Winter 3-19-2023

Examining Predictors of Vicarious Posttraumatic Growth among Sexual Assault Service Providers in Rape Crisis Centers

Anna Wegrzyn
DePaul University, awegrzy1@depaul.edu

Examining Predictors of Vicarious Posttraumatic Growth among Sexual Assault Service Providers in Rape Crisis Centers

A Dissertation

Presented in

Partial Fulfillment of the

Requirements for the Degree of

Doctor of Philosophy

By

Annie Wegrzyn

January 26th, 2023

Department of Psychology

College of Science and Health

DePaul University

Chicago, Illinois

Dissertation Committee

Megan R. Greeson, PhD, Chair

Molly Brown, PhD

Christopher Keys, PhD

Sonya Crabtree-Nelson, PhD

Beth Catlett, PhD

Acknowledgments

I want to start by expressing my sincerest thanks to my dissertation chair and mentor, Dr. Megan Greeson. I am immensely grateful for your continuous support, kindness, and patience throughout my dissertation study and graduate career as a whole. Thank you for all the time and energy you have invested in fostering my personal and professional growth. I have learned so much from you over the years and truly could not have done this without you. I also want to express my sincere appreciation to my dissertation committee: Dr. Molly Brown, Dr. Chris Keys, Dr. Beth Catlett, and Dr. Sonya Crabtree-Nelson. Your valuable insights and feedback have truly enriched this project; my dissertation would not have been the same without you all. An additional thanks to Dr. Chris Keys and Dr. Molly Brown for your mentorship and ongoing support of my professional development over the years. I also want to express my gratitude to my collaborators at the Illinois Criminal Justice Information Authority, for their consultation and guidance in initiating this project. Also, a huge thank you to my lab mates for their comradery and community. It has been a joy to work with you all. I am also forever grateful to my family and friends for their love and encouragement throughout my time in graduate school. Thank you for cheering me on through my successes and challenges, and for believing in me when I did not. To my husband, Rob, thank you for keeping your promise to remind me to take breaks and find joy in the little things in life. Your love keeps me grounded. I am so excited to conclude our respective graduate careers and begin this next chapter of our life together. Lastly, I want to express my appreciation to the rape crisis center leaders who supported my project, and to the staff and volunteers who offered their valuable time to participate in my research. I am so grateful to them, and all other providers, for their commitment to supporting survivors and combating gender-based violence.

Biography

The author, Annie Wegrzyn, was born in Palos Heights, Illinois on December 10th, 1993. She graduated from Lincoln-Way West High School in New Lenox, Illinois, and received her Bachelor of Arts in Psychology at North Central College in 2016. She received her Master of Arts in Community Psychology in 2019 from DePaul University, where she is currently completing her doctoral studies.

Table of Contents

List of Tables

List of Figures

Abstract

Rape crisis centers (RCCs) rely on counselors and victim advocates to provide support to survivors of sexual assault via crisis intervention, advocacy, counseling, case management, and referrals. As a result of their direct service work, sexual assault service providers are frequently exposed to vicarious trauma. This may inhibit both service provision and provider well-being. Not all impacts of engaging in trauma work are negative, however; positive benefits have also been documented from engaging in trauma work. One such benefit is vicarious posttraumatic growth, which is understood as the positive psychological transformation undergone by a trauma worker as a result of their repeated engagement with their clients' trauma (Arnold et al., 2005). Limited research exists on factors associated with vicarious posttraumatic growth among sexual assault service providers. Therefore, the purpose of this study was to examine factors related to vicarious posttraumatic growth among sexual assault service providers. More specifically, this study examined how supervision, peer support, organizational support, trauma-specific education, and exposure to client growth predict vicarious posttraumatic growth in RCC sexual assault service providers. Additionally, this study also aimed to explore the nature of the relationship between vicarious posttraumatic growth and vicarious traumatization. In the first linear regression model, perceptions of organizational support significantly predicted providers' experiences of VPTG, but other variables (i.e., perceptions of supervision, peer support, organizational support, trauma-specific training) did not significantly predict VPTG. In the second multiple linear regression model, which examined exposure to client growth, length of time in role significantly predicted a change in VPTG. A Pearson product-moment correlation did not reveal the relationship between VPTG and VT to be significant, but findings suggest the relationship may be curvilinear. In this case, additional analyses may be considered. By

examining factors associated with vicarious posttraumatic growth and exploring the relationship with vicarious traumatization, this study sought to increase knowledge about how RCCs may help facilitate the positive effects of trauma work. Findings suggest that providers' feelings of organizational support (i.e., that they are valued and respected by their broader organization) may be associated with more positive changes as a result of their work. As such, organizations may consider strategies to communicate their appreciation of staff and volunteers to potentially promote provider longevity, well-being, and overall service provision. Other considerations for future research in this area, such as expanding and adapting strategies for measuring key variables, are discussed.

Keywords: gender-based violence; sexual assault; vicarious posttraumatic growth; vicarious trauma; trauma-informed organizational practices

Examining Predictors of Vicarious Posttraumatic Growth among Sexual Assault Service Providers in Rape Crisis Centers

Rape crisis centers (RCCs) utilize both paid staff employees and unpaid volunteers to provide necessary services to survivors of sexual assault, including legal and medical advocacy, counseling, and crisis hotlines. Sexual assault service providers (i.e., RCC staff and volunteers who provide direct services to survivors) are regularly exposed to survivors' trauma and suffering, thus leaving them susceptible to various negative impacts also faced by other trauma workers (e.g., burnout, secondary traumatic stress, compassion fatigue, and vicarious traumatization). While previous research and practice have largely focused on the negative effects of engaging in trauma work, emerging research also reveals that positive effects may also arise from this work. One such effect is vicarious posttraumatic growth (VPTG), defined as the positive psychological changes experienced by workers as a result of engaging with trauma survivors (Arnold et al., 2005). However, there is a dearth of research exploring predictors of VPTG, particularly with the sexual assault service provider population.

