain emotionally stable following exposure to distressing material.
CHAPTER 2

METHOD

Phase 1 -“Target” Participant

One female participant was selected from the community via a Craigslist posting that described the purpose of the study, the procedures, and requirements for participation. The target participant selected for the study was a 35 year old Caucasian female who responded to the posting and following a telephone screening, agreed to be filmed discussing a traumatic event that would be shown to the experimental participants.

For the video stimulus, the target was asked to disclose on camera an actual instance in which she was severely traumatized. In previous studies using the standard stimulus paradigm, females have been used as it is thought that female targets might be more willing to “disclose personally meaningful, intimate concerns, and do so in a more expressive fashion” than males (Marangoni et al., 1995, p. 858). While filming the video the target’s heart rate was measured and recorded using a finger-pulse oximeter. The video stimulus is 20 minutes in length and consists of two separate clips filmed in one sitting, with only the experimenter and the target participant in the room. The target was prompted by the experimenter with the following instructions, directly prior to when the recording was taken; “For about 30 minutes I’d like you to talk about a traumatizing event that you’ve experienced in your life. This won’t be like a therapy session, so I won’t be responding to you, but I’ll be recording your physiological measurements as you talk. Talk as openly as you can as if you were thinking it through, or writing it down. Start from the beginning, and include as many details as you can remember.”

Following the recording, the target was asked to review the tape and pause it at points where she recalled having had a distinct thought or feeling and to record the content of the thought or feeling on a response form. She was given the option of deleting any portion of the
tape that she chose if she felt it too personal to use for experimental purposes, though she did not elect to delete any portion of the tape. In order to avoid reporting bias (i.e. so she did not report new thoughts or feelings that occur during the review of the tape), the first few minutes of the tape were used as a deliberate “acclimation period”, where no emotional material was discussed, so that the target could become accustomed to seeing herself on video before she began to record her thoughts and feelings. The target chose to discuss a scenario in which she was sexually molested by a group of neighborhood boys when she was 11 years old\(^1\). She discussed details of the event and the effects of the event on her life. She also discussed the death of her father when she was an adult and how this event impacted her life. The target was provided $100 in compensation and signed a consent form giving her permission for the experimenter to show the video stimulus to experimental participants and was given the option of requesting a referral to a local therapy clinic, though she did not request a referral.

**Phase 2- Experimental Participants**

Study participants were recruited into one of two groups as follows: beginning and advanced graduate students in clinical psychology training programs (“therapists”) and gender and age-matched (within five years of age from corresponding participant) laypersons from the community (“nontherapists”). Participants in the nontherapist group met criteria if they reported they had no experience working in the mental health field or providing clinical services. The therapist group was recruited by contacting clinical psychology doctoral training programs (PhD and PsyD) in the Washington, DC metro area. Beginning therapists were in their first year of

\(^1\) Note: The experimenter did not report this incident to CPS as it was determined the experimenter was not a mandated reporter. The target participant did not identify any of the individuals responsible and voluntarily offered to tell her story. The target participant explained that she had informed the appropriate authorities at the time of the incident, and her family decided not to press charges against the parties responsible.
their training programs, and advanced therapists were in their fourth or fifth year of training.

Participants for the nontherapist group were recruited via advertisements on Craigslist.

**Experimental Procedure**

The experimental procedure took place in a laboratory in the psychology building at American University. After signing the consent form, participants filled out study questionnaires consisting of a demographic survey and a self-report survey of empathy (Epstein Feelings Inventory; Mehrabian & Epstein, 1972), as well as a self-report measure of state anxiety where participants rated their current anxiety along a visual analog scale from 0 (“not at all anxious”) to 100 (“extremely anxious”). They were then given instructions for the performance task. The performance task involved watching the video stimulus while their heart rate was monitored with a finger-pulse oximeter. Participants were told that they could stop watching the tape at any point if they felt uncomfortable. The following instructions were verbally administered to all participants by the experimenter: “While you are watching the following videotape, try your best to put yourself in the shoes of the person on the tape. The videotape will be paused at several points throughout the tape. When there is a pause, please write on the form below the time you see displayed on the tape, and what you think the target person was thinking or feeling at this point. You will then be shown four multiple-choice options of possible response options that the target person actually wrote as the thought and/or feeling that she recalled while talking during the taping. Please select which option you think that she wrote.” At each of the eight pre-determined stop points, the tape was paused and the experimenter asked the participant what they believed the target person was thinking and feeling at that point on the tape. The experimenter transcribed the participants’ verbal response and then participants were shown four different responses presented as multiple-choice options and asked to select which response they believe
the target actually gave. The multiple-choice options consisted of the actual response of the
target person, and three other responses that varied in content (see Appendix A).

After viewing the tape, participants completed a self-report measure of state anxiety, a
post-test questionnaire to assess their perceived empathic accuracy on the performance-based
task, and a self-report measure of compassion fatigue (adapted from the Compassion Fatigue
Self-Test, CF subscale; Figley, 1995). Participants were compensated $30 in cash and the
experimenter addressed questions and concerns. To address any anxiety that might be induced by
watching the tape, participants were offered referrals to therapy should they choose. No
participants requested a referral. Study participation took approximately one hour for each
participant.

Measures

**Objective measures of empathy**

Scores for accuracy on the performance task were generated based on participants’ open-
ended responses, multiple choice answers, and physiological reactivity during the performance
task.

**Open-ended Responses to Video Stimulus**

The open-ended responses were coded for their similarity to the responses given by the
target. There were 8 total open-ended response items throughout the video stimulus. Responses
were coded as either 0 (not at all similar), 1 (somewhat similar), or 2 (highly similar). Two
coders who were masked to the participant group scored these responses. The average of the two
scores were used, and a summary score (“Accuracy Score”) was created. Intraclass correlations
revealed that interrater reliability was high (.882).
Multiple-choice Responses to Video Stimulus

The multiple-choice options shown to participants are presented in Appendix A. The total number of accurate multiple-choice responses was scored for each participant to create a multiple-choice response variable (MC). Possible scores range from 0 (no correct responses) to 8 (all correct responses).

Physiological Scores

Participants’ heart rate was recorded at the same 60-second intervals measured for the target participant as they watched the video stimulus where the target participant’s heart rate was recorded during filming of the video. There were 19 total heart rate measurement points for each participant. To determine accuracy between participants and the target, correlations were calculated for each participant comparing theirs to the target’s heart rate measurements.

Self-report Measures

Demographic Survey

A demographic survey was administered to participants. Two different versions of the demographic survey were created for each respective experimental group. Both therapists and nontherapists provided their gender, age, marital status, and race/ethnicity. The therapist version of the demographic survey contained questions that assessed for; training in the mental health field prior to entering their current clinical program, the main theoretical orientation emphasized by their training program, the approximate number of individual therapy clients the participant had worked with during their training program, how many individual clients they had worked with prior to entering their training program (if applicable), and any clinical experience they had with working with traumatized persons.
The nontherapist version of the demographic survey asked if participants had any experience working in the mental health field and if so, to describe the nature and extent of their experience.

Empathy

Self-report empathy was measured with the Epstein Feelings Inventory (EFI; Mehrabian & Epstein, 1972). There are 33 total items, and participants rate each item from +4 (very strong agreement) to -4 (very strong disagreement). To compute a total empathy score, the signs of a subject’s responses on reverse-score items are changed and then an algebraic sum of all 33 responses to the scale is obtained. For males, Mehrabian and Epstein reported M=23, SD=22; for females, M=44, SD=21. There are seven subscales: susceptibility to emotional contagion; appreciation of the feelings of unfamiliar and distant others; extreme emotional responsiveness; tendency to be moved by others’ positive and emotional experiences; tendency to be moved by others’ negative emotional experiences; sympathetic tendency; and willingness to be in contact with others who have problems. All original items were used for the current study. The measure has demonstrated high reliability and discriminant validity (Mehrabian & Epstein, 1972) with all subscales found to be significant at the .01 level, and the split-half reliability for the overall measure to be .84. Internal consistency for the current sample on the EFI was high (α=.77).

