

**Symptomatology and Mediating Caseload Variables of Community Mental Health
Clinicians' Vicarious Traumatization: A Causal-Comparative Investigation**

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Abstract

This study addressed a research problem on community mental health therapists' risk of vicarious trauma, a condition associated with post-traumatic stress symptoms and reduced clinical effectiveness. Because community mental health clinicians frequently treat highly trauma-exposed clients and often manage larger, more complex caseloads, understanding factors contributing to their vicarious trauma risk is critical for supporting therapist well-being and maintaining quality care for vulnerable populations. However, limited prior research has examined the relationship between occupational setting and vicarious trauma. Via a constructivist self-development theory lens, this quantitative, causal-comparative study investigated whether community mental health clinicians report greater vicarious trauma than therapists in other settings and whether caseload size or diagnostic composition mediate this relationship. Trauma therapists in the United States were recruited through social media platforms to complete an online survey on their occupational setting, caseload size and diagnostic composition, and vicarious trauma symptoms using the validated Vicarious Trauma Scale. Although an initial independent samples *t*-test found no statistically significant difference in vicarious trauma between community mental health clinicians and therapists in other settings, a post-hoc *t*-test revealed significantly higher vicarious trauma among community mental health clinicians compared to private practice therapists. Mediation analyses using multiple linear regression indicated neither caseload size nor diagnostic composition significantly mediated the relationship between occupational setting and vicarious trauma, though caseload data inconsistencies limit interpretation. These findings suggest occupational setting may influence vicarious trauma risk but is unlikely to act alone, underscoring the need for organizational supports and continued research on additional contributing factors to better protect clinicians' welfare and treatment quality.

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Chapter 1: Introduction

Psychologists McCann and Pearlman (1990b) first coined the term *vicarious trauma* to describe the adverse psychological changes that individuals experience following their indirect exposure to trauma. As McCann and Pearlman (1990b) emphasized, psychotherapists may be especially vulnerable to vicarious trauma as they repeatedly listen to the details of their clients' traumatic experiences. The current literature suggests clinicians vicariously exposed to their patients' trauma frequently face worsened mental and emotional health (Barre et al., 2024; Charura, 2024; Kercher & Gossage, 2024; Renkiewicz & Hubble, 2023). Furthermore, vicariously traumatized therapists may have poorer professional performance (Charura, 2024; Last et al., 2021; Motamedi et al., 2023; Renkiewicz & Hubble, 2023; Towey-Swift & Whittington, 2021), risking the quality of their clients' treatment (Last et al., 2021; Motamedi et al., 2023).

Psychoanalytic theory has historically framed clinicians' psychological and emotional responses to their patients' trauma stories as a form of *countertransference*—the unconscious feelings that arise among psychotherapists from their work with clients (Arundale & Bellman, 2011; Freud, 1910). However, McCann and Pearlman (1990b) submitted that the effects of counselors' indirect trauma exposure constituted a phenomenon beyond countertransference. McCann and Pearlman noted that the psychoanalytic model implies that therapists' countertransference responses are functions of their unresolved psychological conflicts, while vicarious traumatization may instead be shaped by both the therapists' psychological needs and the circumstances of their clients' trauma narratives. Therefore, as their constructivist self-development theory posits, because individuals construct their realities through complex cognitive structures that interpret events and inform their perceptions and beliefs, and these

schemas can be disrupted by trauma, psychotherapists' vicarious exposure to their clients' trauma can produce significant cognitive and emotional changes (McCann & Pearlman, 1990b).

Decades after McCann and Pearlman (1990b) introduced the construct of vicarious traumatization, the fifth edition of the *Diagnostic and Statistical Manual of Mental Disorders* (American Psychiatric Association, 2013) included repeated or extreme exposure to the aversive details of a traumatic event as a potential diagnostic qualifier for post-traumatic stress disorder (PTSD), indicating vicarious exposure to trauma could lead to PTSD symptomatology.

Numerous recent studies (Aafjes-van Doorn et al., 2020; Helpingstine et al., 2021; Vukčević Marković & Živanović, 2022) have supported McCann and Pearlman's conceptualization of vicarious trauma, finding trauma therapists often endorse PTSD symptoms such as pessimistic thoughts, hyperarousal, anxious mood, emotional disengagement, survivor's guilt, avoidance, hypervigilance, and intrusive re-experiencing of the traumatic events that their patients described. Additionally, mental health practitioners have reported diminished vocational functioning following their clients' trauma disclosures, including distancing themselves (Gaboury & Kimber, 2022) and emotionally detaching (Molnar et al., 2020; Padmanabhanunni & Gqomfa, 2022) from their clients. Vicariously traumatized therapists have consequently noted a deterioration in their clinical work and weakened therapeutic alliances with their clients (Aafjes-van Doorn et al., 2020). Many practitioners have stated they avoided exploring patients' trauma narratives (Last et al., 2021) and reduced evidence-based practices (Motamedi et al., 2023) to mitigate their distress and emotional exhaustion from conducting trauma therapy, potentially posing clinically significant omissions to their clients' services.

Current research has also linked therapists' vicarious trauma with the phenomena of *compassion fatigue* and *burnout* (Kercher & Gossage, 2024; Kounenou et al., 2023). While some

researchers have suggested compassion fatigue and burnout are synonymous with vicarious trauma (Charura, 2024; Wallace & County, 2024), Kercher and Gossage (2024) defined compassion fatigue as the combination of secondary traumatic stress and burnout symptoms, with the latter including overwhelming exhaustion, amotivation, cynicism, and detachment. Mental health professionals reporting greater compassion fatigue have endorsed decreased productivity and higher levels of job turnover (Kercher & Gossage, 2024). Thus, occupational settings with a risk of vicarious trauma and compassion fatigue may face employee attrition, incurring additional costs to recruit, train, and retain new practitioners (Muir et al., 2022; Pappas et al., 2022).

Therapists employed at community mental health centers may be especially vulnerable to vicarious traumatization, as these clinics' clientele have a higher prevalence of trauma than the general population (Motamedi et al., 2023; Sucich et al., 2023). Community mental health centers offer treatment for individuals with mental health conditions in their communities instead of private practice or hospital settings, frequently serving disenfranchised, low-income, ethnically diverse populations (Motamedi et al., 2023; Pincus et al., 2022; Sucich et al., 2023). Previous studies have examined community mental health therapists' high rates of emotional exhaustion, compassion fatigue, burnout, and turnover (Dishop et al., 2019; Kuckertz et al., 2024; Ross et al., 2022; Towey-Swift & Whittington, 2021), yet minimal literature has explored these practitioners' vicarious trauma and its related factors. Hence, further research on community mental health clinicians' vicarious trauma is critical because of its consequences for their psychological health (Motamedi et al., 2023; Towey-Swift & Whittington, 2021) as well as the treatment implications for their often underprivileged patients (Last et al., 2021; Motamedi et al., 2023).

Statement of the Problem

The problem addressed in this study was community mental health therapists' risk of vicarious trauma (Motamedi et al., 2023; Roberts et al., 2022). Psychotherapists listening to the adverse details of their patients' traumatic experiences are susceptible to survivor's guilt, hypervigilance, sleep disturbances, and intrusive thoughts (Charura, 2024; Helpingstine et al., 2021; Padmanabhanunni & Gqomfa, 2022; Salvilla & Bedoria, 2021), mirroring PTSD (Rinfrette et al., 2021). Therapists' vicarious trauma has been linked to compassion fatigue (Gaboury & Kimber, 2023), burnout (Barre et al., 2024; Kounenou et al., 2023; Leung et al., 2023), and poorer professional performance, including deterioration in their clinical work and weakened therapeutic alliances with their clients (Aafjes-van Doorn et al., 2020). Emotionally distressed therapists may minimize evidence-based practices (Motamedi et al., 2023), such as by avoiding exploration of their clients' trauma narratives (Last et al., 2021). Therapists in community mental health settings may be especially at risk since they often treat more traumatized clients (Pincus et al., 2022; Sucich et al., 2023) and larger caseloads (Fukui et al., 2021; National Association of Social Workers [NASW], 2023). As community mental health clinics typically serve disenfranchised, low-income communities (Pincus et al., 2022; Sucich et al., 2023), these vulnerable populations' successful treatment may be jeopardized (Motamedi et al., 2023).

Many researchers have called for further examination of factors associated with therapists' vicarious trauma (Aafjes-van Doorn et al., 2020; Barre et al., 2024; Salvilla & Bedoria, 2021). There is a gap in understanding about how work settings and caseload sizes and diagnostic compositions can influence vicarious trauma, as well as the relationship among vicarious trauma and factors associated with community mental health settings. Understanding the risk of vicarious trauma in this population is crucial to developing interventions to minimize

the impact on therapists (Barre et al., 2024; Gaboury & Kimber, 2023) and their clients (Pincus et al., 2022; Sucich et al., 2023).

Purpose of the Study

The purpose of this quantitative, causal-comparative design study was to compare levels of vicarious trauma as a function of setting (i.e., community mental health practitioners and therapists in other occupational settings) and examine how caseload sizes and caseload diagnostic composition may mediate the relationship between vicarious traumatization and work setting. The population of interest was psychotherapists providing trauma treatment within or outside of community mental health settings. This study aimed for a total sample size of at least 102 participants and acquired a sample of 160 responses with sufficient data for an independent samples *t*-test and 157 for mediation analysis using multiple linear regression. A convenience sampling technique was used to purposefully recruit psychotherapists through social media platforms, including Facebook (n.d.) groups, Reddit (n.d.) communities, and a Discord (n.d.) channel for therapists, as well as the primary investigator's personal Facebook and LinkedIn (n.d.) pages.

The variables of interest included *occupational setting*, identified by participants' reported work environment (e.g., community mental health center, private practice, hospital); *caseload size* (i.e., the number of active clients the therapist treats); *caseload diagnostic composition* (i.e., the percentage of clients on a therapists' caseload treated for a trauma-related condition); and *vicarious trauma*, measured by the validated Vicarious Trauma Scale (VTS; Vrkleviski & Franklin, 2008). The VTS includes eight items answered on a seven-point Likert-type scale (i.e., 1 = *Strongly disagree* to 7 = *Strongly agree*), with total scores ranging from 8 to 56 and higher scores reflecting greater distress (Vrkleviski & Franklin, 2008). Thus, data were

collected at a single time point via an online survey with items on participants' work settings, caseload sizes and diagnostic compositions, and vicarious trauma symptomatology. An independent samples *t*-test was conducted to compare the mean VTS scores among community mental health therapists and therapists in other settings and calculate how likely the differences between the two groups occurred by random chance. Mediation analysis with multiple linear regression was then used to assess how the inclusion of caseload size and diagnostic composition as mediators may increase the model's explanatory power with occupational setting as an independent variable and VTS scores as a dependent variable.

Introduction to Theoretical Framework

The proposed research was primarily guided by McCann and Pearlman's (1990a, 1990b, 1992) constructivist self-development theory. A key concept of constructivist self-development theory is *schemas*—the complex cognitive structures human beings develop to construct their personal realities (McCann & Pearlman, 1990a, 1990b). These mental frameworks include individuals' beliefs, assumptions, and perceptions about themselves and the world that allow them to make sense of their experiences (McCann & Pearlman, 1990a, 1990b). Schemas are thereby used to interpret events and can evolve over people's lifespans as they interact with meaningful environments (McCann & Pearlman, 1990a, 1990b). Consequently, McCann and Pearlman's (1990a, 1990b, 1992) theory proposes traumatic experiences can disrupt schemas, including those regarding safety, trust, self-esteem, intimacy, and autonomy.

Additionally, constructivist self-development theory states psychotherapists treating trauma survivors can be mentally and emotionally affected by repeatedly listening to the details of their patients' trauma narratives (McCann & Pearlman, 1990b). McCann and Pearlman (1990b) coined the term *vicarious trauma* to describe the psychological changes therapists may

experience following recurrent exposure to their clients' traumatic material, framed by constructivist self-development theory as negative alterations to their cognitive schemas and their subsequent distress, disorientation, and impaired interpersonal functioning. McCann and Pearlman noted vicarious trauma symptoms can mirror PTSD, suggesting therapists' work places them at risk of becoming traumatized themselves. Thus, constructivist self-development's theoretical proposition linking practitioners' vicarious exposure to their patients' traumas to disruptions in their cognitive schemas (McCann & Pearlman, 1990b) is relevant to the presented study examining factors contributing to therapists' vicarious traumatization, including their occupational settings, caseload sizes, and caseload diagnostic compositions.

As the guiding theoretical framework, constructivist self-development theory informed several of the research decisions for this potential dissertation. For instance, the problem statement highlighted how recent vicarious trauma literature—such as Barre et al. (2024), Charura (2024), Ortner (2024), and Wallace and County (2024)—framed their participants' reported psychological changes upon working with trauma victims via a constructivist self-development theory lens. However, as few studies have assessed community mental health clinicians' vicarious trauma, the problem statement emphasized this research population gap can be addressed by similarly applying constructivist self-development theory's conceptualization of vicarious trauma to the presented research. In addition, the purpose statement outlined the study's intention to examine possible factors associated with therapists' vicarious trauma, aligning with constructivist self-development theory's assertion that therapists may experience different levels of vicarious trauma depending on their circumstances (McCann & Pearlman, 1990b).

Furthermore, the research questions on therapists' occupational settings' relationship to vicarious trauma and caseload sizes and diagnostic compositions as mediating variables were guided by constructivist self-development theory's description of vicarious trauma with varying intensity of symptoms subject to many personal and professional factors (McCann & Pearlman, 1990b). Because vicarious trauma can range in severity (McCann & Pearlman, 1990b), the purpose statement explained how the research questions were explored by measuring vicarious trauma with the VTS (Vrklevski & Franklin, 2008), a previously validated instrument to evaluate levels of the construct. Vrklevski and Franklin (2008) cited McCann and Pearlman's (1990b) constructivist self-development theory as the informing framework for the VTS items, identifying symptoms as the theory initially described with responses on a Likert-type scale to operationalize the phenomenon. Therefore, constructivist self-development theory directed many components of this study's method and design. Moreover, the findings of this study extended the theory by providing information about the contexts of vicarious trauma, deepening the understanding of how various professional and environmental factors—such as occupational settings, caseload sizes, and caseload diagnostic compositions—influence therapists' vicarious traumatization. By examining community mental health clinicians, the presented research expanded constructivist self-development theory's application to this population, thereby broadening the scope of the theory's utility.

Introduction to Research Methodology and Design (Nature of the Study)

A quantitative, causal-comparative design study was identified as the best suited to address the stated research problem, purpose, and questions. As the current literature reflects a research gap on factors potentially contributing to therapists' vicarious traumatization and researchers' calls for further investigation (Aafjes-van Doorn et al., 2020; Barre et al., 2024;

Salvilla & Bedoria, 2021), a cross-sectional design comparing therapist participants grouped by their occupational setting (i.e., community mental health centers or other work environments) was an apt approach to examine variables related to vicarious trauma levels. Since community mental health clinicians often have larger caseloads (Fukui et al., 2021; NASW, 2023) and more clients with trauma-related conditions (Pincus et al., 2022; Sucich et al., 2023) than other therapists, caseload size and diagnostic composition as possible mediating variables to the relationship between vicarious trauma and occupational setting was examined via a survey design gathering data on these mediators along with participants' scores on the validated VTS (Aguar-Fernández et al., 2022; Aparicio et al., 2013; Benuto et al., 2018; Vrkleviski & Franklin, 2008) for mediation analyses. Hence, a cross-sectional survey research design aligned well with the presented problem and purpose statements and research questions, demonstrating the existence of a discrepancy in vicarious trauma between mental health providers in different settings and suggesting potential contributing factors to the inequity.

Data were collected on four variables: occupational setting, caseload size, caseload diagnostic composition, and vicarious trauma. Occupational setting was an independent variable determined by participants' reported work environment (e.g., community mental health center, private practice, hospital). Caseload size was the first mediating variable defined by the participants' reported number of active clients under their treatment. Caseload diagnostic composition was a second mediator based on participants' reported percentage of clients on their caseloads with a trauma-related condition. Lastly, vicarious trauma was a dependent variable measured by participants' symptom frequency and severity per their VTS scores. Research questions were constructed to relate to occupational setting, caseload size, and caseload diagnostic composition as they may influence vicarious trauma.

Data were first analyzed by an independent samples *t*-test to compare the mean VTS scores between community mental health therapists and those in other settings and calculate how likely the differences between the two groups occurred by random chance. The independent samples *t*-test was first developed by English statistician William Sealy Gosset (1908), who demonstrated that a *t*-distribution could be used to make inferences about population parameters—even with relatively small sample sizes and unknown population standard deviations—and plays a vital role in assessing the statistical significance of the difference between two population means in a *t*-test. Therefore, Gosset’s work significantly informed this study’s data collection and analysis.

Multiple linear regression analysis was subsequently conducted to assess the incremental value of caseload size and diagnostic composition as mediators in explaining variance in VTS scores. Statisticians Hayes and Preacher (2013) were particularly influential in developing methods for estimating indirect effects with multiple mediating variables, authoring a seminal work on mediation analysis via multiple regression. Hayes and Preacher provided significant insight into testing and interpreting the roles of multiple mediators in the mediation process, thereby critically guiding this study’s analysis of caseload size and diagnostic composition’s mediating effects on the relationship between therapists’ occupational setting and VTS scores.

Research Questions

This study aimed to answer three research questions:

RQ1

To what extent do VTS scores differ based on therapists’ occupational setting?

RQ2

To what extent does caseload size mediate the relationship between therapists' occupational setting and VTS scores?

RQ3

To what extent does caseload diagnostic composition mediate the relationship between therapists' occupational setting and VTS scores?

Hypotheses***H1₀***

There is no statistically significant difference in mean VTS scores among community mental health therapists and therapists in other occupational settings.

H1_a

Community mental health therapists have significantly higher VTS scores than therapists in other occupational settings.

H2₀

Caseload size does not mediate the relationship between therapists' occupational setting and VTS scores.

H2_a

Caseload size mediates the relationship between therapists' occupational setting and their VTS scores, such that community mental health clinicians with larger caseloads have higher VTS scores than those in other settings with smaller caseloads.

H3₀

Caseload diagnostic composition does not mediate the relationship between therapists' occupational setting and VTS scores.

H3_a

Caseload diagnostic composition mediates the relationship between therapists' occupational setting and their VTS scores, such that community mental health clinicians with caseloads with a larger percentage of trauma-related conditions have higher VTS scores compared to therapists in other settings with caseloads with a smaller percentage of trauma-related conditions.

Significance of the Study

McCann and Pearlman (1990b) first described vicarious trauma within the context of their constructivist self-development theory as the negative altering of psychotherapists' cognitive schemas from listening to their patients' traumatic experiences, and the current literature has continued to explore this phenomenon (Barre et al., 2024; Charura, 2024; Ortner, 2024; Yu et al., 2023). However, many researchers on therapists' vicarious trauma have encouraged further investigation into factors associated with the construct (Aafjes-van Doorn et al., 2020; Barre et al., 2024; Salvilla & Bedoria, 2021). Little is understood about how work settings can influence vicarious trauma, reflecting a research population gap on the prevalence and severity of vicarious traumatization among therapists in community mental health settings, who often have larger caseloads (Fukui et al., 2021; NASW, 2023) and serve individuals with more complex trauma histories than the general population (Pincus et al., 2022; Sucich et al., 2023). Therefore, this study examining the association between therapists' vicarious trauma and work settings and how caseload size and diagnostic composition may mediate this relationship added critical information to the literature on factors impacting the disparities in vicarious trauma levels among therapists in different settings.

The research findings on community mental health professionals' vicarious trauma advanced the guiding theoretical framework of McCann and Pearlman's (1990b) constructivist self-development theory by offering a greater understanding of this population's risk of vicarious trauma. Although constructivist self-development theory outlines the symptoms of vicarious trauma and therapists' exposure to clients' trauma material as an occupational hazard (McCann & Pearlman, 1990b), this study's evaluation of the roles of professional setting and caseload size and composition provided the theory fundamental knowledge on therapists' vulnerability to such detrimental cognitive and emotional changes. Moreover, by addressing the problem of community mental health professionals' susceptibility, gathering data on their vicarious trauma and possible related factors, and answering research questions comparing community mental health practitioners' vicarious trauma levels to therapists in other settings and identifying caseload size and composition as mediating variables, organizations providing community mental health services could apply this study's conclusions by ensuring therapists have resources to recover from their vicarious trauma and avoiding further psychological harm by limiting caseload sizes and trauma patients per clinician. Thus, the presented research may help community mental health centers be better informed on how to mitigate and prevent their therapists' vicarious trauma.

Definitions of Key Terms

Burnout

Clinical psychologist Herbert Freudenberger (1974) first coined the term *burnout* to label a reaction to prolonged involvement in emotionally demanding situations—especially among those in helping professions—with symptoms including physical and mental exhaustion, a sense of inefficacy, and detachment from clients.

Caseload Diagnostic Composition

Caseload diagnostic composition refers to the diagnosed conditions represented among a practitioner's caseload (Olfson et al., 1994). This study operationalized caseload diagnostic composition as a therapist's caseload's percentage of clients with a trauma-related mental health condition (e.g., PTSD, acute stress disorder).

Caseload Size

Caseload size is the quantity of cases for which a worker or entity is responsible (Richard et al., 2019). For this research, caseload size was defined by the number of clients a therapist is currently treating.

Cognitive Schema

Per their constructivist self-development theory, McCann and Pearlman (1990b) described a *cognitive schema*—pluralized in the literature as *cognitive schemas* (McCann et al., 1988b) and *cognitive schemata* (McCann et al., 1988a)—as a mental framework enabling individuals to interpret their experiences, including their beliefs, assumptions, and expectations about themselves and the world. McCann and Pearlman proposed cognitive schemas are the manifestations of psychological needs and can be disrupted by trauma.

Community Mental Health

Community mental health was developed as an accessible and holistic approach to mental health treatment by integrating services into the communities of individuals with mental health conditions and psychosocial disabilities (World Health Organization [WHO], 2021). Community mental health centers are intended to serve clients in proximity to their residences outside of psychiatric asylums or other institutional settings (WHO, 2021).

Compassion Fatigue

Traumatology researcher Charles Figley (1995) defined *compassion fatigue* as the emotional and physical exhaustion attributed to empathizing with the suffering of others, leading to a reduced capacity for empathy and compassion. Compassion fatigue has also been conceptualized as a combination of burnout and secondary traumatic stress (Halamová et al., 2024; Kercher & Gossage, 2024).

Secondary Traumatic Stress

Figley (1995) additionally defined *secondary traumatic stress* as an acute stress response symptomatically similar to PTSD, often experienced by caregiving professionals following their indirect trauma exposure to those they help. Secondary traumatic stress symptoms can include re-experiencing the traumatic events, avoidance of trauma triggers, and hyperarousal (Figley, 1995).

Vicarious Traumatization

McCann and Pearlman (1990b) initially explained *vicarious traumatization* as the emotional and psychological changes that psychotherapists experience after repeatedly listening to their patients' traumatic material, including significantly altered beliefs and expectations about themselves, others, and their environments. Jenkins and Baird (2002) later differentiated vicarious traumatization from secondary traumatic stress, with the former defined by a profound and persistent transformation of an individual's cognitive schemas and subsequent PTSD symptoms following recurrent indirect trauma and the latter by an acute, shorter-term stress response to close contact with a trauma survivor.

Summary

The presented study investigated the gap in understanding community mental health clinicians' vicarious trauma in relation to their occupational settings, caseload sizes, and caseload diagnostic compositions. Despite the established risks of vicarious trauma for therapists exposed to their clients' traumatic experiences (Barre et al., 2024; Charura, 2024; Kercher & Gossage, 2024), little previous research specifically examined how community mental health settings—with their higher prevalence of trauma cases (Pincus et al., 2022; Sucich et al., 2023)—impact therapists' psychological well-being. The purpose of this quantitative, causal-comparative design study was to compare levels of vicarious trauma as a function of setting (i.e., community mental health practitioners and therapists in other occupational settings) and examine how caseload sizes and caseload diagnostic composition may mediate the relationship between vicarious traumatization and work setting.

Guided by McCann and Pearlman's (1990b) constructivist self-development theory, the research analyzed how caseload characteristics mediate the relationship between occupational setting and vicarious trauma. Through statistical analyses like an independent samples *t*-test and multiple linear regression, the study aspired to identify possible contributing factors to vicarious trauma in community mental health settings. The findings could inform clinical practices, enrich the existing literature on therapist well-being, and advance theoretical frameworks (e.g., constructive self-development theory) regarding how exposure to trauma narratives affects mental health practitioners. Ultimately, the study findings could lead to actionable insights for improving the support and resources available to therapists in community mental health contexts.

Chapter 2: Literature Review

The research problem addressed in this study was community mental health therapists' risk of vicarious trauma (Motamedi et al., 2023; Roberts et al., 2022). Psychotherapists are often indirectly exposed to trauma by recurrently listening to the details of their clients' traumatic experiences and may subsequently develop symptoms aligned with post-traumatic stress disorder (PTSD), such as hypervigilance, intrusive thoughts, and sleep disturbances (Charura, 2024; Helpingstine et al., 2021; Padmanabhanunni & Gqomfa, 2022; Rinfrette et al., 2021; Salvilla & Bedoria, 2021). Therapists vicariously exposed to trauma frequently endorse an impact on their clinical work, as they feel less competent and connected with their patients (Aafjes-van Doorn et al., 2020). Clinicians in community mental health settings could thus be especially at risk for vicarious traumatization, as their clientele have higher rates of trauma (Lu et al., 2022; Motamedi et al., 2023; Sucich et al., 2023), yet minimal prior research had examined this populations' vicarious trauma.

In addition, community mental health practitioners often have larger caseloads than other mental health professionals (Fukui et al., 2021; National Association of Social Workers [NASW], 2023). Some current studies indicated mental health service providers with larger caseloads might be more likely to experience vicarious trauma (Roberts et al., 2022; Sutton et al., 2022), while others found inconsistent evidence linking caseload size to vicarious trauma (Molnar et al., 2020; Rayner et al., 2020). Recent research also proposed diversifying caseloads by minimizing the number of traumatized patients treated per practitioner could mitigate vicarious trauma (Padmanabhanunni & Gqomfa, 2022; Roberts et al., 2022; Sutton et al., 2022). Thus, the purpose of this quantitative, causal-comparative design study was to compare levels of vicarious trauma as a function of setting (i.e., community mental health practitioners and

therapists in other occupational settings) and examine how caseload sizes and caseload diagnostic composition may mediate the relationship between vicarious traumatization and work setting.