Therefore, the purpose of this study is to examine factors that predict VPTG among sexual assault service providers, specifically, peer support, supervision, organizational support, trauma-specific education, and exposure to client growth. Moreover, this study seeks to explore the relationship between vicarious traumatization and VPTG. In examining these questions, this study aims to increase knowledge around VPTG for sexual assault service providers, which may have implications for RCC's policies, training, and practices (e.g., supervision, peer support). To contextualize this study, the literature on sexual assault service provision, the effects of trauma work, and associations with these effects will be reviewed in the following sections.

Overview of Rape Crisis Center Services

Sexual assault service providers (e.g., victim advocates and counselors) within rape crisis centers provide essential support and crisis intervention to survivors of sexual assault. Rape crisis centers (RCCs) enlist both unpaid, trained volunteers and paid staff to provide crisis hotlines, medical and legal advocacy, and counseling (Shaw & Campbell, 2011). Crisis hotlines typically operate 24 hours a day to receive calls from survivors in crisis or their support systems (e.g., friends, significant others), and to provide referrals and support (Wasco et al., 2004). Medical and legal advocates accompany survivors in hospital emergency rooms and during interactions with police and prosecutors, guide survivors through the evidence collection and legal process, ensure that survivors receive appropriate care, and prevent further traumatization from the medical and criminal justice systems (Campbell, 2006; Shaw & Campbell, 2011). RCCs may also offer individual and group counseling—usually via licensed therapists—to help survivors cope with and process their traumatic experiences, and to address psychological symptoms following an assault (Shaw & Campbell, 2011; Wasco et al., 2004).

Through RCCs' services, providers offer crucial support, validation, resources, and case management to survivors. In doing so, however, providers bear witness to survivors' suffering, including painful details of survivors' experiences with sexual assault and abuse (Schauben & Frazier, 1995). This repeated exposure to survivors' trauma may impact advocates and counselors psychologically (Long, 2020; Schauben & Frazier, 1995). Additionally, working with sexual assault survivors often occurs in a higher stake, crisis context, thus presenting additional uncertainties and stressors for providers. For 'on-call' positions such as medical advocates, not knowing whether one may receive a call during a shift, and what to expect on that call, are salient stressors in their work (Long, 2020; Mihelicova et al., 2019). Thus, counselors and

advocates working with survivors of sexual assault experience certain challenges to their work, and may be indirectly impacted as a result of their chronic exposure to survivors' trauma.

Negative Impacts of Trauma Work

Given their frequent and ongoing exposure to survivors' trauma, sexual assault service providers, along with others who engage in trauma work, may experience negative psychological and physical impacts of engaging in their work. Specifically, four impacts are addressed in the following sections: burnout (Maslach et al., 2001), compassion fatigue (Figley, 1995; 2002), secondary traumatic stress (Figley, 1995; 2002), and vicarious traumatization (McCann & Pearlman 1990; Pearlman & Saakvitne, 1995). When trauma workers experience negative impacts as a result of their work, their overall personal wellbeing and ability to engage with clients may be hindered, thereby weakening the overall quality of service provision offered to survivors (Rauvola et al., 2019).

Burnout

One negative impact of trauma work is burnout, which typically occurs after chronic exposure to certain occupational stressors. Generally, burnout comprises three dimensions: emotional exhaustion, cynicism, and diminished professional commitment/inefficiency (Maslach et al., 2001). Professionals experiencing burnout may feel emotionally drained and overwhelmed, overly negative or detached, and incompetent and unproductive in their work (Maslach et al., 2001). While burnout itself is not specific to trauma work (i.e., professionals in many different fields of work may burn out), burnout has been well-documented among sexual assault service providers (Baird & Jenkins, 2003; Bemiller & Williams, 2011; Long, 2020; Ullman & Townsend, 2007). A study with medical advocates indicated that not knowing when they would receive a call and what that call would entail, experiencing high volumes of calls

(particularly difficult ones), and the emotional nature of the calls, contributed to advocate burnout (Long, 2020). Burnout impacts providers' professional capacities, as research demonstrates that it may hinder providers' work with sexual assault survivors and in some cases, their ability to continue in their role altogether (Ullman & Townsend, 2007).

Secondary Traumatic Stress

Trauma workers may also experience secondary traumatic stress in response to indirect trauma exposure in their work. Secondary traumatic stress mirrors symptoms of posttraumatic stress disorder (PTSD) in that those experiencing secondary traumatic stress may suffer from intrusive and recurring thoughts or imagery of the event, numbness, sleep disturbances, or other physical reactions (Figley, 1995). Research with sexual assault service providers reveals that both RCC volunteers and staff may experience secondary traumatic stress as a result of their work (Baird & Jenkins, 2003; Dworkin et al., 2016).

Compassion Fatigue

Compassion fatigue is another negative impact of prolonged engagement with others' trauma. Some conceptual and definitional ambiguity remains around compassion fatigue and secondary traumatic stress. Some research studies present these two constructs as synonymous, whereas in others, they are related but distinct from one another (Rauvola et al., 2019). Figley (2002) defines compassion fatigue as a decrease in trauma workers' ability to empathize. According to the trauma transmission model (Figley, 2002), prolonged exposure to others' trauma may result in a decrease in trauma workers' ability to empathize with trauma survivors, making them less effective in their work.

Vicarious Traumatization

In contrast to burnout, secondary traumatic stress, and compassion fatigue, vicarious traumatization is characterized less by observable, acute symptoms, but rather through enduring personal changes in how a trauma worker understands themselves and their surroundings. Articulated through constructivist self-development theory (McCann & Pearlman, 1992), vicarious traumatization is defined as the disruption and alteration in one's cognitive schemas (i.e., beliefs, worldview, and values) as a cumulative result of repeated empathic engagement with others' trauma (McCann & Pearlman, 1990; Pearlman & Saakvitne, 1995). Vicarious traumatization leads to the "shattering" of one's previously held beliefs (McCann & Pearlman, 1990, p. 140). When a trauma worker indirectly experiences clients' trauma over a prolonged period of time, they may begin to question and alter their existing schemas around dependency/trust, safety, power, independence, esteem, and intimacy (McCann & Pearlman, 1990). Specifically for advocates and counselors working with sexual assault survivors, vicarious traumatization may emerge as diminished feelings of security and safety, distrust of others (particularly men), concerns with sexual intimacy, and heightened sensitivity to power and control issues, especially as they relate to gender (Clemans, 2004; Long, 2020; Mihelicova et al., 2019; Schauben & Frazier, 1995).