Anxiety Pre and Post Video Stimulus

Participants completed a visual-analogue scale of current state anxiety. This scale was given directly prior to and directly following exposure to the video stimulus. The scale is 14 centimeters long, with anchor points of 0 at the lower end (marked “not at all anxious”), “somewhat anxious” as an anchor point directly in the middle of the scale, and 100 at the upper end (marked “extremely anxious”). Participants were instructed to mark a vertical line along the
scale to record their current level of anxiety. The length of the line up until this point was divided by the total length of the line and multiplied by 100 to create an anxiety score. To explore the impact of prior traumatic experiences on participants’ responses to the video, two open ended questions were added to the second anxiety scale, shown post-video. The questions were: “In your own words, how was the experience of watching the video?” and “Have you ever had an experience similar to the person on the tape?” which offered a forced-choice response of yes or no.

**Compassion Fatigue**

The Compassion Fatigue subscale of the Compassion Fatigue Self-Test (CFST; Figley, 1995) was adapted for the current study to measure dispositional (trait) compassion fatigue, as well as state compassion fatigue following exposure to the video stimulus. Jenkins and Baird (2002) similarly adapted the CF subscale and demonstrated high reliability with a Cronbach’s alpha of .84 for this subscale. Jenkins and Baird (2002) reported that the CF subscale has good concurrent validity with another measure of vicarious trauma, the TSI-BSL (Pearlman & Mac Ian, 1996). The 23 items measured self-report state compassion fatigue on a 5 point Likert scale (1=rarely, 5=very often). Items 1-12 represent trait compassion fatigue, and items 13-23 represent state compassion fatigue by referring specifically to participants’ reactions to watching the video stimulus (see Appendix B for items from this subscale). Figley (1995) reported internal consistency for the CFST ranges from .86 to .94. Internal consistency for the current sample on state items was .79. Sample trait items include: “I often feel preoccupied by other people’s stories and experience,” and “I have experienced troubling dreams similar to the dreams described to me by somebody else”. Sample state items include: “While watching the person on the tape, I suddenly and involuntarily recalled a frightening experience in my life,” and “While
watching the tape I had to remind myself to be less concerned about the well-being of the person on the tape.”
CHAPTER 3

RESULTS

Demographics

Data was collected between July, 2011 and March, 2013. The final sample consisted of 72 participants; 36 participants were in the therapist group (18 beginning, 18 advanced) and 36 in the nontherapist group. The Demographic survey revealed descriptive information about the sample (see Table 1). The average age of participants was 27.22 (SD=4.98), and age ranged from 22 to 50 years old. Seventy-one percent of the total sample was female, and 29 percent were male. Seventy percent of the sample was single, 14 percent were cohabiting and 16 percent were married (one participant in the nontherapist group did not report marital status). The majority of the sample consisted of Caucasians (71 percent), 21 percent were African-American, 4 percent were Asian/Pacific Islander, 3 percent were mixed race and 1 percent reported “other” for race. Three percent of the sample reported they were Hispanic/Latino. Unlike age and gender, race was not controlled for in the current sample, and there were 9 more African American participants and 11 less Caucasian participants in the nontherapist group than in the therapist group. The mean age of participants in the therapist group was 27.53 (SD=4.72), and ranged from 22-49. Nontherapists averaged 26.92 years of age (SD=5.23), and ranged from 22 to 50 years old. Participants in the beginning therapist group averaged 25.89 years (SD=3.31) and ranged from 22 to 35. Advanced therapists averaged 29.17 years (SD=5.40) and ranged from 24 to 49. Among participants in the therapist group, 10 reported having experience conducting trauma-focused therapy, another 8 reported having experience conducting assessments and/or clinical intakes with trauma survivors, and 4 others reported having worked on a trauma or crisis hotline. Participants in the advanced group reported having worked with an average of 33.17
clients (range from 8-100), and six of the 18 advanced participants reported having clinical experience prior to their current graduate program.

Table 1. Descriptive Statistics of Participants by Group

<table>
<thead>
<tr>
<th></th>
<th>Therapists Overall (n=36)</th>
<th>Nontherapists (n=36)</th>
<th>Beginning therapists (n=18)</th>
<th>Advanced therapists (n=18)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>11 (31%)</td>
<td>10 (28%)</td>
<td>4 (22%)</td>
<td>7 (39%)</td>
</tr>
<tr>
<td>Female</td>
<td>25 (69%)</td>
<td>26 (72%)</td>
<td>14 (78%)</td>
<td>11 (61%)</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean(SD)</td>
<td>27.53 (4.72)</td>
<td>26.92 (5.28)</td>
<td>25.89 (3.31)</td>
<td>29.17 (5.40)</td>
</tr>
<tr>
<td>Range</td>
<td>22-49</td>
<td>22-50</td>
<td>22-35</td>
<td>24-49</td>
</tr>
<tr>
<td><strong>Marital Status</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>22 (61%)</td>
<td>28 (78%)</td>
<td>13 (72%)</td>
<td>9 (50%)</td>
</tr>
<tr>
<td>Cohabitating</td>
<td>7 (19%)</td>
<td>3 (8%)</td>
<td>3 (17%)</td>
<td>4 (22%)</td>
</tr>
<tr>
<td>Married</td>
<td>7 (19%)</td>
<td>4 (11%)</td>
<td>2 (11%)</td>
<td>5 (28%)</td>
</tr>
<tr>
<td><strong>Race</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>African-American</td>
<td>3 (8%)</td>
<td>12 (33%)</td>
<td>2 (11%)</td>
<td>1 (6%)</td>
</tr>
<tr>
<td>White</td>
<td>31 (86%)</td>
<td>20 (56%)</td>
<td>14 (78%)</td>
<td>17 (94%)</td>
</tr>
<tr>
<td>Asian/Pacific Islander</td>
<td>1 (3%)</td>
<td>2 (6%)</td>
<td>1 (6%)</td>
<td>0</td>
</tr>
<tr>
<td>Other</td>
<td>0</td>
<td>1 (3%)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Mixed Race</td>
<td>1 (3%)</td>
<td>1 (3%)</td>
<td>1 (6%)</td>
<td>0</td>
</tr>
<tr>
<td><strong>Hispanic/Latino?</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>1 (3%)</td>
<td>1 (3%)</td>
<td>1 (6%)</td>
<td>0</td>
</tr>
<tr>
<td>No</td>
<td>35 (97%)</td>
<td>35 (97%)</td>
<td>17 (94%)</td>
<td>18 (100%)</td>
</tr>
</tbody>
</table>
Hypothesis 1: Therapists will score significantly higher on a self-report measure of empathy than nontherapists.

Self-report empathy scores were calculated by adding participants’ scores on the Epstein Feelings Inventory (EFI). An independent samples t-test revealed therapists did not significantly differ from nontherapists in total self-report empathy scores, though differences approached significance in the expected direction (t=1.69, p=.1). As shown in Table 2, the mean score for therapists on the EFI was 79.61 (SD=11.01), and 74.26 for nontherapists (SD=15.35).

