THE EFFECTS OF VICARIOUS TRAUMA ON BURNOUT IN MENTAL HEALTHCARE PROVIDERS: THE MEDIATING ROLE OF WORK INTERFERENCE WITH FAMILY AND THE IMPORTANCE OF PERCEIVED ORGANIZATIONAL SUPPORT

CHRISTOPHER R. GORDON

Bachelor of Art in Psychology

Cleveland State University

May 2018

submitted in partial fulfillment of requirements for the degree

MASTER OF ARTS

at the

CLEVELAND STATE UNIVERSITY

August 2021

We hereby approve this thesis for

CHRISTOPHER R. GORDON

Candidate for the Master of Arts in Psychology, Industrial/Organizational Research

For the

Department of Psychology

And

CLEVELAND STATE UNIVERSITY'S

College of Graduate Studies by

Thesis Chairperson, Michael Horvath, Ph.D.
Department & Date
Thesis Committee Member, Elizabeth Goncy, Ph.D.
Department & Date
Thesis Committee Member, Kenneth Vail, Ph.D
Department & Date

Student's Date of Defense: August 25, 2021

THE EFFECTS OF VICARIOUS TRAUMA ON BURNOUT IN MENTAL HEALTHCARE PROVIDERS: THE MEDIATING ROLE OF WORK INTERFERENCE WITH FAMILY AND THE IMPORTANCE OF PERCEIVED ORGANIZATIONAL SUPPORT

CHRISTOPHER R. GORDON

ABSTRACT

Mental health clinicians often work with clients who have been through significant trauma, and clinicians face risks of traumatization themselves through exposure to the traumatic stories of clients. This indirect traumatization is known as vicarious trauma (VT), and research has shown this to be related to burnout in mental health workers. Mental health clinicians must find a delicate balance between work and family roles, and the present study aimed to determine how this work interference with family (WIF) can explain the relationship between VT and burnout, and how support from the organization can ameliorate the negative effects of VT on the balance between work and family. Questionnaire responses were anonymously collected and analyzed from 110 mental health professionals working in mental health organizations sampled from several counties around Ohio. Analyses of the responses supported the hypotheses that WIF explains the relationship between VT and burnout, but perceived organizational support (POS) does not moderate the relationship VT and WIF, therefore rejecting those hypotheses. On this basis, it is recommended that mental health organizations educate employees on balancing work and family roles and provide adequate resources such as paid time off to help clinicians avoid burnout. Further research is needed to determine if POS is more effective at preventing VT than addressing it.

TABLE OF CONTENTS

	Page
ABSTRACT	iii
LIST OF TABLES	vi
CHAPTER	
I. INTRODUCTION.	1
1.1 Construct Introductions	1
1.2 Study Aims	3
II. LITERATURE REVIEW	5
2.1 Vicarious Trauma	5
2.2 Burnout	13
2.3 Work Interference with Family	17
2.4 Perceived Organizational Support	22
III. METHODS	28
3.1 Participants	,28
3.2 Measures	29
Vicarious Trauma Scale	29
Oldenburg Burnout Inventory	29
Work-Family Conflict Scale	31
Perceived Organizational Support Scale	31
3.3 Procedure	32
IV. DATA ANALYSIS RESULTS	35
4.1 Covariate Analyses	35

4.2 Hypothesis 1	36
4.3 Hypothesis 2	37
4.4 Hypothesis 3	38
4.5 Hypothesis 4	39
V. DISCUSSION	41
5.1 Results Discussion	41
5.2 Limitations and Future Research	45
5.3 Practical Implications and Concluding Remarks	52
REFERENCES	54
APPENDICES	63
A. Tables	63
B. Demographic Questions and Informed Consent	68
C. Vicarious Trauma Scale	72
D. Oldenburg Burnout Inventory	73
E. Work-Family Conflict Scale	75
F. Perceived Organizational Support Scale	76

LIST OF TABLES

Table	Page
A1. Descriptive Statistics.	63
A2. Hypothesis 1 Results.	64
A3. Hypothesis 2 Results.	65
A4. Hypothesis 3 Results	66
A5. Hypothesis 4 Results	67

CHAPTER I

INTRODUCTION

1.1 Construct Introductions

Research has shown that trauma and stress can significantly change the way that individuals view themselves and the world. Post-traumatic stress disorder (PTSD) is a well-documented disorder related to stress and trauma that results from witnessing or experiencing one or more traumatic events (McCann & Pearlman, 1990b). Individuals suffering from PTSD are prone to depression, anxiety, random bouts of anger, recklessness, and insomnia. PTSD can also lead to substance abuse and even suicidal ideation. As a result of these psychological disturbances, those enduring PTSD tend to distance themselves from others, thus leading to the deterioration of relationships with friends and loved ones (McCann & Pearlman, 1990b).

There is a growing body of research suggesting that the experience of traumatization is not limited to the victim (Lerias & Byrne, 2003). Vicarious trauma (VT) is of great interest to mental health clinicians, especially since the recent advocation for trauma-informed care training in mental health care organizations (Branson, 2019). In trauma informed care settings, clinicians understand the effects and pervasiveness of

trauma, in turn fostering a setting of growth and empowerment in the pursuit of safe spaces for clients to heal from past trauma (Hales et al., 2019). Trauma survivors may view themselves and the world through a skewed lens, and the survivors' disrupted inner representations, known as schemas, dictate how they see themselves and how they see their relation to the world (McCann & Pearlman, 1990a). Attempting to understand the world from the view of the victim puts clinicians at risk of vicarious traumatization (McCann & Pearlman, 1990b). This emotional effect of trauma is thought to be contagious (McCann & Pearlman, 1990b). The negative effects of VT have been shown to be both personal and professional (Dombo & Gray, 2013). VT effects also include social isolation, parenting changes, and relationship problems (Dombo & Gray, 2013). Clinicians may even mimic the coping skills of their clients who have been through significant trauma (Tyler, 2012). Despite the importance of VT to clinical work and the cited articles, there is a limited amount of empirical research in the VT literature as most research on VT is done through qualitative research and case studies, which this study aims to remedy by looking at VT in relation to other very important constructs in psychology through quantitative research.

Burnout is a long-standing construct in psychology that is especially prevalent in human services. Burnout is composed of emotional exhaustion, depersonalization, and reduced personal accomplishment (Maslach et al., 1996), although this definition has been contested as will be explained later in the burnout section. This study aims to further examine how the emotional impact of VT can relate to the experience of burnout for mental health clinicians. There have been studies in the literature comparing the effects of VT and burnout on other variables, such as how well VT and burnout predict affective

clinician distress (DeVilly et al., 2009). Most other papers in the literature comparing VT and burnout use case studies and qualitative research as opposed to quantitative research. There is a limited amount of quantitative peer reviewed articles looking at burnout as a possible outcome of VT so this quantitative research will prove valuable in that aspect.

Clinicians live their own lives outside of their work with clients, and the stress of their jobs can make it difficult to balance their work and family lives (Kalliath & Kalliath, 2014). This inability to balance the demands of work and family domains is known as work-family conflict (WFC) according to Greenhaus and Beutell (1985). The construct of WFC can be further broken down and this research will explain each construct in detail in the appropriate section. Research has looked at multiple antecedents of WFC (Byron, 2005) and this research contributes to the literature by considering VT to be an antecedent to WFC. This research will contribute to the literature even further by considering WFC to explain the relationship between VT and burnout. That is, WFC mediates the relationship between VT and burnout. The hypotheses and the theories behind them are explored further in the respective sections.

1.2 Study Aims

This research will prove valuable to clinicians and clients alike as clinicians who are traumatized themselves, and overwhelmed as a result, will not be able to provide the most efficacious client care. Mental health organizations are often very concerned with client mental health, which is obviously important, but this often results in too little attention paid to the actual mental health caregivers. Clinicians can experience some very distressful stories that can be detrimental to their own mental health (McCann & Pearlman, 1990b). The effects of the clinicians' work on their family lives are also

underestimated as clinicians are expected to care about the well-being of clients above all else and to be always available due to increases in technology (Kalliath & Kalliath, 2014). This research will also prove valuable to organizations where VT may occur as this research may show the benefits that both employee and employer can enjoy from perceived organizational support (POS) or the belief that one is important to the organization and is genuinely cared for (Eisenberger et al., 1986). This research proposes that perceived organizational support (POS) changes the strength of the relationship between VT and WFC as a moderator. This research will first review each construct with the appropriate hypotheses incorporated throughout, beginning with VT.

CHAPTER II

LITERATURE REVIEW

2.1 Vicarious Trauma

Trauma is defined by McCann and Pearlman (1990a) as an upsetting event that disrupts an individual's beliefs, expectations, or perceptions of themselves and their relationship with the world, and it has been proposed that clinicians treating traumatized clients can suffer the same consequences indirectly by experiencing vicarious trauma (VT) (McCann & Pearlman, 1990b). Clinicians in the mental health field often work with clients who have been through traumatic situations, and the literature suggests clinicians can be affected vicariously by the trauma that clients have endured (McCann & Pearlman, 1990b). In order to fully understand the concept of VT, first it is vital to understand the theoretical framework that McCann and Pearlman (1990b) derived VT from which explains that trauma reactions of individuals depend on a combination of personal and environmental characteristics (McCann & Pearlman, 1990a). After the effects of trauma on an individual are explained by this framework, the model is applied to explain vicarious traumatization of clinicians counseling those affected by trauma (McCann & Pearlman, 1990b).

The concept of VT was born out of Constructivist Self-Development Theory (CSDT) by McCann and Pearlman (1990a). All constructive psychology theories state that a purely objective view of reality is impossible and that subjective experiences shape the realities of individuals (Raskin & Bridges, 2002). A classic example is Piaget's theory of Epistemology, also known as the Theory of Cognitive Development, which states that individuals learn to create their realities through experiences with schemas, which are beliefs and expectations people use to organize their views of the self and the world, as well as their relationship with the world (Piaget, 1971). Individuals must accommodate their belief system when something happens that does not match their pre-existing schemas, or they must assimilate the information to match their current belief system. McCann and Pearlman (1990a) borrow heavily from Piaget's ideas when talking about how the brain interprets traumatic events. This suggests the way individuals create their own personal meanings and models of the world is greatly impacted by trauma. CSDT uses the concept of schemas to explain the effects of trauma on the psychological self. For example, someone with the belief that people can be trusted may have that belief challenged if their spouse or someone else they trust abuses them. Whether someone can integrate or assimilate the information depends on characteristics of the person and the environment (McCann & Pearlman, 1990a).

CSDT is specifically related to how trauma affects the self, stating that the self contains four main components that are self-capacities, ego resources, psychological needs, and cognitive schemas. Although all four components of CSDT are crucial to understanding trauma, the last two are especially vital to the concept of VT (McCann & Pearlman, 1990b) and thus they will receive the most attention. Psychological needs

motivate an individual's interactions with the environment, and CSDT focuses specifically on needs that are especially affected by trauma (McCann & Pearlman, 1990a). The needs in CSDT are thought to be mostly unconscious and become salient when they are disrupted (McCann & Pearlman, 1990a). An example of a need in CSDT is the need to feel secure and invulnerable to harm. This is the need for safety and those who do not have this need fulfilled will be overly vigilant and anxious. Frame of reference is another need mentioned in CSDT and is the need an individual feels to have consistent reasons and understandings for why events occur. Trauma victims often wonder why such things happen to them and what they did to deserve such unfairness. The other needs included in CSDT are trust, control, esteem, independence, power, and intimacy (McCann & Pearlman, 1990a). Trauma and VT involve any number of these needs being disrupted in the client or the clinician respectively, and how victims of either direct trauma or VT adapt to the disruptions in needs is key as a need in CSDT being met or unmet leads to a certain cognitive schema (McCann & Pearlman, 1990a).