Associations with Negative Effects of Trauma Work

The existing empirical literature has documented a number of risk factors related to the negative impacts of trauma work (i.e., burnout, compassion fatigue, secondary traumatic stress, and vicarious traumatization). The general literature on trauma workers shows that individual-level factors negatively associated with the effects of trauma work include personal self-care practices (Iliffe & Steed, 2000), length of time, or amount of experience in one's position

(Arnold et al., 2005; Baird & Jenkins, 2003; Dworkin et al., 2016; Iliffe & Steed, 2000), and having a sense of personal accomplishment in one's work (Baird & Jenkins, 2003). Additionally, trauma workers with 'workaholic' tendencies have an increased risk of experiencing negative effects such as compassion fatigue (Killian, 2008). Furthermore, Singer et al.'s (2020) research with domestic violence and sexual assault victim advocates suggests that personal trauma history is associated with a higher risk of compassion fatigue. Lastly, research reveals that younger and less experienced sexual assault service providers may be more susceptible to negative impacts such as burnout and secondary traumatic stress (Baird & Jenkins, 2003; Dworkin et al., 2016). This suggests that specific internalized factors may leave certain sexual assault providers more susceptible to experiencing negative effects in their work.

On an organizational level, heavy caseloads and/or short staffing at agencies (Killian, 2008; Schauben & Frazier 1995), low pay (Ullman & Townsend, 2007), and a lack of support both from colleagues and supervisors (Killian, 2008; Ullman & Townsend, 2007; Slattery & Goodman, 2009) are related to an increased likelihood of experiencing negative impacts of trauma work. These aforementioned issues are particularly challenging within RCCs, where limited resources result in high caseload volume, low pay, and limited supervision (Ullman & Townsend, 2007). Importantly, both peer support and supervision have emerged as two key factors within the broader trauma work literature as well as the gender-based violence literature. Research with RCC staff and domestic violence advocates has found that the quality of peer support, as well as the quality of supervision for advocates, may both be inversely related to negative effects such as burnout and vicarious traumatization (Slattery & Goodman, 2009; Ullman & Townsend, 2007). These findings suggest organizational structure and practices may affect how sexual assault service providers and other trauma workers experience negative

impacts of their work like vicarious trauma. Therefore, organizations must take on an active role in mitigating negative outcomes such as burnout, compassion fatigue, secondary traumatic stress, and vicarious traumatization for their staff and volunteers.

Preventing Negative Effects of Trauma Work

The implementation of strategies to prevent negative outcomes of engaging in trauma work may aid in increasing the longevity and overall health of trauma workers. One such way organizations may accomplish this is by incorporating principles of Trauma-Informed Care (TIC; Fallot & Harris, 2006; Harris & Fallot, 2001) into organizational functioning. TIC is a philosophy of care that recognizes the pervasiveness of trauma and seeks to be responsive to the varied ways in which trauma affects individuals (Fallot & Harris, 2006). TIC is comprised of five principles: safety, trustworthiness, choice, collaboration, and empowerment (Fallot & Harris, 2006; Harris & Fallot, 2001), which can be incorporated within both service provision and organizational practices to prevent retraumatization. While the incorporation of TIC into organizational practices may directly apply to service provision for trauma care recipients, it may also benefit trauma workers themselves in preventing the negative effects of their work, such as vicarious traumatization.

Research by Bell and colleagues (2003) identifies organizational strategies to prevent vicarious traumatization of trauma workers, which may in turn facilitate safety, trustworthiness, choice, collaboration, and empowerment among providers. Strategies include diversification of workload, whereby organizations provide opportunities to engage in different types of tasks, so that workers can balance the difficult, traumatic material with less harmful and demanding work (Bell et al., 2003). Organizations can also strive to create a safe, comfortable, and private work environment (Bell et al., 2003), which is particularly important considering trauma workers who

may experience vicarious traumatization report decreased feelings of security (Iliffe & Steed, 2000). Lastly, providing resources for self-care (e.g., health insurance, mental health coverage, and stress management support) is another means through which organizations can empower and support workers (Bell et al., 2003).

Another trauma-informed strategy is the creation of an organizational culture that establishes set norms and values around engaging in trauma work. Organizational culture—or organizational support—recognizes the contributions of trauma workers and normalizes the effects of working with trauma survivors (Bell et al., 2003). Thus, organizational support can encourage and integrate self-care activities into everyday organizational practices (e.g., encouraging time off/breaks, writing self-care into mission statements and protocols, etc.). Research with other responders (e.g., emergency response personnel) reveals that perceived organizational support buffers the effects of vicarious traumatization (Setti et al., 2016) Specific training on vicarious trauma exposure and its varied effects may also aid in preventing the negative effects of trauma (Bell et al., 2003). Trauma-specific education establishes a foundational understanding of the impacts of trauma work, such as vicarious trauma, burnout, compassion fatigue, and secondary traumatic stress. Education and training can offer suggested strategies to bolster trauma worker strengths and prepare them for the stressors inherent in working with trauma survivors (Bell et al., 2003; Harris & Fallot, 2001). Training may also inform trauma workers on how to recognize signs and symptoms of vicarious traumatization in themselves and others, and how to respond appropriately for prevention and intervention (Bell et al., 2003). Thus, trauma-specific education and training can mitigate vicarious traumatization and other negative effects of trauma exposure among trauma workers (Pearlman & Saakvitne, 1995; Trippany et al., 2004).

Both peer support and supervision may also play important roles in lessening the negative effects of trauma work. Bell et al. (2003) emphasized the importance of formal and informal peer and supervision support within the organization to make space for debriefing, processing traumatic material, and providing tangible help (e.g., assistance with paperwork). Peer support, which may include support groups, case consultations, peer retreats, and team-building activities, can help build cohesion among providers and allow them to share insights, empathize, and offer perspective on current concerns and issues (Bell et al., 2003). Peer support and supervision can also help normalize reactions of vicarious exposure to trauma (Trippany et al., 2004).