<table>
<thead>
<tr>
<th>Therapists (n=36)</th>
<th>Nontherapists (n=36)</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean EFI (SD)</td>
<td>79.61(11.01)</td>
<td>74.28 (15.35)</td>
<td>1.69</td>
</tr>
<tr>
<td>Range</td>
<td>59-103</td>
<td>43-102</td>
<td></td>
</tr>
</tbody>
</table>

Hypothesis 1a: No differences are expected between beginning and advanced therapists on a self-report measure of empathy.

An independent samples t-test revealed that consistent with the hypothesis, beginning and advanced therapists did not significantly differ on the EFI (t=.78 p=.44; see Table 3). Beginning therapists scored slightly higher on average (M=81.06, SD=12.36) than advanced therapists (M=78.17, SD=9.62).
Hypothesis 2: Therapists will perform more accurately than nontherapists on objective measures of empathic accuracy.

Objective empathic accuracy on the performance task was measured using open-ended responses, multiple choice responses, and physiological measurements. First, participants’ open-ended responses inferring the target participant’s thoughts and feelings on the video stimulus were coded for accuracy, and a total accuracy score (AS) was calculated for each participant. The highest possible score for each participant was 16 (8 total scores, maximum of 2 points each). AS scores were averaged for the groups and compared by independent samples t-test. Results are shown in Table 4. It was revealed that therapists and nontherapists did not significantly differ in AS (t=0.00, p=1.00). Means for both groups were 5.92, and SD for both groups was 1.64. Therapists’ AS scores ranged from 2.5 to 9.5, and nontherapist AS scores ranged from 2.5 to 8.5.
Table 4. Independent Samples T-Test Comparing Open-Ended Accuracy Scores Between Therapists and Nontherapists

<table>
<thead>
<tr>
<th></th>
<th>Therapists (n=36)</th>
<th>Nontherapists (n=36)</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean AS (SD)</td>
<td>5.92 (1.64)</td>
<td>5.92 (1.64)</td>
<td>.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Range</td>
<td>2.5-9.5</td>
<td>2.5-8.5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Next, participants’ empathic accuracy was assessed in terms of correct responses to the multiple-choice items presented following their open-ended response to the video stimulus. The greatest possible total score on this measure was 8. Total correct responses were summed for each participant, and an independent samples t-test was conducted to determine for significant differences between the groups. Results are reported in Table 5. Consistent with the hypothesis, therapists’ scores were significantly higher than nontherapists’ (t=3.32, p=.001). The range of scores for therapists was 0 to 5 (M=2.42, SD=1.08), and nontherapists ranged from 0 to 4 (M=1.58, SD=1.05).

Table 5. Independent Samples T-Test Comparing Multiple Choice Accuracy Scores Between Therapists and Nontherapists

<table>
<thead>
<tr>
<th></th>
<th>Therapists (n=36)</th>
<th>Nontherapists (n=36)</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean MC (SD)</td>
<td>2.42 (1.02)</td>
<td>1.58 (1.05)</td>
<td>3.32</td>
<td>.001*</td>
</tr>
<tr>
<td>Range</td>
<td>0-5</td>
<td>0-4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note: *Indicates test was significant at the p<.001 level
Contrary to hypotheses, both therapists and nontherapists had similar correlations in physiological patterns compared with the target participant’s physiological pattern, measured by heart rate. Therapists demonstrated 13 negative and 23 positive correlations (M=.1, SD=.31). Of these correlations, only 2 were significant. Nontherapists demonstrated 15 negative and 21 positive correlations (M=.05, SD=.30), with only 1 correlation that was significant. Table 6 presents distributions of physiological correlations among groups. Appendix C presents the target participant’s heart rate along the 18 points measured throughout the video.

Table 6. Distributions of Correlations Between Participants and Target Participant on Physiological Measures by Group

<table>
<thead>
<tr>
<th></th>
<th>Therapists Overall</th>
<th>Nontherapists</th>
<th>Beginning Therapists</th>
<th>Advanced Therapists</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>.10</td>
<td>.05</td>
<td>.17</td>
<td>.03</td>
</tr>
<tr>
<td>75th Percentile</td>
<td>.28</td>
<td>-.01</td>
<td>.43</td>
<td>.26</td>
</tr>
<tr>
<td>25th Percentile</td>
<td>-.35</td>
<td>-.42</td>
<td>-.04</td>
<td>-.18</td>
</tr>
<tr>
<td>Range</td>
<td>-.54-.64</td>
<td>-.52-.55</td>
<td>-.44-.64</td>
<td>-.55-.44</td>
</tr>
</tbody>
</table>

Note: Percentiles are defined by weighted averages

Hypothesis 2a: Advanced therapists will perform more accurately than beginning therapists on objective measures of empathic accuracy.

Objective measures of empathic accuracy were compared between beginning and advanced therapists. Contrary to the hypothesis, an independent samples t-test showed no significant difference between groups on open-ended response accuracy score (AS; t=-.61, p=.55). As seen in Table 7, the group means were in the expected direction. Beginning therapists
scored lower on average (M=5.75, SD=1.78) than advanced therapists (M=6.03, SD=1.51). Scores for beginning therapists ranged from 2.5 to 9, and scores for advanced therapists ranged from 4 to 9.5.

Table 7. Independent Samples T-Test Comparing Open-Ended Accuracy Scores Between Beginning and Advanced Therapists

<table>
<thead>
<tr>
<th></th>
<th>Beginning Therapists (n=18)</th>
<th>Advanced Therapists (n=18)</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean AS (SD)</td>
<td>5.75 (1.78)</td>
<td>6.08 (1.51)</td>
<td>.61</td>
<td>.55</td>
</tr>
<tr>
<td>Range</td>
<td>2.5-9.0</td>
<td>4.0-9.5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

An independent samples t-test revealed that contrary to hypothesis, beginning and advanced therapists did not significantly differ in number of correct multiple choice responses (t=-.77, p=.45), as seen in Table 8. Overall, as expected, advanced therapists scored slightly higher (M=2.56, SD=1.25) than beginning therapists (M=2.28, SD=.89). Scores for beginning therapists ranged from 0 to 3, and advanced therapists ranged from 1 to 5.

Table 8. Independent Samples T-Test Comparing Multiple Choice Accuracy Scores Between Beginning and Advanced Therapists

<table>
<thead>
<tr>
<th></th>
<th>Beginning Therapists (n=18)</th>
<th>Advanced Therapists (n=18)</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean MC (SD)</td>
<td>2.28 (.89)</td>
<td>2.56 (1.25)</td>
<td>.77</td>
<td>.45</td>
</tr>
<tr>
<td>Range</td>
<td>0-3</td>
<td>1-5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Comparisons of the physiological measure for beginning and advanced therapists by independent samples t-tests revealed that HR patterns were not significantly different between groups. According to correlations performed comparing participant HR to the target’s HR, 6 beginning and 7 advanced therapists had negative correlations, and 1 correlation (in the advanced group) was significant. Twelve beginning and 11 advanced therapists had positive correlations with the target’s HR pattern, and 2 of these correlations (both in the beginning group) were significant. Mean HR correlation for beginning therapists was .17 (SD=.31) and for advanced therapists mean HR correlation was .03 (SD=.29).

**Hypothesis 3:** Therapists will report higher state compassion fatigue than nontherapists following presentation of the video stimulus.

Summary scores of items relating to state compassion fatigue which were derived from the Compassion Fatigue subscale of the Compassion Fatigue Self-Test (CFST) were compared by independent samples t-test to determine group differences, as seen in Table 9. Contrary to the hypothesis, nontherapists scored significantly higher on the CFST state items than therapists (t=-3.26, p=.00).