Cognitive schemas are defined in CSDT in the same way they are by Piaget (1971), as a way of interpreting the world with beliefs and expectations. The cognitive schema component of CSDT is the conscious manifestation of unconscious needs being met or unmet (McCann & Pearlman, 1990a). For example, trauma victims may have previously had their frame of reference need met and believed everything happened for a reason, but then after experiencing trauma they developed a new schema that life is unpredictable and random as their need for a consistent understanding of why events occur is no longer met. CSDT is concerned with the level of adaptation individuals show in having their needs disrupted (McCann & Pearlman, 1990a). People who adapt well

may understand after some therapy that the world can be a dangerous place and that they need to accommodate their view of the world as they continue living after experiencing a traumatic event that challenged their need for safety. Those not adapting well may refuse to even be alone in their own home as their previous schema that the world is a safe place is shattered because their need for safety is violated (McCann & Pearlman, 1990a). The changes in schemas that happen in CSDT parallel Piaget's views of accommodation versus assimilation as cognitive schemas are either altered to integrate the new information, or the information is changed to match existing schemas (Piaget, 1971). This is where the complex interplay of the CSDT model shows, as individuals with less ego resources and self-capacities adapt less effectively when previously mentioned needs for schemas are not met (McCann & Pearlman, 1990a). The changes in schemas clients experience due to trauma can also affect the clinician who is hearing the traumatic stories and empathizing with the client resulting in a similar change in schemas for the clinician (McCann & Pearlman, 1990b). This is the central concept of VT and an important one moving forward.

CSDT has been applied to VT in several related occupations. For example, it is used today to assess the effects of trauma on judges as they may experience threats to their CSDT needs, such as a judge's need for safety being violated when their back is facing the door and they are alone (Edwards & Miller, 2019). Vrklevski and Franklin (2008) found elevated levels of VT in criminal law solicitors using CSDT, especially in relation to safety and intimacy. They also found an association between trauma history and VT. CSDT can be used to treat victims of intimate partner violence in that clinicians can focus on the schemas that are affected by the trauma which can lead to options for

person-centered therapy (McLeod et al., 2020). In doing so however, the clinicians open themselves up to possible VT as the clinicians' schemas may also be negatively affected vicariously by the trauma clients endured through intimate partner violence. CDST is also used by therapists and psychologists to explain the effects genocide has on individuals as survivors' basic needs such as control and trust are disrupted (Mangassarian, 2016). Therefore, in theory clinicians working with genocide survivors may have their own needs for control and trust disrupted.

Victims of trauma tend to feel alone and alienated from the world. Therapists can take on this feeling of alienation vicariously, and this phenomenon can be exacerbated by the fact that therapists are often told it is unbelievable that they can listen to such atrocious stories (McCann & Pearlman, 1990b). In other words, clinicians being made to feel "special" for being so empathetic may also feel alienated, thus clinicians may feel stigmatized just like the clients. This is compounded by the fact that clinicians are required by law to keep conversations with clients confidential, perhaps leading to an intensified feeling of separation from friends and loved ones. Clinicians may be vicariously traumatized by conversations with clients and unable to deal with that trauma themselves due to having to keep the conversations that fostered the VT confidential. In attempting to help traumatized clients, clinicians may begin to develop the same skewed schemas as the clients they are trying to help as their own beliefs of the world are challenged by the horrible events clients have endured (McCann & Pearlman, 1990b). This VT may lead to practitioners depleting emotional resources and distancing themselves from clients.

The roots of VT may date back many years, but it is still a very prevalent topic in the mental health literature. Not only that, but it is also a very pervasive topic in other fields such as forensic psychology (Pirelli et al., 2020) and criminology (Moran & Asquith, 2020). Research suggests the large turnover in child welfare work such as foster home care could be in large part due to VT (Hazen et al., 2020). Those working with childhood sexual abuse survivors also report high levels of VT (Moran & Asquith, 2020), and VT has also been found to be prevalent among nurses, educators, criminal defense attorneys, and sexual assault advocates, providing further evidence that VT results from exposure to the trauma or traumatic stories of others (Hazen et al., 2020). Research points to VT being a significant factor in the helping profession's issues with turnover and burnout (Butler et al., 2017). Clinicians may need adequate time off when feeling overwhelmed to process their own emotional reactions to the traumatic stories they have been enduring (Biggart et al., 2017). This topic is very prevalent in the field, but there are similar well researched constructs worth mentioning as well.

It is essential to properly define all constructs being used in research. The emotional cost of VT is often interchangeably labeled as compassion fatigue (Pirelli & Formon, 2020). However, compassion fatigue is different in the sense that it does not require indirect exposure to a traumatic event (whereas VT requires exposure to traumatic stories of clients rather than simply the process of empathizing with them) (Newell & MacNeil, 2010). Indeed, there is often significant overlap between the effects of the two constructs such as difficulty balancing work and home life, higher levels of negative emotional excitation such as anger and anxiety, and unpredictable emotions (Pirelli & Formon, 2020). Despite this ambiguity, it is essential that constructs are adequately

defined, and Newell and MacNeil (2010) point out that VT can be thought of as a change in one's thoughts and beliefs as a result of indirect exposure to trauma, whereas compassion fatigue is the depletion of emotional resources due to empathizing with clients. Indeed, the distinction can be quite thin, and clinicians likely deplete emotional resources by empathizing with clients who have been through trauma, but the main distinction is this depletion can occur through empathizing with any clients for any reason, regardless of whether there is any trauma involved at all (Newell & MacNeil, 2010). Due to the overlap these constructs possess they can also appear simultaneously, although one can also occur without the other (Hazen et al., 2020). It is very essential to consider all other similar constructs in the literature when reviewing a construct for research.

The overlap between VT and compassion fatigue is further complicated by yet another similar construct. The negative emotions and behaviors resulting from indirect exposure to the traumatizing stories of others is known as secondary traumatic stress (STS) (Figley, 1995). This certainly raises even more issues with construct ambiguity in the literature and overlapping causes and effects as both VT and STS have been found to be related to burnout, and they both stem from exposure to others who have been directly traumatized (Hazen et al., 2020). However, there are a few important distinctions to consider, one being that VT is an internal change in one's cognitive schemas and relates to their disruption of needs, whereas STS manifests with external symptoms such as unpredictable emotions, short attention spans, nightmares, and intrusive thoughts (Newell & MacNeil, 2010). Again, STS differs from compassion fatigue in the same way VT

does, in that it requires indirect exposure to a traumatic event rather than simply the act of empathizing with a traumatized client (Hazen et al., 2020).

Extrapolating the differences between VT and STS may be even more difficult, but one important distinction is that STS can manifest much quicker as the behavioral symptoms of PTSD are mirrored in the clinician who is hearing the traumatic stories (Newell & MacNeil, 2010). Behavioral symptoms may manifest quickly, but a change in one's own cognitive schemas typically requires prolonged exposure to the traumatic stories of others as the clinician's own thoughts and beliefs are being consistently challenged (Baird & Kracen, 2006). In support of this, emergency response teams often experience STS but not VT (Baird & Kracen, 2006); there is a marked difference between speaking with a client in a crisis versus speaking with the same client regarding possibly years of traumatic stories, thus VT requires far longer exposure to traumatic stories than STS and occurs in a far smaller population (Baird & Kracen, 2006). Those experiencing VT may also exhibit PTSD like symptom manifestations because of disrupted needs and schemas to be fair, but that reasoning contrasts with an immediate physiological reaction to the stress of the immediate situation that is present in STS whether that be direct or indirect exposure (Baird & Kracen, 2006). It is irrefutable that the lines between VT, STS, and compassion fatigue are quite blurry, but it is essential to focus on one consistent definition for this paper, so this research will focus on the definition of VT provided by McCann and Pearlman (1990b) and the negative effects that stem from that construct.

2.2 Burnout

Burnout is a complex meta-construct that is encapsulated by three individual constructs which are emotional exhaustion, depersonalization, and a lack of personal accomplishment that represent individual, interpersonal, and self-evaluative aspects of burnout respectively (Maslach et al., 1996). This section will explain differing definitions and measurements of burnout as well as the relationship between burnout and VT.

Emotional exhaustion is the most obvious manifestation of burnout (Maslach et al., 2001). Emotional exhaustion is the individual aspect of burnout and relates to the draining of an individual's emotional resources until the worker feels they are no longer able to put emotional effort into the job. Clinicians are especially vulnerable to emotional exhaustion due to their emotional resources being depleted when empathizing with clients who have been traumatized. When emotional demands become too exhausting, it becomes difficult for clinicians to attend to the needs of clients (Maslach et al., 2001).

Depersonalization, the interpersonal aspect of burnout, refers to cynicism from the clinicians towards the clients as well as a separation from the job and can even lead to the clinician believing that the clients deserve what they have been through (Maslach et al., 1996). If clinicians feel that they are suffering emotional consequences that may interfere with their own lives they may distance themselves from clients as a response to the emotional exhaustion. Depersonalization may be especially likely in clinicians expending emotional resources in response to VT as distancing oneself from the situation is a common coping strategy for those that are battling trauma (McCann & Pearlman, 1990a), and it is easier for clinicians to manage the stress of clients when the clients are viewed as objects rather than as complex humans (Maslach et al., 2001). In this same

respect, it may be easier for clinicians to avoid the perils of VT when distancing oneself from clients and avoiding excessive emotional resource depletion. This may lead to less effective client care, and a feeling of inadequacy towards providing client care will constitute the final aspect of burnout.

A lack of personal accomplishment, the third and self-evaluative aspect of burnout, reflects a feeling of inadequacy in one's position (Maslach et al., 2001). For example, clinicians may feel they are not providing the most effective client care (Maslach et al., 1996). If clinicians are not helping their clients heal, then it follows that the clinicians may naturally have a decreased sense of personal accomplishment.

Moreover, clinicians are less likely to feel successful if they are struggling with overwhelming job demands (Maslach et al., 2001). One's worldviews and beliefs being challenged can often be an overwhelming experience regardless of whether the schemas are challenged directly or vicariously (McCann & Pearlman, 1990b).

There is some debate in the literature over the true definition of burnout. Some research has cast doubt on the inclusion of the subscale of a lack of personal accomplishment in the construct of burnout as the first two dimensions of burnout are the core dimensions and have a much stronger correlation with each other than with the third dimension (Demerouti et al., 2001). Cordes and Dougherty (1993) even suggest a sense of personal accomplishment may be a personality trait like self-efficacy, which is a sense of control and meaning in one's life. The third dimension also has the weakest correlation with other variables (Lee & Ashforth, 1996), leading researchers to believe a lack of personal accomplishment is an outcome of burnout rather than a dimension of the construct (Demerouti et al., 2001). Given this disagreement on the true definition on

burnout in the literature, there are a few different measures of burnout available, with two in particular being the most widely used.

There are a couple well known measures of burnout in the psychology literature. The Maslach Burnout Inventory (MBI) (Maslach et al., 1996) is by far the widely most used measure in the literature, but one major weakness is the first two dimensions of exhaustion and depersonalization are negatively worded and the last dimension of lack of personal accomplishment is positively worded. This can lead to a cluster of positively and negatively worded items leading to false factor solutions. Another weakness is that the three sub scales of the MBI must be scored separately and cannot be combined into a single score of burnout (Maslach et al., 1996).

Conversely, the Oldenburg Burnout Inventory (OLBI) measures exhaustion arguably more efficiently by measuring physical and cognitive exhaustion on top of affective exhaustion (Demerouti et al., 2001). The OLBI also measures disengagement which is conceptually almost identical to depersonalization (Demerouti et al., 2001) as disengagement is distancing oneself from the job and from aspects of the job including other people or clients, and the OLBI measures both dimensions in both directions (Demerouti et al., 2001). Also, the OLBI can measure both subscales separately as the MBI can, but unlike the MBI it can also be combined into one total burnout score as it was for example in studies by Goldhagen et al. (2015) and Ezenwaji et al. (2019). Therefore, this study will be using the total score of the OLBI to ensure burnout as a construct is measured rather than separate sub dimensions, and the fact that the OLBI does not measure a lack of personal accomplishment is useful to ensure that emotional

exhaustion and disengagement are the focus as those are most closely related to VT and to each other.