Trauma-informed supervision seeks to empower supervisees, maintain a healthy supervisee-supervisor relationship, ensure supervisee physical and emotional safety, increase knowledge of trauma, and advocate self-care (Berger & Quiros, 2016; Knight, 2018). In doing so, supervision can successfully mitigate the negative effects of trauma. Other research specific to gender-based violence service provision has substantiated the importance of peer social support and supervision in the service provision for survivors of trauma. A study with domestic violence advocates revealed coworker support and quality clinical supervision as predictors of advocate well-being and buffers against secondary traumatic stress (Slattery & Goodman, 2009). Another study conducted with rape victim advocates found that peer support facilitates advocates' integration of self-care practices into their lives (Wasco et al., 2002). Lastly, a third study revealed the benefits related to debriefing (Iliffe & Steed, 2000). Trauma workers who debriefed with colleagues were able to process emotional responses to traumatic material, reflect on their service provision, and cope with challenges (Iliffe & Steed, 2000). Thus, organizational factors such as organizational support, trauma-specific education, peer support, and supervision

have been shown to predict reductions in negative outcomes for trauma workers. However, less is known about whether these factors are also related to the positive impacts of trauma work.

Positive Impacts of Trauma Work

While the implementation of organizational practices may attenuate the negative effects of trauma exposure, it is also necessary for organizations to acknowledge and encourage the potential benefits that come from this challenging work. Vicarious exposure to others' trauma can lead to vicarious traumatization and other undesired outcomes, but it may also result in positive changes, particularly through witnessing survivors' growth, strength, and resilience. Such positive changes may include compassion satisfaction and vicarious posttraumatic growth. Not only are these changes beneficial on their own, but they may also further buffer against the negative effects of trauma work (Baird & Jenkins, 2003; Cummings et al., 2018).

Compassion Satisfaction

Compassion satisfaction refers to feelings of reward, efficacy, and competence in one's role as a trauma worker (Figley, 2002). Trauma workers who experience compassion satisfaction generally may derive pleasure from being able to successfully do their work and help others (Stamm, 2010). In research by Schauben and Frazier (1995), counselors working with sexual assault survivors reported satisfaction in being a part of survivors' healing journeys. Counselors also believed that witnessing their clients' growth, resourcefulness, and perseverance demonstrated the importance of their advocacy/counseling work. Research with sexual assault and domestic violence advocates also indicates that compassion satisfaction is related to factors such as organizational support (Frey et al., 2016). Furthermore, compassion satisfaction has been found to protect against negative impacts among trauma workers generally, such as vicarious traumatization, secondary traumatic stress, and burnout (Cummings et al., 2018).

Vicarious Posttraumatic Growth

Vicarious posttraumatic growth (VPTG; Arnold et al., 2005) is another emerging positive outcome of working with survivors of trauma. VPTG refers to the positive transformation that trauma workers experience as a result of empathetic engagement with trauma survivors. Similar to vicarious traumatization, VPTG results in changes to a trauma worker's schema. This positive transformation can include shifts in one's perspectives on life, interpersonal relationships, and self-perception (Arnold et al., 2005). More specifically, VPTG within trauma workers may result in greater appreciation of life and human resiliency, increased spirituality, improvement in personal traits and strength, and greater valuing of relationships with loved ones (Cohen & Collens, 2013). VPTG was first documented from research with psychotherapists (Arnold et al., 2005) and extends from the theory of posttraumatic growth (i.e., growth following direct trauma; Tedeschi & Calhoun, 2004). There is not yet an articulated theoretical model outlining the process of VPTG specifically; thus, understanding how direct PTG occurs within trauma survivors may inform understanding of VPTG as it occurs within providers and trauma workers.

Posttraumatic Growth Theory. VPTG can be understood through the broader theoretical framework of posttraumatic growth (PTG), or personal growth experienced directly by trauma survivors. As explained by Tedeschi and Calhoun, posttraumatic growth is "not simply a return to baseline—it is an experience of improvement that for some persons is deeply profound" (2009, p. 4). PTG theory posits that, following a traumatic event, a trauma survivor may experience psychological transformation across the following five domains: greater appreciation of life and changed sense of priorities; warmer, more intimate relationships with others; greater sense of personal strength; recognition of new possibilities or paths for one's life; and spiritual development (Tedeschi & Calhoun, 2004). PTG theory underscores the importance

of social support offered in response to a survivors' self-disclosure following an adverse event. According to Tedeschi and Calhoun (2004), when an individual experiences a traumatic event, their pre-existing schemas, beliefs, and assumptions are fundamentally challenged, thus leading them to ruminate on the event in its aftermath. One way in which posttraumatic growth may occur is through self-disclosure of the traumatic event to supportive others; in doing so, the trauma survivor reflects upon and cognitively processes the event, and may receive different perspectives from the sources of support in whom they confided. This mutual sharing, in turn, aids in a survivors' reconstruction of new narratives to be integrated into existing schemas. It is necessary to also see if, similarly, social support may function in similar ways to facilitate VPTG among trauma workers.

While research first observed psychological growth occurring among direct trauma survivors following adverse experiences, similar vicarious growth has been reported by those working with trauma survivors. Emerging literature on VPTG suggests that consistencies exist between posttraumatic growth experienced directly versus indirectly. A review of the literature conducted by Manning-Jones et al. (2015) demonstrated that both posttraumatic growth (PTG) and vicarious posttraumatic growth (VPTG) include changes in relationships, spirituality, personal strength, and personal values and priorities. However, minor differences were noted in how these dimensions specifically manifest between direct vs. vicarious growth. For example, whereas direct PTG may manifest as survivor feeling an increased sense of personal strength, providers experiencing VPTG may feel a strengthening of their professional identity (e.g., a greater ability to impact the lives of trauma survivors, or greater competency in their work). As such, Manning-Jones et al. (2015) propose that VPTG may fit within the broader umbrella of

PTG, but still should be considered as its own distinct construct warranting its own unique empirical exploration.