<table>
<thead>
<tr>
<th></th>
<th>Therapists (n=36)</th>
<th>Nontherapists (n=36)</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean CFST (SD)</td>
<td>13.19 (3.62)</td>
<td>16.89 (5.76)</td>
<td>3.26</td>
<td>.002**</td>
</tr>
<tr>
<td>Range</td>
<td>11-32</td>
<td>5-34</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note:* **Denotes test was significant at the p<.01 level*
Hypothesis 3a: Advanced therapists will have lower scores than beginning therapists on measures of compassion fatigue following presentation of the video stimulus.

Table 10 shows results from an independent samples t-test which revealed that advanced therapists did not score significantly lower than beginning therapists on the state items of the CFST ($t=.59$, $p=.56$).

Table 10. Independent Samples T-Test Comparing State Compassion Fatigue as Measured by the Compassion Fatigue Self-Test (CFST) Between Beginning and Advanced Therapists

<table>
<thead>
<tr>
<th></th>
<th>Beginning Therapists (n=18)</th>
<th>Advanced Therapists (n=18)</th>
<th>$t$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean CFST (SD)</td>
<td>13.56 (4.85)</td>
<td>12.83 (1.79)</td>
<td>.592</td>
<td>.558</td>
</tr>
<tr>
<td>Range</td>
<td>11-32</td>
<td>11-17</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Hypothesis 4: Self-reported empathy will be significantly and positively correlated with self-report compassion fatigue.

A Pearson’s bivariate correlation was conducted comparing participants’ scores on a self-report measure of empathy (EFI) with scores on a measure of state compassion fatigue (CFST). Results are shown in Table 11. Contrary to the hypothesis, among the whole sample, empathy and state compassion fatigue were not significantly correlated ($r=-.007$, $p=.95$).

Table 11. Pearson’s Bivariate Correlations Comparing Self-Report Empathy and Compassion Fatigue

<table>
<thead>
<tr>
<th></th>
<th>Mean EFI (SD)</th>
<th>Mean State CFST (SD)</th>
<th>$r$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Sample (n=72)</td>
<td>76.94 (13.53)</td>
<td>15.04 (5.13)</td>
<td>-.007</td>
<td>.95</td>
</tr>
</tbody>
</table>
Hypothesis 5: Therapists will report a greater increase in anxiety following exposure to the video stimulus than nontherapists.

Change in anxiety was calculated by subtracting participants’ anxiety scores pre-video from their post-video score, creating an “anxiety change” score. Higher change scores are indicative of a greater increase in anxiety following watching the video stimulus, and negative scores indicate that anxiety reduced following watching the video. These scores were compared between groups by independent samples t-test. Though the average change score for nontherapists (M=14.09, SD=19.59) was higher than average change score for therapists (M=8.17, SD=20.63), the difference was not significant (t=-1.239, p=.22). Results are reported in Table 12. Therapists’ anxiety change scores ranged from -38 to 73, and nontherapists ranged from -25 to 68.

<table>
<thead>
<tr>
<th>Therapists (n=36)</th>
<th>Nontherapists (n=36)</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean Change Score (SD)</td>
<td>8.17 (20.63)</td>
<td>14.09 (19.59)</td>
<td>1.24</td>
</tr>
<tr>
<td>Range</td>
<td>-38-73</td>
<td>-25-68</td>
<td></td>
</tr>
</tbody>
</table>

Hypothesis 5a: Beginning therapists will report a greater increase in anxiety following exposure to the video stimulus than advanced therapists.

Advanced therapists scored higher overall on the anxiety change score (M=11.17, SD=19.7) than beginning therapists (M=5.17, SD=21.66), though as is shown in Table 13, independent samples t-test revealed the difference was not significant (t=-.87, p=.39). The range of change scores for beginning therapists was -38 to 47, and therapists ranged from -21 to 73.
Table 13. Independent Samples T-Test Comparing Anxiety Change Scores Between Beginning and Advanced Therapists

<table>
<thead>
<tr>
<th></th>
<th>Beginning Therapists (n=18)</th>
<th>Advanced Therapists (n=18)</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean Change Score (SD)</td>
<td>5.17 (21.66)</td>
<td>11.17 (19.7)</td>
<td>.87</td>
<td>.39</td>
</tr>
<tr>
<td>Range</td>
<td>-38-47</td>
<td>-21-73</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
CHAPTER 4
DISCUSSION

Remarkably, the literature on empathy has failed to substantially explore the role of empathic accuracy in therapists; a group of individuals who particularly rely on this skill to successfully help the clients and patients with whom they work. To address this gap in the literature, the current study explored variables related to practicing psychotherapy (empathy and compassion fatigue) among therapists and age and gender-matched laypersons or “nontherapists” with the goal of achieving a conceptual understanding of how these variables differentiate between the general population and a specific population of therapists. A further aim of the study was to determine the effects of training on empathic skill and compassion fatigue for individuals with various amounts of training in clinical psychology. Toward this end, various measures of empathy and compassion fatigue were utilized, and in general the results indicated that therapists in the sample did not differ from nontherapists on measures of empathy as expected, but these groups differed in that therapists endorsed significantly lower compassion fatigue than nontherapists in response to watching a person discuss a traumatic event. Additional results from the current study did not support Figley’s (1995) theory that compassion fatigue may be greatest for individuals who are highly empathic.

The Epstein Feelings Inventory (EFI; Mehrabian & Epstein, 1972), a common self-report measure of empathy was utilized for the current study. It was expected that scores on this measure would differ significantly between therapists and nontherapists, and that among beginning and advanced therapists, there would be no significant difference, as it was assumed training in clinical psychology would not influence trait empathy. Independent samples t-tests were conducted to compare differences between groups, and though therapists did show slightly higher mean scores on the EFI than nontherapists as shown in Table 2, this difference was not
significant. As hypothesized, beginning and advanced therapists did not score significantly different from each other on the EFI (Table 3). These findings indicate that in the current sample, trait empathy did not meaningfully differentiate between a group of individuals who are training to be therapists, and laypersons. The results should be interpreted with caution, given the lack of significant findings and potential biases based on the participants recruited for the current sample and issues with the measure.

Pearson’s bivariate correlations conducted post-hoc revealed that nontherapists’ age was significantly, negatively correlated with scores on the EFI ($r = -.53$, $p=.001$), though this correlation was not significant for therapists ($r = -.049$, $p=.78$). Most nontherapist participants were recruited specifically to match therapist participants closely in age; therefore range of ages among both groups was almost identical. There is little research devoted to age differences in empathy, though it is reasonable to expect greater variation in trait empathy among individuals randomly selected from the community, versus a select group of individuals (i.e. therapists) who may have endorsed a more narrow range in trait empathy across age due to the importance of this trait for all individuals in this group. The finding that the nontherapist group appeared to be less empathic as age increased merits further research on the association between age and empathy.