The resources secured for this proposal were primarily accessed through databases such as the EBSCO and ProQuest collections, APA PsycArticles, and PubMed Central, and search engines like Google Scholar. Most search parameters included a range of five years (i.e., 2020 to 2025). However, older materials—particularly seminal works, primary theoretical sources, and historical narratives—were obtained without a publication year filter, and references thereby date back to 1910. The majority of the cited literature are research articles published in scholarly journals obtained with a peer-reviewed search filter applied, though books and organizational websites were also accessed without this filter to further gather historical and contextual information. Search terms included *vicarious trauma**, *therapists*, *counselors*, *mental health professionals*, *mental health providers*, *psychologists*, *clinicians*, *social workers*, *community mental health*, *public mental health*, *healthcare professionals*, *healthcare providers*, *physicians*, *nurses*, *secondary trauma**, *indirect trauma*, *compassion fatigue*, *burnout*, *trauma*, *post-traumatic stress*, *PTSD*, *constructivist self-development*, *psychoanalysis*, and *countertransference*. Searches with Boolean operators included combinations of occupational roles and vocational hazards (e.g., *therapists OR counselors OR clinicians OR psychologists AND vicarious trauma**). Additional resources for this literature review were identified from the included sources' reference lists and accessed through their provided Digital Object Identifier (DOI) or searched by title and author if a DOI was not indicated.

Consequently, this literature review offers contextual information on community mental health professionals' vicarious trauma. It begins with a description of the study's guiding

theoretical framework—constructivist self-development theory—including the theory’s history, its definition of vicarious trauma, and existing studies using this framework. Next, recent research on vicarious trauma among the general population is examined, followed by vicarious trauma as an occupational hazard among indirect trauma-exposed professionals. The review then focuses on how healthcare providers may be affected by vicarious trauma before narrowing its attention to mental healthcare practitioners. Evidence of brain structure and neurological changes associated with vicarious trauma is subsequently presented. Constructs related to vicarious trauma, including compassion fatigue, burnout, and secondary traumatic stress, are then reviewed.

The literature review next explores how vicarious trauma may be mitigated, such as via the phenomenon of vicarious post-traumatic growth and adaptive caseload management. An overview of community mental health services is then given, including the history of community mental health, trauma among community mental health consumers, and the impact of the work on community mental health clinicians. Lastly, an evaluation of the quality of the research is provided before summarizing the literature review’s conclusions.

Theoretical Framework

McCann and Pearlman (1990b) first presented the construct of vicarious trauma within the context of their constructivist self-development theory. Constructivist self-development is a theory of personality aiming to understand individuals’ diverse psychological reactions to victimization (McCann & Pearlman, 1990a, 1990b, 1992). The theory focuses on the traumatized individuals’ psychological needs, mental frameworks, and social environments and how the interplay of these factors can influence their trauma responses and effective treatment (McCann & Pearlman, 1990a). It further emphasizes the critical role of a supportive therapeutic

relationship in which both emotional and cognitive aspects of traumatization are addressed to facilitate recovery, offering a comprehensive framework of psychological trauma (McCann & Pearlman, 1990a).

Theoretical Predecessors

McCann and Pearlman's (1990b) constructivist self-development theory expanded upon previously submitted trauma models, including those the authors referred to as a *schema framework* (McCann et al., 1988a) and a *model of psychological adaptation* (McCann et al., 1988b). McCann et al.'s (1988a) schema framework described a relationship between individuals' life experiences and their *cognitive schemata*—the belief systems human beings use to make meaning of their environments. The schema framework proposed individuals' cognitive schemata about themselves and others both shape and are shaped by their experiences in the world, suggesting traumatic events can lead to schemata disturbances (McCann et al., 1988a). As various feelings are also linked to individuals' schemata, a trauma victim's unique interpretation of their experience determines their emotional, cognitive, and behavioral reactions, which could, in turn, influence their interactions with others (McCann et al., 1988a).

McCann et al. (1988a) applied the assumptions of their schema framework to their recommendations for the psychological assessment and treatment of adult survivors of childhood sexual abuse. The authors hypothesized schemata begin forming in early life and develop sequentially, starting with perceptions of safety, followed by beliefs about trust, power, esteem, and intimacy (McCann et al., 1988a). For instance, McCann et al. asserted those traumatized at a very young age may be more likely to have disrupted schemata about safety and trust, while those who had a safe and supportive childhood environment may be less likely to develop adverse schemata in these domains. Conversely, sexual abuse survivors with dissociative, denial,

or avoidant responses may be attempting to protect their healthier power and esteem schemata by eluding victimization memories opposing such beliefs (McCann et al., 1988a). Thus, McCann et al.'s schema framework provided a model to recognize the associations between traumatic experiences, cognitive schemata and their related emotions, and psychological functioning, particularly as they affect childhood sexual abuse survivors.

McCann et al.'s (1988b) model of psychological adaptation similarly proposed a complex relationship between traumatic experiences, cognitive schemas, and psychological adjustment. The psychological adaptation model described five primary categories of psychological trauma responses: emotional, cognitive, biological, behavioral, and interpersonal. Per the model, how persons are uniquely affected by trauma in each of the five domains depends on their schemas, which develop in response to life experiences and factors such as gender and sociocultural background (McCann et al., 1988b). Like McCann et al.'s (1988a) schema framework, the model of psychological adaptation stated schemas on safety, trust, power, esteem, and intimacy develop sequentially and can be disrupted by trauma (McCann et al., 1988b). However, the psychological adaptation model noted schemas' adaptive or maladaptive nature depends on individuals' particular psychological circumstances (McCann et al., 1988b).

The model of psychological adaptation illustrated the relationship between cognitive schemas, psychological adaptation, and life experiences by submitting life experiences shape or alter schemas, which can then influence one's psychological adaptation (McCann et al., 1988b). Psychological adaption can subsequently affect life experiences, which may further impact one's schemas, reflecting an ongoing cycle of these components' interaction (McCann et al., 1988b). McCann et al. (1988b) posited emotional psychological adaptation trauma response patterns can include fear, anxiety, depression, anger, guilt, and shame. Cognitive response patterns often

involve perceptual disturbances, while biological patterns include physiological hyperarousal and somatic disturbances (McCann et al., 1988b). Notable behavioral response patterns include aggressive behaviors, suicidal gestures and attempts, substance abuse, and impaired social functioning (McCann et al., 1988b). Lastly, interpersonal psychological response patterns may include sexual difficulties, relationship conflicts, revictimization, and victimization of others (McCann et al., 1988b). Therefore, the model of psychological adaptation exemplified the interaction between a person's life experiences, cognitive schemas, and psychological adaptation patterns, explaining the diverse contributors and responses to individuals' trauma (McCann et al., 1988b).

Integrated Theoretical Perspectives

While McCann and Pearlman (1990b) built upon the described schema framework (McCann et al., 1988a) and model of psychological adaptation (McCann et al., 1988b) to generate the principles of constructivist self-development theory, their theory also integrated concepts from other theoretical perspectives (McCann & Pearlman, 1990a), including developmental (Mahler et al., 1975), self psychology (Kohut, 1977), social learning (Rotter, 1954), and constructivism (Mahoney & Lyddon, 1988). McCann and Pearlman (1990a) stated Mahler et al.'s (1975) object relations developmental perspective and Kohut's (1977) self psychology informed constructivist self-development theory by reflecting how individuals assimilate information about themselves and others through internalization processes. Per object relations (Mahler et al., 1975) and self psychology (Kohut, 1977), children's mental representations of themselves and others first develop through interactions with others. Infants initially need others for emotional stability and to define their emerging selves as they interact with significant people in their environments to acquire a differentiated sense of self and patterns

of relating to others (Kohut, 1977; Mahler et al., 1975). Over time, individuals can internalize these self-objects (e.g., the psychological representations of others originally perceived as existing to meet a child's needs) and fulfill their own physical and psychological needs with less external support via adaptive self-capacities, ego resources, and cognitive schemas—a development process that can continue across the life span (Kohut, 1977; Mahler et al., 1975).

Constructivist self-development theory (McCann & Pearlman, 1990a) drew from the social learning theory perspective (Rotter, 1954) that an individual's unique self develops through reinforcement processes. Per Rotter (1954), an infant firstly learns to get critical needs (e.g., the need for food) met by pleasing their caregiver or engaging in behaviors to elicit a desired response, which is then generalized as socially learned behaviors to provoke responses for a child's other needs (e.g., love and affection). A positive early environment can thereby help children meet their needs, grow increasingly independent, and develop the capacity to maintain intimate and interdependent relationships (Rotter, 1954). Hence, constructivist self-development theory (McCann & Pearlman, 1990a) recognized social learning theory's (Rotter, 1954) reinforcement mechanism as underlying object relation theory's (Mahler et al., 1975) internalization processes, which contribute to constructivist self-development's construct of cognitive schemas.

Moreover, as its name suggests, constructivist self-development theory is rooted in a constructivist perspective (McCann & Pearlman, 1990a, 1990b, 1992). As Mahoney and Lyddon (1988) explained, constructivism asserts human beings actively create and interpret their personal realities, in that each individual develops their own representational model of the world. In turn, individuals assign meanings to their new experiences from these personal frameworks (Mahoney & Lyddon, 1988). However, rather than simply filtering ongoing experiences like a

fixed template, constructivism posits the representational models dynamically produce and construe new experiences to determine what an individual will perceive as reality (Mahoney & Lyddon, 1988).

Major Theoretical Assumptions

Therefore, by synthesizing developmental (Mahler et al., 1975), self psychology (Kohut, 1977), social learning (Rotter, 1954), and constructivist (Mahoney & Lyddon, 1988) theoretical perspectives, constructivist self-development theory operates on several major assumptions (McCann & Pearlman, 1990a). Firstly, constructivist self-development theory assumes the self chairs an individual's identity and inner life and develops across the life span via internalization, assimilation, and accommodation processes (McCann & Pearlman, 1990a). The self consists of four inter-related components: self capacities that allow positive self-esteem to develop and be maintained; ego resources that regulate individuals' interaction with others and their environments; psychological needs that motivate behaviors; and cognitive schemas that manifest from psychological needs (McCann & Pearlman, 1990a).

Additionally, constructivist self-development theory assumes the constructivist tradition that humans create their own realities (McCann & Pearlman, 1990a, 1990b, 1992). Consequently, traumatic events do not carry predetermined meanings or expectable responses, as they can only be understood within the context of an individual's personal meaning system (McCann & Pearlman, 1992). Furthermore, constructivist self-development asserts traumatic experiences are encoded in verbal and imagery memory systems, and trauma can disrupt any of an individual's components of the self, including self capacities, resources, needs, and schemas (McCann & Pearlman, 1990a). Finally, constructivist self-development theory submits an

individual's adaptation to trauma reflects the interaction between their life experiences and the self (McCann & Pearlman, 1990a).

Vicarious Traumatization

McCann and Pearlman (1990b) subsequently described the phenomenon of vicarious traumatization within the context of their constructivist self-development theory. Although the framework comprehensively examines the complex relationship between traumatic events, cognitive schemas about the self and the world, and psychological adaptation, McCann and Pearlman applied the theory with an emphasis on the psychological needs and cognitive schemas of therapists affected by their clients' trauma. McCann and Pearlman purported several fundamental psychological needs impacted by vicarious trauma, including safety, dependency, trust, power, esteem, intimacy, independence, and frame of reference. These psychological needs manifest as cognitive schemas—which can be influenced by trauma—and each individual uniquely responds to traumatization depending on their most salient schemas (McCann & Pearlman, 1990b). Thus, McCann and Pearlman submitted psychotherapists' cognitive schemas may be disrupted by treating trauma survivors, and their specific response to vicarious trauma exposure relies on the centrality of their schema types, including the degree of discrepancy between the clients' traumatic material and the therapists' preexisting schemas.

For instance, clinicians serving victims of violence or injurious accidents may face challenges to their schemas around safety, experiencing a heightened sense of vulnerability as they listen to stories of threats or harm to innocent people (McCann & Pearlman, 1990b). Similarly, treating clients who have been deceived, betrayed, or had their trust violated by those on whom they depend may alter practitioners' schemas about dependency and trust, potentially leading therapists to be more cynical and distrustful of others (McCann & Pearlman, 1990b).

Vicariously traumatized clinicians with disrupted power schemas may find themselves feeling helplessness or despair about possible uncontrollable circumstances like those their clients have faced, while those with disturbed schemas about independence may identify with their patients' loss of personal freedom (McCann & Pearlman, 1990b). Because trauma patients violated by malicious acts of other human beings may develop diminished esteem for other people, counselors' esteem schemas could likewise cause bitterness, pessimism, and recurrent reflection on human perversity (McCann & Pearlman, 1990b). Therapists may also parallel their clients' isolation and alienation following trauma exposure, influencing their intimacy schemas (McCann & Pearlman, 1990b). Lastly, vicarious trauma can affect practitioners' frame of reference schemas, which can be destructive if heavily focused on the perpetrators' motives or victim-blaming (McCann & Pearlman, 1990b).

Furthermore, as constructivist self-development theory recognizes how trauma affects memory systems, McCann and Pearlman (1990b) proposed vicariously traumatized therapists may internalize their clients' memories as they listen to victimization stories. Clinicians' changes in memory systems from their repeated exposure to traumatic material could be detrimental to their psychological and interpersonal functioning (McCann & Pearlman, 1990b). Traumatic imagery recollected in memory systems is colored by cognitive schemas, which are then encoded in verbal memory systems, and both imagery and verbal memory components can produce schema changes as they accommodate to new personal realities (McCann & Pearlman, 1990b). These memory system alterations can lead to vicarious trauma symptoms such as nightmares, flashbacks, hypervigilance, intrusive thoughts, anxious or angry mood, avoidance, and emotional numbing or dysregulation—mirroring PTSD symptomatology (McCann & Pearlman, 1990b).

Therefore, much like trauma can alter its victims, psychotherapists treating survivors may themselves be affected by the experience (McCann & Pearlman, 1990b).

Current Constructivist Self-Development Literature

Several recent studies (Barre et al., 2024; Charura, 2024; Kounenou et al., 2023; Miller Reed et al., 2023; Renkiewicz & Hubble, 2023; Simms et al., 2021; Wallace & County, 2024; Yu et al., 2023) have continued to employ McCann and Pearlman's (1990b) constructivist self-development as a theoretical framework for exploring vicarious trauma. For example, Barre et al.'s (2024) correlational research examining the relationship between post-traumatic growth (i.e., adaptive changes in identity, beliefs, and behaviors due to trauma exposure) and vicarious trauma conceptualized the latter variable via a constructivist self-development lens, identifying a significant link between the phenomena. Likewise, Charura (2024) referenced McCann and Pearlman's (1990b) seminal work as guiding its interpretative phenomenological analysis to understand the lived experiences of therapists treating previously tortured refugees and asylum seekers in the United Kingdom, finding participants frequently described vicarious trauma symptoms as constructivist self-development theory presented. Kounenou et al. (2023) also cited McCann and Pearlman (1990b) to define vicarious trauma to consider how the construct may relate to Greek mental health practitioners' empathy and burnout and concluded the three variables were positively correlated.

Moreover, Miller Reed et al.'s (2023) and Wallace and County's (2024) phenomenological studies on the subjective experiences of qualitative researchers gathering data on traumatic events both framed vicarious trauma via McCann and Pearlman's (1990b) constructivist self-development perspective, each finding qualitative researchers may be susceptible to indirect traumatization and highlighting the potential benefit of adaptive trauma-

based coping strategies. Simms et al. (2021) comparably conducted a qualitative analysis of refugee mental health interpreters' vicarious trauma and found all participants endorsed work-related emotional distress consistent with constructivist self-development theory (McCann & Pearlman, 1990b). Conversely, Renkiewicz and Hubble (2023) applied McCann and Pearlman's (1990b) framework to a larger cross-sectional study on emergency medical services personnel and found almost 41% experienced vicarious trauma. Yu et al. (2023) also described developing their survey research on social workers' vicarious trauma rooted in a constructivist self-development framework to determine professional support was indirectly related to vicarious trauma with compassion fatigue playing a mediating role. Hence, the current literature reflects constructivist self-development remains a central theoretical lens for ongoing vicarious trauma research, and many studies continue contributing to the theory (Barre et al., 2024; Charura, 2024; Kounenou et al., 2023; Miller Reed et al., 2023; Renkiewicz & Hubble, 2023; Simms et al., 2021; Wallace & County, 2024; Yu et al., 2023).

Alternative Frameworks

Although vicarious trauma was first introduced as a construct via McCann and Pearlman's (1990b) constructivist self-development theory, therapists' psychological responses to their clients' traumatic material have historically been framed within other theoretical models (Freud, 1910; Freudenberger, 1974; Freudenberger & Robbins, 1979). For instance, Rotter's (1954) social learning theory may suggest practitioners whose minimal goals are too high and do not change in response to feedback are susceptible to the psychological strain associated with recurrent emotionally demanding circumstances—a phenomenon Freudenberger (1974) termed *burnout*. Freudenberger and Robbins (1979) described depression, loss of compassion, cynicism, boredom, and discouragement as symptoms of burnout, sharing some of the possible

consequences of disrupted schemas per constructivist self-development theory's vicarious trauma (McCann & Pearlman, 1990b). McCann and Pearlman acknowledged mental health providers may experience burnout for various reasons, including the difficulty of treating trauma victims with chronic, entrenched symptoms requiring intensive, long-term therapy. Nevertheless, McCann and Pearlman asserted while burnout may frequently occur among helping professionals, the effects they recognized from treating trauma survivors are distinct from those serving other challenging populations by encompassing characteristics of significant traumatization.

Psychoanalytic theory has also traditionally been applied to understand psychotherapists' reactions to their patients' trauma narratives (Arundale & Bellman, 2018; Freud, 1910). Psychoanalytic theory proposed clinicians may find unconscious feelings arise from their work with clients in a process known as *countertransference* (Freud, 1910). Consequently, recent studies like Andaházy's (2019) and Renkiewicz and Hubble's (2023) have described vicarious trauma partly as an emotional countertransference response to patients' traumatic stories. McCann and Pearlman (1990b) conceded psychoanalytic theory's conceptualization of countertransference reflects how therapists' exposure to the traumatic experiences of the victims they treat can be hazardous to their own mental health. However, McCann and Pearlman also noted countertransference focuses on clinicians' preexisting personal characteristics to explain how their emotional reactions are a function of their unresolved psychological conflicts, while constructivist self-development submits an interactive perspective in which therapists' responses to their clients' material are shaped by the therapy's specific circumstances and the therapists' cognitive schemas and psychological needs. Moreover, constructivist self-development theory recognizes vicarious trauma as persistent, cumulative (i.e., each patient's trauma story can

additively influence a practitioner's schemas), and pervasive (i.e., affecting many aspects of a therapist's life), hence offering a broader view of the phenomenon's impact (McCann & Pearlman, 1990b). Therefore, constructivist self-development theory was determined to be the stronger framework for the presented investigation into community mental health practitioners' vicarious trauma to recognize the construct's mechanisms and effects comprehensively.

Relation to the Present Study

This study extended constructivist self-development theory by addressing the research gap on the prevalence and severity of vicarious trauma among community mental health therapists and providing insights into the role of occupational settings, caseload sizes, and patient diagnostic profiles in influencing their cognitive schema changes per constructivist self-development theory (McCann & Pearlman, 1990b). Constructivist self-development theory thereby guided many of the study's components. Firstly, the problem statement noted how current vicarious trauma literature like Barre et al. (2024), Charura (2024), Ortner (2024), and Wallace and County (2024) examine psychological changes following work with trauma victims via a constructivist self-development theory lens, yet few studies have evaluated community mental health clinicians' vicarious trauma. Consequently, the problem statement stressed this research population gap could be addressed by equally applying constructivist self-development theory's construct of vicarious trauma to the conferred causal-comparative research. Additionally, the purpose statement reflected the study's intent to assess possible factors associated with therapists' vicarious trauma, aligning with constructivist self-development theory's assertion that vicarious trauma levels can vary depending on therapists' circumstances (McCann & Pearlman, 1990b).

This study's research questions on therapists' occupational settings' relationship to vicarious trauma and caseload sizes and diagnostic compositions as mediators were also guided by constructivist self-development theory's description of vicarious trauma with diverse presentation and intensity of symptoms due to many personal and professional factors (McCann & Pearlman, 1990b). As vicarious trauma can range in severity (McCann & Pearlman, 1990b), the purpose statement described how the research questions were examined by measuring vicarious trauma with a validated instrument to evaluate levels of the construct as influenced by the research variables. Therefore, this causal-comparative study sought to fill the research population gap on community mental health service providers and add to the field's understanding of vicarious trauma via McCann and Pearlman's (1990b) constructivist self-development perspective by identifying the degree to which the framework's conceptualization of vicarious trauma affects community mental health clinicians and the factors mediating the phenomenon's pervasiveness, as the theory directed many components of the research method and design.

Vicarious Trauma in the General Population

The fifth edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-5; American Psychiatric Association, 2013) first reflected how any individual vicariously exposed to trauma can be psychologically and emotionally impacted by including indirect trauma exposure as a potential diagnostic qualifier for PTSD—a criterion which remains in the most recent DSM-5 text revision (American Psychiatric Association, 2022). The DSM-5 also indicated those who have learned a traumatic event occurred to a close family member or friend—such as a serious accident or injury, personal assault, torture, sexual violence, or suicide—may themselves experience PTSD (American Psychiatric Association, 2013). Hence,

members of the general population are susceptible to substantial vicarious trauma symptoms meeting PTSD criteria—ranging from dissociation and avoidance of triggering stimuli to hypervigilance, sleep disturbances, flashbacks, and detrimental alterations in cognitions and mood—should they be informed of others’ experience of traumatic events (American Psychiatric Association, 2013). Furthermore, these symptoms cause clinically significant distress or impair social, occupational, or other critical areas of life functioning (American Psychiatric Association, 2013)—illustrating the potentially profound impact of vicarious trauma exposure.

Vicarious Traumatization via National Events

The current literature has mirrored the DSM-5’s (American Psychiatric Association, 2013) affirmation of how individuals indirectly exposed to the traumatic experiences of others may themselves become traumatized, including through widely publicized events (Bassett & Taberski, 2020; Gallegos et al., 2024; Green et al., 2024; Lee et al., 2023; Li et al., 2020; Liu et al., 2024; Sosoo et al., 2022; Williams, 2021). Distressing events like school shootings or mass illness and death from the coronavirus disease 2019 (COVID-19) pandemic can traumatize individuals who are not directly involved yet repeatedly exposed to the events’ details (Bassett & Taberski, 2020). Some research has suggested the general public may have experienced greater COVID-19-related trauma levels than front-line nurses (Li et al., 2020). Structural and functional brain markers for vicarious traumatization have been identified and potentially show a neural mechanism linking COVID-19-related vicarious trauma to cumulative childhood trauma (Liu et al., 2024). Moreover, recent studies indicated trauma reactions might occur among individuals vicariously exposed to instances of police brutality (Lee et al., 2023; Williams, 2021), including Black Americans’ activated psychological and physiological stress responses upon viewing images of police violence (Gallegos et al., 2024; Sosoo et al., 2022) and anticipatory traumatic

reactions regardless of audiovisual, written, or imaginal format (Green et al., 2024). Thus, aligning with McCann and Pearlman's (1990b) construct of vicarious traumatization, the current literature proposes many individuals could be susceptible to psychological trauma even if indirectly exposed to distressing or horrific phenomena (Bassett & Taberski, 2020; Gallegos et al., 2024; Green et al., 2024; Lee et al., 2023; Li et al., 2020; Liu et al., 2024; Sosoo et al., 2022; Williams, 2021).

Vicarious Trauma as an Occupational Hazard

The DSM-5 also added repeated exposure to aversive details of traumatic events in work-related contexts as a potential diagnostic criterion for PTSD (American Psychiatric Association, 2013). Accordingly, several vicarious trauma studies have since reinforced the DSM-5's PTSD criteria (American Psychiatric Association, 2013) and McCann and Pearlman's (1990b) initial assertion of indirect trauma as an occupational hazard for vocations exposed to traumatic material (Bakhshi et al., 2021; Isobel & Thomas, 2022; Middleton et al., 2022; Miller Reed et al., 2023; Morabito et al., 2021; Newman et al., 2024; Ortner, 2024; Rinfrette et al., 2021; Simms et al., 2021; Smith et al., 2023; Suo et al., 2022; Wallace & County, 2024; Zwisohn et al., 2019). For example, qualitative researchers working with human participants may be among those vulnerable to vicarious trauma when learning about the experiences of traumatized populations (Miller Reed et al., 2023; Smith et al., 2023; Wallace & County, 2024). Current phenomenological studies have found qualitative trauma researchers described PTSD symptoms such as hypervigilance, dissociations, nightmares, flashbacks, and suicidal ideation (Miller Reed et al., 2023) as well as anxiety, anger, intrusive thoughts, and avoidance (Wallace & County, 2024), affecting their social and emotional functioning. Qualitative trauma researchers have reported coping by seeking psychotherapy or disconnecting from their participants' traumatic

stories, including by distancing themselves from their data, increasing alcohol consumption, or avoiding triggering environments (Miller Reed et al., 2023; Wallace & County, 2024).

Additionally, qualitative researchers studying traumatized populations acknowledged the stigma associated with vicarious trauma yet conversely noted perceptions of positive growth from their secondary trauma exposure (Smith et al., 2023). While the recent literature offered pertinent information on vicarious trauma's symptomatology and risks as an occupational hazard, the researchers recommended further examination of the contextual antecedents to the phenomenon (Wallace & County, 2024), including via a quantitative approach (Miller Reed et al., 2023; Smith et al., 2023).