Research on VPTG. While the exact prevalence of VPTG is unknown among trauma workers, VPTG has been documented in a variety of populations that work with trauma survivors, including psychotherapists (Arnold et al., 2005; Brockhouse et al., 2011; Linley & Joseph, 2007), professionals working with refugees and asylum seekers (Rizkalla & Segal, 2020; Splevins et al., 2010), labor and delivery nurses (Beck et al., 2016), military nurses (Doherty et al., 2020), substance abuse treatment providers (Cosden et al., 2016), and ambulance personnel (Kang et al., 2018). Positive changes of VPTG that have been documented in the literature on trauma workers include an increased sense of meaningfulness in work and long-term personal changes such as sensitivity, compassion, insight, tolerance, and empathy (Arnold et al., 2005; Cohen & Collens, 2013). Trauma workers who experience VPTG may undergo changes in spirituality (e.g., more existential questioning, appreciation for different spiritual paths, deepening of faith), as well as increased awareness of luckiness and appreciation of life (Arnold et al., 2005; Cohen & Collens, 2013). Lastly, VPTG may also include increased appreciation for the strength and resilience of human spirit (Arnold et al., 2005; Cohen & Collens, 2013). These changes align with the dimensions established by direct PTG (i.e., appreciation for life, warmer relationships with others, sense of personal strength, recognition of new possibilities for one's life, and spiritual development). However, while VPTG can be understood within the broader framework of PTG, it is important to further explore and recognize the distinct ways in which this process of growth may be experienced vicariously (Manning-Jones et al., 2015).

Further, there is a dearth of research on the specific experiences of VPTG among sexual assault service providers who work with survivors. One study conducted with sexual assault

medical advocates found that advocates experienced growth as a result of their work, specifically, increased compassion towards others and improved relationships with family and friends (Long, 2020). One other study suggested that the quality of peer relationships predicted increased VPTG among sexual assault and domestic violence advocates (Frey et al., 2016), but emphasized the need for additional research to replicate such findings. As a whole, specific experiences of VPTG among sexual assault service providers in RCCs is largely understudied. It is possible that different types of trauma workers, especially those in more crisis-focused volunteer roles (e.g., medical and legal advocates) may undergo VPTG differently; therefore, future exploration is warranted around sexual assault providers' experiences of VPTG.

Associations with VPTG. Multiple individual-level variables have been found to be associated with VPTG. A literature review by Manning-Jones et al. (2015) revealed that the ability to empathize with others, optimism, affect, work satisfaction, sense of coherence, and resilience were positively associated with VPTG for trauma workers. Other individual variables identified in other research on trauma workers include intrinsic religiosity and ability to make meaning from the surrounding world (Abel et al., 2014), engagement in self-care activities (e.g., exercise, hobbies), and participation in personal therapy (Manning-Jones et al., 2015). Lastly, witnessing posttraumatic growth in direct trauma survivors, time, and providers' own personal trauma history have been positively associated with VPTG (Cohen & Collens, 2013; Manning-Jones et al., 2015).

Beyond the individual level, organizational variables have also been associated with VPTG for trauma workers. Just as social support is negatively associated with vicarious traumatization and can facilitate direct PTG, it is also positively associated with VPTG (Manning-Jones et al., 2015). Two particularly important types of social support for trauma

workers in relation to vicarious posttraumatic growth are peer support and supervision (Manning-Jones et al., 2015). Research by Linley and Joseph (2007) found that therapists who received supervision were more likely to experience growth than therapists who did not receive supervision. Similarly, social support in the form of peer support significantly predicted VPTG in a study of health professionals (Manning-Jones et al., 2016). While research with other populations (e.g., EMS responders) has also found evidence for the relationship between social support and VPTG (Kang et al., 2018); further research is needed to determine whether the same findings extend to other populations such as sexual assault service providers.

Rationale

Research has identified numerous challenges associated with engaging in trauma work (i.e., burnout, compassion fatigue, secondary traumatic stress, and vicarious traumatization), but also suggests that positive outcomes may also arise through working with trauma survivors. Positive outcomes such as VPTG may improve retention of trauma workers, as well as the quality of their service provision. Further research is needed to examine associations with VPTG. Current literature has identified factors such as empathy, religiosity, self-care practices, and optimism (Abel et al., 2014; Brockhouse et al., 2011; Manning-Jones et al., 2015); however, focusing exclusively on individual-level variables positions individual trauma workers as solely responsible for their own healing from trauma exposure. Therefore, this proposed study sought to examine both individual and organizational factors that may predict VPTG among sexual assault service providers.

Peer Support

This study explored peer support as a predictor of VPTG in sexual assault providers. Research on both direct PTG and VPTG suggests that social support plays a crucial role in the

development of growth following direct or vicarious trauma exposure. According to PTG theory, when an individual discloses experiences of trauma, they are able to reflect upon their traumatic experiences, which may lead them to reprocess and reformulate existing schemas to experience long-term growth (Tedeschi & Calhoun, 2004). The current research on VPTG seems to support this idea as well, but also underscores subtle differences between social support among trauma workers and direct survivors of trauma. For example, trauma workers' social support might come in the form of peer support groups, as opposed to informal conversations with family members or friends. As such, there is a need to determine whether similar processes occur in a vicarious manner and whether social support can facilitate VPTG among sexual assault service providers.

Supervision

Sexual assault providers' perceptions of supervision was also examined as a predictor of VPTG in this study. Like peer support, supervision meetings may serve as an outlet for trauma workers to debrief and process their indirect trauma. Compared to peer support, supervision may offer a more individualized or formal outlet to process trauma (e.g., through regularly scheduled one-on-one supervision meetings). A supervisor can assist their supervisees in making meaning of supervisees' work with trauma survivors, offer social support, and promote self-care, among other strategies (Deaton et al., 2021). Through employing these strategies, supervisors may facilitate VPTG among trauma workers whom they supervise (Deaton et al., 2021). This study sought to examine whether supervision does indeed predict vicarious posttraumatic growth, focusing specifically on sexual assault service providers.