The unexpected lack of significant difference between therapists’ and nontherapists’ scores on the EFI may further be attributed to a potential sampling bias, such that nontherapists were aware that they were being recruited for a study on empathy. Further, participants’ average scores on the EFI were higher than reported norms from other studies utilizing the same measure. The mean score for all participants in the current sample was 76.94 (SD=13.53). Shortt & Pennebaker (1992) reported that their participants who were highest in physiological measures of empathy had a mean of 53.70 on the EFI. In a sample of female undergraduates, Archer et al.
(1981) reported a mean of 47.51 (SD=27) on the EFI. Williams (1989) reported a mean of 35 (SD=21) in their sample of female nurses. In these studies, it is unclear whether participants were informed specifically that their empathy was being measured. All participants in the current study were informed that the study was measuring empathy, therefore social desirability may have accounted for the above-norm scores on this measure. For participants in the therapist group, it may have been the case that these participants felt that due to the importance of empathy in their chosen field that there was a higher demand on their performance to be perceived as particularly empathic. As previously reported, nontherapists were recruited via Craigslist after responding to a posting that explicitly stated the study was measuring empathy. The subject for the Craigslist posting read as follows: “Seeking volunteers for study on empathy at American University”, and the content of the posting was: Researchers at American University are seeking male and female volunteers between the ages of 22-30 to participate in a study on empathy. Study participation requires filling out questionnaires, watching a videotape and taking physiological measurements. Participation takes approximately 1 hour and requires traveling to the research lab at AU. Participants will be compensated $30 cash. Please reply via email if interested.” Due to this recruitment strategy, the nontherapist participants may have been especially high in empathy and were thus compelled to participate in the study. The recruitment strategy may have in turn lacked appeal for individuals who do not see themselves as especially empathic, and their inclusion in the study may have provided greater variation in the outcomes on the EFI. Researchers have indicated that self-report measures of empathy may not be the most accurate estimators of a person’s level of trait empathy (Marangoni et al., 1995) given that such measures are sensitive to social desirability. In the original published article for the EFI, Mehrabian and Epstein (1972) posit that individuals who have high empathic tendencies are
likely to be highly emotionally aroused as a result of witnessing others’ emotional experiences, suggesting that state measures of empathy might be better indicators of actual empathy. Indeed, a majority of the literature on empathy utilizes performance tasks where individuals’ responses to emotionally arousing material are solicited. Therefore looking at participants’ performance on objective measures of empathic accuracy might be a more appropriate metric of their empathy.

The current study hypothesized that therapists would score higher on measures of empathic accuracy than nontherapists. Based on findings that empathic ability improves with training (Barone et al., 2005), it was also expected that advanced therapists would perform better on measures of empathic accuracy than beginning therapists. Each participant completed the same performance task that utilized three different metrics of empathic accuracy. The performance task was an exercise in which participants inferred the thoughts and feelings of a woman they watched on a video who discussed a real-life sexual trauma and how it affected the course of her life. Participants’ ability to accurately infer her thoughts and feelings were captured by open-ended responses that were later coded for accuracy, and additionally by choosing from four different multiple choice options presented which was her actual statement about what she was actually thinking and/or feeling. Given that being empathically accurate is an important aspect of practicing therapy, it was hypothesized that therapists would score better overall on objective measures of empathic accuracy than nontherapists. Results indicated that participants were not significantly different in terms of the accuracy of their open-ended responses.

Therapists performed significantly better on the multiple-choice task than nontherapists, though beginning and advanced therapists did not significantly differ in their multiple-choice accuracy scores as expected. It is important to consider that the absolute score on this measure was low. For instance, participants could score at least 2 out of 8 on the task by chance alone.
Further, the task may have been particularly challenging given the correct response (see Appendix A) called for the participant to be able to accurately infer a response that included both thought and feeling entries provided by the target. As seen in Table 5, therapists scored an average of 2.42 on the multiple choice task, and nontherapists scored an average of 1.58. The result that this difference was significant should be interpreted with caution, given the low absolute score of this task. Overall, findings on the performance tasks of empathic accuracy in this study indicate that empathic ability was essentially equivalent among all participants, and that even therapists with four or five years of clinical training were not able to outperform individuals with minimal or no training. An important, related consideration is that advanced therapists had more years in terms of experience with their training, though within this group there was high variability in actual amount of experience conducting therapy. The demographic survey collected for participants in the therapist group revealed a wide range in the number of individual clients advanced therapists reported they had worked with- the lowest number reported was 8, and the highest was 100. Additionally, 7 of the advanced therapists had reported prior clinical training experiences. It is possible that experiential differences had an effect on empathic accuracy that was not captured simply by dividing the groups based on how far along they were in their training program. To address this possibility, a post-hoc analysis was conducted by correlating total number of clients advanced therapists had reported working with in their training program with their total accuracy scores and state CFST. Pearson’s bivariate correlations revealed that there were no significant correlations with total clients and open-ended accuracy scores ($r = .12, p = .64$), multiple-choice scores ($r = .10, p = .68$) or state compassion fatigue ($r = .02, p = .95$). It is possible that total number of clients seen may have not been an accurate indicator of actual experience for these participants. For instance, it may have been the
case that participants reporting having worked with a high number of clients had worked with some of these clients for only a few sessions, whereas participants reporting working with a lower number of clients may have seen these clients for a longer duration. Therefore, a more accurate way of assessing actual experience could have been calculated by participant report of their total clinical hours. Moreover, given that participants in the therapist group were trainees with at most five years of clinical training experience, it is possible that the their training experience was insufficient to detect differences in empathic accuracy between this group and the nontherapist group. This is especially pertinent for the beginning therapist group, as 10 of the 18 participants reported they had not performed any clinical work to date in their training program. Future studies utilizing a similar study design with advanced practicing therapists may yield more meaningful differences between these individuals and controls.

The unexpected finding for differences in empathic accuracy may also in part be explained by methodological flaws of the performance task. The design for this portion of the study was based mainly on Marangoni and colleagues’ (1995) study design in which undergraduates viewed a tape of a therapy session. The client in the session reviewed the tape and made a time-logged list of her thoughts and feeling during the session, and was instructed to write a minimum of thirty entries. Subjects reviewed the tape and were instructed to estimate the client’s thoughts and feelings at each time-logged point. Half of the subjects were given feedback halfway through the experiment, and the other half were not. Marangoni et al.’s findings indicated that those in the training condition performed better than those who did not receive feedback, though in general all participants’ performance improved with increased exposure to the client. Indeed, post-hoc analyses revealed that in the current sample overall, participants’ accuracy scores on open-ended items were significantly higher for the final four
items, than for the first four items \((t=4.79, p=.000)\), providing further evidence that additional inferential points may have increased overall accuracy scores on the task. Barone et al. (2005) also found that accuracy of inferring feelings for a target participant was improved with feedback.

The design utilized for the current study varied slightly from Marangoni et al. (1995), as the target was not told a minimum number of thought/feeling entries to complete, and participants were not given feedback about their answers. Comparing the two study designs, the current study may have failed to find significant differences between groups on the performance task as a result of a lack of feedback given to participants throughout the task. Results from the multiple-choice accuracy scores determined a significant difference between performance for therapists and nontherapists as expected, whereas the open-ended response score did not detect this difference between groups. Given that feedback has improved performance when utilized in other study designs aimed at capturing empathic accuracy in a similar way, use of feedback in the current study may have been a better indicator of empathic accuracy in the open-ended task.

Beyond utilization of a performance task, another common way to measure objective empathy is via physiological measurements, which were also obtained from participants for the current study. This portion of the study was based on Shortt and Pennebaker’s (1992) study design comparing physiological responses between disclosers who were videotaped describing their experiences in the Holocaust that were later shown to participants whose physiological responses were recorded and compared to the disclosers’. For the current study, participants’ heart rate was measured at the same 60-second intervals as those obtained for the target participant. Consistent with Shortt and Pennebaker’s analyses, a Pearson bivariate correlation was obtained for each participant-target dyad. Next, the number of significant correlations
among participants was used to estimate group differences. However, each group of participants yielded approximately the same amount of significant correlations, and the same amount of correlations in positive or negative direction. Statistically significant correlations would have required at least a .5 or -.5 correlation, though the range of data points demonstrates that few correlations fell in this range. Therefore, no further analyses were conducted on physiological correlations, as there appeared to be an even overall distribution among all groups. Table 6 shows a more detailed approach to looking at the different correlations among participants. According to distributions, more therapists (according to mean in the 75th percentile) had a greater effect size than nontherapists. Surprisingly, advanced therapists and nontherapists were approximately equal in mean correlations, though beginning therapists had greatest effect size when looking at mean and top percentile. Also, most therapists’ correlations- both beginning and advanced were in the positive direction, whereas nontherapists had more correlations in the negative direction; though again, these were not significant. It should also be noted that Shortt and Pennebaker found that measurement of skin conductance level (SCL) was a more sensitive measure of physiological changes in response to emotional material.