VT and burnout can be related in many ways, but it is imperative to discuss how they are separate constructs. VT and burnout may appear to be similar constructs at first glance and there has even been some debate in the literature whether the constructs are simply measuring the same thing. Devilly et al. (2009) found that strenuous work demands contributed to clinician affective distress more than trauma exposure, and that VT appeared to just be measuring burnout as exposure to traumatic material had no significant effects. However, they also found that affective distress was predicted even better by VT and burnout than just burnout alone. This suggests that even if VT may predict counselor distress less effectively than burnout, VT still contributes something more to their model than burnout alone (Devilly et al., 2009). In the VT and burnout literature the constructs are generally seen as divergent since burnout is a temporary consequence of demands at work with the results being mostly work related and VT is a more permanent change in world view due to empathizing with victims of trauma with results that can reach out of the workplace (Michalopoulos & Aparico, 2012). Both constructs are important to understanding the mental health of those caring for traumatized clients and warrant further research.

Recall that those suffering VT will be having their current schemas challenged (McCann & Pearlman, 1990b). Clinicians struggling to adapt their worldviews will expend emotional resources and may distance themselves from the job to cope with the emotional overload. Also, research shows that clinicians working with aggressive traumatized clients and those with "difficult" disorders such as Borderline Personality

Disorder tend to report higher levels of burnout (Melchoir et al., 1997), as do clinicians working with clients who have eating disorders (Warren et al., 2012). Since many psychologists believe such disorders are often results of trauma (Sansone & Sansone, 2007), the VT that clinicians endure is in theory related to burnout. In support of this, the similar construct STS has been found to be positively related to burnout (Shoji et al., 2015).

2.3 Work Interference with Family

People often fulfill different roles in their lives, such as work and family roles, and conflicts between roles can cause psychological strain in numerous ways. Role conflict is generally defined as overlap between two roles in which complying with one role will make engaging in the other more difficult (Greenhaus & Beutell, 1985). It can also be difficult to keep the lines between roles from blurring. Role blurring can make it difficult to keep aspects of one domain from interfering with the other (Ashforth et al., 2000), for example a clinician having their need for safety disrupted may now appear overly vigilant and anxious around their parents or children. There is often spillover from one domain into the other due to the nature of the work (Kalliath & Kalliath, 2014). Role conflict can also occur as those who are used to being counselors may try to play the role of counselor rather than partner with their significant other (Kalliath & Kalliath, 2014). These are examples of work-family conflict (WFC) which is the construct that will be covered in this section.

It has been established that role conflict can lead to overlap between work and family domains. Greenhaus and Beutell (1985) define WFC as incompatibility between the work and family domains. Participation in one role makes participating in the other

more difficult. Demands of the work role make it more difficult to engage in the family role. WFC is not a unidimensional construct as it has been expanded in two significant ways. First, WFC has been shown to be bidirectional (Netemeyer et al., 1996). Work can interfere with family (WIF) or family can interfere with work (FIW). WIF tends to affect performance and attitudes at work more, whereas FIW tends to affect attitudes regarding family (Amstad et al., 2011). WFC can also be broken into time based, strain based, and behavior based conflict (Greenhaus & Beutell, 1985).

Time constraints in one role may make participating in the other more difficult, and this is the concept of time based WFC (Greenhaus & Beutell, 1985). Clinicians who are parents of younger children tend to have more time based WFC than clinicians without children since younger children require great amounts of care (Uysal Irak et al., 2020). Larger families also come with greater time demands than small families and thus larger families are prone to frequent time based WFC. Clinicians, especially those with large families, may face considerable time based WFC due to being expected to work anytime and anywhere with recent advances in technology (Kalliath & Kalliath, 2014). Lines between roles are blurred leading to a lack of time to attend to the needs of both work and family domains. As important as this kind of WFC is to the field and the introduction to the construct in general, the next two are especially important to this research.

Strain based WFC occurs when performance in one role is impacted by the strain in another (Greenhaus & Beutell, 1985). The psychological strain of one role makes participating in the other more difficult. Mental health workers can face a great deal of mental stress including overtime, long hours, lack of appreciation from others, too little

staff, complex work, high pressure at work, and conflict with coworkers and clients (Kalliath & Kalliath, 2014). Psychological strain from work can lead to anger and stress that makes it difficult to engage in non-work roles (Greenhaus & Beutell, 1985).

VT can be related to strain based WIF as the psychological strain of hearing traumatic stories may make participating in the spouse role more difficult as clinicians are left with limited emotional resources after work. Stressful situations at work can lead to anxiety, apathy, irritability, and frustration that makes it difficult to have a healthy life outside of work (Greenhaus & Buetell, 1985). Practitioners may also expend a great deal of mental energy attempting to keep the emotional effects of VT separate from their home lives (McCann & Pearlman, 1990b). Trying to reconcile shattered schemas with a healthy home life may relate to strain based WIF. For example, a counselor speaking with a client who had their need for safety violated may no longer feel safe at home with their own family (McCann & Pearlman, 1990b). Similarly, the counselor may fantasize about how they would violently retaliate against someone who attacked their family after speaking with a victim of an attack, bringing the counselor's beliefs about their own power into question and affecting their ability to participate fully in the family domain due to being preoccupied with the stress from work. In other words, an increase in VT is related to an increase in strain based WIF.

This study's first hypothesis is that strain based WIF acts as a mediator, explaining the positive relationship between VT and burnout. In this model, VT relates to burnout, and strain based WIF is underlying mechanism explaining the relationship. An increase in VT relates to an increase in strain based WIF by presenting strain from the work role that makes it difficult to participate in the family role. I hypothesize that this

increase in strain based WIF will then relate to an increase in burnout. That is, there is a positive relationship between VT and strain based WIF, and a positive relationship between strain based WIF and burnout. Research does support a relationship between WIF and burnout. WFC has been shown to lead to emotional exhaustion and work withdrawal in social workers (Travis et. al, 2016). When reviewing outcomes of WFC, Allen et al. (2000) found burnout to be the outcome most strongly related to WFC. In theory, clinicians will deplete emotional resources trying to reconcile the strain based WIF. This emotional depletion may lead to a separation of the clinician from clients to cope with the strain.

H1: Strain based WIF mediates the relationship between VT and burnout.

Behavior that is expected of engaging in one role may not be acceptable in another role. This is known as behavior based WFC (Greenhaus & Beutell, 1985). For example, managers are thought to be self-reliant, aggressive, and objective, while family members are expected to be subjective, warm, and emotional. Behavioral expectations tend to differ between work and family roles. The earlier example of a clinician acting overly vigilant and anxious due to a disrupted need for safety is an example of behavior based WFC. Another example is a clinician must be emotionally stable whereas they may be expected to be emotionally vulnerable as a partner in a relationship. Clinicians must have healthy boundaries with their clients but be very close and nurturing with their children.

Indeed, it may be difficult for clinicians to keep the negative effects of VT separate from the family domain and this may lead to an increase in behavior based WIF.

Since the lines between roles are often blurred in the case of mental health workers, it

may be difficult to keep negative worldviews and beliefs from permeating into other domains. A clinician who had their need for safety disrupted by hearing about clients being raped by their partners or parents for example, may no longer feel safe around their own partners or parents and may begin acting scared and distant from them. It can be difficult to separate the behaviors that are appropriate for the work and family roles, thus relating an increase in VT to an increase in behavior based WIF. For example, a clinician may be distant from their clients to avoid the perils of VT, but that kind of distant approach is not appropriate for the family domain. Also, a clinician whose need for frame of reference was disrupted may no longer feel consistent reasoning for why things happen and may begin to question everything their family is doing. As another example, a clinician whose need for trust is disrupted may begin spying on their family and questioning their every move.

As explained earlier, mediation is the underlying mechanism explaining the relationship between two variables. This study postulates that an increase in VT is related to an increase in behavior based WIF. This study also proposes that an increase in behavior based WIF will result in an increase in burnout as well. There is a positive relationship between VT and behavior based WIF, and there is a positive relationship between behavior based WIF and burnout. This all comes together to form the second hypothesis, as explained by the mediation model similar to the first hypothesis.

Behavior based WIF may explain the relationship between VT and burnout. In other words, behavior based WIF may function as a mediator between VT and burnout. Behaving appropriately between roles may deplete emotional resources, and clinicians may distance themselves from clients to avoid engaging in any other behavior that is not

appropriate for the family role. Clinicians may also begin to distance themselves from their families as they have no emotional resources left after expending them in the workplace. For the next hypothesis, I predict that behavior based WIF will mediate the relationship between VT and burnout.

H2: Behavior based WIF mediates the relationship between VT and burnout.

2.4 Perceived Organizational Support

Employees exhibit higher job performance when they feel valued and cared for by the organization they work for according to Organizational Support Theory (OST) (Eisenberger et al., 1986), and employees tend to personify organizations and attribute actions of members of the organization to the organization itself. In other words, actions of individuals in the organization such as supervisors reflect motives of the organization as a whole. If a supervisor acts in a favorable manner towards employees, then those employees will feel that the organization favors them. OST states when employees feel valued and respected then they feel obligated to reciprocate with higher performance, and the belief that employees have that they are valued and cared for with economic and emotional support is perceived organizational support (POS) (Eisenberger et al., 1986).

An important aspect of POS is that employees exchange their work for expected rewards, and people are more likely to engage in an exchange if they feel that the rewards outweigh the costs according to Social Exchange Theory (SET) (Rhoades & Eisenberger, 2002). Costs can constitute anything negative to employees such as effort put into the relationship, and rewards are positive aspects such as social support and a genuine sense of caring. SET also states that rewards such as emotional support must be attributed to the employer's choice as in employers decide to reward employees by their own volition and

benevolence rather than due to outside forces such as employees threatening to form a union unless they get fair treatment (Rhoades & Eisenberger, 2002). POS incorporates SET in the sense that employee performance is higher when employees feel rewarded and genuinely cared for by the organization.

POS comes with many benefits for both employer and employee. POS increases affective attachment of the employee and raises global beliefs that their hard work will be rewarded, and POS has been shown to reduce absenteeism (Eisenberger et al., 1986). POS also results in a greater felt obligation of employees to work hard and remain loyal to the organization and has been shown to lower turnover intentions (Kurtessis et al., 2017). Employees who feel respected and valued will be more interested in their job tasks, and this can lead to greater job performance. POS can also lead to a meaningful life and a sense of purpose for employees by fulfilling socioemotional needs such as a sense of belonging and emotional support (Rhoades & Eisenberger, 2002).

Socioemotional needs fulfilled by POS lead to a greater desire of the employee to reciprocate the employer's efforts on top of psychological well-being of the employee (Eisenberger et al., 1986).

Research has shed light on multiple antecedents of POS. Perceived fairness of the distribution of rewards is a crucial antecedent, and this includes procedural justice such as involvement in business decisions and appropriate notice before decisions are applied, and interactional justice, which involves social aspects such as interpersonal treatment of employees and information concerning how decisions are made (Rhoades & Eisenberger, 2002). Another antecedent known as perceived supervisor support (PSS) is very similar to POS as it is the belief that a supervisor cares for and values employees (Kottke

&Sharafinski, 1988). It makes sense that employees would relate this to POS as employees often attribute actions of members of the organization to the organization itself (Eisenberger et al., 1986). Job security, or the feeling that one's organization wants to keep them employed, has also been shown to precede POS (Rhoades & Eisenberger, 2002). Another antecedent of POS is leader-member exchange (LMX), a mutual feeling of trust and respect between leader and employee in which the leader provides guidance and resources for the employee who in turn reciprocates with increased effort and performance (Liden et al., 1997).

A moderating variable changes the strength of the relationship between two variables, and I hypothesize the effects of VT on strain based WIF will be weakened by POS. That is, POS moderates the relationship between VT and strain based WIF. Although research on the relationship between POS and VT is lacking research in the literature, POS is a form of social support, and social support can help clinicians create strong boundaries and a clear division between work and family lives when dealing with the psychological strain of VT (Michalapoulos & Apracio, 2012). Clinicians feel less strained and exhausted after being exposed to the trauma of others when they feel supported by a close connection to others (Harrison & Westwood, 2009), and POS is a form of social support that can create a sense of belonging and connection to a greater purpose for employees (Rhoades & Eisenberger, 2002).