Other current literature on the vicarious trauma hazards within academia focused on students' indirect trauma exposure (Bakhshi et al., 2021; Rinfrette et al., 2021; Suo et al., 2022). Research assessing law students' risk of being adversely affected by their trauma-related work and how gender, personality, and social support influence their vulnerability to vicarious trauma found female gender, high neuroticism, and low extraversion were positively associated with vicarious trauma levels but no statistically significant relationship between social support and vicarious trauma (Bakhshi et al., 2021). Comparably, social work students' experience with personal trauma and their exposure and response to their internship clients' trauma may put them at risk of secondary traumatic stress and vicarious trauma, as many reported personal trauma histories and secondary traumatic stress symptoms while in their student internships and approximately one-third developed vicarious trauma (Rinfrette et al., 2021). The recent research thereby provided critical insights into factors related to vicarious trauma, yet researchers subsequently proposed future studies on other protective factors for vicarious traumatization to

effectively safeguard against the psychological and emotional harm of indirect trauma (Bakhshi et al., 2021; Rinfrette et al., 2021).

Other professionals at risk of vicarious trauma include public service lawyers (Zwisohn et al., 2019), forensic interviewers (Middleton et al., 2022), sexual assault detectives (Morabito et al., 2021), emergency response professionals (Meeker et al., 2024), and refugee mental health interpreters (Simms et al., 2021). Congruent with findings on law students' vicarious traumatization (Bakhshi et al., 2021), recent research suggested public service lawyers may concordantly be vulnerable to personality, relationship, perceptual, and brain changes associated with prolonged trauma due to their work with survivors (Zwisohn et al., 2019). Similarly, forensic interviewers of children making abuse allegations often experience vicarious trauma symptomatology in various contexts, including within their interviews, outside their interviews but within their professional roles, and within their personal lives (Middleton et al., 2022). Detectives investigating sexual assault cases also frequently express vicarious trauma symptoms, including challenges separating the trauma affiliated with their investigations from the possible victimization of their own families, reflecting their altered cognitive schemas on trust and safety (Morabito et al., 2021). Additionally, other law enforcement, emergency medical services, and fire department employees often face vicarious trauma, though adverse vicarious trauma outcomes may be minimized by perceptions of their organization valuing their well-being (Meeker et al., 2024). Lastly, interpreters working in refugee mental health treatment may struggle with vicarious trauma from repeatedly listening to refugees' particularly devastating stories yet often report positive growth from their services, including a sense of resilience and empowerment (Simms et al., 2021). Although the present literature recognized many ways vicarious trauma can pose an occupational hazard, future research on factors contributing to

vicarious trauma variation (Morabito et al., 2021), including protective factors (Bakhshi et al., 2021) and other occupational factors associated with vicarious trauma (Simms et al., 2021), was encouraged.

Healthcare Professionals' Vicarious Trauma

While the literature has demonstrated how vicarious traumatization may affect various professionals exposed to indirect trauma (Bakhshi et al., 2021; Middleton et al., 2022; Miller Reed et al., 2023; Morabito et al., 2021; Ortner, 2024; Rinfrette et al., 2021; Simms et al., 2021; Smith et al., 2023; Suo et al., 2022; Wallace & County, 2024; Zwisohn et al., 2019), much of the vicarious trauma research has focused on healthcare providers (Berhe et al., 2022; Isobel & Thomas, 2022; Li et al., 2020; Newman et al., 2024; Nkurunziza et al., 2024; Peacock, 2023; Piras et al., 2024; Renkiewicz & Hubble, 2023; Wu et al., 2024; Zhang et al., 2024). Emergency medical services personnel frequently report vicarious trauma, with recent research suggesting approximately 41% of emergency medical services professionals experienced vicarious trauma, and almost 53% among those scoring high enough on a vicarious trauma measure to possibly illicit poorer immune system functionality (Renkiewicz & Hubble, 2023). Emergency medical service providers were more likely to experience vicarious trauma if they were female, had childhood trauma, or had other stress syndromes like burnout or compassion fatigue (Renkiewicz & Hubble, 2023). Similarly, Ethiopian hemodialysis healthcare workers faced with medical supply shortages during the besiege of the Tigray region—from November 2020 to June 2021—often presented with vicarious trauma, including feelings of hopelessness, bystander guilt, irritability, sadness about their patients' victimization, and associated compassion fatigue as they witnessed patients' suffering and deaths otherwise preventable in typical circumstances (Berhe et al., 2022). Chinese resident physicians during the release of COVID-19 pandemic restrictions

also endorsed vicarious trauma symptoms, with physicians who were men, experienced adverse life events, or had emotion-focused coping styles more prone to vicarious traumatization and those with problem-focused coping styles, who were not on duty, or who had not been transferred less susceptible (Zhang et al., 2024). Given the diverse evidence of vicarious trauma predictors and manifestations among healthcare professionals, calls for further research justifiably included additional exploration of potential vicarious trauma causality (Renkiewicz & Hubble, 2023; Zhang et al., 2024) and workplace mitigation factors (Renkiewicz & Hubble, 2023).

Vicarious Trauma in Nursing. Many studies on healthcare professionals' vicarious trauma have focused on nurses (Isobel & Thomas, 2022; Li et al., 2020; Newman et al., 2024; Nkurunziza et al., 2024; Peacock, 2023; Piras et al., 2024; Wu et al., 2024). Vicarious trauma in the nursing literature has been predominately conceptualized per McCann and Pearlman's (1990b) original definition, as the empathic engagement and rapport required for competent nursing may make them comparatively vulnerable to vicarious traumatization (Isobel & Thomas, 2022). Vicarious trauma can affect nurses in a variety of settings (e.g., forensic, midwifery, emergency departments, mental health units, and substance use services), and such settings may pose a higher risk of vicarious trauma due to treating patients who have experienced trauma (e.g., physical abuse, accidents, disasters, sexual assault) as well as exposure to pervasive stress and responsibility, frequent redundancies, and disconnects between medical and humanistic discourses (Isobel & Thomas, 2022). For instance, forensic mental health nurses may be predisposed to greater vicarious trauma than nurses in mainstream mental health services because the former are exposed to the aversive details of their patients' violent crimes (Newman et al., 2024). Research indicated almost half of forensic mental health nurses have moderate

levels of vicarious trauma, and over a quarter have high levels—which is associated with greater absenteeism and poorer mental health (Newman et al., 2024). Congruently, Rwandan nurses and midwives caring for perinatal adolescent mothers who learn of their patients' trauma histories and ongoing violence from their pregnancies often subsequently recognized vicarious trauma symptoms, including experiencing the emotional and psychological challenges parallel to their patients, ruminating on their patients' stories outside the perinatal environment, projecting the traumas onto their own children, and becoming hypervigilant in parenting (Nkurunziza et al., 2024). As occupational settings may play a key role in vicarious trauma, additional research was promoted to examine environmental and organizational risk and protective factors in various settings (Isobel & Thomas, 2022; Nkurunziza et al., 2024).

Other vocational factors related to nurses' vicarious trauma have also been examined (Li et al., 2020; Peacock, 2023; Piras et al., 2024; Wu et al., 2024). Although recent research proposed the general public may have experienced greater vicarious traumatization levels than front-line nurses during the onset of the COVID-19 pandemic, results showed that non-front-line nurses likewise had significantly higher vicarious trauma scores than front-line nurses (Li et al., 2020). However, contrary study findings have emphasized nurses responsible for providing direct patient care had higher experiences of vicarious trauma than non-direct care nurses, and vicarious trauma exposure was greater among those in nursing leadership (Peacock, 2023). Furthermore, while many nurses faced vicarious trauma during the first wave of the COVID-19 pandemic, those who utilized positive coping strategies (e.g., physical activity, reading, listening to music, practicing medication) had lower levels of vicarious trauma, and nurses with negative coping (e.g., avoidance, medication misuse, alcohol and substance use) had significantly higher vicarious trauma levels (Piras et al., 2024). Nevertheless, though vicarious traumatization can

impact nurses' cognitive schemas and overwhelm them with their patients' trauma, the research conversely suggested it could also result in personal and professional growth and job satisfaction (Wu et al., 2024). Consequently, recommended directions for future research include investigating different contexts of vicarious trauma (Wu et al., 2024) and organizational strategies to improve well-being (Piras et al., 2024).

Mental Health Practitioners' Vicarious Trauma

Much like other healthcare professionals (Bakhshi et al., 2021; Middleton et al., 2022; Miller Reed et al., 2023; Morabito et al., 2021; Ortner, 2024; Rinfrette et al., 2021; Simms et al., 2021; Smith et al., 2023; Suo et al., 2022; Wallace & County, 2024; Zwisohn et al., 2019), mental health service providers are susceptible to vicarious traumatization through their repeated exposure to their clients' traumatic material (Aafjes-van Doorn et al., 2020; Barre et al., 2024; Charura, 2024; Foreman, 2018; Gaboury & Kimber, 2023; Halevi & Idisis, 2018; Helpingstine et al., 2021; Kounenou et al., 2023; Leung et al., 2023; McNeillie & Rose, 2021; Méndez-Fernández et al., 2022; Molnar et al., 2020; Mustafa et al., 2020; Ortner, 2024; Padmanabhanunni & Gqomfa, 2022; Rinfrette et al., 2021; Roberts et al., 2022; Salvilla & Bedoria, 2021; Sutton et al., 2022; Tsouvelas et al., 2029; Yu et al., 2023). Quantitative research during the COVID-19 pandemic found psychotherapists experienced moderate levels of vicarious trauma on average, and approximately 15% reported high vicarious trauma levels (Aafjes-van Doorn et al., 2020). The literature has highlighted several factors that may contribute to mental health clinicians' vicarious traumatization, such as research finding social workers' vicarious trauma during the COVID-19 outbreak in China had a negative relationship with government support—with compassion fatigue serving a fully mediating role—while stronger professional identity had an unexpected positive correlation with vicarious trauma (Yu et al.,

2023). Therapists' high levels of vicarious trauma have also been associated with younger age, less clinical experience, and aversive online treatment experiences during the pandemic (Aafjes-van Doorn et al., 2020). These findings offer key insights into factors associated with mental health professionals' vicarious traumatization, yet additional research is encouraged to examine other mediating mechanisms in their vicarious trauma development, especially as COVID-19 may be less influential in future studies' results (Aafjes-van Doorn et al., 2020; Yu et al., 2023).

Furthermore, vicarious trauma has been found to impact mental health service providers working in diverse contexts (Charura, 2024; Padmanabhanunni & Gqomfa, 2022; Roberts et al., 2022). Aligning with vicarious trauma research on refugee mental health interpreters (Simms et al., 2021), phenomenological exploration of psychotherapists treating refugees and asylum seekers who have been tortured found these practitioners often experienced significant emotional distress, perceived the world as unsafe, and identified challenges in their personal and intimate relationships (Charura, 2024). Therapists of tortured refugees and asylum seekers frequently engaged in activities conflicting with their professional role expectations, which could have also contributed to their vicarious trauma and burnout (Charura, 2024). Likewise, an interpretive phenomenological analysis of South African female psychologists treating sexual assault survivors revealed these practitioners may feel helplessness, self-blame, survivor's guilt, intrusive re-experiencing of their clients' trauma, greater vulnerability to sexual assault themselves, increased mistrust of men, and hypervigilance for their daughters' safety (Padmanabhanunni & Gqomfa, 2022). Fly-in and fly-out mental health practitioners serving Inuit communities with high trauma rates are similarly susceptible to vicarious traumatization, often acknowledging reduced self-capacities, feelings of overwhelm, and exhaustion from their work (Roberts et al., 2022). However, calls for future vicarious trauma research with broader and

larger samples were made (Charura, 2024; Padmanabhanunni & Gqomfa, 2022; Roberts et al., 2022), which could further clarify how different environments impact clinicians.

Mental health practitioners specializing in child welfare and protection (Molnar et al., 2020), art therapy (Ortner, 2024), and treatment for commercial sexual exploitation survivors (Helpingstine et al., 2021) have also evidenced vicarious traumatization despite their diverse occupational settings. Child welfare counselors and other child protection workers are at risk for vicarious trauma due to their exposure to the trauma narratives of those they serve, with greater encounters with indirect trauma, disturbing media, and direct trauma experiences associated with higher vicarious trauma levels (Molnar et al., 2020). These professionals' vicarious traumatization can manifest as PTSD, poorer occupational functioning, and impaired interpersonal relationships (Molnar et al., 2020). A case study on a trainee art therapist in a forensic inpatient mental health clinic further found the participant's vicarious trauma presented as hypervigilance, dissociation, and re-enactment of previous traumatic memories (Ortner, 2024). Other qualitative research on service providers for victims of commercial sexual exploitation indicated these practitioners experienced anxious and depressed moods, nightmares, and somatic symptoms (e.g., headaches, insomnia, poor health) associated with their vicarious trauma exposure (Helpingstine et al., 2021). The literature thereby highlighted how therapists in various settings may become vicariously traumatized (Charura, 2024; Molnar et al., 2020; Ortner, 2024; Padmanabhanunni & Gqomfa, 2022; Roberts et al., 2022; Helpingstine et al., 2021), yet additional research on other risk and protective factors for therapists' vicarious trauma was encouraged (Molnar et al., 2020).

Therapists' Personal Trauma History

One substantial predictor of mental health professionals' vicarious traumatization may be their prior experience of direct trauma (Gaboury & Kimber, 2023; Leung et al., 2022; Molnar et al., 2020). Previous trauma experiences are common among mental health service providers (Gaboury & Kimber, 2023; Helpingstine et al., 2021; Keesler, 2018; Leung et al., 2022; Ortner, 2024; Rinfrette et al., 2021)—often disproportionately higher than the general population and other vocations (Keesler, 2018; Leung et al., 2022)—and many counselors cite their early traumatic experiences as motivators for their chosen careers (Leung et al., 2022; Rinfrette et al., 2021). Nonetheless, recent research has established a positive relationship between mental health workers' personal trauma histories and their development of vicarious traumatization (Leung et al., 2022; Molnar et al., 2020). In particular, the prevalence of childhood maltreatment is high among mental health clinicians—especially emotional abuse and neglect—and has also been associated with an increased risk of practitioners' vicarious trauma (Gaboury & Kimber, 2023). Therapists with child maltreatment histories frequently experienced the psychological consequences of vicarious trauma, including altered worldviews, disruptions in their cognitive schemas, and occupational burnout (Gaboury & Kimber, 2023). Conversely, research on social work students' adverse childhood experiences and vicarious trauma revealed adverse childhood experiences were initially associated with avoidance-based trauma responses but had no correlations to any other secondary trauma outcomes at the post-test measurements following their internships' conclusion (Rinfrette et al., 2021). Further quantitative vicarious trauma research on risk factors for vicarious trauma (Gaboury & Kimber, 2023; Rinfrette et al., 2021), with clear and consistent definitions of the construct (Leung et al., 2022), was thusly suggested.

Brain Structure and Neurological Functioning

In addition to the emotional and psychological symptoms reported by mental health practitioners experiencing vicarious trauma (Charura, 2024; Molnar et al., 2020; Ortner, 2024; Padmanabhanunni & Gqomfa, 2022; Roberts et al., 2022; Helpingstine et al., 2021), research has found vicarious trauma may be identified by brain structure and neurological functioning changes (Isobel & Angus-Leppan, 2018; Liu et al., 2024; Suo et al., 2022; Zwisohn et al., 2019). Aligning with previous studies exemplifying how directly experiencing traumatic events may influence brain development and neurological functioning (Akiki et al., 2017; Bremner, 2006; Prajjwal et al., 2022; Zhu et al., 2022; Zotev et al., 2018), indirect trauma exposure may comparably affect brain physiology (Isobel & Angus-Leppan, 2018; Liu et al., 2024; Suo et al., 2022; Zwisohn et al., 2019). Vicarious traumatization related to COVID-19 was shown to potentially influence the functional connectome of the brain's default mode, fronto-parietal, salience, medial frontal, and motor networks (Suo et al., 2022) as well as increase gray matter volume in the right dorsolateral prefrontal cortex and reduce resting-state functional connectivity between the right dorsolateral prefrontal cortex and precuneus (Liu et al., 2024). Public service lawyers recurrently subjected to their clients' traumas may have similar neurological responses from their chronic exposure as those directly experiencing acute traumatic events (Zwisohn et al., 2019). Correspondingly, psychiatrists may experience over-activation of the sympathetic nervous system in response to their patients' traumatic material, and their neuroendocrine, autonomic, and limbic systems may repeatedly activate akin to when faced with a threat (Isobel & Angus-Leppan, 2018). Therefore, recent neuropsychological research has demonstrated possible links between structural brain changes and vicarious trauma (Liu et al., 2024; Suo et al., 2022), though additional quantitative studies on vicarious trauma among other populations—

especially groups highly vulnerable to vicarious traumatization—were recommended (Suo et al., 2022).

Compassion Fatigue and Burnout

The literature has illustrated significant associations between vicarious trauma, compassion fatigue, and burnout (Bhagwagar, 2022; Helpingstine et al., 2021; Kounenou et al., 2023; Leung et al., 2023; Sutton et al., 2022; Yu et al., 2023). While some researchers noted compassion fatigue and vicarious trauma have been discussed as synonymous constructs (Charura, 2024; Wallace & County, 2024), others have identified them as distinct phenomena (Kercher & Gossage, 2024; Roberts et al., 2022; Wu et al., 2024; Yu et al., 2023). Compassion fatigue has consequently been defined as the emotional and physical exhaustion attributed to empathizing with the suffering of others, leading to a reduced capacity for empathy and compassion. Compassion fatigue has also been conceptualized as a combination of secondary traumatic stress and burnout (Halamová et al., 2024; Kercher & Gossage, 2024)—the latter initially described as a reaction to prolonged involvement in emotionally demanding situations, leading to symptoms such as physical and mental exhaustion, a sense of inefficacy, and detachment from colleagues and clients (Freudenberger, 1974).

Like vicarious trauma (Aafjes-van Doorn et al., 2020; Barre et al., 2024; Charura, 2024; Foreman, 2018; Gaboury & Kimber, 2023; Halevi & Idisis, 2018; Helpingstine et al., 2021; Kounenou et al., 2023; Leung et al., 2023; McNeillie & Rose, 2021; Méndez-Fernández et al., 2022; Molnar et al., 2020; Mustafa et al., 2020; Ortner, 2024; Padmanabhanunni & Gqomfa, 2022; Rinfrette et al., 2021; Roberts et al., 2022; Salvilla & Bedoria, 2021; Sutton et al., 2022; Tsouvelas et al., 2029; Yu et al., 2023), compassion fatigue may be a substantial occupational risk for mental health practitioners (Bhagwagar, 2022; Kercher & Gossage, 2024; Norrman

Harling et al., 2020; Ratzon et al., 2022; Sutton et al., 2022; Towey-Swift & Whittington, 2021; Yu et al., 2023). Compassion fatigue has been considered particularly detrimental to psychological service providers, as these helping professionals depend on their compassion for motivation to deliver satisfactory patient care (Norrman Harling et al., 2020; Sutton et al., 2022). New Zealander psychologists during the COVID-19 pandemic were found to have high rates of compassion fatigue, with significant risk factors including COVID-19-related stress, anxiety symptoms, and treating at-risk clients (Kercher & Gossage, 2024). High levels of compassion fatigue—along with secondary traumatic stress and vicarious trauma—among Indian mental health professionals have indicated a potentially greater need for the community’s systemic care (Bhagwagar, 2022). Complex and emotionally straining patient cases, ethical stress, and the logistical burden of care were reportedly linked with psychologists’ compassion fatigue (Norrman Harling et al., 2020). Community mental health teams’ higher compassion fatigue may be associated with lower workload congruence (i.e., the practitioner perceives the workload to be a manageable amount), suggesting the demands of their jobs place them at greater vulnerability (Towey-Swift & Whittington, 2021). Consequently, the literature exemplified compassion fatigue as an occupational hazard for mental health service providers (Bhagwagar, 2022; Kercher & Gossage, 2024; Norrman Harling et al., 2020; Ratzon et al., 2022; Sutton et al., 2022; Towey-Swift & Whittington, 2021; Yu et al., 2023).

Moreover, mental health clinicians’ compassion fatigue (Yu et al., 2023) and burnout (Kounenou et al., 2023; Helpingstine et al., 2021) may be correlated with their vicarious trauma. Compassion fatigue among Chinese social workers during the COVID-19 pandemic had a positive relationship with their vicarious trauma levels and played a fully mediating role in the effect of government and professional support on vicarious trauma (Yu et al., 2023). Greek

mental health practitioners' empathy and vicarious trauma were also found to be positively related to their levels of burnout, with vicarious trauma having a more significant impact on burnout (Kounenou et al., 2023). Similarly, qualitative research has indicated commercial sexual exploitation victim service providers often experience instances of both burnout and vicarious traumatization (Helpingstine et al., 2021). Burnout was comparably found to have a significant positive association with secondary trauma among Israeli social workers during the first COVID-19 wave (Ratzon et al., 2022). Nevertheless, although recent studies highlighted the compassion fatigue and burnout risks for vicariously traumatized mental health service providers (Kounenou et al., 2023; Helpingstine et al., 2021; Yu et al., 2023), burnout has received more attention in the literature than indirect trauma, leading to a call for further investigation into the latter (Bhagwagar, 2022).

Secondary Traumatic Stress

Analogous to compassion fatigue and burnout (Charura, 2024; Wallace & County, 2024), the construct of secondary traumatic stress has been used synonymously with vicarious trauma in the literature (Molnar et al., 2020). However, much of the current research acknowledged the historically interchangeable use of the terminology yet noted conceptual differences (Bhagwagar, 2022; Leung et al., 2023; Penix et al., 2020; Rayner et al., 2020; Sutton et al., 2022; Yu et al., 2023). Secondary traumatic stress was initially defined as an acute stress response with symptomatic parallels to PTSD (e.g., re-experiencing a traumatic event, avoidance of trauma triggers, and hyperarousal) frequently experienced by helping professionals exposed to indirect trauma (Figley, 1995), thereby divergent from the long-term cognitive schema changes associated with vicarious traumatization (McCann & Pearlman, 1990b, 1992). Many recent studies have thusly examined secondary traumatic stress per the phenomenon's original distinct

definition (Bhagwagar, 2022; Penix et al., 2020; Ratzon et al., 2022; Rayner et al., 2020; Sutton et al., 2022; Towey-Swift & Whittington, 2021; Vukčević Marković & Živanović, 2022).

Much like vicarious trauma (Aafjes-van Doorn et al., 2020; Barre et al., 2024; Charura, 2024; Foreman, 2018; Gaboury & Kimber, 2023; Halevi & Idisis, 2018; Helpingstine et al., 2021; Kounenou et al., 2023; Leung et al., 2023; McNeillie & Rose, 2021; Méndez-Fernández et al., 2022; Molnar et al., 2020; Mustafa et al., 2020; Ortner, 2024; Padmanabhanunni & Gqomfa, 2022; Rinfrette et al., 2021; Roberts et al., 2022; Salvilla & Bedoria, 2021; Sutton et al., 2022; Tsouvelas et al., 2029; Yu et al., 2023), mental health clinicians exposed to their clients' traumatic material are susceptible to developing secondary traumatic stress (Bhagwagar, 2022; Penix et al., 2020; Ratzon et al., 2022; Rayner et al., 2020; Sutton et al., 2022; Towey-Swift & Whittington, 2021; Vukčević Marković & Živanović, 2022). Secondary traumatic stress is prevalent among mental health professionals, with some studies finding approximately 30% of social workers and psychologists (Rayner et al., 2020) and 27% of community mental health teams (Towey-Swift & Whittington, 2021) met secondary traumatic stress criteria, and other research reflecting moderate secondary traumatic stress levels among psychiatrists, with 62% of practitioners scoring in the top quartile of scores (Bhagwagar, 2022). Additionally, similar to vicarious trauma (Kounenou et al., 2023), burnout was positively related to secondary traumatic stress among clinicians treating traumatized military populations (Penix et al., 2020) and Israeli social workers during the COVID-19 pandemic (Ratzon et al., 2022). The literature presented mixed findings on the role of trauma training and peer support in mitigating secondary traumatic stress, though quality—but not quantity—of clinical supervision may be associated with lower secondary traumatic stress levels (Sutton et al., 2022; Vukčević Marković & Živanović, 2022). Consequently, therapists' indirect trauma exposure places them at risk for both secondary

traumatic stress (Bhagwagar, 2022; Penix et al., 2020; Ratzon et al., 2022; Rayner et al., 2020; Sutton et al., 2022; Towey-Swift & Whittington, 2021; Vukčević Marković & Živanović, 2022) and vicarious trauma (Aafjes-van Doorn et al., 2020; Barre et al., 2024; Charura, 2024; Foreman, 2018; Gaboury & Kimber, 2023; Halevi & Idisis, 2018; Helpingstine et al., 2021; Kounenou et al., 2023; Leung et al., 2023; McNeillie & Rose, 2021; Méndez-Fernández et al., 2022; Molnar et al., 2020; Mustafa et al., 2020; Ortner, 2024; Padmanabhanunni & Gqomfa, 2022; Rinfrette et al., 2021; Roberts et al., 2022; Salvilla & Bedoria, 2021; Sutton et al., 2022; Tsouvelas et al., 2029; Yu et al., 2023), with further research on indirect trauma among mental health professionals encouraged (Bhagwagar, 2022), including on the influence of organizational factors (Sutton et al., 2022), such as the trauma practitioners have on their caseloads (Rayner et al., 2020).

Vicarious Trauma Mitigation

Although vicarious trauma may impact mental health clinicians' psychological and emotional well-being (Aafjes-van Doorn et al., 2020; Barre et al., 2024; Charura, 2024; Foreman, 2018; Gaboury & Kimber, 2023; Halevi & Idisis, 2018; Helpingstine et al., 2021; Kounenou et al., 2023; Leung et al., 2023; McNeillie & Rose, 2021; Méndez-Fernández et al., 2022; Molnar et al., 2020; Mustafa et al., 2020; Ortner, 2024; Padmanabhanunni & Gqomfa, 2022; Rinfrette et al., 2021; Roberts et al., 2022; Salvilla & Bedoria, 2021; Sutton et al., 2022; Tsouvelas et al., 2029; Yu et al., 2023), the literature highlighted several methods to potentially prevent or mitigate vicarious traumatization (Halevi & Idisis, 2018; Mustafa et al., 2020; Ortner, 2024; Salvilla & Bedoria, 2021; Tsouvelas et al., 2019). A strong negative correlation between vicarious traumatization and differentiation of self (i.e., an individual's capacity to balance their sense of self with togetherness with others) emphasized how developing adaptive intrapersonal

and interpersonal differentiation may minimize vicarious trauma risk (Halevi & Idisis, 2018). Likewise, as vicarious trauma levels may be positively related to poorer family relationships, the latter's positive correlation with emotion-focused coping strategies and negative correlation with problem-focused coping indicated coping skills training may reduce the influence of vicarious trauma on healthcare professionals' maladaptive family functioning (Mustafa et al., 2020). Consequently, the research suggested practitioners may benefit from tools to improve their interpersonal functioning and decrease their vicarious trauma predisposition (Halevi & Idisis, 2018; Mustafa et al., 2020).