Shortt and Pennebaker’s (1992) study also utilized a video of persons talking about traumatic experiences to observe the reaction of their participants. They hypothesized that in their study, “[t]he TV could have acted as a buffer, shielding and preventing the listeners from truly getting involved in the discloser’s traumas and processing traumatic information…in typical social interactions it would be rare for listeners to remain completely silent while listening to disclosure” (p. 175). This may have also been the case in the current study, particularly given that therapists are used to interacting with clients, rather than passively sitting and listening to them. This may have stunted their ability to feel emotionally connected with the
person, and also blunted their emotional response and ability to feel that they understood. However, as evidenced by scores of compassion fatigue, there were differences in how therapists and nontherapists responded emotionally to the tape.

The hypothesis that advanced therapists would score higher on measures of empathic accuracy than beginning therapists was not met. The expectation that therapists with more training would be more empathically accurate was based on Barone et al.’s (2005) finding that empathic skill increased with specialized training over time. In their study, participants who were first year graduate students in clinical psychology watched a tape of a therapy session conducted by a clinical psychology student, and inferred the thoughts and feelings of the client in the tape. The experimental group in their study completed role plays where they practiced inferring thoughts and feelings of others while interviewing them, and received feedback about their empathic accuracy, and the other half did not receive feedback about their interviews. Findings indicated that training by providing feedback about participant performance resulted in greater empathic accuracy on a performance task at the end of the semester. The current study did not assess whether therapists in the sample had received specific training in empathic accuracy throughout their training experiences. It may have been the case that although participants in the advanced therapist group had a greater amount of overall experience conducting therapy, without receiving feedback about their ability to be empathically accurate, they might not perform any better than therapists with much less experience practicing therapy on the performance task. In assessing skill levels of trainees, Hogan (1964) found that novice therapist trainees performed equivalently to experienced therapists at the basic components of building a therapeutic relationship by using reflective listening, rapport building, and empathy. Findings from the current study similarly indicated that empathic skill, in addition to trait empathy might not
differentiate substantially among individuals with various amounts of training in psychology and laypersons. This might particularly be the case if participants’ training programs do not emphasize specific training in empathic accuracy. In actual therapeutic settings, feedback on therapists’ empathic accuracy is occasionally provided by their clients. For example, a given client may comment on the accuracy of a reflection made by their therapist, providing the therapist insight to the client’s perspective and thereby increasing their empathic accuracy exponentially over time. In this way, therapists often receive feedback about their empathic accuracy though additional specific training may improve this skill even further.

A further consideration regarding the nonsignificant findings in empathic accuracy scores in the current study is that though the proportions were equal between groups, the majority of participants in the current study were female (Table 1). Researchers have reported findings that indicate empathy may vary based on gender, such that women are typically found to be more empathic than men (Manstead, 1992). Interestingly, a post-hoc paired samples t-test revealed that in the current study, trait empathy as measured by the EFI did not significantly differ between males (n=21) and females (n=51) in the sample (t=.17, p=.87). Further analyses revealed no significant differences between males and females in either the therapist or nontherapist group (t=.1, p=.92; t=.35, p=.73, respectively) or between male participants in the therapist and nontherapist groups (t=1.26, p=.22).

The literature regarding gender differences in empathy has shown the contrary to be true when empathy is measured objectively as empathic accuracy. Ickes, Gesn & Graham (2000) found that gender differences in EA only occurred when subjects were aware that empathy was being measured (as was the case in the current study), and when they were informed about the expectations of performance on measures of empathy based on gender. A post-hoc independent
samples t-test revealed that for the current sample empathic accuracy, as measured by accuracy of open-ended responses on the performance task differed significantly between males and females in the nontherapist group only (t=2.53, p=.016) such that females in this group had significantly higher accuracy scores. An independent samples t-test comparing accuracy scores between male participants in the therapist and nontherapist groups approached significance (t=1.88, p=.07), with male therapists scoring higher than male nontherapists in empathic accuracy. Based on these findings, it is likely that there was greater homogeneity in empathic skill among participants in the therapist group than in the nontherapist group as all participants in the therapist group were more highly similar due to career choice than controls who were not similar in this regard. These findings further support evidence presented in the literature that gender differences in empathy are more pronounced when measured as empathic accuracy than as trait empathy. The finding that male therapists were significantly higher in empathic accuracy than male nontherapists may elucidate the finding that gender differences did not appear to affect empathic accuracy of therapist participants, as males who pursue clinical psychology may be more empathically skilled than males who do not pursue this field.

Other unanticipated findings emerged in the current study. It was hypothesized that therapists, and advanced therapists would have greater scores on state items for the compassion fatigue subtest of the CFST, a self-report measure of compassion fatigue, than their counterparts, because of the assumption that higher empathy leads to higher CF (Figley, 1995). Contrary to hypothesis however, nontherapists endorsed significantly higher scores on the CFST after watching the video stimulus, demonstrating that therapists endorsed less emotional distress as a result of watching the tape. Beginning therapists scored higher than advanced therapists on the CFST, though this difference was not statistically significant. Post-hoc analysis revealed that
total trait and state scores on the CFST were significantly different between these groups, with advanced therapists scoring significantly lower than nontherapists \( t=2.16, \ p=.037 \). As noted in Table 10, the range of scores on state items of the CFST was 11-17 for advanced therapists, whereas this range was much greater for beginning therapists, whose range extended close to the same ceiling as nontherapists (11-32). This finding suggests that more experience and training may lead to a greater ability to cope with stressful, emotional material, which is consistent with findings by Clark (2009) who interviewed therapists with varying levels of experience in the field and found the most resilient therapists had learned strategies to cope with repeated exposure to distressing material presented by their clients over the years.

Researchers have posited that personal trauma history is a strong predictor of increased risk for compassion fatigue (Cunningham, 2003; Figley, 1995; Nelson-Gardell & Harris, 2003). According to this theory, an individual who has experienced a traumatic event—particularly one similar to the person they are working with—will be more likely to experience symptoms of CF, especially if they have not personally processed the event sufficiently. All participants responded to an item assessing if they had had a similar experience as the target participant. Three participants, 2 of whom were beginning therapists and the third in the nontherapist group also endorsed that they had experienced the loss of a parent, which was described the target participant. Due to the low base rate, it was unlikely that participants’ similar experiences would have affected subsequent outcomes on CFST. Nine participants, 8 of whom were in the nontherapist group, endorsed that they had also experienced sexual assault in their lifetime. Given that nearly one-quarter of participants in the nontherapist group had prior experiences that may have increased their compassion fatigue scores, a post-hoc paired-samples t-test was performed comparing scores on CFST between participants in the nontherapist group who had
reported having personal experience with sexual trauma with those who did not report having such prior experience. It was determined that there was no significant difference between groups (t=.93, p=.39), thus it is possible these participants’ personal experiences with sexual trauma did not influence their scores on the CFST.