Expected help from the organization lessens stress levels of employees and strengthens the balance between work and family roles by providing the employees with emotional resources. Emotional support is an important aspect to POS and is also essential in helping people deal with trauma whether it be direct or vicarious (McCann &

Pearlman, 1990b). Ego resources involve the psychological resources used to relate to the outside world and cope with trauma such as willpower and initiative in CSDT (McCann & Pearlman, 1990a). According to Conservation of Resources Theory (COR), psychological stress occurs in three stages starting with a threat of loss of resources (Hobfoll, 1989). This can lead to an actual loss of resources, and a lack of gained resources leads to elevated stress. VT causes significant stress by disrupting unconscious needs and negatively affecting cognitive schemas (McCann & Pearlman, 1990b) which constitutes a threat to resources and can drain resources as one tries to cope with disrupted needs and schemas, but POS can provide coping resources for clinicians to cope with VT (Kurtessis et al., 2017) such as debriefing, counseling, and paid time off. The coping resources provided by the organization may not completely eradicate VT but should help employees deal with the stress of trauma (Michalapoulos & Apracio, 2012), and this should lead to less spillover of stress from the work domain into the family domain that would lead to strain based WIF.

H3: POS moderates the strength of the relationship between VT and strain based WIF.

I also hypothesize that the relationship between VT and behavior based WIF will be weaker when POS is present, so POS will moderate the relationship between VT and behavior based WIF. Trust is the belief that one will not be taken advantage of and is a vital aspect to both VT and POS. Those high in POS trust that the organization will not take advantage of them (Kurtessis et al., 2017) and those with an intact need for trust will believe that people are honest and will not take advantage of them. Since employees tend to personify organizations and attribute humanlike qualities to organizations, if clinicians trust their organization and assign it humanlike characteristics, then this can provide

resources for clinicians to cope with their need for trust being disrupted and they may apply that trust to other people. Clinicians may accuse their significant others of lying if they have a disrupted need for trust (McCann & Pearlman, 1990b), but POS may help rebuild that sense of trust and allow clinicians to behave in a more trusting manner towards their families even when suffering from VT.

VT disrupts the needs of power and esteem and this may lead to behavior based WIF, but POS may mitigate this effect through social support and a sense of self-efficacy. The need for power is the need to feel like one has control over their own lives and esteem is the need to feel a close connection to others (McCann & Pearlman, 1990a). A disrupted sense of power may lead clinicians to attempting to control others, even loved ones, due to a feeling of unease and powerlessness. In theory, POS can mitigate this behavior based WIF through self-efficacy. Self-efficacy is one's sense of ability and control when dealing with current situations, and POS increases self-efficacy by meeting socioemotional needs (Kurtessis et al., 2017), so the self-efficacy provided by POS can help clinicians cope with VT as their need for power is disrupted (McCann & Pearlman, 1990b). In addition, clinicians with a need for esteem disrupted by VT can feel a close connection to their managers and organizations through POS to help lessen the impact of VT and allow a sense of belonging to flourish (Kurtessis et al., 2017). This can help lessen the behavior of separation from loved ones that is common in those suffering from trauma (McCann & Pearlman, 1990b). If clinicians have adequate resources from POS to cope with the stress of VT, that should decrease the spillover of negative behavior into the family domain.

H4: POS moderates the strength of the relationship between VT and behavior based WIF.

In summary, this research will make multiple contributions to the literature. First, this research will contribute to the sparse literature on quantitative research regarding VT. This research will also add to the understanding of the relationship between VT and burnout by examining the direct relationship between the two constructs. This research will add to the literature further by proposing an explanation of the relationship between VT and burnout through mediation with strain based and behavior based WIF. This research will also help remedy the lack of quantitative research examining what organizations can do to moderate the effects of VT in the form of POS which comes with many benefits for both employer and employee. This research is important because it can help further the understanding of the mental health of the ones providing the mental health treatment and how organizational support can make a difference, as well as how those providers can balance their work and family lives. In the end, this research will provide valuable results for both mental health agencies and the employees that work for them.

CHAPTER III

METHOD

3.1 Participants

In order for this study to have 80% power, a minimum of 43 participants were required. This number of participants was calculated using G*Power 3.1 assuming a one-tailed hierarchical multiple regression for Hypotheses 3 and 4. This sample size calculation is assuming effect size .15 for a medium effect size as suggested by Cohen (1988) along with an alpha of .05 and a power of .80. Questionnaire responses were anonymously collected from 151 mental health professionals working in mental health organizations sampled from several counties around Ohio. There were 41 responses discarded completely from the analysis as they did not finish questionnaires due to not living with family or blood relatives leaving 110 participants. A majority of the participants were female (81.8%) and 18.2% were male with no participants identifying as non-binary or other gender. Most of the participants had graduate degrees (60%) and current graduate students were the minority (6.4%). Also, 18.2% had undergraduate degrees and 15.4% were current undergraduates while 7.3 % preferred not to say. The majority of participants reported a large workload (71.8%), which was assessed by

simply asking participants if they have a large workload. The majority also reported not having subordinates (62.7%) and not having more than one job (68.2%). All demographic questions can be found in Appendix B. One participant did not answer the tenure item or education item, three did not answer strain based or behavior based WIF scales, and four did not answer POS scales.

3.2 Measures

Vicarious Trauma Scale. The vicarious trauma scale (α = .88) (Vrklevski & Franklin, 2008) was used to assess how distressed participants are working with the traumatizing stories of clients (Vrklevski & Franklin, 2008). The scale contains seven items that measure how distressed the clinician is working with traumatized people. They are rated on a 7-point Likert scale, ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). The total can range from 8 to 56, with higher scores showing higher distress. Examples include "My job involves exposure to distressing material and experiences" and "I find myself distressed by listening to my clients' stories and situations." Research has confirmed the reliability and validity of this scale. Aparicio et al. (2013) found an internal consistency of .77, and Benuto et al. (2018) found an internal consistency of .83. The construct validity of the VTS has also been supported (Benuto et al., 2018). All items of the VTS are shown in Appendix C. Respondent scores were summed and an internal consistency of .79 was found. M = 36.69, SD = 7.69, and range = 34.

Oldenburg Burnout Inventory (OLBI). Burnout was measured using the Oldenburg Burnout Inventory (OLBI) (Demerouti et al., 2010). The scale measures exhaustion and disengagement using a 4-point Likert scale. The exhaustion subscale has eight items and measures feelings of emptiness, a need for rest, and overextension at

work physically and emotionally. Example items include "There are days I feel tired before I arrive at work" and "During my work, I often feel emotionally drained."

Disengagement is similar to depersonalization from the MBI and measures a separation from the job and aspects of the job. Cynicism towards aspects of the job is also covered under the disengagement dimension. Example items include "Sometimes, I feel sickened by my work tasks" and "Over time, one can become disconnected from this kind of work." There are 16 items altogether with four positively worded items and four negatively worded items that are reverse coded in each dimension.

The measure can be used to assess burnout or work engagement as they are seen as two sides of the same coin (Demerouti et al., 2010). When measuring burnout positively worded items should be reverse coded. Cronbach's alpha is .82 for exhaustion dimension and .83 for disengagement, and the correlation between subscales is .39 (Demerouti et al., 2010). The correlation between the OLBI and the MBI is over .70 (Halbesleben & Demerouti, 2005). A great deal of research in the literature uses both subscales separately, but the scale has been used as a total score before (Goldhagen et al., 2015; Ezenwaji et al., 2019). A factor analysis has also confirmed the scale can be used as a single score (Tipa et al., 2019). This research also found a correlation of .71 between subscales, suggesting participants may not be differentiating between subscales, providing more reasoning for the use of a single score. All items for the scales are shown in Appendix D. Respondent scores were summed, and an internal consistency of .89 for the total burnout score was found. M = 35.1, SD = 7.1, and range = 36. The internal consistency of the exhaustion scale is .78, and the cronbach's alpha for disengagement is .86 in this study.

Work-family conflict scale. Strain based WIF and behavior based WIF were measured using the scale created by Carlson et al. (2000). The scale measures all three forms of WFC (time, strain, and behavior) using a 5-point Likert Scale and measures both directions (work interference with family and family interference with work). The version used in this research specifically used the items that address strain and behavior based WIF. Examples include "When I get home from work I am often too frazzled to participate in family activities/responsibilities" and "The problem solving behaviors I use in my job are not effective in resolving problems at home." The coefficient alpha for stain based WIF is .85 and .78 for behavior based WIF (Carlson et al., 2000). There are three items in the strain based WIF scale and three items in the behavior based WIF scale. All items are shown in Appendix E. Respondent scores for strain based WIF were summed, and an internal consistency of .89 was found. M = 7.82, SD = 3.24, and range = 12. Respondent scores for behavior based WIF were summed, and an internal consistency of .87 was found. M = 6.95, SD = 2.63, and range = 12.

Perceived Organizational Support Scale. POS was measured using the Perceived Organizational Support scale (Esienberger et al., 1986), a 36-item scale using a 6-point Likert Scale that has been shown by the authors to be very reliable with a Cronbach's alpha of .97. This research used a shorter version of the scale with eight items for economical reasons to avoid participant fatigue with too many survey questions.

According to Rhoades and Eisenberger (2002) the use of shorter versions does not appear problematic. Sample items of the eight-item scale include "The organization values my contribution to its well-being" and "The organization really cares about my well-being."

All items are shown in Appendix F. Respondent scores were summed, and an internal consistency of .95 was found. M = 42.82, SD = 11.28, and range = 47.

3.3 Procedure

The procedure of this study was approved by the Institutional Review Board of Cleveland State University after written permission was obtained by upper management of every participating agency on the agency's official letterhead. Participants who work in the mental health field were sent an email by the approving upper management with the link to the anonymous survey. The email read "This is a survey from Chris Gordon, a masters student at Cleveland State University majoring in Industrial/Organizational Psychology. He would really appreciate if you can take fifteen minutes of your time to complete this survey. Please note there is a consent form for you to read and agree to before beginning the survey where more details are given." Participants were required to consent to the research before the survey could begin. Participants were asked their gender, tenure, age, education, workload, number of jobs, and number of subordinates to control for possible covariates and gather demographic information. Participants were then asked if they live with family or blood relatives, and those who did not answer yes were taken to the end of the survey to ensure only responses from those with family at home were collected.

Concerns of psychological harm regarding questions concerning VT were addressed. In order to ensure as little harm as possible, clients were not asked any questions about trauma that they do not already experience at work. These risks are equal to those encountered in daily life for participants. For example, participants were asked how they feel about experiences hearing the traumatic stories of clients. Participants are

never asked about direct trauma and questions only pertain to experiences on the job.

Participants could skip any question that makes them uneasy, and there was no penalty for stopping. The number for the National Suicide Prevention Lifeline 1-800-273-8255 was provided on every page in the event any participant felt triggered or upset in any way and needed to talk.

Participants were then asked if they are in a relationship, and those who did not answer yes were taken to the end of the survey. Those who answered yes were asked about their relationship satisfaction, and those results were analyzed as well, although not as part of this study.

Data was analyzed using SPSS 25. Potential covariates of age, gender, tenure, job amount, number of subordinates, education, and workload were dummy coded in SPSS to make testing with linear regression possible. All covariates were categorical, so they had to be dummy coded as categorical levels have no discernable meaning in regression. In the end there were three dummy variables for tenure and education, two for age, and one for the rest (gender only had one dummy variable as no participants identified as other gender). Current graduate students had the lowest group size with seven participants in that group. Possible covariates were then analyzed using simple linear regression.

Responses of "prefer not to say" were not dummy coded as they were treated as missing data. Missing data was deleted pairwise to maximize sample size and power.