Organizational Support

Another predictor of VPTG examined in this study was organizational support. Organizational support is different from support from supervisors and support from peers in that

organizational support refers to the feeling that a service provider's organization as a whole (as opposed to specific individuals) appreciates and values them. Bell and colleagues (2003) suggest that organizational support (which is distinct from other forms of support like peer support and supervision) can aid in the prevention of vicarious traumatization. Additionally, organizational support has been found to predict VPTG in mental health provider populations (Cohen & Collens, 2013). However, the relationship between organizational support and VPTG has not yet been measured within the sexual assault service provider population. Thus, this study aimed to determine whether broader organizational support may predict VPTG.

Trauma-Specific Education

This study also investigated whether trauma-specific education predicted VPTG. Previous literature underscores the importance of trauma-specific education on preventing negative effects such as vicarious traumatization (Bell et al., 2003, Pearlman & Saakvitne, 1995; Trippany et al., 2004), as training may increase awareness of exposure to trauma, warning signs and symptoms, and prevention and coping strategies. However, less is known about how training may be associated with the positive effects of engaging in trauma work. In order to determine whether training may predict positive effects such as VPTG, additional research is needed. Findings from this study may inform training efforts at RCCs to incorporate discussions of VPTG into ongoing education.

Exposure to Client Growth

This study also sought to determine whether exposure to client growth predicts VPTG. The literature has drawn mixed conclusions with respect to exposure to client growth and its role in VPTG. A systematic literature review by Cohen & Collens (2013) posits that for a trauma worker to experience VPTG, they must first be exposed to client's growth. As such, they

hypothesize that interventions that "do not allow the time and scope for this process to occur may be less facilitative of the practitioner's growth." (Cohen & Collens, 2013, p. 578). This hypothesis suggests that crisis-oriented roles within sexual assault service provision, such as medical advocacy, may have less of an opportunity to experience vicarious posttraumatic growth, as these positions typically entail less long-term interactions with survivors. However, research by Frey and colleagues (2016) and Long (2020) indicate that growth can in fact occur among sexual assault advocates as a result of their work. Thus, additional research is needed to ascertain whether, and to what extent, exposure to client growth is in fact a significant predictor of VPTG for sexual assault service providers. This may provide important insight into the potential for crisis-oriented roles (e.g., medical advocates and rape crisis hotline workers) to experience VPTG.

Vicarious Posttraumatic Growth within Sexual Assault Service Provision

Research has found that factors such as peer support, supervision, organizational support, training, and exposure to client growth are associated with VT and VPTG for trauma workers (Bell et al., 2003; Cohen & Collens, 2013; Manning-Jones et al., 2015). Limited research, however, examine these predictors of VPTG within the specific population of sexual assault service providers. The current body of research primarily centers the experiences of mental health clinicians, but it is possible that providers working with sexual assault survivors may be exposed to trauma differently, which warrants a closer examination. For example, given the stressful, unpredictable, and crisis-oriented nature of their role (Long, 2020; Mihelicova et al., 2019), volunteers engaging in medical advocacy may have fewer opportunities to witness long-term client growth, which has been identified as an important facilitator of VPTG (Arnold et al 2005; Cohen & Collens, 2013; Manning-Jones et al., 2015). Nevertheless, some research

suggests that medical advocates still may experience some growth as a result of their crisis work (Long, 2020). Moreover, counselors may have long-term interactions with a survivor, but may face unique challenges in their work, such as working with a survivor who chooses to stay with their abuser who may be sexually assaulting them. Given the uncertainties around the benefits that may come from engaging in sexual assault advocacy, this study proposes a deeper examination around the factors related to VPTG in sexual assault service providers.

Vicarious Posttraumatic Growth and Vicarious Traumatization

Lastly, this study proposes an examination into the relationship between vicarious posttraumatic growth and vicarious traumatization. Both vicarious posttraumatic growth (VPTG) and vicarious traumatization (VT) refer to providers' long-term schematic changes as a result of their empathic engagement with their clients who have experienced trauma. In both VPTG and VT, an individual is vicariously exposed to another's trauma, which may shock and 'shatter' fundamental beliefs they may hold about themselves, the world, and those around them (Cohen & Collens, 2013). Where these two phenomena differ is in their manifestation, as VT results in negative changes (e.g., diminished sense of safety and heightened distrust towards others) whereas VPTG results in positive changes (e.g., increased perceptions of personal strength and greater appreciation for life). Research suggests that these experiences are not mutually exclusive. Indeed, trauma workers may experience both VT and VPTG as a result of their work (Arnold et al., 2005). Further, Cohen and Collen's (2013) systematic literature review suggests that research should explore these two phenomena together rather than regard them as mutually exclusive.

The relationship between vicarious posttraumatic growth and vicarious traumatization remains unclear in the empirical literature. Some studies show a positive association between

VPTG and VT (Cosden et al., 2016; Rizkalla & Segal, 2020); others, a curvilinear relationship; and yet others, no relationship (Cohen & Collens, 2013; Manning-Jones et al., 2015). In addition, it is unknown under what conditions these three kinds of relationships are most likely to occur. Thus, this is an important area for further exploration, as providing empirical evidence for the relationship between these two constructs may have practical implications for RCCs. For example, acknowledging that sexual assault service providers may experience both positive and negative personal changes as a result of their work may be important to incorporate into trauma-specific training to help normalize these impacts with sexual assault service providers and help prepare them for their work.

Research Questions

Understanding VPTG and its predictors has practical implications for providers' work. Increased knowledge on factors related to VPTG can help individual sexual assault service providers and RCCs prepare providers for their work. Understanding what factors are related to VPTG may inform training and practice (e.g., supervision, peer support) on how to promote the positive benefits of engaging in trauma work. Thus, the purpose of this study was to examine factors related to VPTG in sexual assault service providers. The primary research questions are defined below:

Research Question I. Controlling for the effects of personal trauma history, length of time in role, and agency site; do perceptions of supervision, peer relationships within organization, organizational support, and trauma-specific education predict vicarious posttraumatic growth among sexual assault service providers?

Hypothesis I. After controlling for the effects of personal trauma history, length of time in role, and agency site; greater perceived supervision, peer relationships, organizational support, and

trauma-specific education will significantly predict higher levels of posttraumatic growth among sexual assault service providers.

Research Question II. Does witnessing clients' direct posttraumatic growth predict vicarious posttraumatic growth among sexual assault service providers?