The current study empirically tested Figley’s (1995) theory that higher empathy leads to higher compassion fatigue by conducting a Pearson’s bivariate correlation between self-reported empathy and state compassion fatigue for the entire sample. Results indicated that there were no significant correlations for participants overall, as reported in Table 11. This in part may be explained by the previously reported finding that scores on the EFI did not significantly differ between participants and that self-report empathy did vary but not in any meaningful way based on group, yet there were significant group differences on the CFST. This means there was greater variability in this measure than on the EFI, though a test of correlation of the two measures would not reflect any meaningful pattern of scores. As such, the lack of significant correlations between the two measures is not surprising.

The current study tested participants’ change in subjective anxiety directly prior to and directly after watching the video stimulus, comparing the two anxiety scores by independent samples t-test. It was expected that similar to compassion fatigue, anxiety would also be greater for therapists and advanced therapists after watching the tape, than for nontherapists and beginning therapists. These findings should be interpreted with caution due to the lack of significance which may have emerged as “anxiety” could have been construed idiosyncratically among participants, though other studies have found the visual analog scale of anxiety to be a useful and valid metric of subjective anxiety. Cella and Perry (1986) used a visual analog scale (ranging from 0-100) to measure feelings of anxiety at various time points throughout a given
day in family members of burn victims on a hospital unit. On average, participants’ mean anxiety ranged from 38.2(SD=29.3) to 51.4(SD=32.2). These average scores were somewhat higher than those observed in the current study, though they were measured in a naturalistic setting with individuals who were likely to be anxious due to the nature of the environment their ratings were ascertained. McDonald et al. (2010) measured subjective anxiety using the same visual analog scale as the current study in both an experimental group where feelings of anxiety were experimentally manipulated in addition to a control group, and found scores comparable to the current study. Participants in the experimental group were current cigarette smokers presented with verbal depictions of negative scenarios involving consequences of smoking. These participants’ mean anxiety increased from 24.67 (SD=21.91) at pre-test to 43.33 (SD=28.65) at post-test, whereas control participants’ mean scores increased from 23.81(SD=22.14) at pre-test to 28(SD=20.36) at post-test. Analyses revealed that mean scores on the visual analog scale had significantly increased in the experimental group relative to the control group. Participants’ scores on the visual analog scale of anxiety in the current study was comparable to findings from McDonald et al.; participants’ mean score pre-video was 24.79 (SD=22.09), and 36.04 (SD=22.8) post-video. According to results from these studies, it appears that the visual analog scale of anxiety is indeed a useful metric, and the nonsignificant findings in the current study indicate perhaps anxiety endorsed by participants was unrelated to the video stimulus, particularly considering the measure simply asked participants to rate their current level of anxiety. For instance, some participants endorsed feeling less anxious after watching the video, in which case these participants’ anxiety may have been related to nervousness about the task or other personal reasons which subsided as a result of focusing on the performance task.
Overall, the findings of the current study indicate that empathy as a personality trait differed among participants in the study, though there was not sufficient evidence presented that therapists are any more empathic than laypersons. Additionally, results did not indicate that therapists were especially high in empathic accuracy as a result of specialized training, though the study design may have been unable to detect significant differences between groups. The most robust finding for the current study was that therapists in the sample were more adept at coping emotionally after watching a person on tape describing a distressing experience, and that advanced therapists were less troubled than beginning therapists.

An aim of the study was to determine whether empathy and empathic ability differed among a sample of participants who have received training in clinical psychology and those who have not in an effort to better understand if being particularly empathic might lead an individual to choose to pursue this field of work. Though it was hypothesized that empathy may be greater among participants in the therapist group, based on the findings of the current study (i.e. that empathy did not differ significantly), there are likely many reasons that lead individuals to pursue this field. Data collected in the study lends evidence to the argument that therapists might be particularly skilled at coping with intense emotional material presented by another person. Given that being highly tolerant of interacting with emotionally distressed individuals is a fundamental aspect of being a psychologist, it might also be that individuals who drop out of the field or become easily burnt out may lack this ability to some degree. Future research in this area can further elucidate what personality characteristics are associated with individuals who are drawn to the field.
Limitations

There were several methodological limitations in the current study that may have contributed to a lack of significant findings. An unexpected finding was that empathic accuracy was not significantly different between therapists and nontherapists in the sample. Marangoni et al.’s (1995) original study utilized 30 thought/feeling descriptors for participants to infer. In comparison, the current study utilized 8 inference points, and it is possible that more robust differences would have been discovered among participants if there were more items to infer, as the absolute accuracy scores would have been greater. However, it is also possible that having more inferential points would also provide the opportunity for more errors thus leading to similar percentages of correct/incorrect inferences. The videos used in Marangoni et al.’s study ranged from 30-55 minutes in length whereas the video used in the current study was 20 minutes long. Had the video in the current study been longer, the target may have identified additional inferential points, thus affecting empathic accuracy scores for participants. Additionally, it is likely that a longer video stimulus may have induced greater compassion fatigue scores for participants due to elongated exposure to the target describing emotionally upsetting experiences. Given the significant differences found between therapists and nontherapists, it is possible that nontherapists would have endorsed a greater increase in compassion fatigue scores following a longer video stimulus than therapists, particularly since participants in the therapist group are more acclimated to being exposed for 45-50 minutes, the typical length of a therapy session. Further, Marangoni et al. commented that familiarity with the target may improve empathic accuracy. Post-hoc analyses compared participants’ open-ended accuracy scores on the first and last four inferential items on the performance task in the current study, and revealed that overall, participants’ scores were significantly higher for the last four items on the task (t=4.79, p=.000).
Therefore, it is conceivable that participants’ scores on the performance task may have been further enhanced by using a longer video stimulus.

In a similar performance task, Barone et al. (2005) divided target and participant responses into thoughts and feelings and found accuracy for inferred feelings but not thoughts differed among participants. They concluded that this was because feelings are far easier to infer than the content of thoughts. The current study did not differentiate between thoughts and feelings inferred by participants, and by including these together in the analysis of accuracy, may have underestimated the ability of participants to infer feelings versus thoughts. For example, if the target was instructed to record her feelings but not thoughts at points throughout the video and participants instructed to infer these feelings, their accuracy would have been greater if she reported feeling sad. With regard to inferring thoughts, if she reported specific thoughts related to the content of what she was saying during the video these would have been much more difficult for participants to discern regardless of amount of empathic skill, resulting in a lower accuracy score.

A further unanticipated finding was that empathic accuracy did not differ between beginning and advanced therapists. The comparison of these two groups assumed that overall empathic abilities would have been roughly the same among the advanced group when they were in their first year of training, as compared with the actual beginning therapist group. Barone et al. (2005) followed a sample of therapy trainees for one semester and found that participants who received specialized training in empathic accuracy performed better on a performance task than participants who did not have the same specialized training. Further, in the current study, advanced therapists’ responses on the demographic survey indicated that there was variability in the amount of their experience in terms of how many clients they had worked with, which was
not controlled for in analyses. Therefore, a more useful way to determine actual training effects would have been to use a longitudinal study design following the same cohort of participants to determine the effect of actual training on their abilities.