Furthermore, the literature recognized various approaches mental health workers may employ to cope with vicarious trauma (Charura, 2024; Helpingstine et al., 2021; Méndez-Fernández et al., 2022; Padmanabhanunni & Gqomfa, 2022; Salvilla & Bedoria, 2021). Service providers for commercial sexual exploitation victims reported self-care, support from family and friends, and spiritual practices helped mitigate vicarious trauma (Helpingstine et al., 2021), while therapists treating tortured refugees and asylum seekers similarly noted regular debriefing, personal hobbies, and familial activities as adaptive coping strategies (Charura, 2024). Qualitative research has also shown mental health professionals in the Philippines coped with vicarious trauma by recognizing symptoms, maintaining healthy relationships, regulating their thought processes, and practicing their faith (Salvilla & Bedoria, 2021). Comparably, social workers' recovery experiences, such as relaxation activities and psychological detachment from their work, were suggested to protect them from vicarious trauma (Méndez-Fernández et al., 2022). Psychologists for sexual assault survivors cited recurrent adaptive re-appraisals of their jobs (e.g., viewing their work as healing) and their personal psychotherapy to alleviate vicarious trauma (Padmanabhanunni & Gqomfa, 2022). Actively receiving psychotherapy has been

positively associated with mental health practitioners' higher vicarious trauma levels, yet this relationship may be attributed to vicariously traumatized individuals' greater likelihood to seek treatment (Halevi & Idisis, 2018). Therefore, therapists vicariously exposed to their clients' traumas may reduce the influence on their mental and emotional health by engaging in adaptive self-care and social activities (Charura, 2024; Helpingstine et al., 2021; Méndez-Fernández et al., 2022; Padmanabhanunni & Gqomfa, 2022; Salvilla & Bedoria, 2021).

A small body of research has explored therapeutic treatments for mental health clinicians' vicarious trauma (Ortner, 2024; Tsouvelas et al., 2019). For example, one single-case study found creative art interventions helped a trainee art therapist manage dissociative defense mechanisms and somatic symptoms of vicarious trauma (Ortner, 2024). Other research examined a vicarious trauma prevention protocol based on an eye movement desensitization and reprocessing (EMDR) group therapy approach for mental health professionals treating children with abuse and neglect histories and found the EMDR model was associated with decreased hyperarousal, avoidance, intrusion, subjective distress, and negative workplace affect (Tsouvelas et al., 2019). While these findings' applications are limited by the studies' small samples and relatively narrow scopes, they represented potentially efficacious clinical interventions for therapists' vicarious traumatization (Ortner, 2024; Tsouvelas et al., 2019).

Governmental (Yu et al., 2023) and organizational (Helpingstine et al., 2021; Méndez-Fernández et al., 2022; Padmanabhanunni & Gqomfa, 2022; Sutton et al., 2022) supports may also help moderate therapists' vicarious trauma. Government supports (e.g., tangible backing such as funding and legal auspices) were found to have a negative direct effect on Chinese social workers' vicarious trauma during the COVID-19 pandemic (Yu et al., 2023). Organizational factors like supportive clinical supervision and peer support networks have been recommended

to mitigate mental health professionals' vicarious trauma (Sutton et al., 2022), with psychotherapists treating sexual trauma identifying collegial support as particularly critical to managing vicarious traumatization (Helpingstine et al., 2021; Padmanabhanunni & Gqomfa, 2022). Congruently, organizational support from social workers' colleagues and supervisors—including collaborative efforts and interest in their welfare—may protect them from vicarious trauma (Méndez-Fernández et al., 2022). Thus, government (Yu et al., 2023) and organizational (Helpingstine et al., 2021; Méndez-Fernández et al., 2022; Padmanabhanunni & Gqomfa, 2022; Sutton et al., 2022) supports may play key roles in minimizing mental health service providers' vicarious trauma development, though additional research on other vicarious trauma risk and protective factors was encouraged (Méndez-Fernández et al., 2022; Sutton et al., 2022).

Vicarious Post-Traumatic Growth

Mental health professionals treating traumatized clients may experience both the detrimental symptoms of vicarious trauma and the constructive effects of post-traumatic growth (Barre et al., 2024; Jiang et al., 2023; McNeillie & Rose, 2021). Vicarious post-traumatic growth has been defined as the cognitive and emotional responses to secondary trauma exposure that promote positive perceptual changes, such as learning lessons and finding meaning from traumatic experiences (Barre et al., 2024), appreciating resilience and enhanced social skills (Jiang et al. 2023), and feeling satisfaction from witnessing patients' therapeutic successes (McNeillie & Rose, 2021). Victim support professionals' vicarious post-traumatic growth has been linked to their vicarious trauma, as vicarious trauma scores have positively correlated with post-traumatic growth measures (Barre et al., 2024). Social support was shown to indirectly influence psychological hotline counselors' vicarious post-traumatic growth by adaptively mediating their resilience and cognitive re-appraisals (Jiang et al., 2023). Post-traumatic growth

may also be associated with therapists' perception of their work as rewarding, increasing their confidence and plateauing their self-doubt (McNeillie & Rose, 2021). Thus, the literature indicated mental health clinicians' vicarious trauma exposure might have nuanced and multidimensional implications for their cognitive schemas and overall well-being (Barre et al., 2024; Jiang et al., 2023; McNeillie & Rose, 2021).

Caseload Management

The literature has further addressed how mental health clinicians' vicarious trauma may be mitigated by ensuring their caseloads are smaller and balanced (Foreman, 2018; Méndez-Fernández et al., 2022; Molnar et al., 2020; Padmanabhanunni & Gqomfa, 2022; Rayner et al., 2020; Roberts et al., 2022; Sutton et al., 2022). Recent research determined social workers' trauma caseloads and overall workloads positively predicted their vicarious trauma (Méndez-Fernández et al., 2022). Moreover, workloads and trauma caseloads were negatively associated with social workers' recovery experiences and organizational support, potentially increasing the likelihood of their vicarious trauma development (Méndez-Fernández et al., 2022). A participatory action study on fly-in, fly-out mental health service providers in Inuit communities similarly concluded that practitioners' greater trauma exposure (e.g., serving a large number of clients in a short period, seeing as many clients as possible while in a community) may increase vicarious trauma risk, subsequently recommending reduced caseloads and decreased time spent in traumatized communities (Roberts et al., 2022). Thus, as the current literature noted counselors with smaller caseloads might be less likely to experience vicarious trauma symptoms (Roberts et al., 2022; Sutton et al., 2022), and diversifying caseloads by decreasing the number of traumatized patients treated per provider could also alleviate vicarious trauma's impact

(Padmanabhanunni & Gqomfa, 2022; Roberts et al., 2022; Sutton et al., 2022), caseload size and composition may be critical factors to consider for vicarious trauma mitigation.

Nonetheless, research findings on caseload and vicarious trauma have been inconsistent (Foreman, 2018; Molnar et al., 2020; Rayner et al., 2020). A recent systemic review had mixed results, with some analyzed studies suggesting greater indirect trauma exposure was correlated with higher vicarious trauma levels and others that practitioners' number of clients, interviews, or hours spent working had no significant association (Molnar et al., 2020). Personal trauma histories among therapists were instead proposed to have a greater impact on their vicarious traumatization risk than their caseload sizes and composition, as another study did not find a statistically significant correlation with the latter (Rayner et al., 2020). Greater exposure to clients' trauma material was also found not to influence counselors' wellness levels, and counselors with high levels of wellness along with client trauma exposure had significantly lower levels of vicarious trauma (Foreman, 2018). Furthermore, average vicarious trauma scores suggested that many counselors had their psychological needs challenged but did not have cognitive schemas about their self-competence, trustworthiness of others, or the safety of the world altered (Foreman, 2018). Hence, given the discrepancies in the effect of caseloads on mental health workers' vicarious trauma (Foreman, 2018; Méndez-Fernández et al., 2022; Molnar et al., 2020; Padmanabhanunni & Gqomfa, 2022; Rayner et al., 2020; Roberts et al., 2022; Sutton et al., 2022), additional examination of the potential relationship may offer vital insights.

Mental health practitioners' caseloads have also been investigated for their impact on other occupational hazards associated with vicarious trauma with divergent findings (Bhagwagar, 2022; Helpingstine et al., 2021; Kercher & Gossage, 2024; Penix et al., 2020;

Towey-Swift & Whittington, 2021). For instance, high and complex caseloads were reportedly associated with burnout among service providers for victims of commercial sexual exploitation (Helpingstine et al., 2021), yet total caseload size was not associated with secondary traumatic stress among clinicians treating military populations—rather, a greater trauma caseload was linked with more secondary traumatic stress symptoms (Penix et al., 2020). Additionally, an exploration of risk factors for New Zealander psychologists' compassion fatigue concluded manageable caseloads may promote the sustainability of the psychology workforce (Kercher & Gossage, 2024). Perceptions of a manageable workload in community mental health teams were significantly associated with reduced secondary traumatic stress and compassion fatigue, but workload scores were not related to caseload sizes themselves (Towey-Swift & Whittington, 2021). Uneven distributions of caseloads were proposed to risk Indian mental health professionals' well-being, though a knowledge gap on whether a higher caseload ratio of trauma survivors may affect practitioners' secondary trauma was highlighted (Bhagwagar, 2022). Therefore, more research on mental health clinicians' caseloads and their relationship to vicarious trauma could offer a deeper understanding of the occupational factors affecting the phenomenon.

Community Mental Health Services

Community mental health centers offer treatment for individuals with mental health conditions in their communities as an alternative to private practice or hospital settings (Drake & Latimer, 2012; Rosenberg & Rosenberg, 2017; World Health Organization [WHO], 2021; Yeager et al., 2013). Community mental health services were developed as an accessible and holistic approach to mental health treatment by integrating services into the communities of individuals with psychiatric disorders and psychosocial disabilities (WHO, 2021). Consequently,

community mental health clinics often serve disenfranchised, low-income, ethnically diverse populations (Motamedi et al., 2023; Pincus et al., 2022; Rosenberg & Rosenberg, 2017; Sucich et al., 2023). Community mental health centers thereby aim to treat consumers in proximity to their residences outside of psychiatric asylums or other institutional settings historically housing those with chronic mental health conditions (WHO, 2021).

History of Community Mental Health

In the United States, the community mental health movement was largely marked by President John F. Kennedy signing the Community Mental Health Act in 1963, followed by the establishment of community mental health centers in cities throughout the country (Drake & Latimer, 2012; Hamm et al., 2020; Rosenberg & Rosenberg, 2017; Yeager et al., 2013). The movement was significantly impacted by deinstitutionalization efforts to improve the livelihood of those deemed severely mentally ill (Yeager et al., 2013). Persons with mental illness were historically viewed as inmates, housed in jails and prison-like environments, and treated comparably to criminals (Rosenberg & Rosenberg, 2017). These individuals later assumed the roles of hospital patients, facing treatments including lobotomies, sterilization, heavy medication doses, and electro-shock therapy, and they often remained institutionalized their entire lives with pessimistic prognoses (Hamm et al., 2020; Rosenberg & Rosenberg, 2017).

Deinstitutionalization proponents inevitably perceived psychiatric asylums as overcrowded, dehumanizing, and obsolete, and alternative therapeutic communities proposed in the 1950s were seen as a more moral approach (Yeager et al., 2013).

Other factors contributing to the deinstitutionalization era included psychotropic medication innovations (Yeager et al., 2013) and economic impetuses (Rosenberg & Rosenberg, 2017). The discovery and development of the first antipsychotic medications resulted in

numerous patients considered appropriate for discharge from state hospitals, with hospitalized populations dropping from approximately 600,000 to fewer than 150,000 (Drake & Latimer, 2012; Yeager et al., 2013). Deinstitutionalization initiatives also sought to create financial cost savings for the states (Rosenberg & Rosenberg, 2017). Nevertheless, financial and programmatic resources for those released from psychiatric institutions often did not follow them into the community, frequently leading to hospitalization recidivism and arguably increasing homelessness and imprisonment (Rosenberg & Rosenberg, 2017). Thus, community mental health was hailed by President Kennedy as a bold new treatment approach to address the country's mental health needs (Rosenberg & Rosenberg, 2017), and the Community Mental Health Act prompted increased backing for community-based services and reduced funding for public mental hospitals (Hamm et al., 2020).

The development of government-funded Medicare and Medicaid programs in 1965 allowed individuals 65 and older, with certain disabilities, and limited income, respectively, to access healthcare services, further facilitating the transition from large psychiatric hospitals to community-based centers (Yeager et al., 2013; Hamm et al., 2020). Within eight years, 398 community mental health clinics began operating across the United States (Hamm et al., 2020). By 2016, 2,636 community mental health centers were registered in the National Directory of Mental Health Treatment Facilities, employed by a mix of mental health professionals and paraprofessionals, including counselors, psychologists, occupational therapists, social workers, psychiatrists, nurses, case managers, and addiction specialists (Hamm et al., 2020). Hence, these initiatives promoted health as an attainable outcome for individuals with mental health conditions via greater community connection and less restrictive care environments (Hamm et al., 2020).

However, the community mental health centers that arose in the 1960s initially assumed a broad agenda, aspiring to assuage all mental health problems through both prevention and treatment (Drake & Latimer, 2012). By the 1970s, after these ambitions proved difficult, community mental health programs narrowed their focus on facilitating the deinstitutionalization of individuals with long-term and disabling psychiatric disorders by offering mental health treatment to the population (Drake & Latimer, 2012). This decade coincided with the mental health consumer movement—a civil rights entity for those with chronic mental health conditions concerned they had been oppressed, incarcerated, overmedicated, and coerced for many years in American mental health facilities, promoting client self-determination and working against forced treatment (Rosenberg & Rosenberg, 2017). The mental health consumer movement posited recovery from chronic psychiatric conditions was possible and could include a life of independence rather than one of low expectations and minimal achievements (Rosenberg & Rosenberg, 2017). Consequently, recovery-based models grew in the 1980s and 1990s, influencing community mental health care to encompass goals toward education, employment, healthy relationships, independent housing, and community engagement (Drake & Latimer, 2012; WHO, 2021).

Consumer-centered, recovery-focused treatment orientations remain key for community mental health practices (Rosenberg & Rosenberg, 2017; Towey-Swift & Whittington, 2021; WHO, 2021). Community mental health clinics continue to serve clients with persistent mental health disorders and psychosocial disabilities via various treatments, including individual and group counseling and psychotherapy, pharmacotherapy, peer support, case management, and crisis intervention (WHO, 2021). Community mental health centers can also promote consumers' community inclusion through vocational training, transitional and supported employment

programs, housing services, supported education, social protection benefits, and social and recreation programs (WHO, 2021). Hence, community mental health has often moved toward a holistic approach with a range of mental health services and functions to improve and maintain the well-being of their clientele with chronic mental health conditions (Rosenberg & Rosenberg, 2017; WHO, 2021).

Community Mental Health Consumers' Trauma

Community mental health clients may have more significant and complex trauma histories than the general population (Lu et al., 2022; Motamedi et al., 2023; Sucich et al., 2023). Research indicated many community mental health consumers have had adverse childhood experiences, and over 40% reported a history of four or more, significantly greater than 16% found in the general population (Sucich et al., 2023). Emotional abuse, physical abuse, and emotional neglect were the most prevalent experiences among those with a greater number of traumatic childhood events, and having more adverse childhood experiences was associated with a greater number of co-occurring psychiatric disorders (Sucich et al., 2023). Convergent research findings have suggested trauma was community mental health clients' most common presenting problem, affecting 53% (Motamedi et al., 2023), while over 92% of community mental health consumers had experienced a traumatic event in their lifetimes (Lu et al., 2022). Therefore, the literature emphasized the substantial role trauma may play in community mental health treatment (Lu et al., 2022; Motamedi et al., 2023; Sucich et al., 2023).

Furthermore, the current research showed high rates of PTSD among community mental health patients (Lu et al., 2022; Pincus et al., 2022; Sucich et al., 2023). One study determined approximately half of patients at a New York City community mental health center had PTSD or a trauma-related diagnosis (Sucich et al., 2023), while another found 49.6% in three northeastern

states had probable or provisional PTSD (Lu et al., 2022), and a third suggested 58.2% of Philadelphia community mental health clients potentially had PTSD—significantly exceeding the national average of 8.3% (Pincus et al., 2022). Contrary to an initial hypothesis, 100% of the Philadelphia community mental health patients meeting PTSD diagnostic criteria were appropriately referred to trauma treatment (Pincus et al., 2022). Conversely, research on trauma among young adult public mental health consumers concluded only 15.1% positively screened for PTSD had the diagnosis documented (5.3% as a primary diagnosis and 9.8% as a secondary diagnosis), with bipolar and major depressive disorders more common and schizophrenia and schizoaffective disorders about equally as common primary diagnoses (Lu et al., 2023). Although the literature diverged on whether PTSD is under-diagnosed in community mental health (Lu et al., 2023; Pincus et al., 2022), the findings highlighted the prevalence of trauma among community mental health consumers (Lu et al., 2022, 2023; Motamedi et al., 2023; Pincus et al., 2022; Sucich et al., 2023), demonstrating community mental health clinicians' risk of being vicariously exposed to their clients' trauma.

Impact on Community Mental Health Clinicians. Community mental health clients' substantial and complex trauma histories (Motamedi et al., 2023; Pincus et al., 2022; Sucich et al., 2023) suggest their mental health providers could be affected by delivering trauma treatment (Last et al., 2021; Motamedi et al., 2023). Research on community mental health practitioners' emotional exhaustion and adaptation of evidence-based practices (EBPs) found that supportive program environments were associated with the effective augmentation of EBPs, while therapists' emotional exhaustion was a significant moderator (Motamedi et al., 2023). More emotionally exhausted community mental health therapists ineffectively reduced EBPs less often, and less emotionally exhausted therapists successfully augmented EBPs more often, when

their organizations reportedly used more EBP-specific implementation strategies—emphasizing the significant role of mental health providers’ emotional exhaustion in their clinical performance (Motamedi et al., 2023). Another study examining public mental health therapists’ implementation of a specific EBP, trauma-focused cognitive behavioral therapy (TF-CBT), found therapists often exclude the trauma narrative phase of the TF-CBT intervention, partly attributed to reported feelings of anxiety, distress, overwhelm, and fear about their clients’ possible trauma narratives (Last et al., 2021). Although these studies did not specifically explore the construct of vicarious trauma, they revealed the potential impact of trauma work on community mental health therapists and the implications for their clients’ treatment quality (Last et al., 2021; Motamedi et al., 2023).

Additionally, current research has shown how community mental health workers may be vulnerable to the related phenomena of compassion fatigue, burnout, and secondary traumatic stress (Chang & Shin, 2021; Moore et al., 2022; Sklar et al., 2021; Towey-Swift & Whittington, 2021). One recent study on community mental health teams identified 32% scored above the cutoff (i.e., above the 75th percentile based on normative data) on a burnout measure and 27% on a secondary traumatic stress measure, with only 25% and 21% scoring below the 25th percentile on these measures, respectively (Towey-Swift & Whittington, 2021). Community mental health service providers may experience especially high burnout rates when faced with work changes, which were substantial during the COVID-19 pandemic (Sklar et al., 2021). Work changes were found to have a significant indirect effect on community mental health practitioners’ turnover intentions via their burnout levels (Sklar et al., 2021), and high staff turnover—along with burnout and low morale—has been recognized as a threat to community mental health organizations’ sustainability (Moore et al., 2022). Compassion fatigue and satisfaction were

shown to be significant predictors of community mental health professionals' burnout, and occupational stress and experience with aggressive behaviors in the workplace through maladaptive emotion regulation and compassion satisfaction had indirect pathways associated with burnout (Chang & Shin, 2021). Community mental health researchers called for future study of the characteristics specific to different jobs within the field (Chang & Shin, 2021), organizational variables affecting community mental health providers (Towey-Swift & Whittington, 2021), and other factors affecting the sustainability of community mental health assets (Moore et al., 2022) to further assess the psychological impact of engaging in community mental health work, particularly with larger quantitative research samples outside of the COVID-19 context (Sklar et al., 2021).

Although the literature explored how community mental health work can affect practitioners' mental and emotional health (Chang & Shin, 2021; Moore et al., 2022; Sklar et al., 2021; Towey-Swift & Whittington, 2021) and their delivery of trauma interventions (Last et al., 2021; Motamedi et al., 2023), minimal research has examined community mental health clinicians' vicarious trauma. As compassion fatigue and burnout have been associated with vicarious trauma (Bhagwagar, 2022; Helpingstine et al., 2021; Kounenou et al., 2023; Leung et al., 2023; Sutton et al., 2022; Yu et al., 2023)—often used as synonymous variables (Charura, 2024; Wallace & County, 2024) despite their distinct characteristics (Kercher & Gossage, 2024; Roberts et al., 2022; Wu et al., 2024; Yu et al., 2023)—the pervasiveness of the former phenomena among community mental health clinicians (Chang & Shin, 2021; Moore et al., 2022; Sklar et al., 2021; Towey-Swift & Whittington, 2021) suggests these practitioners may also experience high vicarious traumatization rates, yet there is a lack of studies assessing their vicarious trauma prevalence. Community mental health service providers frequently have larger

caseloads than other mental health professionals (Fukui et al., 2021; NASW, 2023), and some studies found larger caseloads pose a higher risk of vicarious trauma (Roberts et al., 2022; Sutton et al., 2022). Though the evidence on caseload size's relationship with vicarious trauma is mixed (Foreman, 2018; Molnar et al., 2020; Rayner et al., 2020), some researchers have recommended smaller caseloads for community mental health clinicians (Keiller et al., 2023). However, the current research on therapists' caseload composition is more consistent, reflecting the potential association between more trauma work on a caseload and higher vicarious trauma levels (Padmanabhanunni & Gqomfa, 2022; Roberts et al., 2022; Sutton et al., 2022), indicating how the high rates of trauma and PTSD among community mental health consumers (Lu et al., 2022, 2023; Motamedi et al., 2023; Pincus et al., 2022; Sucich et al., 2023) could place their treatment providers at greater risk for vicarious traumatization. Consequently, research evaluating vicarious traumatization rates among community mental health clinicians compared to therapists in other settings—along with how caseload sizes and diagnostic composition may mediate vicarious trauma levels—may provide critical insights to address a phenomenon affecting the well-being of practitioners (Aafjes-van Doorn et al., 2020; Barre et al., 2024; Charura, 2024; Foreman, 2018; Gaboury & Kimber, 2023; Halevi & Idisis, 2018; Helpingstine et al., 2021; Kounenou et al., 2023; Leung et al., 2023; McNeillie & Rose, 2021; Méndez-Fernández et al., 2022; Molnar et al., 2020; Mustafa et al., 2020; Ortner, 2024; Padmanabhanunni & Gqomfa, 2022; Rinfrette et al., 2021; Roberts et al., 2022; Salvilla & Bedoria, 2021; Sutton et al., 2022; Tsouvelas et al., 2029; Yu et al., 2023) and their clients' treatment quality (Gaboury & Kimber, 2022; Last et al., 2021; Molnar et al., 2020; Motamedi et al., 2023; Padmanabhanunni & Gqomfa, 2022).

Quality Evaluation of the Literature

Despite the significant contributions the reviewed literature offered to understand vicarious trauma and related constructs, multiple limitations should be acknowledged. Firstly, with the exception of a between-subjects study on Black Americans' vicarious trauma that randomly assigned participants to audiovisual, written, or imaginal exposure to police violence toward a Black man (Green et al., 2024), most of the studies discussed were not true experiments and thus can only describe associations with vicarious trauma and not draw fully causal conclusions. Other than a two-year within-subjects study on social work students' vicarious trauma and secondary traumatic stress (Rinfrette et al., 2021), minimal research was longitudinal, limiting conclusions on long-term vicarious trauma presentations. Additionally, aside from a single-case study on art therapy interventions (Ortner, 2024) and a one-group, pretest-posttest quasi-experiment on an EMDR group therapy approach for mental health professionals treating abused children (Tsouvelas et al., 2019), the literature lacked exploration of specific treatments for vicarious trauma. Hence, restrictions associated with the methodology and designs of the reviewed literature must be recognized to accurately assess greater conclusions drawn about various aspects of vicarious trauma.

Furthermore, while several qualitative studies provided nuanced details about their participants' experiences with vicarious trauma and associated constructs, the small samples inherent to most qualitative methods limited their findings' generalizability (Charura, 2024; Helpingstine et al., 2021; Last et al., 2021; McNeillie & Rose, 2021; Roberts et al., 2022; Salvilla & Bedoria, 2021; Simms et al., 2021; Smith et al., 2023; Wallace & County, 2024). Many of these qualitative studies also recognized how potential biases could have affected their findings, such as social desirability biases leading participants to minimize their vicarious trauma

or burnout experiences to avoid negative perceptions from the researchers (Helpingstine et al., 2021) or researcher biases causing the researchers' pre-existing ideas about vicarious trauma to impact their data interpretation (McNeillie & Rose, 2021; Smith et al., 2023). For example, McNeillie and Rose (2021) acknowledged how cognitive behavioral therapy as their preferred working model may have influenced their data synthesis, resulting in themes emphasizing the cognitive, emotional, behavioral, and physiological symptoms vicariously traumatized therapists experience upon marked changes to their schemata. Moreover, although Ortner (2024) did not explicitly identify biases, the single-case, self-as-subject approach risked the researcher's preconceived notions of vicarious trauma and art therapy interventions biasing the outcomes—partly contributing to why this research design has been historically criticized as scientifically inadequate, along with a lack of necessary controls and sufficient participants to generate meaningful findings (Davis, 2003). Hence, limitations to the evaluated studies' transferability and trustworthiness should be noted.