Hypothesis II. Increased exposure to client posttraumatic growth will significantly predict higher levels of vicarious posttraumatic growth among sexual assault service providers.

Research Question III. What is the nature of the relationship between vicarious traumatization and vicarious posttraumatic growth among sexual assault service providers?

This research question is exploratory and thus, no hypothesis is proposed.

Method

Participants

A total of 105 staff and volunteer service providers from Illinois rape crisis centers participated in this study. Initial eligibility criteria included: having 40-hour Illinois Coalition Against Sexual Assault (ICASA)-approved advocacy training, working directly with sexual assault survivors (i.e., by providing advocacy, crisis intervention, case management, and/or counseling services), providing services to at least one survivor in the past two years, and serving in their role for at least two years. Thus, RCC staff and volunteers who have not directly provided support services to survivors within the past two years (e.g., due to their administrative position or a prevention-focused educator role) would be ineligible for the study. However, during the recruiting and data collection phase it was determined that the eligibility criterion regarding the minimum length of time in role (i.e., at least two years) was too restrictive. Therefore, the criteria were amended by the researcher to expand eligibility and approved by DePaul University's Institutional Review Board. Following this amendment, providers who had

been in their role for at least six months were then eligible to participate in this study. This update is discussed further in the Sampling and Recruitment subsection of the Procedures section.

Participant Demographics: Professional Characteristics

Descriptive analyses were conducted to examine the demographic data of the participant sample. The sample consisted of sexual assault service providers from rape crisis centers across Illinois. Participants could select multiple responses to report what their roles were, and over half of the 105 participants identified as advocates (*n*=65, 63.1%), followed by counselors (*n*=29, 28.2%), and crisis hotline workers (*n*=26, 25.2%). The majority of participants were paid staff (*n*=80, 76%), whereas the remaining one quarter identified as unpaid volunteers (*n*=25, 23.8%). The length of time participants served in their agency roles ranged from six months to 40 years, with 40% participants having been in their role at their agency between 1-3 years. Professional characteristics of the participant sample are presented in Table 1.

Participant Demographics: Personal Characteristics

Participants ranged in age from 22 years old to 73 years old, with the average participant age being 36.6 years (*SD*=12.95). The participant sample consisted primarily of women-identified individuals (*n*=96, 91.4%). Participants were able to select multiple racial and ethnic categories, and the majority of participants identified as white (n=83, 79%; Asian *n*=2, 1.8%; Black/African American *n*=6, 5.7%; Latinx/Hispanic *n*=16, 15.2%; Native American or Alaska Native *n*=1, 1%; Native Hawaiian or Pacific Islander *n*=1, 1%; prefer not to respond *n*=2, 1.9%). Twenty-four participants self-identified as members of the LGBTQ+ community (22%).

Additionally, most participants reported having experienced direct personal trauma (*n*=77, 73%). Personal participant demographics are presented in Table 2.

Table 1

Participant Demographics: Professional Characteristics

Characteristic	Total (*N*=105)
Role *n* (%)	
Advocate	65 (63.1%)
Hotline	26 (25.2%)
Counselor	29 (28.2%)
Other[a]	24 (23.3%)
Staff vs. volunteer *n* (%)	
Paid staff member	80 (76.2%)
Volunteer	25 (23.8%)
Length of time in current role at agency *n* (%)	
Less than 1 year	28 (26.7%)
1-3 years	44 (41.9%)
4-6 years	23 (21.9%)
7-9 years	1 (1%)
10-12 years	1 (1%)
13 or more years	8 (7.6%)
Hours worked M(SD)	
Staff (per week)	39.11 (9.55)
Volunteer (per month)	36.92 (35.41)
Highest level of education *n* (%)	
High school/GED	2 (1.9%)
Some college without degree	8 (7.6%)
Associates degree	1 (1%)
Bachelor's degree	52 (49.5%)
Master's degree	38 (36.2%)
Professional or Doctorate degree (e.g., PhD, EdD, MD, etc.)	4 (3.8%)

[a]e.g., Director with direct service responsibilities, case manager, prevention educator, community outreach, counseling or volunteer coordinator

Table 2

Participant Demographics: Personal Characteristics

Characteristic	Total (*N*=105)
Age M (SD)	36.6 (12.95)
Gender identity *n* (%)	
Woman (both transgender and cisgender)	97 (92%)
Man (both transgender and cisgender)	2 (1.9%)
Non-binary	5 (4.8%)
Other	1 (1%)
Race/ethnicity *n* (%)[a]	
Asian	2 (1.8%)
Black/African American	6 (5.7%)
Latinx/Hispanic	16 (15.2%)
Native American or Alaska Native	1 (1%)
Native Hawaiian or Pacific Islander	1 (1%)
White/Caucasian	83 (79%)
Prefer not to respond	2 (1.9%)
Self-identified member of LGBTQ+ community *n* (%)	
Yes	24 (22.9%)
No	76 (72.4%)
Prefer not to respond	5 (4.8%)
Personal trauma history *n* (%)	
Yes	77 (73.3%)
No	28 (26.7%)

[a] 93.3% self-identified as just one race/ethnicity; 4.8% self-identified as more than one race/ethnicity

Measures

Screening and Demographic Questions

The survey was administered online through Qualtrics (see Appendix E for the full survey). Eligibility criteria were assessed with a preliminary screening questionnaire at the

beginning of the survey that included questions about prospective participant age, whether they completed state-approved advocacy training, the length of time they had been in their role, and approximately how many participants they have served in their role. Participants were also asked about information pertaining to their work in the RCC, specifically, their status as either a volunteer or paid staff member, their role responsibilities (e.g., advocate, hotline worker, counselor, other), the length of time in their role at their agency, and the average number of hours worked per week (or, for volunteers, per month). Other basic demographic questions pertaining to participant gender, self-identification as a member of the LGBTQ+ community, race/ethnicity, level of education, and personal direct trauma history were included at the end of the questionnaire.