Before running any analyses, the relevant assumptions were tested. Hypotheses 1 and 2 were tested using Hayes Method (PROCESS). In the output of PROCESS in SPSS, a significant mediator effect is indicated if zero is not between the lower and upper-level

confidence intervals in the indirect (mediator) effect section of the output. Hypotheses 3 and 4 were tested using hierarchical linear regression. Hypothesis 3 included three block in the regression, the first being possible covariates, the second being the covariates with predictors of interest, and the third including the previous two plus the interaction, which is the product of the two predictors of interest. If the third block has a significant R^2 change (p<.05) then that will show that the interaction is significant, meaning that the effect of one predictor is different at different levels of the other predictor. In other words, the effect of VT varies significantly when different levels of POS are present. The same process was done for Hypothesis 4, although with one less block as there was no covariate to control for because the dependent variable was found to have no significant covariates.

CHAPTER IV

RESULTS

4.1 Covariate Analyses

Means, standard deviations, alphas, and intercorrelations between variables can be viewed in Table A1. In the first analysis, to identify any associations between demographic variables or other possible covariates and the dependent variables, data on participant age, tenure, gender, workload, education, having more than one job, and having subordinates was collected. Prior to any analyses, an examination of the Mahalanobis distance scores indicated no multivariate outliers. A simple regression was run between each possible covariate's dummy coded variables and each outcome variable. Residual and scatter plots showed that the assumptions of normality, linearity, and homoscedasticity were all satisfied. The simple linear regressions testing the covariates revealed that most covariates are insignificant, and they were subsequently left out of future analyses. However, workload (two levels) was found to be a significant covariate with burnout, F(1, 108) = 5.04, p < .05, explaining 4.5% of the variance in burnout. Those with a larger workload experience higher levels of burnout, b = 3.32, $\beta = 0.00$

.21, t = 2.24, p < .05. Workload was also found to covary significantly with strain based WIF, F(1, 105) = 7.61, p < .001, explaining 6.8% of the variance in strain based WIF. Those with a larger workload experience higher levels of strain based WIF, b = 1.89, $\beta = .26$, t = 2.76, p < .01. Thus, workload was kept in subsequent regression analyses as a covariate when the outcome variable was burnout or strain based WIF.

4.2 Hypothesis 1 Results

Mediation in the first two hypotheses was tested using PROCESS v. 3.5 on SPSS 25. Model 4 was used for a mediation model with 95% confidence intervals and 5000 bootstrapped samples. First, for the first hypothesis the steps of the PROCESS model were replicated in a regression model to test the relevant assumptions. There were not issues with multicollinearity as all tolerance and VIF values were within the accepted limits. Residual and scatter plots showed that the assumptions of normality, linearity, and homoscedasticity were all satisfied. The first hypothesis was regarding whether strain based WIF mediates or explains the relationship between VT and burnout. VT was entered as the predictor variable, with burnout as the outcome variable and strain based WIF was entered as the mediator. Workload was entered as the covariate. Results of the mediation analysis can be found in Table A2. The direct effect from VT to strain based WIF is positive and statistically significant, b = .19, $\beta = .44$, s.e. = .04, p < .01, indicating that participants scoring higher on VT experience higher levels of strain based WIF. The direct effect of VT on burnout is also significant, b = .14, $\beta = .15$, s.e. = .07. p < .05, indicating that participants experiencing higher levels of VT also experience higher levels of burnout. The direct effect of strain based WIF on burnout is also significant, b =

1.49, β = .67, s.e. = .17, p < .05, indicating that participants experiencing higher levels of strain based WIF also experience higher burnout.

A significant indirect effect was used to signify a significant mediation effect. The indirect effect is tested using non-parametric bootstrapping. If zero falls between the lower and upper bound of the 95% confidence interval, then the indirect effect is zero. If zero is outside the confidence interval, then there is a significant non-zero effect of mediation. A significant mediation effect for Hypothesis 1 was found, IE = .28, 95% CI = .17, .40, with the completely standardized indirect effect being IE = .29, 95% CI = .19, .40, indicating that strain based WIF does mediate the relationship between VT and burnout.

4.3 Hypothesis 2 Results

The second hypothesis was then tested the same way using PROCESS, this time looking at whether behavior based WIF mediates the relationship between VT and burnout with workload as the covariate again. There were not issues with multicollinearity as all tolerance and VIF values were within the accepted limits. Residual and scatter plots showed that the assumptions of normality, linearity, and homoscedasticity were all satisfied. Results of this mediation analysis can be found in Table A3. The direct effect from VT to behavior based WIF is positive and statistically significant, b = .09, $\beta = .27$, s.e. = .08, p < .01, indicating that participants scoring higher on VT experience higher levels of behavior based WIF. The direct effect of VT on burnout is also significant, b = .34, $\beta = .36$, s.e. = .07. p < .01, again indicating that participants experiencing higher levels of VT are also experiencing higher levels of burnout. The direct effect of behavior based WIF on burnout is also significant, b = .86,

 β = .31, s.e. = .23, p < .01, indicating that participants experiencing higher levels of behavior based WIF also experience higher burnout. A significant mediation effect for Hypothesis 2 was found, IE = .08, 95% CI = .02, .17, with the completely standardized indirect effect being IE = .09, 95% CI = .02, .17, indicating that behavior based WIF does mediate the relationship between VT and burnout.

4.4 Hypothesis 3 Results

In order to test the moderation effect of Hypothesis 3, workload was placed in the first block. Workload, VT, and POS were placed in the second block, and the predictors from the previous two blocks plus the product of VT and POS to represent the interaction between the two constructs was placed in the third block. This created a three-stage hierarchical regression to test for moderation. There were not issues with multicollinearity as all tolerance and VIF values were within the accepted limits. Residual and scatter plots showed that the assumptions of normality, linearity, and homoscedasticity were all satisfied. The results of the final step of this hierarchical regression testing the interaction can be found in Table A4. The new model was a significant predictor of strain based WIF, F(4,101) = 11.92, p < .001. However, the interaction did not cause a significant R^2 change as the variance explained only increased by .8%, indicating a non-significant interaction. Thus, the effect of VT on strain based WIF is not changed significantly by the presence of POS.

The interaction in the third step was not significant, but the main effects in the second step determine that VT and POS are significant predictors of strain based WIF over and above each other when controlling for workload, F(3,102) = 15.49, p < .001. In the second step, VT and POS caused a significant R^2 change and account for 24.5% of the

variance in strain based WIF when controlling for workload. The main effects in the second step determine that an increase in VT relates to an increase in strain based WIF over and above the effects of POS, b = .16, $\beta = .38$, t = .04, p < .001, and an increase in POS relates to a decrease in strain based WIF over and above the effects of VT, b = -.08, $\beta = -.26$, t = -3.06, p < .05. In summarization, VT and POS are significant predictors of strain based WIF over and above each other when controlling for workload, but the effects of VT on strain based WIF are not changed significantly by the presence of POS, as evidenced by the insignificant interaction.

4.5 Hypothesis 4 Results

In order to test the moderation effect of Hypothesis 4, VT and POS were entered in the first block, and VT plus the product of VT and POS to represent the interaction between the two constructs was placed in the second block. This created a two-stage hierarchical regression to test for moderation. There were not issues with multicollinearity as all tolerance and VIF values were within the accepted limits. Residual and scatter plots showed that the assumptions of normality, linearity, and homoscedasticity were all satisfied. The results of the final step of this hierarchical regression can be found in Table A5. The new model was a significant predictor of behavior based WIF, F(2, 103) = 6.07, p < .01. However, the interaction did not cause a significant R^2 change as the variance explained only increased by 1.7%, indicating a non-significant interaction. Thus, the effect of VT on behavior based WIF is not changed significantly by the presence of POS.

The interaction in the second step of Hypothesis 4 was not significant, but the main effects in the first step determine that VT and POS are significant predictors of

behavior based WIF, F(2.103) = 5.81, p < .05. In the second step, VT and POS caused a significant R^2 change and account for 10.1% of the variance in behavior based WIF. The main effects in the second step determine that an increase in VT relates to an increase in behavior based WIF over and above the effects of POS, b = .08, $\beta = .24$, t = 2.52, p < .05, but an increase in POS does not relate to a decrease in behavior based WIF over and above the effects of VT. In summarization, VT is a significant predictor of behavior based WIF over and above the effects of POS, but POS is not a significant predictor over the effects of VT on behavior based WIF, and the effect of VT on behavior based WIF is not changed significantly by the presence of POS, as evidenced by the insignificant interaction.

CHAPTER V

DISCUSSION

5.1 Results Discussion

The mixed results indicated several key findings for this research. The mixed results suggest that the first two hypotheses were supported, and the latter two were not. The data suggest that VT and burnout are positively related. As mentioned earlier, prolonged time with a traumatized client is a precursor to VT, so clinicians may try to distance themselves from clients to cope with the strain of their schemas and beliefs being challenged. I predict that these clinicians hearing the traumatic stories of their clients have expended their emotional resources listening to and empathizing with their clients, and they started to disengage themselves from the clients as a way to protect their own resources, thus leading to the construct of burnout as defined and measured by Demerouti et al. (2010). The data also suggest a significant direct effect from VT to strain based WIF. These results imply that the psychological strain of listening to and empathizing with clients in tandem with the disrupted needs and schemas of the clinicians makes it difficult to balance work and home lives. A clinician who spoke with

a client at length about sexual abuse from a family member may no longer feel safe around their own family due their belief that family is safe having been disrupted.

The purpose of this study was to gain a better understanding of the relationship between VT and burnout. Strain based WIF as a mediator of the relationship between VT and burnout may help improve that understanding. The results of the present study support the first hypothesis that strain based WIF explains the relationships between VT and burnout. These results are consistent with the finding by Travis et al. (2016) that conflict between work and family roles is related to burnout. I theorize that strain based WIF explains the relationship because clinicians are expending emotional resources trying to balance work and family lives, and the stress is leading them to disengage from clients and unable to have adequate emotional resources for roles needed at home such as parent or spouse.

The results of this study support the second hypothesis as well. Behavior based WIF was found to mediate the relationship between VT and burnout. First, it is worth discussing that VT was found to be significantly positively related with behavior based WIF. I predict this relationship exists because clinicians experiencing VT may start behaving in ways that are not conducive to the family role, such as controlling or generally mistrusting their partner or family after their need for trust was disrupted, and therefore both clinicians' needs for trust and their levels of trust of their partners should be considered for future research. Perhaps they are always defensively preparing for a physical strike from their partner after their need for safety has been disrupted. The stress of trying to balance appropriate behaviors between work and home is no doubt stressful, and this attempt at balance may deplete emotional resources, and then the clinician tries

to disengage from clients to avoid engaging in any other behaviors at home that are not conducive to a healthy home life, thus leading to burnout and supporting the second hypothesis.

The hypotheses of this study were not all supported. In opposition of the third hypothesis, POS was not found to be a significant moderator of the relationship between VT and strain based WIF. In other words, the presence of POS does not significantly alter the relationship between VT and strain based WIF, seemingly contradicting the claim by Michalapoulos and Apracio (2012) that the social support provided by POS can facilitate stronger boundaries and provide emotional resources for balancing work and home lives. This also seems to contradict the claim that emotional support is a key factor in overcoming trauma (McCann & Pearlman, 1990b) as POS is a form of emotional support for clinicians. However, perhaps the emotional strain of balancing work and home lives when experiencing VT is too great for the resources provided by POS as sustenance to be enough. Conservation of Resources Theory (Hobfall, 1989) states that as resources are depleted they must be replenished, and it is possible POS does not replenish enough. Perhaps POS is far more effective at preventing VT in the first place, and the support provided by POS has little use when clinicians are already traumatized. Future research should either try to disprove this paper's findings regarding POS, or study whether POS is effective in preventing VT rather than addressing it.