Regardless, the reviewed literature possessed many strengths. Several quantitative vicarious trauma studies utilized instruments with solid psychometric properties, such as Vrkleviski and Franklin's (2008) well-validated Vicarious Trauma Scale (Aafjes-van Doorn et al., 2020; Bakhshi et al., 2021; Kounenou et al., 2023; Méndez-Fernández et al., 2022; Newman et al., 2024; Yu et al., 2023), thereby improving the results' internal validity, reliability, and accuracy. Similarly, the reviewed qualitative studies implemented recommended data collection and analysis protocols to increase credibility, highlighting data saturation (Salvilla & Bedoria, 2021; Simms et al., 2021; Wallace & County, 2024), data triangulation (Charura, 2024; Helpingstine et al., 2021) and iterative thematic analyses (Charura, 2024; Last et al., 2021; Roberts et al., 2022; Simms et al., 2021; Wallace & County, 2024). Therefore, the reviewed

literature provided valuable insights into vicarious trauma, associated phenomena (e.g., compassion fatigue, post-traumatic growth), and community mental health services.

Summary

This literature review examined vicarious traumatization, primarily through the lens of McCann and Pearlman's (1990b) constructivist self-development theory. Constructivist self-development theory posited individuals build their understanding of the world through cognitive schemas (McCann & Pearlman, 1990a, 1990b, 1992). Trauma, including via indirect exposure, can disrupt these fundamental beliefs, impacting psychological needs like safety, trust, power, esteem, and intimacy (McCann & Pearlman, 1990b). Thus, therapists' vicarious trauma manifests as changes in these schemas, potentially leading to symptoms similar to PTSD (Aafjes-van Doorn et al., 2020; Barre et al., 2024; Charura, 2024; Foreman, 2018; Gaboury & Kimber, 2023; Halevi & Idisis, 2018; Helpingstine et al., 2021; Kounenou et al., 2023; Leung et al., 2023; McNeillie & Rose, 2021; Méndez-Fernández et al., 2022; Molnar et al., 2020; Mustafa et al., 2020; Ortner, 2024; Padmanabhanunni & Gqomfa, 2022; Rinfrette et al., 2021; Roberts et al., 2022; Salvilla & Bedoria, 2021; Sutton et al., 2022; Tsouvelas et al., 2029; Yu et al., 2023).

The DSM-5 recognized indirect trauma exposure—whether initially experienced by a family member, close friend, or work client—as a potential diagnostic qualifier for PTSD (American Psychiatric Association, 2013). Consequently, vicarious trauma may be an occupational hazard for various professions, particularly those repeatedly exposed to traumatic details, such as healthcare providers (Berhe et al., 2022; Isobel & Thomas, 2022; Li et al., 2020; Newman et al., 2024; Nkurunziza et al., 2024; Peacock, 2023; Piras et al., 2024; Renkiewicz & Hubble, 2023; Wu et al., 2024; Zhang et al., 2024), legal professionals (Middleton et al., 2022; Morabito et al., 2021; Zwisohn et al., 2019) and mental health practitioners (Aafjes-van Doorn et

al., 2020; Barre et al., 2024; Charura, 2024; Foreman, 2018; Gaboury & Kimber, 2023; Halevi & Idisis, 2018; Helpingstine et al., 2021; Kounenou et al., 2023; Leung et al., 2023; McNeillie & Rose, 2021; Méndez-Fernández et al., 2022; Molnar et al., 2020; Mustafa et al., 2020; Ortner, 2024; Padmanabhanunni & Gqomfa, 2022; Rinfrette et al., 2021; Roberts et al., 2022; Salvilla & Bedoria, 2021; Sutton et al., 2022; Tsouvelas et al., 2029; Yu et al., 2023). Brain imaging studies indicated neurological changes possibly associated with vicarious trauma (Isobel & Angus-Leppan, 2018; Liu et al., 2024; Suo et al., 2022; Zwisohn et al., 2019). The research also reflected how factors like professionals' personal trauma history (Gaboury & Kimber, 2023; Leung et al., 2022; Molnar et al., 2020), occupational setting (Isobel & Thomas, 2022; Nkurunziza et al., 2024), and workload (Foreman, 2018; Méndez-Fernández et al., 2022; Molnar et al., 2020; Padmanabhanunni & Gqomfa, 2022; Rayner et al., 2020; Roberts et al., 2022; Sutton et al., 2022) can influence vulnerability.

Vicarious trauma has been associated with other vocational hazards, including compassion fatigue and burnout (Bhagwagar, 2022; Charura, 2024; Helpingstine et al., 2021; Kounenou et al., 2023; Leung et al., 2023; Renkiewicz & Hubble, 2023; Sutton et al., 2022; Yu et al., 2023). These constructs, along with secondary traumatic stress, are frequently discussed alongside vicarious trauma and occasionally used interchangeably (Charura, 2024; Molnar et al., 2020; Wallace & County, 2024), though many researchers emphasized their conceptual distinctions (Bhagwagar, 2022; Kercher & Gossage, 2024; Leung et al., 2023; Penix et al., 2020; Rayner et al., 2020; Roberts et al., 2022; Sutton et al., 2022; Wu et al., 2024; Yu et al., 2023). Compassion fatigue has subsequently been defined as the emotional exhaustion from empathizing with suffering that comprises symptoms of burnout—a reaction to prolonged involvement in emotionally demanding circumstances leading to physical and mental exhaustion,

a sense of inefficacy, and social detachment—and secondary traumatic stress—an acute trauma response to indirect traumatic exposure (Halamová et al., 2024; Kercher & Gossage, 2024). Each are recognized occupational risks for mental health clinicians and are often correlated with vicarious trauma (Bhagwagar, 2022; Charura, 2024; Helpingstine et al., 2021; Kounenou et al., 2023; Leung et al., 2023; Renkiewicz & Hubble, 2023; Sutton et al., 2022; Yu et al., 2023).

The literature also proposed strategies for mitigating vicarious trauma, including developing self-awareness, utilizing coping skills, seeking personal and professional support, and engaging in self-care (Charura, 2024; Halevi & Idisis, 2018; Helpingstine et al., 2021; Méndez-Fernández et al., 2022; Mustafa et al., 2020; Padmanabhanunni & Gqomfa, 2022; Salvilla & Bedoria, 2021). Although limited, emerging research on specific therapeutic interventions for vicarious trauma suggested art therapy (Ortner, 2024) and EMDR group therapy (Tsouvelas et al., 2019) may alleviate vicarious trauma symptoms. Furthermore, studies examining vicarious post-traumatic growth highlighted how indirect trauma exposure could also lead to positive personal and professional changes, such as finding meaning in traumatic experiences and experiencing satisfaction from witnessing clients' therapeutic successes (Barre et al., 2024; Jiang et al., 2023; McNeillie & Rose, 2021). In addition, adaptive caseload management may mitigate vicarious traumatization, with some studies submitting smaller and more diverse caseloads may reduce vicarious trauma risk (Méndez-Fernández et al., 2022; Molnar et al., 2020; Padmanabhanunni & Gqomfa, 2022; Roberts et al., 2022; Sutton et al., 2022), although findings are not entirely consistent (Foreman, 2018; Molnar et al., 2020; Rayner et al., 2020). Hence, the composition of caseloads, particularly the proportion of clients seeking trauma treatment, may be a more robust predictor of therapists' vicarious trauma (Padmanabhanunni & Gqomfa, 2022; Roberts et al., 2022; Sutton et al., 2022).

As community mental health centers serve clients with significantly higher rates of trauma and PTSD than the general population (Lu et al., 2022, 2023; Motamedi et al., 2023; Pincus et al., 2022; Sucich et al., 2023), practitioners in these settings may be more likely to be exposed to indirect trauma. While research indicated this work can lead to emotional exhaustion and challenges in delivering trauma-informed care (Last et al., 2021; Motamedi et al., 2023), there is a limited amount of research specifically examining the prevalence of vicarious trauma among community mental health workers. Given their large caseloads (Fukui et al., 2021; NASW, 2023) and high trauma rates among their clients (Lu et al., 2022, 2023; Motamedi et al., 2023; Pincus et al., 2022; Sucich et al., 2023), this population may be particularly vulnerable to vicarious trauma, emphasizing the importance of research examining community mental health clinicians' vicarious trauma and mediating variables like caseload size and composition.

Consequently, the purpose of this quantitative, causal-comparative design study was to compare levels of vicarious trauma as a function of setting (i.e., community mental health practitioners and therapists in other occupational settings) and examine how caseload sizes and caseload diagnostic composition may mediate the relationship between vicarious traumatization and work setting. Utilizing McCann and Pearlman's (1990a, 1990b, 1992) constructivist self-development framework, it investigated the prevalence and severity of vicarious trauma in this population and assessed the influence of clinicians' occupational settings, caseload sizes, and client diagnostic profiles. Thus, this research sought to contribute to the understanding of vicarious trauma in community mental health and inform strategies to support the well-being of these practitioners.

Chapter 3: Research Method

This study addressed a research problem associated with community mental health therapists' risk of vicarious trauma (Motamedi et al., 2023; Roberts et al., 2022). Psychotherapists repeatedly listening to the adverse details of their clients' trauma narratives are susceptible to developing negative perceptions about themselves and the world (Gaboury & Kimber, 2023), potentially leading to post-traumatic stress disorder (PTSD) symptoms like hypervigilance, intrusive thoughts, avoidance, and sleep disturbances (Charura, 2024; Helpingstine et al., 2021; Padmanabhanunni & Gqomfa, 2022; Rinfrette et al., 2021; Salvilla & Bedoria, 2021). These mental and emotional changes associated with vicarious trauma exposure may affect mental health practitioners' clinical performance, as they often report feeling less competent and having a weaker therapeutic alliance with their patients (Aafjes-van Doorn et al., 2020). As caseloads at community mental health centers are often larger (Fukui et al., 2021; National Association of Social Workers [NASW], 2023) with clients who have more complex trauma histories (Lu et al., 2022; Motamedi et al., 2023; Sucich et al., 2023), clinicians in these settings may be particularly vulnerable to vicarious traumatization. However, a research gap remains on the prevalence and severity of community mental health therapists' vicarious trauma and how factors such as caseload size and composition affect the psychological phenomenon.

Consequently, the purpose of this quantitative, causal-comparative design study was to compare levels of vicarious trauma as a function of setting (i.e., community mental health practitioners and therapists in other occupational settings) and to examine how caseload size and caseload diagnostic composition may mediate the relationship between vicarious traumatization and work setting. The research population was psychotherapists in the United States who treat trauma-related conditions within or outside of community mental health settings. The study

aimed for a total sample of at least 102 participants and obtained 160 survey responses with sufficient data for an independent samples *t*-test and 157 for a mediation analysis using multiple linear regression. Using a convenience sampling technique, participants were recruited via social media platforms. An independent samples *t*-test was conducted to compare the vicarious trauma levels among community mental health clinicians and therapists in other settings, and a multiple linear regression analysis assessed whether caseload size and diagnostic composition partly or wholly mediated the relationship between setting and vicarious trauma.

This chapter provides detailed information about the research method for this causal-comparative study. It begins with a discussion on the nature of the study, including the appropriateness of the quantitative, causal-comparative approach and how the methodology and design better align with the research problem, purpose, and questions than possible alternatives. Next, a description of the research population (i.e., trauma therapists, including those working in community mental health) is provided, along with an explanation of the sampling and recruitment methods. The survey instrumentation is then described, followed by operational definitions of the variables, which include *occupational setting*, *vicarious trauma*, *caseload size*, and *caseload diagnostic composition*. The study procedures and data analyses (i.e., independent samples *t*-test and multiple linear regression) are subsequently reviewed. Assumptions, limitations, and delimitations are then identified. Finally, the study's ethical assurances are presented, preceding a summary of this research method chapter.

Research Methodology and Design (Nature of the Study)

This study employed a quantitative, causal-comparative design with a cross-sectional survey approach best suited to address the research problem, purpose, and questions. Recent literature demonstrated an ongoing research gap on several factors potentially contributing to

mental health clinicians' vicarious traumatization, with many researchers encouraging additional study on variables associated with their vicarious trauma (Aafjes-van Doorn et al., 2020; Barre et al., 2024; Salvilla & Bedoria, 2021), including with broader and larger samples (Charura, 2024; Padmanabhanunni & Gqomfa, 2022; Roberts et al., 2022). Thus, the utilized quantitative method included more participants and subsequently offered greater generalizability than the previous qualitative vicarious trauma studies.

Qualitative methods could have been employed to explore mental health practitioners' vicarious trauma, yet they were less fitting to address the specific research gap on the role of occupational settings and caseloads in vicarious traumatization. Qualitative research can provide detailed and nuanced information on vicarious trauma, like the recent phenomenological studies that gathered data on participants' lived experiences with the phenomenon (Helpingstine et al., 2021; Miller Reed et al., 2023; Padmanabhanunni & Gqomfa, 2022; Simms et al., 2021; Wallace & County, 2024). Nonetheless, phenomenology and other qualitative data collection strategies do not aim to reveal measurable differences between groups (Henline-Hall, 2024). Therefore, such methodologies were deemed inadequate to compare community mental health clinicians' vicarious trauma levels to therapists in other settings, nor to analyze the role of potential mediators in the relationship between occupational settings and vicarious trauma.

In contrast, a quantitative method with a causal-comparative design comparing the vicarious trauma levels of community mental health practitioners to therapists in other work environments aptly examined how occupational setting relates to vicarious traumatization. Moreover, as community mental health centers often have more clients with trauma-related conditions (Lu et al., 2022; Motamedi et al., 2023; Pincus et al., 2022; Sucich et al., 2023) and larger caseloads (Fukui et al., 2021; NASW, 2023) than other treatment settings, caseload size

and diagnostic composition as mediators to the relationship between vicarious trauma and occupational setting were investigated via a survey on these variables along with participants' scores on a well-validated vicarious trauma instrument (Aguilar-Fernández et al., 2022; Aparicio et al., 2013; Benuto et al., 2018; Vrklevski & Franklin, 2008). Findings from the mediation analyses offered valuable insights into the impact of caseloads on vicarious trauma, as prior literature had conflicting results (Foreman, 2018; Méndez-Fernández et al., 2022; Molnar et al., 2020; Padmanabhanunni & Gqomfa, 2022; Rayner et al., 2020; Roberts et al., 2022; Sutton et al., 2022). Consequently, a causal-comparative design with a cross-sectional survey approach was most appropriate to address the study's research problem, purpose, and questions by reflecting on any existing divergence in mental health professionals' vicarious trauma across settings and indicating possible factors contributing to the discrepancy.

Causal-comparative designs are often employed to examine causes when experimental assignment and manipulation are improbable or unethical (Fulmer, 2018). Causal-comparative studies typically begin with an expected outcome—the dependent variable representing the *effect*—and a group difference explored as a potential *cause* of the effect (Fulmer, 2018). A causal-comparative design can be a useful alternative to a true experiment when investigating intact groups, which are compared to test as a possible cause of an effect (Fulmer, 2018). When the cause and effect are assumed and have already transpired, a retrospective causal-comparative approach can analyze the data *ex post facto* (i.e., after the fact) because the group distinction and its effects have occurred (Fulmer, 2018). This study thereby applied a retrospective causal-comparative design to evaluate intact groups (i.e., community mental health clinicians and therapists working in other environments) and determine how existing factors (i.e., occupational

setting, caseload size, and caseload composition) may produce an effect on their vicarious trauma levels.

A causal-comparative design was selected over a true experimental design, as the latter would have been impractical for this research. True experimental research designs similarly depend on statistical analyses to test hypotheses and are the most rigorous and precise methodologies (Henline-Hall, 2024). True experiments have well-defined independent variables that can be manipulated by researchers with randomly assigned conditions, thereby assuring greater internal validity by controlling for external variables (Fulmer, 2018; Henline-Hall, 2024). Vicarious trauma has been studied via experimental methods, such as Green et al.'s (2024) recent research on Black Americans' vicarious trauma, in which participants were randomly assigned to audiovisual, written, or imaginal exposure to an incident of police violence toward a Black man. However, the present study sought to examine therapists' vicarious trauma as influenced by occupational setting, caseload size, and caseload diagnostic composition—variables that are less feasible to manipulate and randomly assign—so a causal-comparative approach was employed.

Population and Sample

This study's population of interest was psychotherapists providing trauma treatment within or outside of community mental health settings. The exact number of therapists currently serving traumatized clients in the United States is difficult to determine, but recent data from the Bureau of Labor Statistics (2025) suggested as of 2023, there were approximately 207,500 psychologists, 76,000 marriage and family therapists, 751,900 social workers, and 449,800 substance abuse, behavioral disorder, and mental health counselors. With the necessary education and training, professionals in these occupations can treat a range of issues that may include trauma (Bureau of Labor Statistics, 2025). Education and training requirements vary by

state and position, yet substance use and behavioral disorder counselors typically need a bachelor's degree; mental health counselors, marriage and family therapists, and clinical social workers require a master's degree; and psychologists often need a doctoral degree (Bureau of Labor Statistics, 2025). As this study utilized a constructivist self-development theory lens, which initially emphasized trauma therapists' risk of vicarious traumatization (McCann & Pearlman, 1990a, 1990b, 1992), mental health professionals treating trauma were a fitting research population. Moreover, since the study's research problem, purpose, and questions addressed vicarious trauma level differences between community mental health clinicians and therapists in other environments, a research population encompassing therapists within and outside community mental health centers was most appropriate.

The sample included 160 therapists who provide trauma treatment and completed the online survey's vicarious trauma items. Using the statistical power analysis software G*Power (Faul et al., 2007), a power analysis for the sample size for an independent *t*-test with one tail (due to the single hypothesized directionality), a conventional Cohen's *d* medium effect size of .5, an alpha/significance level of .05, a desired power of at least .80, and an allocation ratio of 1.0 (i.e., equal comparison group sizes) indicated a required sample size of 51 participants per group. However, as recent research suggested approximately one third of behavioral health clinicians work in community mental health settings (Pathman et al., 2025), a power analysis with an allocation ratio of 2—congruent with the population estimates while keeping other values constant—reflected a desired sample size of 38 community mental health clinicians and 76 therapists in other settings for a total sample of 114. Nevertheless, consistent with the observed rate of survey responses from community mental health therapists compared to therapists in other occupational settings during data collection, an a priori sample size power analysis via

G*Power for an independent *t*-test with an allocation ratio of 3.0 and other values remaining constant indicated a minimum sample size of 134 (i.e., at least 34 community mental health therapists and 100 therapists in other settings), which was surpassed with 160 survey responses (44 community mental health therapists and 116 therapists in other settings) with complete data for the *t*-test. The power analysis for the sample size for mediation analyses (i.e., multiple linear regression) through G*Power (Faul et al., 2009) with a conventional medium effect size of .15, an alpha level of .05, a power value of .80, two tested predictors (i.e., occupational setting and caseload size or diagnostic composition) and three total predictors (i.e., occupational setting and caseload size and composition) identified a required sample size of 68—below the required sample for the *t*-test. Thus, this study obtained the desired sample size to test all hypotheses and adequately address the research problem, purpose, and questions.

Participant recruitment was conducted through multiple online resources, including social media platforms such as Facebook (n.d.) groups, Reddit (n.d.) communities, and a Discord (n.d.) channel for psychotherapists, as well as the primary investigator's personal Facebook and LinkedIn (n.d.) pages. A convenience sampling technique was thus employed to recruit trauma therapists from these online platforms. Convenience sampling is often used in behavioral research because it is easier to reach available participants (Privitera, 2020) and was implemented for this study to ensure a sample with an adequate number of trauma therapist participants across different work settings. Snowball sampling was also promoted during recruitment by encouraging individuals to share the study information and survey with qualifying therapists within their social networks. Inclusion criteria comprised participants' status as therapists in the United States currently treating clients with trauma.

Instrumentation

Data were collected through a study questionnaire (see Appendix A) administered via an online survey platform, Qualtrics. After acquiring informed consent, the questionnaire began with six closed-ended items on participants' demographic information, including gender, age group, ethnicity/racial background, education, profession, and years of experience. The survey also included three questions on respondents' occupational setting, the number of clients on their caseload, and the percentage of their clients with a trauma-related condition, respectively. Finally, the questionnaire included all eight items from the Vicarious Trauma Scale (VTS; Vrkleviski & Franklin, 2008) to measure participants' self-reported vicarious trauma symptoms.

The VTS consists of eight items answered on a seven-point Likert-type scale (i.e., 1 = *Strongly disagree* to 7 = *Strongly agree*), with total scores ranging from 8 to 56 and higher scores reflecting greater distress (Vrkleviski & Franklin, 2008). The VTS (Cronbach's $\alpha = .88$) was initially developed to evaluate subjective levels of distress associated with working with traumatized clients via items such as, "I find myself distressed by listening to my clients' stories and situations" (Vrkleviski & Franklin, 2008, p. 115), "I find myself thinking about distressing material at home" (Vrkleviski & Franklin, 2008, p. 115), and "Sometimes I feel helpless to assist my clients in the way I would like" (Vrkleviski & Franklin, 2008, p. 115). The instrument was first formally administered concurrently with several other standardized psychological tests, including the Impact of the Event Scale–Revised (IES-R; Weiss & Marmar, 1997), to legal professionals to compare criminal law and noncriminal law solicitors' vicarious trauma levels (Vrkleviski & Franklin, 2008). The IES-R is a 22-item self-report measure designed to parallel PTSD diagnostic criteria and has established sufficient psychometric properties (Weiss & Marmar, 1997). A significant correlation (.261) between the IES-R and VTS was found ($p < .01$)

following the latter's development, suggesting the convergent and criterion validity of the VTS (Vrklevski & Franklin, 2008).

Further examination of the validity and reliability of the VTS reflected its solid psychometric properties (Aguiar-Fernández et al., 2022; Aparicio et al., 2013; Benuto et al., 2018). Aparicio et al. (2013) implemented reliability statistics, factor analysis, and item response theory approaches to assess the psychometric properties of the VTS and found the instrument had strong internal consistency reliability yet purported the scale had higher validity when implemented as a two-factor model categorizing items as either the cognitive or the affective impact of working with traumatized clients. Aguiar-Fernández et al.'s (2022) exploratory and confirmatory factor analyses later supported Aparicio et al.'s assertion of the high internal consistency and two factors of the VTS, along with submitting the VTS correlated with relevant job variables (e.g., workload, burnout, engagement, detachment) and could differentiate respondents by trauma caseload. Conversely, Benuto et al. (2018) reported their data did not support Aparicio et al.'s findings, determining per their confirmatory factor analyses the two-factor model had poor goodness of fit and instead fit best as a unidimensional construct. Nevertheless, Aparicio et al., Aguiar-Fernández et al., and Benuto et al. promoted the VTS as a reliable and valid instrument for assessing vicarious trauma. Subsequently, current quantitative research has continued to employ the VTS to measure vicarious traumatization (Aafjes-van Doorn et al., 2020; Bakhshi et al., 2021; Kounenou et al., 2023; Méndez-Fernández et al., 2022; Newman et al., 2024; Yu et al., 2023).

Therefore, given the demonstrated psychometric properties of the VTS (Aguiar-Fernández et al., 2022; Aparicio et al., 2013; Benuto et al., 2018; Vrklevski & Franklin, 2008) and its recent successful applications evaluating mental health professionals' vicarious trauma

(Aafjes-van Doorn et al., 2020; Aguiar-Fernández et al., 2022; Kounenou et al., 2023; Méndez-Fernández et al., 2022; Yu et al., 2023), the scale was deemed a suitable instrument for this study comparing community mental health clinicians' and other therapists' vicarious trauma. The VTS developers, Vrkleviski and Franklin (2008), permit the test's content to be reproduced and utilized for non-commercial research and educational purposes without seeking written permission if the distribution is controlled (i.e., limited to participants engaged in research or enrolled in the educational activity); the complete permissions statement can be reviewed in Appendix B.

Operational Definitions of Variables

The study variables included one predictor, two potential mediators, and one criterion. These variables were operationalized as follows:

Occupational Setting

This study's predictor variable—occupational setting—was measured by participants' responses to a survey item inquiring about their work setting. Response categories for this survey item included private practice, hospital, school, community mental health center, and other. Responses were then binary coded as 1 for community mental health center settings and 0 for those other than a community mental health center setting. Thus, this predictor had a dichotomous, nominal level of measurement.

Caseload Size

As the first mediator, caseload size was measured by numerical responses to a survey item on how many clients participants reported they currently treat. Caseload size was thereby represented at a ratio level of measurement.

Caseload Diagnostic Composition

Caseload diagnostic composition was the second mediating variable and similarly assessed at a ratio level of measurement via numerical responses to a survey item on the percentage of clients on respondents' caseloads diagnosed with PTSD or a trauma-related condition. However, unlike caseload size, scores for caseload diagnostic composition were limited to a range between 0 and 100 due to the proportional values percentages can denote.

Vicarious Trauma

Lastly, vicarious trauma was measured by participants' VTS scores. The VTS includes eight items on vicarious traumatization symptomatology answered on a seven-point Likert-type scale, in which 1 = *Strongly disagree* and 7 = *Strongly agree* (Vrklevski & Franklin, 2008). Total VTS scores can thus range from 8 to 56, with higher scores reflecting greater vicarious trauma levels (Vrklevski & Franklin, 2008). Because the VTS has equally spaced numerical values yet lacks a true zero point (Vrklevski & Franklin, 2008), its scores are at the interval level of measurement. The VTS has demonstrated robust psychometric properties since its development (Aguilar-Fernández et al., 2022; Aparicio et al., 2013; Benuto et al., 2018; Vrklevski & Franklin, 2008), underscoring the instrument's suitability for measuring vicarious trauma in this study.

Study Procedures

Following the Notice of Exemption from National University's Institutional Review Board (IRB), participants were recruited through a description of the study accompanied by a digital flyer (see Appendix C) posted on social media platforms that target mental health practitioners as well as the principal investigator's personal social media accounts. The principal investigator acquired permissions from moderators and administrators of the selected social media pages to post the research recruitment materials. The online post and flyer introduced the

study and directed prospective respondents to the web address for the Qualtrics questionnaire. The first page of the Qualtrics survey presented an informed consent page (see Appendix D) outlining eligibility criteria, the confidentiality of their responses with no identifying information acquired, any possible risks of participating, how concerns may be addressed, how the data would be utilized, the requirements of participants, and the ability to discontinue engagement at any time. The directions also included contact information for the primary investigator to address any participant questions about the research. The survey availability for incomplete sessions was time-limited and deleted after 30 days.