Though researchers have found evidence that physiological responses mimic empathic responses, studies using such measurements typically include more than one measure of physiological response. For instance, Shortt and Pennebaker (1992) used both skin conductance level (SCL) and heart rate to measure physiological responses in their sample, and found SCL to be more sensitive to empathic changes. By measuring SCL the current study may have found greater differences among participants’ physiological responses, though due to budget constraints it was not possible to obtain the machinery for measuring SCL. Further, it should be noted that the affect expressed by the target participant on the video stimulus may not have been sufficiently evocative to elicit a strong emotional response from participants in the study. Marangoni et al. (1995) selected volunteers to act as target participants in the videos for their study based on having a wide range of emotional expression, noting that one of their target participants wept openly during the tape. The target participant utilized for the current study had undergone several years of counseling and therapy focusing on resolution of the events that she described in the tape. It is possible that this was related to her somewhat restricted range of affect during the tape as she described the traumatizing event. Towards the final minutes of the video, the target participant described losing her father to cancer- an event that occurred much more recently and that she did not apparently address in counseling. At this point, her affect shifts and she appears much more emotional than in the earlier part of the tape (which is also reflected in her recorded HR throughout the video, shown in Appendix C). Accordingly, participants may
have not had enough opportunity for their corresponding physiological reactions to have a great
enough range, thus not appearing significantly correlated to the target’s.

There are many features of the field that can potentially attract an individual to clinical
psychology. This is especially pertinent in the case of the current study, considering 32 of the 36
therapist participants were in PhD programs and may have a greater interest in research as
opposed to the clinical work. Although the current study found evidence to suggest that having
higher tolerance for sitting with emotionally distressing material presented by others is common,
there are likely other personality traits or personal experiential factors that draw individuals to
the field. By measuring personality traits other than empathy, the current study could have
provided more details about which traits are more common for therapists than for laypersons.
Further, in order to better differentiate characteristics of individuals drawn to a helping
profession, the current study could have recruited only participants from PsyD programs that are
clinically focused, rather than scientist-practitioner programs that include research as a large
portion of training.

**Implications**

The finding that therapists with more training experience did not have better scores on
measures of empathic accuracy than those with less training suggests that perhaps the training
this group received did not focus adequately on providing feedback about empathic accuracy. As
described in the research, specialized training in empathic accuracy is a highly reliable and
effective training method (Barone et al., 2005; Marangoni et al., 1995). Given that empathic
accuracy is an important aspect of successful therapy such that it helps to build the therapeutic
alliance, training programs should ensure such specialized training to students.
The current study found that therapists with greater experience and training were better able to tolerate the emotional demands of listening to a person describe an emotionally upsetting scenario. This suggests that the measure used in the current study to determine group differences, the CFST, is a useful way in which to measure emotional response to such material. An area in which it is highly important to find individuals who are able to cope with particularly stressful material presented by those seeking psychological treatment is in the area of mental health treatment for U.S. military veterans and service members diagnosed with Post Traumatic Stress Disorder (PTSD).

In a national survey of United States soldiers returning from the wars in Iraq and Afghanistan, Cohen and colleagues (2010) found that about 35% had received mental health diagnoses through the VA. The most prevalent diagnosis for returning soldiers is PTSD, which arises from surviving highly traumatic experiences and results in the individual experiencing recurrent and distressing flashbacks of the traumatic event, persistent arousal, avoidance and psychological numbing (DSM-IV-TR, 2000). It is not surprising that many veterans return from combat with PTSD, given the amount of exposure to violent, dangerous and disturbing situations that are an everyday part of fighting in combat. The research clearly indicates that rates of PTSD as well as other mental health issues among veterans have been steadily rising, due to increasingly complex demands on soldiers (e.g. Cohen et al., 2010, Hoge et al., 2004). The treatment outcomes for these veterans are reliant on the ability of mental health professionals to meet the high demands required for treatment of PTSD. The United States Department of Veterans Affairs has rolled out two particular types of therapeutic treatment for PTSD on a national scale; Cognitive Processing Therapy (CPT; Resick & Schnicke, 1992), and Prolonged Exposure therapy (Foa, Hembree & Rothbaum, 2007). In order to perform these treatments
effectively, therapists must be able to remain resilient and tolerate repeatedly hearing stories of traumatic combat experiences.

Resiliency under this definition may not necessarily exist in all therapists. Therefore, it is apparent that there should be some way to determine which therapists may be best equipped at handling such work with those who suffer from PTSD. In order to come to such an understanding, it must be understood if resiliency is a pre-existing characteristic of the individuals who go into therapy training, or if it is something that can be developed. According to the results of this study, resilience might be particularly high in individuals who choose to pursue work as therapists. Performance tasks similar to the one utilized for this study may be useful in determining which therapists may be most appropriate for delivering treatment for PTSD and other traumas.
MULTIPLE CHOICE OPTIONS PRESENTED TO PARTICIPANTS WITH CORRECT RESPONSE CHOICE HIGHLIGHTED

Time points during video are in parentheses.

1. (3:27)
   a. Anxiety, sadness, some remembering fear
   b. Confusion about what was happening
   c. Anger for what they were doing to me
   d. Violated, afraid, wishing I fought back

2. (4:02)
   a. Feeling lots of anxiety, pain in remembering
   b. Feeling very violated, anger in remembering
   c. Sadness in remembering
   d. Feeling detached from what had happened, thinking how long ago it seems now

3. (5:23)
   a. Anger at my mother, strong hurt
   b. Wishing my mother would have been more understanding
   c. Sadness at how unfair my mother was to me
   d. Anxiety about what had happened to me

4. (7:37)
   a. Feeling depth of loss, thinking of surviving
   b. Feeling sad for what I had been through
   c. Worry that I would be scarred for life
   d. Thinking of how no one understood what I was going through
5. (14:12)
   a. Deep pain, anger at my mother, hurt
   b. Deep sadness, anger at the boys who hurt me
   c. Feeling betrayed by my mother, hopeless
   d. Thinking what might have been different if my mother was more understanding

6. (:34) (second segment)
   a. Remembering at that time how happy I was
   b. Remembering how good it felt to move on
   c. Remembering how difficult it was to try to act normal
   d. Remembering how sad I still felt

7. (1:27)
   a. Remembering how painful, like being kicked in the stomach
   b. Remembering how surprised I was to hear the news
   c. Remembering how I felt like all of my progress had gone out the window
   d. Remembering being scared for my father

8. (3:00)
   a. The darkest day, intense sadness, loss
   b. Guilt that I hadn’t been there enough for him before
   c. Scared that I was feeling everything coming back from my past
   d. I felt vulnerable, afraid, sad
ITEMS INCLUDED IN MEASURE OF STATE COMPASSION FATIGUE, ADAPTED FROM THE COMPASSION FATIGUE SELF-TEST

For items 13-23, please refer to your experience of watching the videotape you saw earlier.

1. ___While watching the person on the tape I thought about violence against her perpetrator.
2. ___Watching the person on the tape caused me to have flashbacks about some of my own experiences.
3. ___I felt frightened by something the person on the video said.
4. ___Since watching the tape, I have experienced intrusive/troubling thoughts about the person on the tape.
5. ___While watching the person on the tape, I suddenly and involuntarily recalled a frightening experience in my life.
6. ___I worry that I may lose sleep as a result of listening to the story of the person on the tape.
7. ___I worry that I might be “infected” by the traumatic stress of the person on the tape.
8. ___While watching the tape, I had to remind myself to be less concerned about the well-being of the person on the tape.
9. ___The thought of having to try to help the person on the video as her counselor or therapist would make me feel trapped.
10. ___The thought of having to try to help the person on the video as her counselor or therapist would make me feel hopeless.
11. ___If I were helping the person on the video as her counselor or therapist, I would feel as if I were in danger.
APPENDIX C

TARGET PARTICIPANT’S HEART RATE AS MEASURED THROUGHOUT THE VIDEO STIMULUS

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REFERENCES