The fourth hypothesis was also not supported by the data. The needs of the clinician being disrupted may lead to behaviors that are not appropriate for life at home, and support from the organization was predicted to help rebuild those needs and facilitate healthier behaviors. Kurtessis et al. (2017) found that those high in POS trust the

organization will not take advantage of them, and it was theorized this trust could be applied to others outside of the clinician's work life. However, despite POS facilitating socioeconomical needs and a sense of self-worth (Kurtessis et al., 2017) as well as a sense of control over one's work life (Eisenberger et al., 1986), POS was not found to be a significant moderator, perhaps implying again that the support gained from POS is not enough to overcome the negative effects of VT and may instead be more effective at preventing negative behavioral outcomes of VT rather than rectifying them. POS also did not have a significant effect on behavior based WIF over and above the effects of VT. Future research should investigate whether POS is more effective at preventing than buffering.

Also, it must be addressed that having a large workload was found to be a significant covariate and predictor of burnout, and this continuous usage of emotional resources supports the theory by Maslach et al. (19996) that depletion of emotional resources is a key factor in the construct of burnout. This finding also supports the finding by Devilly et al. (2009) that strenuous work demands contribute to worker burnout. Workload was also found to be a significant predictor of strain based WIF. I theorize the stress of the large workload makes it difficult to engage in family life, supporting the claim by Greenhaus and Beutell (1985) that the stress of one role makes engaging in the other more difficult.

The results of this study provide some small but significant contributions to the literature. Specifically, this research responds to the call by Devilly et al. (2009) to further examine the relationship between VT and burnout. This research also responds to the call to further the understanding of the balancing of work and family lives that

clinicians must partake in on a regular basis (Kalliath & Kalliath, 2014). The results extend upon the research by Travis et al. (2016) as well, further supporting the relationship between WFC and burnout. This research provides some unique contributions given the lack of research on VT and WIF in the literature as well.

5.2 Limitations and Future Research Directions

There are several limitations to this study, the first being the sample size. There are 110 participants which although well above the necessary 43 participants is still a relatively small number, and only several counties in the state of Ohio were surveyed so the results cannot be generalized to much of the greater public. Participants also may have been nested within their organizations, and organizational differences may have contributed to differences between participants. For example, some organizations may have practices or policies in place to help raise awareness and prevention of VT, or they perhaps have support policies that help ameliorate clinician burnout such as paid time off. Data concerning possible nesting were not collected for this study, and future research should consider organizational differences regarding VT and employee support as well as education practices. Group sizes were also very small, with the lowest group size of seven being graduate students. Group sizes this small may not be able to find any statistically significant effects. Future research should survey larger samples in multiple locations and with larger group sizes.

The number of participants screened may also be an issue. There were 41 responses deleted because they did not have family living at home, but future research should attempt to study WFC without having to filter out so many participants. Research on VT and WFC is novel so future research should attempt to replicate these results and

measure if other means of support may buffer the negative effects of VT, or perhaps if this study's results regarding POS can be refuted. Future research should also further study the relationship between VT and behavior based WIF, and how to educate clinicians on properly balancing the appropriate behaviors between work and home, and how to keep the stress of the work life from impacting their behaviors at home.

POS did not have a significant moderation effect, but future researchers should also consider the possibility that the measure itself contributed to this. The measurement of POS is subjective by nature as participants are asked if they "feel" supported and cared for (Eisenberger et al., 1986). This is quite different from an objective measure of POS. For example, perhaps future research could somehow measure PTO provided by agencies, the amount of debriefing time, therapy offered for the clinicians, the amount of training, the amount of break time allotted, schedule flexibility, work from home options, and so on. Future research should also examine why this study found a positive relationship between VT and strain based WIF over and above the effects of VT, but the same could not be said for behavior based WIF. Perhaps POS can be effective at providing emotional resources to clinicians but that is not enough to ameliorate the negative effects VT can have on the behavior of clinicians outside of work.

Individuals can differ on many levels including personality and needs (McCann & Pearlman, 1990a), and the amount of support it takes to feel supported may differ depending on the person and situation. Objective measures may provide a clearer picture of the effects of organizational support rather than subjective measures of whether employees feel supported. The same can be said for workload. This study used a subjective measure simply asking participants if they have a large workload. A more

objective measurement of workload size such as caseloads may be useful for future research. Of course, this is not to say objective and subjective measures should not be used together. It may also be possible for future research to conduct longitudinal studies that would be conducted at multiple time points. This would allow researchers to determine if organizational changes have any significant effects on the mental health workers by providing some time for the changes to take hold between observations.

Although the first two hypotheses were supported by this study, researchers should consider the possibility of burnout acting as a mediator between VT and strain based WIF, as well as between VT and behavior based WIF. Research has found that reduced burnout is related to a decrease in WIF (Norling & Chopik, 2020). This may be due to employees regaining emotional resources lost at work and using those resources for their family roles, resulting in less disengagement from family. This writer analyzed the mediation effect of burnout on the relationship between VT and strain based WIF, as well as the relationship between VT and behavior based WIF using the same PROCESS method, although not as part of any hypotheses of this study so the results will not be fully reported. The results indicated lower point estimates (.12 versus .28 for strain based WIF and .06 versus .08 for behavior based WIF) but they are significant, suggesting that perhaps burnout does mediate the relationship between VT and strain based WIF as well as between VT and behavior based WIF, although this model may not be as strong as the model proposed by this research. This research is all correlational by design, so causation can only be theorized. Researchers should consider this possibility of burnout as a mediator as both a limitation of this research and a direction for future research.

On the topic of burnout, future research should consider whether using the OLBI as a total score as opposed to two separate subscales makes a difference. This researcher found a correlation of .71, suggesting participants may not differentiate between the two subscales, thus method bias may be a limitation. There is some recent research that has opted to use a total OLBI score (Goldhagen et al., 2015; Ezenwaji et al., 2019), and a factor analysis confirmed it can be a unidimensional measure (Tipa et al., 2019). Although not formally written in the results section, I did test the mediation hypotheses with the separate burnout subscales as the outcome variables rather than the burnout total score. I did the same with reverse mediation with burnout subscales as the explanatory variables. It should be noted that first I tested assumptions and ran a regression which found that workload is a significant predictor of the exhaustion subscale but not the disengagement subscale. Perhaps participants are emotionally exhausted by the workload but do not disengage from clients because they care about the well-being of others, even if at the cost of their own mental health. Future research may want to investigate this as well.

This researcher found there is still a significant strain based WIF mediation effect after controlling for workload when using the exhaustion subscale as the outcome variable as zero is not between the upper and lower confidence interval, albeit with a slightly lower coefficient than the total burnout score as the outcome (.17 versus .28). There is also still a significant behavior based WIF mediation effect between VT and exhaustion after controlling for workload although the coefficient is again a bit smaller this time (.04 versus .08). The mediation between VT and disengagement using strain based WIF was significant but with a smaller coefficient than the total score (.11 versus

.28) without workload as a covariate. Adding workload as a covariate only changed the coefficient by .1 (.10) which makes sense considering it's not a significant predictor.

When running behavior based WIF as a mediator with disengagement as the outcome variable, the mediation was again significant but with a smaller coefficient than the total score (.04 versus .08). This is the case regardless of whether workload is added as a covariate, again confirming workload is not a significant predictor of disengagement. The coefficient for reverse mediation looking at exhaustion as the mediator and strain based WIF as the outcome (controlling for workload) was significant and found a slightly higher coefficient than a burnout mediator (.13 versus .12). The analysis with disengagement as the mediator and strain based WIF while controlling for workload found a slightly lower but still significant coefficient (.08 versus .12). The mediation between VT and behavior based WIF with exhaustion as the mediator is still significant with a slightly lower coefficient (.06 versus .12). The mediation effect of disengagement between VT and behavior based WIF is also significant but lower (.04 versus .12). Again, my analysis and quick write up did not appear to find any significant differences between using the OLBI as a full score versus two separate scores, both in the hypothesized and reversed mediation effects, but future research should investigate this further.

This study has covered many negative effects of trauma, but other research has shown that a trauma history can surprisingly have positive effects as well. As mentioned briefly in the literature review on VT, although full recovery from trauma is often rare as the effects of trauma are internalized and can often change how a person sees the worth, it is possible to adjust one's worldview to accommodate the trauma and adjust to this new way of experiencing life through self-efficacy and emotional regulation (McCann &

Pearlman, 1990a). Those who have been through trauma are sometimes able to function at their baseline levels again through self- regulation and coping skills, and this process that is also known in the literature as trauma resilience (Gatt et al., 2020).

Clinicians may have developed resilience through their own trauma, and as a parallel to VT, they may even experience vicarious resilience, and become motivated and inspired by the resilience that their clients have shown through their own trauma (Silveira & Boyer, 2014). Research has shown that resilience in social workers is related to more effective management of stress (Rose & Palattiyil, 2020). Vrklevski and Franklin (2008) state that a trauma history may put one at a higher risk of VT, but the literature also provides evidence that a trauma history may build resilience (Gatt et al., 2020). Future research should consider trauma history as capable of being detrimental and protective, and consider whether the possible resilience or vicarious resilience of clinicians can provide a protective factor against VT.

It is imperative to mention the COVID-19 pandemic as an important limitation to this study, as well as a significant factor in future research. Research has found COVID-19 and the fear surrounding it had a significant effect on WFC and the ways organizations work in general such as working from home (Karakose et al., 2021). The pandemic was found to relate to an increase in burnout among nurses as well as post traumatic growth (PTG) (Chen et al., 2021). PTG is essentially the opposite of PTSD and is similar to resilience and encompasses a new meaning in one's relationships, a greater sense of one's own strengths, and a greater ability to prioritize what is truly important in life, leading to a positive view of the world due to the self-capacities and coping skills developed throughout the trauma (Chen et al., 2021). Data concerning pandemic related

changes or whether participants were working from home was not collected, and this limitation should be kept in consideration for future research. An examination of Table A1 reveals the high intercorrelation (.74) between strain based WIF and burnout is another limitation to be considered. Such a high correlation suggests the two constructs are quite similar to each other, perhaps due to the important role emotional exhaustion plays in both constructs, which may have contributed to the successful mediation. Method bias is also a possibility here, as participants may not have differentiated between strain based WIF and burnout scales. Future research is needed for determination.

COVID-19 was and still is a significant trauma for much of the world, and thus the pandemic should be considered as such. This trauma may have negatively affected clinicians in ways this study did not take into consideration. However, due to COVID-19 individuals may have developed a greater sense of care for the community and altruistic motivation to keep others safe through social distancing and may perhaps develop trauma resilience or PTG. It is also very important to consider that many people worked from home during the pandemic, and some organizations have made that the new normal, therefore future research should consider whether this change in workplace policies may change the relationship between work and family domains. Future research could test participants in a work from home group condition to control for any possible effects that may have, and perhaps ask participants if they have felt significantly distressed or empowered by the pandemic to control for personal factors. Researchers may also consider replicating previous research that was conducted pre pandemic to see if the pandemic itself caused any significant changes. The negative effects of COVID-19 need

to be considered in future research, but just like with other kinds of trauma, the positive effects must be considered as well.

5.3 Practical implications and Concluding Remarks

This research provides evidence for organizations to consider taking the family lives of clinicians seriously and understanding that keeping a delicate balance between the two roles is essential for avoiding burnout in the demanding field of mental health. Organizations experiencing high worker burnout should consider the indirect trauma that the clinicians are experiencing, and measure employee trauma to determine if that is a factor in employee burnout. Organizations must realize how much they consider the delicate balance between work and family lives that clinicians must face daily and ensure adequate education, support, and available time off.

Organizations should use these findings to educate employees on how to best balance their behaviors between roles and how to manage boundaries between work and family when considering appropriate behaviors. Organizations should consider regular "pulse checks" on employees to ensure they are coping well and that their mental health is in order as POS seems to be "too little too late" when clinicians are already experiencing VT. Agencies should also consider possible work form home options, control over schedules, adequate break time, debriefing time, education on creating boundaries between work and family domains, being considerate of clinicians choosing family over work, and providing separate paid time off specifically for mental health issues and perhaps some available counseling as well to help manage the stress of the work and prevent as much spillover from the work domain into the family domain as possible.