Participants offering informed consent moved to the next part of the Qualtrics survey, which prompted them to provide their demographic information, occupational setting, caseload size, and percentage of clients with a trauma-related condition. The final page presented the eight Likert-type VTS items on participants' vicarious trauma symptomatology, which was used to identify the severity of their vicarious traumatization. The Qualtrics survey remained accessible to new respondents during the data collection period of approximately eight weeks. The data were then exported from Qualtrics to the Statistical Package for the Social Sciences (SPSS) software for statistical analyses.

Data Analysis

To investigate the first research question—namely, the extent to which vicarious trauma differs among therapists based on occupational setting—the data were coded and analyzed in SPSS with an independent samples *t*-test. This statistical procedure compared mean scores on the VTS between therapists in community mental health settings and those in other contexts, thereby evaluating whether observed differences in means were statistically significant or likely attributable to random variation. Participants' responses to the survey item on occupational

setting were binary-coded as 1 for community mental health center settings and 0 for settings not identified as a community mental health centers to dichotomize the data. The independent samples *t*-test, initially formulated by English statistician William Sealy Gosset (1908), enables inferential analysis of population means, even under conditions of relatively small sample sizes and unknown population standard deviations. Given its foundational role in determining the significance of mean differences between two independent groups, the independent samples *t*-test was the most appropriate method for testing the first hypothesis and addressing the research problem of the impact of occupational settings on vicarious trauma.

Multiple linear regression analysis was then employed in SPSS via Hayes' (2022) mediation analysis PROCESS macro to examine the extent to which caseload size and caseload diagnostic composition mediate the variance in VTS scores. The methodological contributions of Hayes and Preacher (2013) have been especially influential in advancing techniques for estimating indirect effects within models involving multiple mediators. Their seminal work on mediation analysis via multiple regression provided a robust framework for assessing the individual and combined influence of mediators within complex causal pathways (Hayes & Preacher, 2013). Informed by this framework (Hayes & Preacher, 2013), the study utilized multiple linear regression to systematically evaluate the mediating roles of caseload size and diagnostic composition in the relationship between therapists' work settings and vicarious trauma experiences. Hence, multiple linear regression was an apt data analysis strategy to answer the study's second and third research questions on the mediating roles of caseload size and caseload diagnostic composition, respectively, in the relationship between the predictor (i.e., occupational setting) and criterion (i.e., VTS scores), thus addressing the current research gap on factors associated with therapists' vicarious traumatization.

The data were warranted to meet the assumptions of the statistical tests by ensuring a sufficient sample size and conducting assumption-checking tests in SPSS. As a statistical power analysis for the *t*-test suggested a sample size of at least 134 participants with a group allocation ratio of 3.0, and the power analysis for the mediation analyses recommended a lower total minimum sample (i.e., 68), this study met the sample size assumptions of the tests with a sample of 160 and 157, respectively. *T*-test assumptions were further verified in SPSS for normality with a histogram, Q-Q plot, and Shapiro-Wilk test; homogeneity of variance with Levene's test for equality of variance; and lack of outliers with a boxplot. Multiple regression assumptions were checked in SPSS for linearity with a scatter plot, independence of errors with a Durbin-Watson statistic, homoscedasticity with a scatter plot of the standardized residuals and predicted values, normality with a Q-Q plot and Shapiro-Wilk test, lack of multicollinearity with collinearity diagnostics, and lack of outliers with Cook's distance values. These assumption checks certified the selected statistical analyses appropriately tested the hypotheses.

As the initial independent samples *t*-test results did not support rejecting the first null hypothesis, post-hoc analyses were conducted to identify other significant findings in the data. This included a post-hoc independent samples *t*-test comparing community mental health and private practice therapists' VTS scores, as these groups were the most well-represented in the data. Because the post-hoc *t*-test demonstrated community mental health professionals reported significantly higher vicarious trauma than private practice therapists, a post-hoc mediation analysis examining the mediating roles of caseload size and diagnostic composition on the significant relationship between occupational setting and VTS scores was subsequently conducted on the community mental health and private practice therapists' data. Thus, post-hoc

analyses offered pertinent insights when no significant difference was found between community mental health clinicians' and all other therapists' VTS scores.

Assumptions

The study operated under a few notable assumptions. Firstly, participant responses were assumed to be truthful and accurate, as participants self-selected to complete the survey and their anonymity and confidentiality were ensured. The two comparison groups—community mental health clinicians and therapists in other settings—were assumed to be similar with respect to other characteristics not accounted for in this study (e.g., levels of empathy, confidence, or clinical expertise). Additionally, SPSS was assumed to be a precise statistical tool to correctly measure the relationships between therapists' work settings, caseload sizes, caseload diagnostic compositions, and vicarious trauma. The study's results were therefore interpreted with an awareness of these underlying assumptions.

Limitations

Several limitations of the study should be acknowledged. By utilizing a convenience sampling method, only individuals who were readily available and self-selected to participate in the online survey were included. Convenience sampling as a non-probability sampling method is susceptible to selection bias because the convenient participants may not accurately represent the research population (Privitera, 2020). For example, mental health practitioners with greater vicarious trauma may view their experience as stigmatizing and be less likely to participate than those with less vicarious traumatization. Conversely, more vicariously traumatized therapists may have a stronger interest in the study and opt to complete the survey. Consequently, while the convenience sampling technique promoted participant accessibility and quick data collection, it may have limited the research's generalizability (Privitera, 2020).

Furthermore, the chosen research design posed limitations to the definitive establishment of causal relationships. Because participants in this causal-comparative study were not randomly assigned to occupational settings, caseload sizes, or caseload diagnostic compositions, the findings fall lower on an evidence hierarchy than a true experiment (Glasofer & Townsend, 2019; Privitera, 2020). The cross-sectional approach also limited conclusions about the direction of the relationship between occupational setting and vicarious trauma, as the temporal order (i.e., whether work setting causes vicarious trauma or vicarious trauma symptoms influence setting selection) was not addressed by the data collected at a single time point. Lastly, the study's survey method was limited by its reliance on self-reported measures, which can introduce response biases due to participants' social desirability or personal perceptions of their mental health (Privitera, 2020). Therefore, these limitations were considered when drawing conclusions from the research findings.

Nevertheless, the proposed research took measures to mitigate some of its potential limitations. Although the convenience sampling method may be prone to selection bias (Privitera, 2020), this study aimed to diversify the sample as much as possible by recruiting a sufficient number of participants from numerous sources, including various social media websites and groups. In addition, participants' anonymity and confidentiality were assured to minimize social desirability response bias. Thus, these mitigation efforts sought to moderate the study's limitations and promote its validity.

Delimitations

Many delimitations were set to narrow the study's focus to an apposite scope. The study only included mental health clinicians providing trauma treatment, meaning the findings may not be generalizable to therapists who do not work with trauma survivors or other professionals

vicariously exposed to trauma material. The study also only examined therapists' caseloads in terms of size and diagnostic composition as possible mediators in the relationship between occupational setting and vicarious trauma instead of considering other caseload aspects, such as the severity of clients' mental health conditions or the duration of their therapeutic relationships. Moreover, the study's employment of the VTS acquired measurable data on respondents' vicarious trauma levels yet did not gather qualitative or nuanced information on their vicarious trauma experiences. These boundaries ensured the feasibility and pertinence of the study.

These research decisions also warranted their relevance to the existing literature and this study's stated research problem, purpose, questions, and theoretical framework. As McCann and Pearlman's (1990a, 1990b, 1992) constructivist self-development theory asserted therapists may experience different levels of vicarious trauma depending on their circumstances, the present study sought to extend the theory by providing information about the contexts of vicarious trauma, deepening the understanding of how various professional and environmental factors—like occupational settings, caseload sizes, and caseload diagnostic compositions—may affect practitioners' vicarious traumatization. By focusing on community mental health clinicians, the research aimed to expand constructivist self-development theory's application to this population, thereby broadening the theory's utility. Additionally, the recent literature has made calls for further research into vicarious trauma causality (Renkiewicz & Hubble, 2023; Zhang et al., 2024), risk and protective factors for therapists' vicarious trauma (Molnar et al., 2020), and workplace mitigation factors (Renkiewicz & Hubble, 2023), including with broader and larger samples (Charura, 2024; Padmanabhanunni & Gqomfa, 2022; Roberts et al., 2022)—highlighting how this quantitative study examining the influence of occupational settings, caseload sizes, and caseload diagnostic compositions on vicarious trauma offered valuable

insights. Given the discrepancies in the effect of caseloads on mental health workers' vicarious trauma found in the current research (Foreman, 2018; Méndez-Fernández et al., 2022; Molnar et al., 2020; Padmanabhanunni & Gqomfa, 2022; Rayner et al., 2020; Roberts et al., 2022; Sutton et al., 2022), centering on caseload sizes and diagnostic compositions as mediating variables provided greater clarification. Hence, the identified delimitations aligned with this study's objectives.

Ethical Assurances

The present research was conducted with several ethical assurances. The study received approval from National University's IRB prior to data collection, and the risk to participants was identified as minimal. Research has suggested those with trauma histories may be triggered by stimuli associated with trauma recall (Kimble et al., 2021), and the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research's (National Commission; 1979) ethical principle of preventing harm was considered. However, participants were not asked to describe the details of their traumatic experiences when completing the VTS items on their potential vicarious trauma symptoms, minimizing the likelihood of traumatic recall distress and reflecting a lower probability and magnitude of harm or discomfort than encountered in daily life. Nonetheless, potential participants were notified of the focus of the research on how their work as therapists may affect them when informed consent was obtained.

Accordingly, this study ensured the costs to participants (e.g., time spent completing the questionnaire) did not substantially exceed the benefits (e.g., contributing to the literature on therapists' vicarious trauma) of the research per the ethical principle of beneficence (National Commission, 1979), yet the voluntary nature of participation was highlighted for potential respondents. The informed consent document emphasized individuals could decline to

participate, skip any survey items, or discontinue participation at any time. In accordance with the IRB's requirements for secure data storage, all data obtained and transmitted from the Qualtrics survey was encrypted through the platform's Transport Layer Security and protected by an encrypted password (Qualtrics, n.d.). Therefore, the informed consent also specified responses would be provided anonymously, and participants' confidentiality was maintained by collecting minimal identifiable information, using and protecting strong computer passwords, and encrypting transmitted and stored data.

The role of the researcher in the study was also considered to minimize researcher bias. The primary investigator has personal and professional experience related to the study topic, given a history of several years as a psychotherapist in community mental health settings treating trauma and a present management role overseeing a community mental health clinic. To reduce researcher bias, the investigator did not have direct contact with the study participants during data collection, which occurred via the Qualtrics online survey platform. Furthermore, the established and validated VTS (Aguilar-Fernández et al., 2022; Aparicio et al., 2013; Benuto et al., 2018; Vrkleviski & Franklin, 2008) was utilized to assess vicarious trauma. Thus, the study employed these applicable strategies to mitigate biases.

Summary

The study adopted a quantitative, causal-comparative design with a cross-sectional survey approach, justified by the need to compare measurable levels of vicarious trauma across distinct groups and examine potential mediating factors. The rationale for this methodological choice hinged on the limitations of qualitative designs and the minimal feasibility of a true experiment to address the study's specific research questions—namely, if community mental health clinicians' vicarious trauma differs from therapists' in other settings and how caseload

size and caseload diagnostic composition influence this relationship. A causal-comparative design was deemed most suitable for analyzing existing group differences and mediating effects, given the impracticality of manipulating variables such as occupational setting or caseload composition and the ethical constraints inherent in experimental approaches.

The targeted research population comprised psychotherapists treating trauma in community mental health centers and other settings, with a sample size determined sufficient to achieve adequate statistical power for the selected analyses. Recruitment was conducted via online social media platforms, employing a convenience sampling strategy while facilitating access to a diverse sample. Data collection utilized an online questionnaire hosted on Qualtrics, incorporating demographic questions and items on occupational setting, caseload size (i.e., the number of clients currently treated), caseload diagnostic composition (i.e., the percentage of clients), and the validated VTS (Aguiar-Fernández et al., 2022; Aparicio et al., 2013; Benuto et al., 2018; Vrklevski & Franklin, 2008). Analytical procedures included an independent samples *t*-test to compare vicarious trauma levels between groups and multiple linear regression to explore the mediating roles of the caseload variables.

The present study rested on several assumptions, including the accuracy of the self-reported data, the adequate similarity of the two therapist groups on unmeasured variables, and the reliability of SPSS for statistical analysis. Limitations included the use of convenience sampling, which may have introduced selection bias and thereby limited generalizability, and the causal-comparative design with a lower level of cause-and-effect evidence than a true experiment. Delimitations, such as focusing solely on mental health clinicians treating trauma and specific caseload variables, intentionally narrowed the study's scope to align with its purpose and the constructivist self-development theoretical framework. Ethical safeguards—including

informed consent, data encryption, and minimal participant risk of harm—were implemented, and researcher bias was mitigated through limited participant contact and use of an established instrument to measure vicarious trauma. Consequently, the study aimed to offer crucial insights into community mental health clinicians' vicarious trauma.

Chapter 4: Findings

The problem addressed in this study was community mental health therapists' risk of vicarious trauma (Motamedi et al., 2023; Roberts et al., 2022). Psychotherapists vicariously exposed to the details of their clients' traumatic experiences are susceptible to survivor's guilt, hypervigilance, sleep disturbances, and intrusive thoughts (Charura, 2024; Helpingstine et al., 2021; Padmanabhanunni & Gqomfa, 2022; Salvilla & Bedoria, 2021), mirroring PTSD (Rinfrette et al., 2021), and because community mental health clinicians often treat more traumatized clients (Pincus et al., 2022; Sucich et al., 2023) and larger caseloads (Fukui et al., 2021; National Association of Social Workers [NASW], 2023), they may be especially at risk. Hence, the purpose of this quantitative, causal-comparative design study was to compare levels of vicarious trauma as a function of setting (i.e., community mental health practitioners and therapists in other occupational settings) and examine how caseload sizes and caseload diagnostic composition may mediate the relationship between vicarious traumatization and work setting.

A convenience sampling technique was used to purposefully recruit psychotherapists who treat trauma through social media platforms—including Facebook (n.d.) groups, Reddit (n.d.) communities, and a Discord (n.d.) channel for therapists, as well as the primary investigator's personal Facebook and LinkedIn (n.d.) pages—to complete an anonymous online survey. The survey included items on respondents' demographic information, occupational setting, caseload size, caseload diagnostic composition, and vicarious traumatization symptoms per the validated Vicarious Trauma Scale (VTS; Vrkleviski & Franklin, 2008). The VTS comprises eight items, answered on a seven-point Likert-type scale (i.e., 1 = *Strongly disagree* to 7 = *Strongly agree*), with total scores ranging from 8 to 56 and higher scores indicating greater distress (Vrkleviski & Franklin, 2008). An independent samples *t*-test was conducted to compare the mean VTS scores

among community mental health therapists and therapists in other work settings and calculate the likelihood that the differences between the two groups occurred by random chance. A mediation analysis using a multiple linear regression model (Hayes' [2022] PROCESS macro, Model 4; 5,000 bootstrap samples) was subsequently performed to examine the effects of caseload size and diagnostic composition on the relationship between occupational setting and VTS scores. Post-hoc analyses, including a second *t*-test and mediation analysis, were then conducted to evaluate the difference between community mental health and private practice therapists' VTS scores and caseload size and diagnostic composition as mediators, respectively.

This chapter presents the study's outcomes, including the validity and reliability of the data, the demographics represented in the acquired sample, and the results of the data analyses. The extent to which the results were consistent with the existing literature on vicarious trauma and its constructivist self-development theoretical framework is also discussed, followed by a summary of the study's key findings.

Validity and Reliability of the Data

The present causal-comparative study took several measures to demonstrate the validity and reliability of its data, including employing the VTS—an instrument with established solid psychometric properties (Aguiar-Fernández et al., 2022; Aparicio et al., 2013; Benuto et al., 2018; Vrklevski & Franklin, 2008)—via a self-administered, anonymous format to minimize social desirability bias (Krumpal, 2011; Nederhof, 1985; Ong & Weiss, 2000) and subsequently evaluating internal consistency and item-total correlations.

Validity

The data's construct validity was chiefly assured by measuring vicarious trauma with the well-validated VTS (Aguiar-Fernández et al., 2022; Aparicio et al., 2013; Benuto et al., 2018;

Vrklevski & Franklin, 2008). Vrklevski and Franklin (2008) developed the VTS to evaluate subjective levels of distress associated with working with traumatized clients. The instrument was first formally administered concurrently with several other standardized psychological tests, including the Impact of the Event Scale–Revised (IES-R; Weiss & Marmar, 1997), to legal professionals to compare criminal law and non-criminal law solicitors' vicarious trauma levels (Vrklevski & Franklin, 2008). As the IES-R was designed to parallel PTSD diagnostic criteria and has demonstrated satisfactory psychometric properties (Weiss & Marmar, 1997), the significant correlation (.261) found between the IES-R and VTS ($p < .01$) following the latter's development reflected the convergent and criterion validity of the VTS (Vrklevski & Franklin, 2008).

However, subsequent assessments of the VTS's validity have led to divergent perspectives about the instrument's single-factor scale (Aguiar-Fernández et al., 2022; Aparicio et al., 2013; Benuto et al., 2018). Aparicio et al. (2013) implemented factor analysis and item response theory approaches to assess the psychometric properties of the VTS and purported the scale had higher validity when implemented as a two-factor model categorizing items as either the cognitive or the affective impact of working with traumatized clients. Aguiar-Fernández et al.'s (2022) exploratory and confirmatory factor analyses later supported Aparicio et al.'s assertion of the two factors of the VTS, along with submitting the VTS correlated with relevant job variables (e.g., workload, burnout, engagement, detachment) and could differentiate respondents by trauma caseload. Conversely, Benuto et al. (2018) reported their data did not support Aparicio et al.'s findings, determining per their confirmatory factor analyses the two-factor model had poor goodness of fit and instead fit best as a unidimensional construct. Nonetheless, Aparicio et al., Aguiar-Fernández et al., and Benuto et al. endorsed the VTS's

sufficient validity to measure vicarious trauma, and this study employed the instrument with its initial single-factor scale.

Moreover, because this study collected data via an anonymous online survey, the threat of social desirability bias on the data's construct validity may have been mitigated. Research has historically indicated self-administered (Nederhof, 1985) and anonymous (Krumpal, 2011; Ong & Weiss, 2000) questionnaires are less susceptible to participants providing socially desirable yet imprecise responses, suggesting this study had an improved prospect of its participants accurately self-reporting their vicarious trauma symptoms per the VTS. Likewise, as the VTS only includes eight items (Vrklevski & Franklin, 2008), and the questionnaire consisted of a total of 17 items, participants may have been less likely to experience survey fatigue—potentially leading to unconsidered and inaccurate responses—more prevalent with instruments longer than 30 items (Sharma, 2022). In addition, of the participants who reached the end of the questionnaire and responded to the VTS items, only one respondent did not complete all eight VTS items (i.e., two VTS items were unanswered), illustrating a low missing data rate unlikely to skew the *t*-test's results with the response's exclusion from analysis relative to more substantial missing data (Alam et al., 2023; Shah et al., 2014). Therefore, the study's implementation of the validated VTS (Aguilar-Fernández et al., 2022; Aparicio et al., 2013; Benuto et al., 2018; Vrklevski & Franklin, 2008), an anonymous survey method, and minimal missing VTS items support the validity of the data.

Nevertheless, some aspects of this research suggest potential impairment to the validity of the data. The study's convenience sampling method via recruitment on social media platforms meant only those who were available and self-selected to participate in the online survey were included. Convenience sampling as a non-probability sampling method is susceptible to selection

bias because the convenient participants may not accurately represent the research population (Privitera, 2020). For instance, mental health practitioners with greater vicarious trauma may view their experience as stigmatizing and be less likely to participate than those with less vicarious traumatization, or contrariwise, more vicariously traumatized therapists may have a greater interest in the study and opt to complete the survey. Additionally, the recruitment materials were shared on several social media pages that were regionally based proximal to the primary investigator's Los Angeles, California location—such as the Facebook groups *California MFT Therapists and Supporters*, *LA Therapists (Psychotherapists, Psychologists, LCSW)*, *Los Angeles LGBTQIA+ Therapist Network*, and *Therapists (Los Angeles Area)*—thereby possibly limiting the geographic representation of the sample. Consequently, the study's convenience sampling method may have restricted the external validity of its findings.

Furthermore, the sample's demographics convey the possible generalizability limitations to mental health professional populations minimally represented in the sample. As Table 1 illustrates, few participants identified as Asian or Pacific Islander ($n = 7$; 4.4%), Indigenous American or Alaskan Native ($n = 1$; 0.6%), or Middle Eastern or North African ($n = 2$; 1.3%). Only 10% ($n = 16$) of the analyzed sample identified as male, and while 3.8% ($n = 6$) of respondents preferred to self-describe their gender, no participants selected the survey's non-binary/third gender option. Addiction therapists, behavioral therapists, psychiatrists, and school counselors were represented by only one respondent each (i.e., 0.6% per profession), while marriage and family therapists were the most represented profession ($n = 68$; 42.5%). The latter may be partly attributed to recruitment on some social media pages targeting marriage and family therapists, including the Facebook groups *California MFT Therapists and Supporters*, *Marriage and Family Therapists*, and *MFTGuide*. Thus, the study's external validity may have

been stronger with a more proportionate, demographically representative sample of the population (i.e., psychotherapists in the United States treating trauma).

Table 1

Participant Demographics

Characteristic	<i>n</i>	%
Gender		
Male	16	10.0
Female	138	86.3
Other	6	3.8
Age		
18 to 24	4	2.5
25 to 34	63	39.4
35 to 44	42	26.3
45 to 54	32	20.0
55 to 64	12	7.5
65 or older	7	4.4
Ethnicity		
Asian or Pacific Islander	7	4.4
Black or African American	10	6.3
Indigenous American or Alaskan Native	1	0.6
Latino/a/x or Hispanic	20	12.5
Middle Eastern or North African	2	1.3
White or Caucasian	108	67.5
Multiple ethnicities/other	12	7.5
Education		
Current master's student	8	5.0
Received a master's degree	123	76.9
Current doctoral student	13	8.1
Received a doctoral degree	16	10.0
Profession		
Addiction therapist	1	0.6
Behavioral therapist	1	0.6
Clinical social worker	40	25.0
Marriage and family therapist	68	42.5
Mental health counselor	20	12.5
Professional clinical counselor	11	6.9
Psychologist	9	5.6
Psychiatrist	1	0.6
School counselor	1	0.6
Other	8	5.0

Occupational setting		
Community mental health center	44	27.5
Hospital	6	3.8
Private practice	81	50.6
School	5	3.1
Other	24	15.0

Additional data validity threats addressed include the examination of the missing or possibly inaccurate data to assess for systematic issues. While only one participant who reached the end of the questionnaire and responded to the VTS did not complete all eight items, more missing data were found for items on participants' caseload size and diagnostic composition ($n = 4$; 2.5%). However, the results of a Little's Missing Completely at Random (MCAR) test were non-significant ($\chi^2(23) = 25.30, p = .34$), indicating the assumption of MCAR was met rather than signifying potential systematic missingness. Nonetheless, the data on caseload diagnostic composition reflected some participants provided numerical responses to the questionnaire item on the percentage of their caseload with a trauma-related condition that were incompatible with their reported caseload sizes (i.e., representing a fractional value rather than a whole number for their number of clients with a trauma-related condition), suggesting a systematic issue regarding the accurate comprehension and calculation of the caseload diagnostic composition item.

Consequently, the validity of the caseload diagnostic composition data may have been compromised, and findings associated with this variable should be interpreted with caution.

Lastly, the study's lower statistical power submits a greater likelihood of a Type II error and associated weaker internal validity. An a priori sample size power analysis via G*Power for an independent t -test with one tail (due to the single hypothesized directionality), a conventional Cohen's d medium effect size of .50, an alpha/significance level of .05, a desired power of at least .80, and an allocation ratio of 3.0 (consistent with the observed rate of survey responses

from community mental health therapists compared to therapists in other occupational settings during data collection) indicated a minimum sample size of 134 (i.e., at least 34 community mental health therapists and 100 therapists in other settings), which was surpassed with 160 survey responses (44 community mental health therapists and 116 therapists in other settings) with complete data for the *t*-test. However, the *t*-test identified a smaller Cohen's *d* effect size of .21, minimizing the achieved power ($1 - \beta = .33$) per a retrospective power analysis. Hence, the study's validity must be construed within the context of the reduced actual statistical power.

Reliability

The data's reliability was upheld largely by measuring vicarious trauma with the VTS, as the instrument has been shown to be adequately reliable since its development (Aguiar-Fernández et al., 2022; Aparicio et al., 2013; Benuto et al., 2018). For example, Aparicio et al. (2013) implemented reliability statistics, factor analysis, and item response theory approaches to evaluate the psychometric properties of the VTS and found the instrument had strong internal consistency reliability. Aguiar-Fernández et al.'s (2022) exploratory and confirmatory factor analyses later supported Aparicio et al.'s assertion of high internal consistency. Although Aparicio et al. and Aguiar-Fernández et al. both proposed a two-factor model for the VTS, while Benuto et al. (2018) reported their data did not support Aparicio et al.'s results—determining per their confirmatory factor analyses the two-factor model had poor goodness of fit and instead fit best as a unidimensional construct—Aparicio et al., Aguiar-Fernández et al., and Benuto et al. all endorsed the scale as a measure with sufficient reliability.

Moreover, the short eight-item length of the VTS may minimize the likelihood of survey fatigue common among participants responding to longer questionnaires and thereby mitigate inconsistent responses or missed items. Indeed, of those who reached the end of the survey and

responded to the VTS items, only one respondent did not complete all eight VTS items (i.e., two VTS items were unanswered), reflecting a low missing data rate unlikely to introduce random error or significantly reduce the Cronbach's alpha compared to larger amounts of missing data (Alam et al., 2023; Shah et al., 2014). Accordingly, the Cronbach's alpha with the incomplete response removed illustrated acceptable internal consistency ($\alpha = .74$).