The results of this study indicate the importance of education regarding VT for both employers and employees. This study echoes Branson (2019) in that trauma informed care, or care provided on the understanding that trauma changes the way one sees the world, and can be "contagious," is essential for mental health workers to maintain their own mental health. Organizations must provide a setting of safety, trust, and understanding to facilitate resiliency against the contagion of VT (Hales et al., 2019). Clinicians may pick up negative coping skills form clients (Tyler 2012) as well as their negative schemas, and organizations must work to make sure clinicians understand this threat and are able to sense when they need space from work. This research furthers the understanding that a healthy balance between work and family is essential for healthy clinicians (Kalliath & Kalliath, 2014) and organizations must ensure that clinicians are able to devote adequate time to their families, as well as adequately separate the two roles. POS may not be enough to buffer VT according to this research, but organizations should provide enough support that VT never becomes a pervasive issue in the first place. Perhaps future research can support this prediction. In conclusion, mental health workers face a great deal of stress and trauma in their daily lives at work, and it is essential that they can have a healthy and separate home life to balance that out and prevent them from getting burned out in this very demanding field.

REFERENCES

- Allen, T.D., Herst, D.E.L., & Bruck, C.S. (2000). Consequences associated with work-to-family conflict: a review and agenda for future research. *Journal of Occupational Health Psychology*, *5*(2), 78-308.
- Amstad, F.T., Meier, L.L., Fasel, U., Elfering, A., & Semmer, N.K. (2011). A metaanalysis of work-family conflict and various outcomes with a special emphasis on cross-domain versus matching-domain relations. *Journal of Occupational Health Psychology*, 16(2), 151-169.
- Ashforth, B.E., Kreiner, G.E., & Fugate, M. (2000). All in a day's work: Boundaries and micro role transitions. *The Academy of Management Review*, 25(3), 472-491.
- Baird, K. & Kracen, A.C. (2006). Vicarious traumatization and secondary traumatic stress: A research synthesis. *Counselling Psychology Quarterly*, 19(2), 181-188.
- Biggart, L., Ward, E., Cook, L., & Schofield, G. (2017). The team as a secure base:

 Promoting resilience and competence in child and family social work. *Children and Youth Services Review*, 83, 119-130.
- Branson, D.C. (2019). Vicarious trauma, themes in research, and terminology: A review of the literature. *Traumatology*, 25(1), 2-10.
- Butler, L.D., Carello, J., & Maguin, E. (2017). Trauma, stress, and self-care in clinical training: Predictors of burnout, decline in health status, secondary traumatic stress symptoms, and compassion satisfaction. *Psychological Trauma: Theory, Research, Practice, and Policy, 9*(4), 416-424.

- Byron, K. (2005). A meta-analytic review of work-family conflict and its antecedents. *Journal of Vocational Behavior*, 67(2), 169-198.
- Carlson, D.S., Kamcar, K.M., & Williams, L.J. (2000). Construction and initial validation of a multidimensional measure of work-family conflict. *Journal of Vocational Behavior*, 56(2), 249-276.
- Chen, R., Sun, C., Chen, J.J., Jen, H.J., Kang, X.L., Kao, C.C., & Chou, K.R. (2021). A large-scale survey on trauma, burnout, and posttraumatic growth among nurses during the COVID-19 pandemic. *International Journal of Mental Health Nursing*, 30, 102-116.
- Cohen, J. (1988). Statistical Power Analysis for the Behavioral Sciences. New York, NY: Routledge Academic.
- Cordes, C.L. & Dougherty, L. (1993). A review and an integration of research on job burnout. *US: Academy of Management, 18*(4), 621-656.
- Demerouti, E., Bakker, A.B., Nachreiner, F., & Schaufeli, W.B. (2001). The job demands-resources model of burnout. *Journal of Applied Psychology*, 86(3), 499-512.
- Demerouti, E., Mostert, K., & Bakker, A.B. (2010). Burnout and work engagement: A thorough investigation of the independency of both constructs. *Journal of Occupational Health Psychology*, 15(3), 209-222.

- Devilly, G.J., Wright, R., & Varker, T. (2009). Vicarious trauma, secondary traumatic stress, or simply burnout? Effect of trauma therapy on mental health professionals. *Australian and New Zealand Journal of Psychiatry*, 43(4), 373-385.
- Dombo, E.A. & Gray, C. (2013). Engaging spirituality in addressing vicarious trauma in clinical social workers: A self-care model. *Social Work & Christianity*, 40(1), 89-104.
- Edwards, C.P. & Miller, M.K. (2019). An assessment of judges' self-reported experiences of secondary traumatic stress. *Juvenile & Family Court Journal*, 70(2), 7-29.
- Eisenberger, R., Huntington, R., Hutchison, S., & Sowa, D. (1986). Perceived Organizational Support. *Journal of Applied Psychology*, 71(3), 500-507.
- Ezenwaji, I.O., Eseadi, C., Okide, C.C., Nwosu, N.C., Ugwoke, S.C., Kennedy, O., Oforka, T.O., & Oboegbulem, A. (2019). Work-related stress, burnout, and related sociodemographic factors among nurses: Implications for administrators, research, and policy. *Medicine*, 98(3), 1-6.
- Figley, C.R. (1995). Compassion fatigue: Toward a new understanding of the costs of caring. In B.H. Stamm (Ed.), *Secondary traumatic stress: Self-care issues for clinicians, researchers, and educators* (3-28). Lutherville, MD: Sidran Press.
- Gatt, J.M., Alexander, R., Emond, A., Foster, K., Hadfield, K., Mason-Jones, A., Reid, S., Theron, L., Ungar, M., Wouldes, T.A., & Wu, Qiaobing (2020). Frontiers in Psychiatry, 10 (997), 1-15.

- Goldenhagen, B., Kingsolver, K., & Stinnett, S. (2015). Stress and burnout in residents: impact of mindfulness-based resilience training. *Advances in Medical Education and Practice*, 2015 (6), 525-532.
- Greenhaus, J.H. & Beutell, N.J. (1985). Sources and conflict between work and family roles. *The Academy of Management Review*, 10(1), 76-88.
- Lerias, D. & Byrne, M.K. (2003). Vicarious traumatization: symptoms and predictors.

 Stress and Health: Journal of the International Society for the Investigation of

 Stress, 19(3), 129-138.
- Hales, T.W., Green, S.A., Bissonette, S., Warden, A., Diebold, J., Koury, S.P., & Nochajski, T.H. (2019). Trauma-informed care outcome study. *Research on Social Work Practice*, 29(5), 529-539.
- Harrison, R.L. & Westwood, M.J. (2009). Preventing vicarious traumatization of mental health therapists: Identifying protective practices. *Psychotherapy: Theory,**Research, Practice, Training, 46(2), 203-219.
- Hazen, K.P., Carlson, M.W., & Hatton-Bowers, H. (2020). Evaluating the facilitating interactions (FAN) approach: Vicarious trauma, professional burnout, and reflective practice. *Children and Youth Services Review, 112,* 1-35.
- Halbesleben, J.R.B. & Demerouti, E. (2005). The construct validity of an alternative measure of burnout: Investigating the English translation of the Oldenburg Burnout Inventory. *Work & Stress*, 19(3), 208-220.

- Hobfoll, S.E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist*, 44(3), 513-524.
- Kalliath, P. & kalliath, T. (2014). Work-family conflict: Coping strategies adopted by social workers. *Journal of Social Work Practice*, 28(1), 111-126.
- Karakose, T., Yirci, R., & Papadakis, S. (2021). Exploring the interrelationship between COVID-19 phobia, work-family conflict, family-work conflict, and life satisfaction among school administrators for advancing sustainable management. *Sustainability*, *13*(8654), 1-19.
- Kottke, J.L. & Sharafinski, C.E. (1988). Measuring perceived supervisory and organizational support. *Educational and Psychological Measurement*, 48(4), 1075-1079.
- Kurtessis, J.N., Eisenberger, R., Ford, M.T., Buffardi, L.C., Stewart, K.A., & Adis, C.S. (2017). Perceived organizational support: A meta-analytic evaluation of organizational support theory. *Journal of Management*, 43(6), 1854-1884.
- Lee, R.T. & Ashforth, B.E. (1996). A meta-analytic examination of the correlates of the three dimensions of job burnout. *Journal of Applied Psychology*, 81(2), 123-133.
- Lerias, D. & Byrne, M.K. (2003). Vicarious traumatization: symptoms and predictors.

 Stress and Health: Journal of the International Society for the Investigation of

 Stress, 19(3), 129-138.

- Liden, R.C., Sparrowe, R.T., & Wayne, S.J. (1997). Leader-member exchange theory:

 The past and potential for the future. In G.R. Ferris (Ed.), *Research in personnel*and human resources management (pp. 47-119). Elsevier Science: JAI Press.
- Mangassarian, S.L. (2016). 100 Years of trauma: the Armenian Genocide and Integrational Cultural Trauma. *Journal of Aggression, Maltreatment, & Trauma*, 25(4), 371-381.
- Maslach, C., Jackson, S.E., & Leiter, M.P. (1996). *Maslach Burnout Inventory* (3rd ed.). Consulting Psychologists Press.
- Maslach, C., Schaufeli, W.B., & Leiter, M.P. (2001). Job burnout. *Annual Rev. Psychol.* 52, 397-422.
- McCann, L., and Pearlman, L. A. (1990a). Through a Glass darkly: Understanding and Treating the Adult Trauma Survivor through Constructivist Self-Development theory. New York: Brunner/Mazel.
- McCann, I.L. & Pearlman, L.A. (1990b). Vicarious traumatization: A framework for understanding the psychological effects of working with victims. *Journal of Traumatic Stress*, 3(1), 131-149.
- McLeod, D.A., Havig, K., Natale, A., & Pharris, A. (2020). Intimate partner violence: Innovations in theory to inform clinical practice, policy, and research. *Social Sciences*, *9*(71), 1-13.
- Melchoir, M.E.W., Van den Berg, A.A., Halfens, R., & Abu-Saad, H.H. (1997). Burnout and the work environment of nurses in psychiatric long-stay care settings. *Social Psychiatry and Psychiatric Epidemology*, 32(3), 158-164.

- Michalopoulos, L. & Aparicio, E. (2012). Vicarious trauma in social workers: The role of trauma history, social support, and years of experience. *Journal of Aggression, Maltreatment, & Trauma, 21*(6), 646-664.
- Moran, R.J. & Asquith, N.L. (2020). Understanding the vicarious trauma and emotional albour of criminological research. *Methodological Innovations*, 13(2), 1-11.
- Netemeyer, R.G., Boles, J.S., & McMurrian, R. (1996). Development and validation of work-family conflict and family-work conflict scales. *Journal of Applied Psychology*, 81(4), 400-410.
- Newell, J.M. & MacNeil, G.A. (2010). Professional burnout, vicarious trauma, secondary traumatic stress, and compassion fatigue. *Best Practices in Mental Health: An International Journal*, 6(2), 57-68.
- Norling, L.R. & Chopik, W.J. (2020). The association between coworker support and work-family interference: A test of work environment and burnout as mediators. Frontiers in Psychology, 11(819), 1-15.
- Piaget, J. (1971). Psychology and Epistemology: Toward a Theory of Knowledge, Viking, New York.
- Pirelli, G., Formon, D.L., & Maloney, K. (2020). Preventing vicarious trauma (VT), compassion fatigue (CF), and burnout (BO) in forensic mental health: Forensic psychology as exemplar. *Professional Psychology: Research and Practice*, 51(5), 454-466.
- Raskin, J. D., & Bridges, S. K. (Eds.). (2002). Studies in meaning: Exploring constructivist psychology. Pace University Press.