Nonetheless, as Table 2 exemplifies, two VTS items had notably low item-total correlations: Item 1, "My job involves exposure to distressing material and experiences" ($r = .04$) and Item 2, "My job involves exposure to traumatized or distressed clients" ($r = .00$), while the remaining items had correlations ranging from .52 to .63. This may be due to the higher mean scores found for Item 1 ($M = 6.12$, $SD = 1.33$) and Item 2 ($M = 6.46$, $SD = 1.07$), as the means for other the items ranged from 3.25 to 4.77. Higher values for Items 1 and 2 could be attributed to the participant inclusion criteria outlined on the survey recruitment materials and informed consent document—which stated individuals must provide therapy to clients with trauma to be eligible for the study—potentially increasing the likelihood of higher agreement responses for these items. Removing Items 1 and 2 may marginally increase the Cronbach's alpha, as Table 2 indicates, yet because the VTS data showed a preliminary acceptable Cronbach's alpha, all items were retained due to their theoretical relevance.

Table 2

VTS Item Statistics

Item	Item description	<i>M</i>	<i>SD</i>	Corrected item-total correlation	Cronbach's alpha if item deleted
1	My job involves exposure to distressing material and experiences.	6.12	1.33	.04	.77

2	My job involves exposure to traumatized or distressed clients.	6.46	1.07	.00	.77
3	I find myself distressed by listening to my clients' stories and situations.	4.45	1.54	.55	.69
4	I find it difficult to deal with the content of my work.	3.25	1.53	.63	.68
5	I find myself thinking about distressing material at home.	3.81	1.67	.53	.69
6	Sometimes I feel helpless to assist my clients in the way I would like.	4.53	1.91	.55	.69
7	Sometimes I feel overwhelmed by the workload involved in my job.	4.77	1.89	.52	.70
8	It is hard to stay positive and optimistic given some of the things I encounter in my work.	3.70	1.83	.57	.68

Assumptions of the Independent Samples T-Test

An independent samples *t*-test was conducted to address the first research question on the extent to which VTS scores differ based on therapists' occupational setting. Independent samples *t*-tests operate under several assumptions (Bennett et al., 2017; Gosset, 1908). Firstly, as the name suggests, the two groups the *t*-test compares must be independent—participants in one group cannot be in another (Bennett et al., 2017)—and this assumption was met by comparing participants who either identified as community mental health therapists or reported another primary occupational setting. Secondly, the *t*-test requires continuous data for the dependent variable (Bennett et al., 2017; Gosset, 1908), and this assumption was satisfied because the VTS employs a Likert-response format and yields a summed total score that is treated as a continuous variable with an interval scale (Vrklevski & Franklin, 2008).

The *t*-test further assumes the dependent variable is approximately normally distributed, although it is robust to mild normality violations when sample sizes are greater than 30 (Bennett et al., 2017; Gosset, 1908). The *t*-test sample was large enough to meet the latter criterion ($N = 160$), and a normal distribution was verified with a non-significant Shapiro-Wilk test ($W = .985$,

$p = .079$) and visual inspection of a histogram and a Q-Q plot. Finally, the independent samples t -test assumes homogeneity of variances (Bennett et al., 2017; Gosset, 1908), and this was confirmed by a non-significant Levene's test for equality of variances, $F(1, 158) = 1.33, p = .250$. Thus, the assumptions were met for the initial independent samples t -test comparing the VTS scores of community mental health clinicians to therapists in all other settings. These assumptions were also established for a post-hoc independent samples t -test examining the vicarious trauma differences between the most represented groups with complete VTS responses—community mental health practitioners ($n = 44$) and private practice therapists ($n = 81$), as a histogram, a Q-Q plot, and a Shapiro-Wilk test ($W = .984, p = .156$) indicated a normal distribution and a Levene's test, $F(1, 123) = 0.10, p = .749$, represented the homogeneity of variances.

Assumptions of the Multiple Linear Regression Model

A mediation analysis via a multiple linear regression model (Hayes' [2022] PROCESS macro, Model 4; 5,000 bootstrap samples) was conducted to address the second and third research questions regarding the extent to which caseload size and caseload diagnostic composition, respectively, mediate the relationship between therapists' occupational setting and VTS scores. Multiple linear regression assumptions include linearity, independence of errors, homoscedasticity, normality of residuals, and lack of multicollinearity or influential outliers (Bennett et al., 2017; Hayes & Preacher, 2013). A scatterplot of residuals versus predicted values indicated linearity and homoscedasticity of the data, and a histogram and normal probability-probability plot (P-P plot) reflected normally distributed residuals. Variance inflation factors demonstrated no multicollinearity ($VIFs < 2.0$). Cook's distance detected one potentially influential case ($D_i = 1.98$), and the Durbin-Watson statistic was $d = 0.06$. Removing the

identified influential case increased the Durbin–Watson statistic closer to the acceptable range ($d = 2.54$), yet because observations represent independent therapists measured once rather than time-ordered data, the assumption of independence of errors is considered satisfied by study design. Furthermore, while eliminating the influential case from the mediation analysis improved the model diagnostics by decreasing residual skewness and kurtosis, it did not alter the substantive pattern of results. Consequently, assumptions for the initial multiple linear regression model were assured.

A post-hoc mediation analysis was computed following the post-hoc t -test results that revealed community mental health practitioners had significantly higher VTS scores than private practice therapists to examine if caseload size and diagnostic composition mediate the relationship between occupational setting and vicarious traumatization. Preliminary analyses were run to test regression assumptions. Examination of residual plots indicated linearity and homoscedasticity. A histogram and normal P–P plot suggested normally distributed residuals. The Durbin–Watson statistic was $d = 2.09$, signifying independent errors (though the study’s design, absent of temporal or sequential structure, negated the risk of autocorrelation of residuals). Variance inflation factors showed no multicollinearity ($VIFs < 2.0$), and Cook’s distance indicated no influential cases were detected ($D_i < 0.05$). Hence, assumptions for the post-hoc multiple linear regression model were met.

Results

This causal-comparative study compared levels of vicarious trauma as a function of setting (i.e., community mental health practitioners and therapists in other occupational settings) with an independent samples t -test and examined if caseload size and caseload diagnostic composition mediate the relationship between vicarious traumatization and work setting via a

mediation analysis with a multiple linear regression model. Participants in the United States who provide therapy to clients with trauma were recruited via social media webpages to complete an anonymous questionnaire on Qualtrics, an online survey platform, and 210 responses were received. Of the 210 survey responses, 160 provided complete data on their occupational setting and vicarious trauma symptomatology per the VTS and were included in the initial independent samples *t*-test, while 157 had complete data on their caseload size and diagnostic composition to be analyzed with the multiple linear regression model. As Table 1 highlights, the research sample was predominantly female ($n = 138$), White or Caucasian ($n = 108$), and under 45 years old ($n = 109$). Most respondents reported a master's degree as their highest level of education ($n = 123$). The analyzed data revealed respondents reported an average of 8.79 years of experience, a caseload size of 30.56, and a caseload diagnostic composition (i.e., the percentage of clients on their caseloads with a trauma-related condition) of 55.04% (see Table 3). Overall, the participants who completed the VTS had a mean score of 37.03 ($SD = 7.69$) out of 56 on the measure, which suggests moderate levels of subjective distress (Vrklevski & Franklin, 2008).

Table 3

Descriptive Statistics

Characteristic	<i>M</i>	<i>SD</i>
Years of experience	8.79	8.10
Caseload size	30.56	34.18
Caseload diagnostic composition	55.04	32.16
VTS score	37.03	7.69

Research Question and Hypothesis 1

To test the first hypothesis and address Research Question 1—"To what extent do VTS scores differ based on therapists' occupational setting?"—an independent samples *t*-test was computed with the complete VTS response data ($N = 160$) to compare the mean vicarious trauma scores of community mental health therapist respondents ($n = 44$) to participants practicing therapy in other occupational settings ($n = 116$). The results indicated participants working in community mental health centers ($M = 38.20$, $SD = 7.09$) reported higher vicarious trauma levels than those in other settings ($M = 36.58$, $SD = 7.88$), yet the difference was not statistically significant $t(158) = 1.20$, $p = .117$, $d = .21$, 95% CI [-.14, .56]. Therefore, this *t*-test's findings did not support rejecting the null hypothesis.

A post-hoc independent samples *t*-test was subsequently conducted to compare vicarious traumatization among the two largest represented groups in the sample ($N = 125$): community mental health clinicians ($n = 44$, $M = 38.20$, $SD = 7.09$) and private practice therapists ($n = 81$, $M = 34.94$, $SD = 7.38$). The results showed a statistically significant difference between the two groups, $t(123) = 2.40$, $p = .009$, $d = 0.45$, 95% CI [0.08, 0.82], with therapists in community mental health settings reporting higher vicarious trauma.

Research Question and Hypothesis 2

The second hypothesis and research question—"To what extent does caseload size mediate the relationship between therapists' occupational setting and VTS scores?"—were addressed with a mediation analysis via a multiple linear regression model to examine if participants' ($N = 157$) caseload sizes mediated the relationship (although non-significant per the initial *t*-test) between their occupational setting and vicarious trauma. Congruent with the *t*-test, the total effect of occupational setting on vicarious trauma was not significant, $b = 1.69$, $SE =$

1.39, $t(155) = 1.21$, $p = .23$, 95% CI [-1.07, 4.44]. Caseload size was not significantly related to occupational setting ($p = .77$) nor to vicarious trauma when controlling for occupational setting ($p = .52$). The indirect effects via caseload size (95% CI [-0.34, 0.24]) were non-significant. As Cook's distance detected one potentially influential case ($D_i = 1.98$) with a caseload size of 350, the mediation model was rerun with this case removed ($N = 156$). Although model diagnostics improved (i.e., a substantial decrease in the skewness and kurtosis of the residuals), the results were functionally unchanged: occupational setting did not significantly predict vicarious trauma either directly ($b = 1.89$, $p = .17$) or indirectly through caseload size ($b = -0.04$, 95 % CI [-0.62, 0.20]). Neither the original overall regression model $F(3, 153) = 1.26$, $p = .29$, $R^2 = .02$, nor the adjusted model, $F(3, 152) = 2.08$, $p = .105$, $R^2 = .04$, for vicarious trauma were significant. Thus, caseload size did not significantly mediate the relationship between occupational setting and vicarious trauma, and the second null hypothesis was not rejected.

As a post-hoc independent samples t -test found community mental health practitioners had significantly higher VTS scores than private practice therapists, a post-hoc mediation analysis with a multiple linear regression model was consequently conducted to assess whether participants' ($N = 122$) caseload sizes mediated the relationship between occupational setting and vicarious traumatization. Aligning with the post-hoc t -test, occupational setting significantly predicted vicarious trauma, $b = 3.33$, $SE = 1.39$, $p = .018$, and the overall model was significant, $F(3, 118) = 2.96$, $p = .035$, $R^2 = .07$. However, caseload size ($b = -0.26$, $SE = 4.41$, $p = .953$, 95% CI [-8.43, 7.95]) was not predicted by occupational setting, and did not significantly predict vicarious trauma when controlling for occupational setting ($p = .186$). Bootstrapped indirect effects were non-significant for caseload size ($b = 0.01$, 95% CI [-0.44, 0.38]). These results

indicate caseload size did not mediate the relationship between occupational setting and vicarious trauma.

Research Question and Hypothesis 3

Concurrent with Research Question 2, the third research question—"To what extent does caseload diagnostic composition mediate the relationship between therapists' occupational setting and VTS scores?"—was addressed with the initial multiple linear regression model for mediation analysis to determine if participants' ($N = 157$) caseload diagnostic composition mediated the non-significant relationship between their occupational setting and vicarious trauma. The overall regression model was not significant, $F(3,153) = 1.26, p = .29, R^2 = .02$, and the total effect of occupational setting on vicarious trauma was non-significant, $b = 1.69, SE = 1.39, t(155) = 1.21, p = .23, 95\% CI [-1.07, 4.44]$. Caseload diagnostic composition was not significantly related to occupational setting ($p = .87$) nor to vicarious trauma when controlling for occupational setting ($p = .15$). The indirect effects via caseload diagnostic composition ($95\% CI [-0.55, 0.32]$) were also non-significant. Hence, the initial mediation analysis found caseload diagnostic composition did not mediate the relationship between occupational setting and vicarious trauma, thereby not in support of rejecting the null hypothesis.

Correspondingly, the post-hoc mediation analysis with a multiple linear regression model ($N = 122$), following the significant findings of the post-hoc t -test comparing community mental health ($n = 42$) and private practice therapists ($n = 80$), evaluated if caseload diagnostic composition mediated the relationship between occupational setting and VTS scores. While the overall regression model was significant, $F(3, 118) = 2.96, p = .035, R^2 = .07$, and occupational setting significantly predicted vicarious trauma, $b = 3.33, SE = 1.39, p = .018$, caseload diagnostic composition was not predicted by occupational setting ($b = 0.18, SE = 5.95, p = .976$,

95% CI [-12.15, 11.89]), and did not significantly predict vicarious trauma when controlling for occupational setting ($p = .359$). Bootstrapped indirect effects were also non-significant for caseload diagnostic composition ($b = -0.004$, 95% CI [-0.41, 0.36]). Consequently, the post-hoc mediation analysis determined caseload diagnostic composition did not mediate the relationship between occupational setting and vicarious trauma.

Comparison of Results to the Literature Review

The results of this study partially aligned with the reviewed vicarious trauma literature. Congruent with McCann and Pearlman's (1990a, 1990b, 1992) constructivist self-development theory and its conceptualization of vicarious trauma, the sample of psychotherapists providing trauma treatment endorsed symptoms of subjective distress associated with working with their traumatized patients. Total VTS scores can range from 8 to 56, and higher scores indicate greater vicarious traumatization (Vrklevski & Franklin, 2008). As participants who completed the measure had a mean score of 37.03 ($SD = 7.69$) out of 56, the results suggest overall moderate levels of vicarious trauma. These findings were thereby consistent with the original theoretical perspective that mental health practitioners indirectly exposed to their clients' trauma narratives are at risk for distorted cognitive schemas and emotional distress (McCann & Pearlman, 1990b) as well as the substantial recent research examining the persisting phenomenon (Aafjes-van Doorn et al., 2020; Barre et al., 2024; Charura, 2024; Foreman, 2018; Gaboury & Kimber, 2023; Halevi & Idisis, 2018; Helpingstine et al., 2021; Kounenou et al., 2023; Leung et al., 2023; McNeillie & Rose, 2021; Méndez-Fernández et al., 2022; Molnar et al., 2020; Mustafa et al., 2020; Ortner, 2024; Padmanabhanunni & Gqomfa, 2022; Rinfrette et al., 2021; Roberts et al., 2022; Salvilla & Bedoria, 2021; Sutton et al., 2022; Tsouvelas et al., 2029; Yu et al., 2023). Nevertheless, the hypothesis tests performed to address this study's three research questions

provided mixed support for the existing literature, which had a notable research gap on the influence of work settings and inconsistent findings on the impact of caseload sizes and diagnostic compositions on vicarious traumatization (Foreman, 2018; Méndez-Fernández et al., 2022; Molnar et al., 2020; Padmanabhanunni & Gqomfa, 2022; Rayner et al., 2020; Roberts et al., 2022; Sutton et al., 2022).

The independent samples *t*-test results offered varying parallels with the reviewed previous vicarious trauma research. There has been minimal examination of community mental health therapists' vicarious traumatization, though constructivist self-development theory posits vicarious trauma presentation can be affected by environmental factors (McCann & Pearlman, 1990b), ostensibly including occupational setting. While a research gap on community mental health practitioners' vicarious trauma was identified, the literature suggested those working in community mental health were susceptible to emotional exhaustion and challenges in delivering trauma-informed care (Last et al., 2021; Motamedi et al., 2023). Thus, the *t*-tests' findings that community mental health clinicians experienced significantly higher rates of vicarious trauma than private practice therapists but non-significantly more than therapists in other settings overall were somewhat aligned with the literature reviewed on the psychological implications of providing community mental health services.

Furthermore, the results of the mediation analyses contribute to the conflicting conclusions in the existing vicarious trauma literature on the influence of caseload size and composition. Though previous evidence purported community mental health centers have larger caseloads (Fukui et al., 2021; NASW, 2023) and more clients with trauma-related conditions (Pincus et al., 2022; Sucich et al., 2023) than other therapeutic settings, this study's multiple linear regression models found occupational setting did not predict caseload size or caseload

diagnostic composition within the research sample. Correspondingly, neither caseload size nor diagnostic composition mediated the relationship between occupational setting and vicarious trauma, contrasting with the current literature suggesting counselors with smaller caseloads might be less likely to experience vicarious trauma symptoms (Roberts et al., 2022; Sutton et al., 2022) and decreasing the number of traumatized patients treated per provider could mitigate vicarious trauma (Padmanabhanunni & Gqomfa, 2022; Roberts et al., 2022; Sutton et al., 2022) while converging with other studies that found caseload sizes and compositions were not significantly associated with vicarious trauma levels (Foreman, 2018; Molnar et al., 2020; Rayner et al., 2020). Therefore, this study's results revealed varied agreement with the present vicarious trauma literature.

Summary

This quantitative, causal-comparative study examined the extent to which community mental health practitioners' vicarious traumatization differs from therapists' in other occupational settings and whether caseload size and caseload diagnostic composition mediated that relationship. Using a sample of psychotherapists in the United States who treat trauma, results from the independent samples *t*-test indicated community mental health therapists had higher VTS scores than those in other settings, but the difference was not statistically significant. However, a post-hoc *t*-test comparing community mental health and private practice therapists identified a statistically significant difference, with community mental health practitioners reporting greater vicarious trauma. Subsequent mediation analyses found neither caseload size nor caseload diagnostic composition significantly mediated the relationship between occupational setting and vicarious trauma, either in the full sample or in post-hoc analyses comparing community mental health and private practice therapists.

In sum, while community mental health therapists exhibited somewhat higher vicarious trauma levels than peers in other settings, occupational setting alone did not significantly predict vicarious trauma across all groups, and the hypothesized mediators—caseload size and diagnostic composition—did not explain this relationship. The moderate levels of vicarious trauma found among the trauma therapy practitioners aligned with constructivist self-development theory (McCann & Pearlman, 1990b) and previous research highlighting vicarious trauma as a vocational hazard (Aafjes-van Doorn et al., 2020; Barre et al., 2024; Charura, 2024; Foreman, 2018; Gaboury & Kimber, 2023; Halevi & Idisis, 2018; Helpingstine et al., 2021; Kounenou et al., 2023; Leung et al., 2023; McNeillie & Rose, 2021; Méndez-Fernández et al., 2022; Molnar et al., 2020; Mustafa et al., 2020; Ortner, 2024; Padmanabhanunni & Gqomfa, 2022; Rinfrette et al., 2021; Roberts et al., 2022; Salvilla & Bedoria, 2021; Sutton et al., 2022; Tsouvelas et al., 2029; Yu et al., 2023). The results also contributed to the current mixed evidence regarding the role of caseload characteristics in vicarious trauma symptomatology (Foreman, 2018; Molnar et al., 2020; Padmanabhanunni & Gqomfa, 2022; Rayner et al., 2020; Roberts et al., 2022; Sutton et al., 2022). These findings should be further interpreted in relation to the existing literature, theoretical framework, study limitations, and implications for clinical practice and future research as discussed in Chapter 5.

Chapter 5: Discussion, Recommendations, and Study Summary

The research problem this study addressed was community mental health therapists' risk of vicarious trauma (Motamedi et al., 2023; Roberts et al., 2022). Psychotherapists repeatedly listening to their patients' trauma narratives are susceptible to developing post-traumatic stress disorder (PTSD) symptoms themselves (Charura, 2024; Helpingstine et al., 2021; Padmanabhanunni & Gqomfa, 2022; Rinfrette et al., 2021; Salvilla & Bedoria, 2021), and community mental health service providers may be particularly vulnerable because they often have larger caseloads (Fukui et al., 2021; National Association of Social Workers [NASW], 2023) with more traumatized clients (Pincus et al., 2022; Sucich et al., 2023). Thus, the purpose of this quantitative, causal-comparative design study was to compare levels of vicarious trauma as a function of setting (i.e., community mental health practitioners and therapists in other occupational settings) and examine how caseload sizes and caseload diagnostic composition (i.e., the percentage of a therapists' caseload diagnosed with a trauma-related condition) may mediate the relationship between vicarious traumatization and work setting.

The presented research thereby employed a quantitative method with a causal-comparative design and a cross-sectional survey approach to compare existing groups of community mental health clinicians and therapists in other work settings on their vicarious traumatization and examine caseload size and diagnostic composition as possible mediators. Therapist participants who met the study's inclusion criteria (i.e., residing in the United States and providing therapy to clients with trauma) were recruited through social media platforms, including Facebook (n.d.) groups, Reddit (n.d.) communities, and a Discord (n.d.) channel aimed at therapists, as well as the primary investigator's personal Facebook and LinkedIn (n.d.) pages. Data were collected via an anonymous online survey hosted on the Qualtrics platform, which

consisted of items on participants' demographic information, occupational setting, caseload size and diagnostic composition, and the Vicarious Trauma Scale (VTS; Vrkleviski & Franklin, 2008) to assess vicarious trauma symptomatology.

The survey received 210 responses, 160 of which included complete data on the VTS items. The data with the completed VTS items were then analyzed with an independent samples *t*-test to compare the mean vicarious trauma scores of community mental health therapist respondents to participants practicing therapy in other occupational settings, which found community mental health practitioners reported greater vicarious trauma than therapists in other settings, yet the difference was not significant. A mediation analysis using a multiple linear regression model with Hayes' (2022) PROCESS macro (Model 4; 5,000 bootstrap samples) was conducted with the data on caseload size and diagnostic composition to determine if these variables mediated the relationship (although non-significant) between occupational setting and vicarious trauma. Consistent with the *t*-test, the total effect of occupational setting on vicarious trauma was not significant, nor was the overall regression model. As neither caseload size nor diagnostic composition mediated the relationship between occupational setting and vicarious trauma, the corresponding null hypotheses were not rejected.

However, a post-hoc independent samples *t*-test comparing community mental health and private practice therapists' mean VTS scores showed a significant difference, with therapists in community mental health settings reporting higher vicarious trauma. A post-hoc mediation analysis with a multiple linear regression model (Hayes' [2022] PROCESS macro, Model 4; 5,000 bootstrap samples) was thus conducted to determine if caseload size and diagnostic composition mediated the significant relationship found in the post-hoc *t*-test. Although the overall regression model was significant, and occupational setting significantly predicted

vicarious trauma, neither caseload size nor diagnostic composition were predicted by occupational setting, and bootstrapped indirect effects were non-significant for caseload size and diagnostic composition. Therefore, caseload size and diagnostic composition did not demonstrate mediating effects on the relationship between occupational setting and vicarious trauma.

Nonetheless, these results must be construed within the context of the study's limitations. For instance, while the VTS has demonstrated solid psychometric properties for measuring vicarious trauma (Aguiar-Fernández et al., 2022; Aparicio et al., 2013; Benuto et al., 2018; Vrklevski & Franklin, 2008), the literature has disagreed on whether it functions as a single-factor (Benuto et al., 2018; Vrklevski & Franklin, 2008) or two-factor (Aguiar-Fernández et al., 2022; Aparicio et al., 2013) instrument, and this study employed the VTS as its original single-factor model (Vrklevski & Franklin, 2008). Moreover, though the self-administered and anonymous format of the study's online survey may have minimized the likelihood of social desirability bias (Krumpal, 2011; Nederhof, 1985; Ong & Weiss, 2000), the self-report measure remained vulnerable to inaccurate responses, such as some of the suspected erroneous caseload diagnostic composition data reflecting values inconsistent with the total reported caseload sizes. Likewise, the convenience sampling method via social media recruitment may not have produced a representative sample of trauma therapists, as participants self-selected into the research. The study's limitations should thus be considered when interpreting the findings.

Consequently, this chapter reviews the major conclusions of the study and examines factors that may influence the interpretation of the results. The findings are described by the extent to which they address the research problem and purpose and contribute to the existing vicarious trauma literature and theoretical framework, including how they align with and diverge from previous research. The study's implications and potential societal impact are presented,

followed by recommendations for practice and future research. The chapter is then concluded with a summary of the study and its significance.

Discussion

This study found therapists treating patients with trauma averaged moderate levels of vicarious trauma symptomatology per the VTS (Vrklevski & Franklin, 2008), supporting constructivist self-development theory's conception of vicarious traumatization as a significant occupational hazard for mental health professionals repeatedly exposed to their clients' trauma narratives (McCann & Pearlman, 1990b). However, the hypothesis tests conducted to address the study's three research questions provided mixed support for the existing literature and offered indistinct conclusions about the role of occupational setting in vicarious trauma. The initial independent samples *t*-test comparison between community mental health practitioners and therapists in other work environments indicated the former had higher VTS scores, but the difference was not statistically significant. Conversely, a post-hoc *t*-test revealed therapists at community mental health centers experienced significantly greater vicarious traumatization than those in private practice. These findings suggested though community mental health therapists may not have significantly higher vicarious trauma levels than their peers across all occupational environments, therapists' work setting may have some influence on their vicarious trauma levels. Thus, as this study aimed to address a research problem on the knowledge gap on community mental health therapists' vicarious traumatization and determine if this population has greater vicarious trauma levels, the *t*-test results submitted community mental health providers may indeed be at higher risk for vicarious trauma than therapists in other settings, yet their vicarious traumatization might not be significantly greater than other therapists overall.

Additionally, contrary to some of the prior literature (Padmanabhanunni & Gqomfa, 2022; Roberts et al., 2022; Sutton et al., 2022) but aligning with other previous research (Foreman, 2018; Molnar et al., 2020; Rayner et al., 2020), caseload sizes and diagnostic compositions were not found to play a significant role in therapists' vicarious trauma. The mediation analyses with multiple linear regression models showed neither caseload size nor diagnostic composition significantly mediated the relationship between occupational setting and vicarious traumatization, even within the post-hoc analysis of community mental health and private practice therapists' data in which the overall regression model was significant and occupational setting significantly predicted vicarious trauma. As this study sought to examine the extent to which these variables affected the relationship between occupational setting and vicarious trauma, the results thereby address a portion of the research problem and purpose by providing insight into how higher caseloads or a greater percentage of trauma clients do not necessarily explain differences in therapists' vicarious trauma levels. This is significant to the field, as the existing literature was inconsistent on the impact of caseload characteristics on vicarious trauma (Foreman, 2018; Molnar et al., 2020; Padmanabhanunni & Gqomfa, 2022; Rayner et al., 2020; Roberts et al., 2022; Sutton et al., 2022), and the findings of the current mediation analyses contribute to the mixed evidence, implicating factors contributing to vicarious trauma severity remain complex and inconclusive.

Caseload size and diagnostic composition may have not been identified as mediators in the relationship between occupational setting and vicarious traumatization largely because setting did not predict either caseload variable. This reflected community mental health therapists did not report significantly larger caseloads or a greater percentage of traumatized patients on their caseload than their peers, opposing the reviewed literature that emphasized

community mental health centers often have high caseloads (Fukui et al., 2021; NASW, 2023) and a greater proportion of clients with trauma (Pincus et al., 2022; Sucich et al., 2023).

Nonetheless, these findings should be interpreted with caution, as some of the data implied the respondents may not have accurately reported their caseload characteristics. Several participants provided values for their caseload size and diagnostic composition that were incongruent (e.g., a respondent identified a caseload size of four clients as well as the percentage of their caseload with a trauma-related condition as 4% despite a caseload of four clients equating to each client representing 25% of the caseload)—suggesting the survey items on caseload characteristics may have been difficult for respondents to comprehend and calculate correctly. Hence, the verbiage employed for the caseload survey items and mechanism for their measurement (e.g., requiring a percentage of the caseload rather than a total count of clients with a trauma-related condition for the caseload diagnostic composition variable) may have systematically biased the findings pertaining to therapists' caseloads, potentially accounting for the results diverging from the current literature.

Concurrently, the recruitment and sampling methods used in this study should be considered when interpreting the results. Although the sample size surpassed the target as determined by an a priori sample size power analysis to detect a moderate effect size with sufficient power (i.e., at least .80), continuing recruitment for a larger sample with a greater proportion may have allowed the data to detect smaller but significant effects. Even with efforts to specifically recruit community mental health practitioners, the final study sample was unevenly distributed between those in community mental health and other settings, with the greatest representation from private practice therapists. Accordingly, participants' caseload diagnostic compositions may not have significantly differed across settings partly because the

survey respondents self-selected to participate. The recruitment materials presented this vicarious trauma study with emphasis on its participation criteria, which included providing therapy to clients with trauma, so while therapists treating fewer trauma patients could have been eligible, individuals who self-selected to study may have had a greater percentage of traumatized clients than the overall population. Similarly, item-total correlation analyses revealed the first two VTS items—whether participants’ jobs involve exposure to distressing material and experiences, and traumatized or distressed clients, respectively—had significantly higher average scores than other items, contributing to greater overall VTS scores. Therefore, the accuracy and generalizability of the findings may have been influenced by self-selection biases associated with the study’s recruitment materials emphasizing trauma therapy provision as an inclusion criterion.

Regardless, this study’s results may offer valuable contributions to constructivist self-development theory and the vicarious trauma literature as well as wide-ranging societal implications associated with mental health treatment. As the research sample reported an average of moderate vicarious trauma levels, the findings converge with constructivist self-development theory’s assertion of therapists’ psychological and emotional changes following their indirect exposure to their clients’ traumatic material (McCann & Pearlman, 1990b). Consequently, this research suggests within the context of constructivist self-development theory, mental health practitioners impacted by vicarious trauma across various occupational settings may experience altered perceptions about themselves and the world as informed by their fundamental psychological needs, including safety, dependency, trust, power, esteem, intimacy, independence, and frame of reference (McCann & Pearlman, 1990b). Such changes may manifest as pessimistic thoughts, hyperarousal, anxious mood, emotional disengagement, survivor’s guilt, avoidance, hypervigilance, and intrusive re-experiencing of the traumatic events

that their patients described (Aafjes-van Doorn et al., 2020; Helpingstine et al., 2021; Vukčević Marković & Živanović, 2022), indicating trauma therapists across settings may be vulnerable to analogous PTSD symptoms. Hence, this study reflected therapists treating traumatized clients in a variety of environments could be susceptible to a decompensation in their mental and emotional well-being—and subsequently their social and occupational functioning (Molnar et al., 2020; Mustafa et al., 2020)—with those in community mental health possibly at greater risk than their peers in private practice.

Furthermore, the implications of therapists' vicarious traumatization affect not only individual clinicians but also the quality, sustainability, and equity of mental health services. Vicariously traumatized therapists often report poorer professional performance (Charura, 2024; Last et al., 2021; Motamedi et al., 2023; Renkiewicz & Hubble, 2023; Towey-Swift & Whittington, 2021), risking the quality of their clients' treatment (Last et al., 2021; Motamedi et al., 2023). Since this study found community mental health practitioners had significantly higher vicarious traumatization than private practice therapists, consumers of community mental health services—often disenfranchised, low-income, ethnically diverse populations (Motamedi et al., 2023; Pincus et al., 2022; Rosenberg & Rosenberg, 2017; Sucich et al., 2023) with psychiatric disorders and psychosocial disabilities (World Health Organization [WHO], 2021)—may be disproportionately affected by a reduction in treatment quality. Additionally, as vicarious trauma has been associated with compassion fatigue and burnout (Bhagwagar, 2022; Charura, 2024; Helpingstine et al., 2021; Kounenou et al., 2023; Leung et al., 2023; Renkiewicz & Hubble, 2023; Sutton et al., 2022; Yu et al., 2023), the present study proposes therapists across work environments could be susceptible to these phenomena. Community mental health practitioners may have greater turnover intentions with higher burnout levels (Sklar et al., 2021), and high

staff turnover—along with burnout and low morale—has been identified as a threat to the sustainability of community mental health organizations (Moore et al., 2022). Therefore, the discrepancy this study found between community mental health and private practice therapists' vicarious traumatization may indicate unique challenges for both those employed and served by community mental health centers compared to private practice settings.

Moreover, if vicarious trauma reduces treatment quality (Charura, 2024; Last et al., 2021; Motamedi et al., 2023; Renkiewicz & Hubble, 2023; Towey-Swift & Whittington, 2021) and access to care due to clinicians' absenteeism (Newman et al., 2024) and turnover (Sklar et al., 2021), community mental health service providers' vicarious traumatization may compromise their clients' mental health recovery. Community mental health centers were historically developed as part of deinstitutionalization efforts to minimize hospitalizations of individuals with chronic psychiatric conditions (Drake & Latimer, 2012; Hamm et al., 2020; Rosenberg & Rosenberg, 2017), especially as public mental asylums received reduced funding (Hamm et al., 2020). However, consumers of community mental health services—who often have severe and persistent mental health conditions (WHO, 2021)—may experience greater instability and mental health crises without sufficient access to adequate treatment, potentially encumbering their families and communities as well as crisis response and psychiatric hospital personnel. Thus, the substantial vicarious trauma rates found among community mental health professionals, as well as other psychotherapists, implicate substantial societal costs.

Nonetheless, these societal outcomes are more probable implications from the study's findings on therapists' vicarious trauma across settings than conclusions drawn on their caseload characteristics. Although the results of the mediation analyses using multiple linear regression models determined caseload size and diagnostic composition were not significantly related to

vicarious trauma, nor did they mediate the relationship between occupational setting and vicarious trauma, factors such as the likely inaccurate reporting of the percentage of the caseloads with traumatized clients and the lack of significant difference of caseload characteristics across settings may have influenced these findings, consequently minimizing confidence in concluding caseload characteristics have no role in therapists' vicarious trauma. Yet it is also possible other variables not examined in this study may have a greater influence on vicarious trauma inequities, such as financial compensation disparities granting private practice therapists access more resources to mitigate vicarious trauma, or those suggested by the literature on personality (Bakhshi et al., 2021), clinical supervision and peer support (Sutton et al., 2022), and personal trauma histories among therapists (Gaboury & Kimber, 2023; Leung et al., 2022; Molnar et al., 2020; Rayner et al., 2020; Rinfrette et al., 2021). Hence, limited conclusions may be drawn on the impact of caseload size and diagnostic composition on vicarious traumatization.

In sum, the study's findings extend the constructivist self-development framework by reinforcing the notion that psychotherapists' cognitive schemas and psychological needs are impacted by indirect trauma exposure, as highlighted by the research sample's reported vicarious trauma levels (McCann & Pearlman, 1990b). This research confirmed community mental health professionals experienced vicarious trauma symptoms, and at a greater severity than their counterparts in private practice, adding further empirical support to the literature on therapists' vicarious trauma (Charura, 2024; Helpingstine et al., 2021; Padmanabhanunni & Gqomfa, 2022; Rinfrette et al., 2021; Salvilla & Bedoria, 2021). The null findings on caseload size and diagnostic composition contribute to the mixed existing evidence of their role in vicarious trauma (Foreman, 2018; Molnar et al., 2020; Padmanabhanunni & Gqomfa, 2022; Rayner et al., 2020; Roberts et al., 2022; Sutton et al., 2022), underscoring the multifaceted nature of the

phenomenon. While methodological issues from potential sampling biases and self-reported data may have affected the results, the study aptly addressed the research problem of community mental health therapists' risk of vicarious traumatization, though additional research is encouraged to further explore the complexity of vicarious trauma's development.

Recommendations for Practice

The results of this study informed several recommendations for practice within the field of mental health services. As the findings indicate substantial vicarious trauma across psychotherapy settings, with community mental health practitioners reporting higher levels than private practice therapists, the development of vicarious trauma symptoms should be monitored in mental health treatment environments. The VTS has been shown to validly and reliably measure vicarious trauma symptomatology (Aguilar-Fernández et al., 2022; Aparicio et al., 2013; Benuto et al., 2018; Vrkleviski & Franklin, 2008) and could be used at community mental health organizations and other settings with indirect trauma exposure to regularly assess their employees' vicarious trauma and intervene accordingly. Though current research on specific therapeutic interventions for vicarious trauma is limited, the literature suggests trauma treatments such as art therapy (Ortner, 2024) and Eye Movement Desensitization and Reprocessing (EMDR) group therapy (Tsouvelas et al., 2019), as well as consistent and empathic clinical supervision and peer supports (Sutton et al., 2022; Vukčević Marković & Živanović, 2022), may mitigate symptoms. Such emerging trauma therapies and organizational supports for vicarious traumatization are thus encouraged to be accessible to community mental health service providers and other practitioners vulnerable to vicarious trauma.

Additionally, as community mental health therapists frequently experience emotional exhaustion, compassion fatigue, burnout, and turnover (Dishop et al., 2019; Kuckertz et al.,

2024; Ross et al., 2022; Towey-Swift & Whittington, 2021), and these phenomena have been linked with vicarious trauma (Kercher & Gossage, 2024; Kounenou et al., 2023), broader organizational and policy efforts should be endorsed to promote clinicians' holistic well-being. This study did not offer conclusive findings on the role of caseload size and diagnostic composition in vicarious trauma, yet because systematic biases may have compromised the accuracy of the caseload data, and caseload factors' implications for vicarious trauma remain controversial in the literature (Foreman, 2018; Molnar et al., 2020; Padmanabhanunni & Gqomfa, 2022; Rayner et al., 2020; Roberts et al., 2022; Sutton et al., 2022), caution should be taken before dismissing therapists' workload considerations like caseload distributions. Along with ensuring available organizational supports and evidence-based clinical supervision (Sutton et al., 2022; Vukčević Marković & Živanović, 2022), community mental health agencies and other settings susceptible to vicarious trauma may recruit and retain clinical staff by offering sufficient financial compensation, health benefits, and paid time off. By avoiding clinical staffing shortages, community mental health centers can appropriately disseminate trauma client cases among larger teams to prevent burdening therapists with untenable workloads, potentially mitigating vicarious trauma and associated burnout and turnover. Therefore, investing in adequately hiring and compensating community mental health employees—partly by safeguarding or increasing funding for community mental health services—may benefit therapists, consumers, and the broader public by protecting practitioners' and clients' psychological and emotional health.

Recommendations for Future Research

Despite the valuable contributions to the vicarious trauma literature this study may provide, further research is recommended to extend constructivist self-development theory's

knowledge on the multifaceted construct. Future vicarious trauma research could improve upon this study with a modified replication, ideally with a larger, diverse sample comprised of greater representation from community mental health professionals and therapists in varied settings. Given the validity concerns of the caseload diagnostic composition data, a replicated study may instead measure this variable without requiring participants to calculate the percentage of traumatized patients they treat, such as by inquiring about the total number of clients they treat for a trauma-related condition. Alternatively, trauma workload factors could be assessed by reports of how frequently therapists conduct sessions with their traumatized clients or the number of hours per week spent providing trauma therapy. Additional research could thus develop more profound insights into the contrasting evidence on caseload characteristics' relationship with vicarious traumatization.

Examination of other potential factors affecting vicarious trauma is also encouraged. For instance, if an income disparity is found between private practice and community mental health therapists, future studies could evaluate whether private practice therapists' higher socioeconomic status improves their access to resources to manage or mitigate vicarious traumatization, offering a possible explanation for the higher VTS scores among community mental health practitioners. Additionally, clinicians' prior experience of direct trauma could be explored as a mediator, as the literature has suggested its association with mental health professionals' vicarious traumatization (Gaboury & Kimber, 2023; Leung et al., 2022; Molnar et al., 2020). Since previous trauma experiences are common among mental health service providers (Gaboury & Kimber, 2023; Helpingstine et al., 2021; Keesler, 2018; Leung et al., 2022; Ortner, 2024; Rinfrette et al., 2021)—often disproportionately higher than the general population and other occupations (Keesler, 2018; Leung et al., 2022)—and many counselors cite

their early traumatic experiences as motivators for their chosen careers (Leung et al., 2022; Rinfrette et al., 2021), future research could evaluate if community mental health therapists have more extensive personal trauma histories than their peers and if such contributes to their greater vulnerability to vicarious traumatization. Other mediators to consider for future studies could include therapists' age, years of experience, level of education, licensure status, and quantity and perceived quality of clinical supervision. Consequently, as the present study determined caseload characteristics did not mediate the relationship between occupational setting and VTS scores, further research may identify more significant mediating variables.

Accordingly, additional study into factors relevant to risk of personal trauma histories as they relate to mental health professionals' vicarious traumatization is promoted. Individuals who experienced low socioeconomic status (Jang et al., 2025; Misiak et al., 2022) or with racial (Kler et al., 2025; Valentine et al., 2025), gender identity, and sexual orientation minority statuses (Labonté et al., 2023; McKernan et al., 2025; Paquette et al., 2021) experience more direct trauma, and therapists with these identities may subsequently be more prone to vicarious trauma. Examining if vicarious trauma rates indeed differ for social minority group therapists can offer critical data to develop support for these providers, who may be especially vital in community mental health organizations as their identities often align with these agencies' diverse clientele (Pincus et al., 2022; Sucich et al., 2023). Likewise, qualitative research—such as phenomenological approaches to examine the lived experiences of vicarious trauma among racial, gender, and sexual orientation minority mental health professionals in different work settings—could provide nuanced and in-depth information about how vicarious traumatization may affect minority status therapists in various environments vulnerable to the occupational hazard.

Future research on the outcomes of vicarious trauma could also significantly contribute to the literature and extend constructivist self-development theory's understanding of the construct. Studies investigating the perspectives of community mental health clients could offer insights outside of the limitations of therapists' self-reports and reflect the efficacy of their treatment as possibly impacted by vicarious trauma. Similarly, research sampling clinical supervisors at community mental health sites could reveal their views on how their supervisees' vicarious trauma influences professional performance and the clinical supervision relationship. Furthermore, the emerging research on how vicarious trauma can contribute to post-traumatic growth (Barre et al., 2024; Jiang et al., 2023; McNeillie & Rose, 2021) could be expanded to explore the positive consequences community mental health therapists experience from their trauma work, such as learning lessons and finding meaning from traumatic experiences (Barre et al., 2024), appreciating resilience and enhanced social skills (Jiang et al. 2023), and feeling satisfaction from witnessing patients' therapeutic successes (McNeillie & Rose, 2021) as found among mental health professionals in other settings. Hence, future research is necessary to recognize the unique implications of community mental health professionals' vicarious trauma.

Lastly, further exploration of interventions for vicarious traumatization is key to assisting affected mental health service providers. While the present study offered information on the complex nature of psychotherapists' vicarious trauma (i.e., how occupational setting and caseload factors may not fully explain variances in severity), next steps in this line of research could include investigating preventative measures and viable treatments for vicarious trauma appropriate for different therapy environments. The existing literature on specific interventions for vicarious trauma is limited, with treatments such as art therapy (Ortner, 2024) and EMDR group therapy (Tsouvelas et al., 2019) as well as quality clinical supervision and peer supports

(Sutton et al., 2022; Vukčević Marković & Živanović, 2022) demonstrating aptitude for mitigating symptoms. Considering the findings of this study indicated vicarious trauma differences as a function of occupational setting—with community mental health service providers reporting greater vicarious trauma than private practice therapists—future research could examine how various interventions may be most suitable to alleviate vicarious traumatization in different settings. Thus, by addressing strategies to avoid or treat vicarious trauma, future studies can invaluablely contribute to the constructive self-development theory literature and promote better outcomes for mental health professionals and the communities they serve.

Study Summary

This quantitative, causal-comparative study addressed the research problem of community mental health clinicians' vicarious traumatization, investigating whether their risk may be higher than therapists' in other occupational settings and if caseload size and diagnostic composition contributed to this difference. Therapists treating trauma across the United States were recruited from social media platforms to complete an online survey on their demographic data, occupational setting, caseload size and diagnostic composition, and vicarious trauma symptoms as measured by the well-validated VTS (Aguar-Fernández et al., 2022; Aparicio et al., 2013; Benuto et al., 2018; Vrklevski & Franklin, 2008). An initial independent samples *t*-test revealed community mental health practitioners reported higher vicarious trauma than their counterparts, though this difference was not statistically significant, while a post-hoc *t*-test comparing community mental health and private practice therapists found the former had significantly greater VTS scores. Mediation analyses using multiple linear regression models (Hayes' [2022] PROCESS macro, Model 4; 5,000 bootstrap samples) determined neither

caseload size nor diagnostic composition significantly mediated the relationship between occupational setting and vicarious trauma. However, the mediation analyses findings should be interpreted with caution, as the caseload data likely consisted of inaccuracies due to the inconsistencies in some of the values participants reported for their caseload size and the percentage of clients with a trauma-related condition. Nevertheless, these results emphasize the plausible complexity of factors influencing vicarious trauma, suggesting occupational settings may have some impact, yet other variables likely also play a role.

This study's importance lies in its contribution to constructivist self-development theory and the vicarious trauma literature in understanding the vocational hazards faced by mental health professionals, especially those in community mental health settings serving vulnerable populations (Motamedi et al., 2023; Pincus et al., 2022; Sucich et al., 2023). The research findings reinforce the need for regularly monitoring and developing organizational supports to prevent therapists' vicarious trauma, which has been shown to affect their well-being (Charura, 2024; Helpingstine et al., 2021; Padmanabhanunni & Gqomfa, 2022; Salvilla & Bedoria, 2021) and client treatment quality (Last et al., 2021; Motamedi et al., 2023), subsequently impacting the broader community. Hence, the study addressed a notable research gap and offers key insights for clinicians, organizations, and policymakers aiming to mitigate vicarious trauma and promote sustainable mental health services. Future research is encouraged to explore more diverse samples, additional possible mediating variables, and adaptive interventions to further support mental health professionals in managing vicarious trauma.

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Appendix A: Study Questionnaire

1. What is your gender?
 - Woman
 - Man
 - Non-binary/third gender
 - I prefer to self-describe:
2. What is your age group?
 - 18 to 24
 - 25 to 34
 - 35 to 44
 - 45 to 54
 - 55 to 64
 - 65 or older
3. Which ethnicity or racial background best describes you?
 - Asian or Pacific Islander
 - Black or African American
 - Indigenous American or Alaskan Native
 - Latino/a/x or Hispanic
 - Middle Eastern or North African
 - White or Caucasian
 - Multiple ethnicities/other:
4. What is your highest level of education?
 - Bachelor's degree

- Current master's student
 - Received a master's degree
 - Current doctoral student
 - Received a doctoral degree
5. Which best describes your profession?
- Addiction therapist
 - Behavioral therapist
 - Clinical social worker
 - Marriage and family therapist
 - Mental health counselor
 - Professional clinical counselor
 - Psychologist
 - Psychiatrist
 - School counselor
 - Other:
6. How many years of experience do you have as a therapist?
7. Which setting best describes your primary work environment?
- Community mental health center
 - Hospital
 - Private practice
 - School
 - Other:
8. How many clients do you have on your caseload?

9. What percentage of the clients on your caseload are you treating for a trauma-related condition?

Please read the following statements and indicate on a scale of 1 (*strongly disagree*) to 7 (*strongly agree*) how much you agree with them.

10. My job involves exposure to distressing material and experiences.

- 1) Strongly disagree
- 2) Disagree
- 3) Slightly disagree
- 4) Neither agree nor disagree
- 5) Slightly agree
- 6) Agree
- 7) Strongly agree

11. My job involves exposure to traumatized or distressed clients.

- 1) Strongly disagree
- 2) Disagree
- 3) Slightly disagree
- 4) Neither agree nor disagree
- 5) Slightly agree
- 6) Agree
- 7) Strongly agree

12. I find myself distressed by listening to my clients' stories and situations.

- 1) Strongly disagree
- 2) Disagree

- 3) Slightly disagree
 - 4) Neither agree nor disagree
 - 5) Slightly agree
 - 6) Agree
 - 7) Strongly agree
13. I find it difficult to deal with the content of my work.
- 1) Strongly disagree
 - 2) Disagree
 - 3) Slightly disagree
 - 4) Neither agree nor disagree
 - 5) Slightly agree
 - 6) Agree
 - 7) Strongly agree
14. I find myself thinking about distressing material at home.
- 1) Strongly disagree
 - 2) Disagree
 - 3) Slightly disagree
 - 4) Neither agree nor disagree
 - 5) Slightly agree
 - 6) Agree
 - 7) Strongly agree
15. Sometimes I feel helpless to assist my clients in the way I would like.
- 1) Strongly disagree

- 2) Disagree
- 3) Slightly disagree
- 4) Neither agree nor disagree
- 5) Slightly agree
- 6) Agree
- 7) Strongly agree

16. Sometimes I feel overwhelmed by the workload involved in my job.

- 1) Strongly disagree
- 2) Disagree
- 3) Slightly disagree
- 4) Neither agree nor disagree
- 5) Slightly agree
- 6) Agree
- 7) Strongly agree

17. It is hard to stay positive and optimistic given some of the things I encounter in my work.

- 1) Strongly disagree
- 2) Disagree
- 3) Slightly disagree
- 4) Neither agree nor disagree
- 5) Slightly agree
- 6) Agree
- 7) Strongly agree

Appendix B: Permission Statement for Use of the Vicarious Trauma Scale



Vicarious Trauma Scale

PsycTESTS Citation:

Vrklevski, L. P., & Franklin, J. (2008). Vicarious Trauma Scale [Database record]. Retrieved from PsycTESTS. doi: <https://dx.doi.org/10.1037/t03119-000>

Instrument Type:

Rating Scale

Test Format:

7-point Likert-type scale, ranging from 1 (strongly disagree) to 7 (strongly agree).

Source:

Vrklevski, Lila Petar, & Franklin, John (2008). Vicarious trauma: The impact on solicitors of exposure to traumatic material. *Traumatology*, Vol 14(1), 106-118. doi: <https://dx.doi.org/10.1177/1534765607309961>, © 2008 by SAGE Publications. Reproduced by Permission of SAGE Publications.

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Appendix C: Online Recruitment Post

Hello! My name is Brittany Edwards, and I am a doctoral student at National University. I am conducting an online survey to examine how therapists may be affected by working with clients who have trauma histories and the factors influencing their experiences. In order to participate, you must currently reside in the United States and provide therapy to clients with trauma. The survey is anonymous and has 17 questions, may take an estimated 10 to 15 minutes to complete, and will ask questions about your gender, age group, ethnicity/racial background, education, profession, years of experience, work setting, caseload size, and percentage of clients with a trauma-related condition, as well as how your work as a therapist may have affected you. Follow this link if you wish to participate in this voluntary research:


https://ncu.co1.qualtrics.com/jfe/form/SV_0rirc8qZVGcyTiu. Feel free to share this link on your page and to others who may be eligible to participate!

Image description: A recruitment flyer for a study on therapists' vicarious trauma is displayed.

A photograph shows two people engaged in a therapy session.

Participants Needed for a Study on Therapists' Vicarious Trauma

- You are eligible for this study if you currently reside in the United States and provide therapy to clients with trauma.
- Participants will be asked to complete an anonymous online questionnaire on their gender, age group, ethnicity/racial background, education, profession, years of experience, work setting, caseload size, percentage of clients with a trauma-related condition, and how their work as therapists may have affected them.



If you are interested in participating, please click this link:

https://ncu.co1.qualtrics.com/jfe/form/SV_0rirc8qZVGcyTiu

Thank you for considering participating in this voluntary research! Please contact me with any questions about this study.

Brittany Edwards, Doctoral Student at National University
B.Edwards0317@o365.ncu.edu

Appendix D: Informed Consent Document



National University IRB
9338 Lightwave Ave., San Diego, CA 92123
irb@nu.edu

Hello,

My name is Brittany Edwards, and I am a doctoral student at National University. I am conducting an online survey to examine how therapists may be affected by working with clients who have trauma histories and the factors influencing their experiences. In order to participate, you must currently reside in the United States and provide therapy to clients with trauma.

The following survey includes questions about your gender, age group, ethnicity/racial background, education, profession, years of experience, work setting, caseload size, and percentage of clients with a trauma-related condition. It also includes questions about how your work as a therapist may have affected you. However, the survey will not ask details about your clients' traumatic experiences. It will take an estimated 10 to 15 minutes of your time to complete the survey.

Your participation in this study is voluntary. You may skip questions or discontinue the survey at any time. If you decide to participate, your responses will be anonymous - that is, recorded without any identifying information that is linked to you. If you have any questions regarding this survey, please contact me at B.Edwards0317@o365.ncu.edu.

If you have any questions regarding your rights as a human subject and participant in this study, or to report research-related problems, you may email the National University IRB at irb@nu.edu.

By clicking the next button and completing the survey you indicate that you have consented to participate in this research. If you do not want to participate, please close the browser.