- Rhoades, L. & Eisenberger, R. (2002). Perceived organizational support: A review of the literature. *Journal of Applied Psychology*, 87(4), 698-714.
- Rose, S. & Palattiyi, G. (2020). Surviving or thriving? Enhancing the emotional resilience of social workers in their organisational settings. *Journal of Social Work*, 20(1), 23-42.
- Sansone, R.A. & Sansone, L.A. (2007). Childhood trauma, borderline personality, and eating disorders: A developmental cascade. *Eating Disorders: The Journal of Treatment & Prevention*, 15(4), 333-346.
- Shoji, K., Lesnierowska, M., Smoktunowicz, E., & Bock, J. (2015). What comes first, job burnout or secondary traumatic stress? Findings from two longitudinal studies from the US and Poland. *PLoS ONE*, *10*(8), 1-15.
- Silveria, F.S. & Boyer, W. (2014). Vicarious resilience in counselors of child and youth victims of interpersonal trauma. *Qualitative Health Research*, 25(4), 513-526.
- Travis, D.J., Lizano, E.L. & Mor Barak, M.E. (2016). "I'm so stressed!": A longitudinal model of stress, burnout and engagement among social workers in child welfare settings. *British Journal of Social Work, 46*(4), 1076-1095.
- Tipa, R.O., Tudose, C., & Pucarea, V.L. (2019). Measuring burnout among psychiatric residents using the Oldenburg Burnout Inventory (OLBI) instrument. *Journal of Medicine and Life*, 12(4), 354-360.
- Tyler, T.A. (2012). The limbic model of systematic trauma. *Journal of Social Work Practice*, 26(1), 125-138.

- Uysal Irak, D., Kalkism, K., & Yidirim, M. (2020). Emotional support makes the difference: Work-family conflict and employment related guilt among employed mothers. *Sex Roles: A Journal of Research*, 8(2), 53-65.
- Vrklevski, L.P. & Franklin, J. (2008). Vicarious trauma: The impact on solicitors of exposure to traumatic material. *Traumatology*, *14*(1), 106-118.
- Warren, C.S., Schafer, K.J., Crowley, M.E.J. & Olivardia, R. (2013). Demographic and work-related correlates of job burnout in professional eating disorder treatment providers. *Psychotherapy*, *50*(4), 553-564.

APPENDIX A: Tables

Table A1.

Descriptive Statistics

Variable	M	SD	1	2	3	4	5	6	7	8	9
1. Gender ^a	.82	.39									
2. Job amount ^b	.32	.47	.02								
3. Subordinates ^c	.37	.49	.02	04							
4. Workload ^d	.72	.45	14	.04	.15						
5. Vicarious Trauma	36.69	7.69	.15	.01	.20*	.23*	.79				
6. Burnout	35.09	7.1	05	.01	.04	.21*	.47**	.89			
7. Strain based work interference with family	7.82	3.24	.15	.00	.10	.26**	.48**	.74**	.89		
8. Behavior based work interference with family	6.95	2.63	18	.08	.09	.11	.28**	.42**	.43**	.87	
9. Perceived organizational support	42.82	11.28	06	01	02	17	25**	52**	38**	22**	.95

Note. Coefficient alphas are in the diagonal where appropriate. ^a Coded 0=male, 1=female; ^b Coded 0=no multiple jobs, 1=multiple jobs; ^c Coded 0=no subordinates, 1=subordinates; ^d Coded 0=no large workload, 1=large workload. *p<.05;**p<.01.

Table A2

Strain Based Work Interference with Family Mediation Results

Variable / Effect	b	β	SE	t	p	95% Con Inter	0
Workload → Burnout	.03	.00	1.44	1.06	.29	-1.33	4.39
Workload → Strain Based Work Interference with Family	1.01	.14	.64	1.57	.12	27	2.29
Vicarious Trauma — → Burnout	.14	.15	.07	2.02	<.05	.00	.28
Vicarious Trauma → Strain Based Work Interference with Family	.19	.44	.04	4.93	<.001	.11	.26
Strain Based Work Interference with Family → Burnout	1.49	.67	.17	9.01	<.001	1.16	1.82
	Effec	ts					
Direct	.14		.07	2.02	<.05	.00	.28
Indirect	.28	.29	.06			.17	.40
Total	.42		.08	4.96	<.001	.25	.59

Note. Based on 5000 bootstrap samples

Table A3

Behavior Based Work Interference with Family Mediation Results

Variable / Effect	b	β	SE	Т	p	95 Confid Inte	dence
Workload → Burnout	1.36	.08	1.36	.99	.32	-1.35	4.06
Workload Behavior Based Work Interference with Family	.20	.03	.58	.35	.72	94	1.35
Vicarious Trauma——→ Burnout	.34	.36	.08	4.10	<.001	.17	.50
Vicarious Trauma — Behavior Based Work Interference with Family	.09	.27	.03	2.77	<.05	.03	.16
Behavior Based Work Interference with Family → Burnout	.86	.31	.24	3.71	<.001	.40	1.32
	Effec	ts					
Direct	.34		.08	4.10	<.001	.17	.50
Indirect	.08	.09	.04			.02	.17
Total	.42		.08	4.96	<.001	.25	.59

Note. Based on 5000 bootstrap samples

Table A4

Hierarchical Regression on the Moderation Effect of Perceived Organizational Support Between Vicarious Trauma and Strain

Based Work Interference with Family

Variable		R^2	ΔR^2	В	SE	β	p
Step 1		.07*	.07*				<.05
	Intercept			10.69	6.14		.085
	Workload			.65	.65	.09	.32
Step 2		.31**	.25**				<.001
	Vicarious Trauma			.01	.15	.01	.97
	Perceived Organizational Support			22	.13	75	.11
Step 3		.32	.01				.29
	Vicarious Trauma × Perceived Organizational Support			.00	.00	.54	.29

Note. All b values are drawn from step 3 of the hierarchical regression

Table A5

Hierarchical Regression on the Moderation Effect of Perceived Organizational Support Between Vicarious Trauma and Behavior Based Work Interference with Family

Variable		R^2	ΔR^2	В	SE	β	p
Step 1		.32*	.10*				<.05
	Intercept			12.83*	5.20*		<.05
	Vicarious Trauma			11	.13	32	.41
	Perceived Organizational Support			21	.11	88	.08
Step 2		.35	.02				.14
	Vicarious Trauma × Perceived Organizational Support			.00	.00	.81	.14

Note. All b values are drawn from step 2 of the hierarchical regression

APPENDIX B

Informed consent and demographic questions

Informed Consent Form My name is Chris Gordon (2718701@vikes.csuohio.edu) (440-723-6963). I am a graduate student at Cleveland State University working on research under my advisor Dr. Mike Horvath (m.horvath59@csuohio.edu) (216-687-2574). We are asking you to complete a short survey for our research being given to people who work in the mental health field. The survey is very short and should not take more than fifteen minutes. The purpose of this study is to see how mental health workers feel about aspects of their work and home lives. If you choose to take part in this study you will be asked how you feel about your work life and your home life. Taking the survey is completely your choice and you can stop at any time. There is no reward for taking the survey and no punishment if you do not. You will be asked if you feel supported by your workplace. You will also be asked how you feel about sad or difficult stories you hear from clients at work. There is a risk you may feel emotions that you may have felt at work. You may skip any question that makes you uneasy. If you need to talk to someone at any time the number for the National Suicide Prevention Lifeline is 1-800-273-8255 and that will be found on every page. There is a small risk that your answers may be seen by someone else. In order to reduce this risk, all answers will be anonymous. Results of the study may be published and presented at conferences. Results will be published as an average across respondents. You will never be asked your name and you do not have to provide any personal info. If you have any questions about your rights as a research participant you may contact the Cleveland State University International Review Board at (216) 687-3630. You may also contact myself (2718701@vikes.csuohio.edu) (440-723-

6963) or Dr. Mike Horvath (m.horvath59@csuohio.edu) (216-687-2574) with any
questions. If you are 18 years of age or older, understand the statements above, and agree
to be a part of the study, click on the "I Agree" button to begin the survey.
I agree (1)
I do not agree (2)
How long have you been in the mental health field?
Less than 1 year (1)
5 - 10 years (2)
Over 10 years (3)
Prefer not to say (4)
How old are you?
18-30 (1)
31-50 (2)
Over 50 (3)
Prefer not to say (4)
What gender are you?
Male (1)
Female (2)

Non-binary / other gender (3)
Prefer not to say (4)
What is your education level?
Current undergrad (1)
Undergrad degree (2)
Current graduate student (3)
Graduate degree (4)
Prefer not to say (5)
Would you say you have a large workload?
yes (1)
no (2)
Do you have any employees that answer to you or that you supervise?
yes (1)
no (2)
Do you work more than one job?
yes (1)
no (2)
Do you live with blood relatives, relatives by marriage, adopted relatives, or significant others?

yes (1)

no (2)

APPENDIX C

Vicarious Trauma Scale

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

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

- 1. My job involves exposure to distressing material and experiences.
- 2. My job involves exposure to traumatized or distressed clients.
- 3. I find myself distressed by listening to my clients' stories and situations.
- 4. I find it difficult to deal with the content of my work.
- 5. I find myself thinking about distressing material at home.
- 6. Sometimes I feel helpless to assist my clients in the way I would like.
- 7. Sometimes I feel overwhelmed by the workload involved in my job.
- 8. It is hard to stay positive and optimistic given some of the things I encounter in my work.

APPENDIX D

Oldenburg Burnout Inventory

Please read the following statements and indicate on a scale of 1 (*strongly agree*) to 4 (*strongly disagree*) how much you agree with them. R means reverse coded when higher scores indicate higher burnout.

```
(1 = Strongly agree, 2 = Agree, 3 = Disagree, 4 = Strongly disagree)
```

- 1. I always find new and interesting aspects in my work.
- 2. There are days where I feel tired before I arrive at work.(R)
- 3. It happens more and more often that I talk about my work in a negative way.(R)
- 4. After work, I tend to need more time than in the past in order to relax and feel better.(R)
- 5. I can tolerate the pressure of my work very well.
- 6. Lately, I tend to think less at work and do my job almost mechanically.(R)
- 7. I find my work to be a positive challenge.
- 8. During my work, I often feel emotionally drained.(R)
- 9. Over time, one can become disconnected from this type of work.(R)
- 10. After working, I have enough energy for my leisure activities.
- 11. Sometimes I feel sickened by my work tasks.(R)
- 12. After my work, I usually feel worn out and weary.(R)

- 13. This is the only type of work that I can imagine myself doing.
- 14. Usually, I can manage the amount of my work well.
- 15. I feel more and more engaged in my work.
- 16. When I work, I usually feel energized.

APPENDIX E

Work-family Conflict Scale

Please read the following statements and indicate on a scale of 1 (*strongly disagree*) to 5 (*strongly agree*) how much you agree with them.

(1 = Strongly disagree, 2 = Disagree, 3 = Neither agree nor disagree, 4 = Agree, 5 = Strongly agree)

Strain-based work interference with family

- 7. When I get home from work I am often too frazzled to participate in family activities/responsibilities.
- 8. I am often so emotionally drained when I get home from work that it prevents me from contributing to my family.
- 9. Due to all the pressures at work, sometimes when I come home I am too stressed to do the things I enjoy.

Behavior-based work interference with family

- 13. The problem-solving behaviors I use in my job are not effective in resolving problems at home.
- 14. Behavior that is effective and necessary for me at work would be counterproductive at home.
- 15. The behaviors that I perform that make me effective at work do not help me to be a better parent and spouse.

APPENDIX F

Perceived Organizational Support Scale

Please read the following statements and indicate on a scale of 0 (*strongly disagree*) to 6 (*strongly agree*) how much you agree with them.

- (0 = Strongly disagree, 1 = Moderately disagree, 2 = Slightly disagree, 3 = Neither agree nor disagree, 4 = Slightly agree, 5 = Moderately agree, 6 = Strongly agree)
- 1. The organization values my contribution to its well-being.
- 3. The organization fails to appreciate any extra effort from me.(R)
- 7. The organization would ignore any complaint from me.(R)
- 9. The organization really cares about my well-being.
- 17. Even if I did the best job possible, the organization would fail to notice.(R)
- 21. The organization cares about my general satisfaction at work.
- 23. The organization shows very little concern for me.(R)
- 27. The organization takes pride in my accomplishments at work.