Vicarious Posttraumatic Growth (Dependent Variable)

To measure participants' experiences of vicarious posttraumatic growth, the Posttraumatic Growth Inventory was utilized (Tedeschi & Calhoun, 1996). The Posttraumatic Growth Inventory (PTGI) is a validated instrument developed to measure positive personal growth following traumatic experiences. While the PTGI's original purpose is to assess for *direct* posttraumatic growth, it has also been previously used by researchers studying service providers' experiences of *vicarious* posttraumatic growth (Brockhouse et al., 2011; Cosden et al., 2016; Frey et al., 2016; Linley & Joseph, 2007; Manning-Jones et al., 2016; Rizkalla & Segal, 2020).

The original PTGI measures 21 items on a Likert scale from 0-5 with 0= "*I did not experience this change as a result of my crisis"* and 5= "*I experienced this change to a very great degree as a result of my crisis"* (Tedeschi & Calhoun, 1996). However, to adapt the PTGI to measure vicarious posttraumatic growth, researchers have revised the scale's response anchors to capture change resulting from professional work (e.g., 0="*I did not experience this change as*

a result of my therapy work" or 5=*"I experienced this change to a very great degree as a result of my therapy work";* Linley & Joseph, 2007). In this study, the 21 items were initially measured on a Likert scale from 1-6 (1= *"I did not experience this change as a result of my work with sexual assault survivors",* 6= "*I experienced this change to a very great degree as a result of my work with sexual assault survivors"*). However, during the data cleaning phase the scoring was recoded from a scale of 1-6 to 0-5 to be consistent with past research that has used this scale in such a way (Abel et al., 2014; Brockhouse et al., 2011; Linley & Joseph, 2007; Rizkalla & Segal, 2020; Tedeschi & Calhoun, 1996). Average scores on this measure ranged from 0-5.

The inventory consists of five factors related to VPTG: new possibilities, relating to others, personal strength, spiritual change, and appreciation of life. Sample items include: "I have a greater sense of closeness to others" and "I have a greater appreciation for the value of my own life." Strong internal consistency for this measure has been demonstrated in previous research, with reported Cronbach's alphas of .95 in their respective study samples (Brockhouse et al., 2011; Frey et al. 2016; Manning-Jones et al., 2017). Consistent with previous research, Cronbach's alpha for this current study was .94.

Vicarious Traumatization (Independent Variable)

Participants' experiences of vicarious traumatization were measured using the Vicarious Trauma Scale (VTS; Vrklevski & Franklin, 2008). The VTS is an 8-item questionnaire measured on a Likert scale of 1-7 (1=*strongly disagree*, 7=*strongly agree*). An example item includes "I find myself distressed by listening to my clients' stories and situations" and "It is hard to stay positive and optimistic given some of the things I encounter in my work." In this study, 'Clients' were defined to participants as sexual assault survivors, and 'job' or 'work' referred to their current volunteering or work at their respective rape crisis center. The measure demonstrated

adequate reliability in research by Michalopoulos and Aparicio (2012) with a Cronbach's alpha of .88. Cronbach's alpha for this study was .78. Average scores ranged from 1-7, with higher averages indicating higher levels of self-reported vicarious traumatization.

Perception of Supervision (Independent Variable)

The Short Supervisory Relationship Questionnaire (S-SRQ; Cliffe et al., 2014) was used to examine providers' perceptions of supervision (specifically, the supervisor with whom participants worked most closely at their rape crisis centers). The S-SRQ consists of 18 items focused on aspects of the supervisory relationship across three subscales, measured on a Likert scale from 1-7 (1=*strongly disagree*, 7=*strongly agree)*. The questionnaire items were revised from past tense to present tense, to reflect current perceptions of supervision. The 'Safe Base' subscale consists of items related to the security of the supervisor-supervisee relationship (e.g., "I feel able to openly discuss my concerns with my supervisor"). The 'Reflective Education' subscale refers to the process of learning and reflection via supervisory meetings (e.g., "my supervisor helps me identify my own learning/training needs"). Lastly, the 'Structure' subscale consists of items capturing the level of organization of supervision sessions (e.g., "Supervision sessions are focused"). Research has demonstrated the S-SRQ as having both high internal validity and high reliability, with an overall alpha of .96 (Cliffe et al., 2014). Similarly, Cronbach's alpha for this study was .96.

Perception of Peer Support (Independent Variable)

To measure perceptions of peer support, this study utilized a coworker support scale from research by Bemiller and Williams (2011). This scale consists of five items measuring peer support: "I would say that I get along with my colleagues," "I would say that my colleagues get along with one another," "I feel that my colleagues are supportive of me and my work," "If I

wanted to talk to someone about a work-related problem I could rely on one or more of my colleagues to listen," and "If I needed to talk to someone about a personal problem I could rely on one or more of my colleagues to listen." Participants were instructed to consider 'colleagues' as the other staff or volunteers within their rape crisis center. The items are measured on a 5-point Likert scale (1=*strongly disagree*, 5=*strongly agree*), which were computed as average scores for each participant. This scale demonstrated both convergent validity and adequate reliability, as Bemiller & Williams (2011) reported a Cronbach's alpha of .84. Cronbach's alpha for this present study was .87.

Perception of Organizational Support (Independent Variable)

Participants' perceptions of the organizational support they receive at their rape crisis centers were measured through Eisenberger et al.'s (1986) Survey of Perceived Organizational Support (SPOS). A shorter, 8-item version of the original 36-item measure was utilized, measured on a Likert scale from 1-7 (1= strongly disagree to 7= strongly agree). Sample items include "The organization cares about my general satisfaction at work" and "The organization takes pride in my accomplishments at work." The instrument includes four reverse-coded items, (e.g., "The organization fails to appreciate any extra effort from me."). This shortened measure has previously demonstrated both significant convergent validity (Worley et al., 2009) and good internal consistency, with previous studies reporting Cronbach's alpha of 0.93 (Frey et al., 2016; Worley et al., 2009) and .95 (Brockhouse et al., 2011). This study too indicated the measure demonstrates strong internal consistency (α= .97).

Perception of Trauma-Specific Education (Independent Variable)

Trauma-specific education was measured through participants' perceptions of training adequacy related to trauma exposure. There is no validated instrument to measure overall

perception of adequacy on trauma-specific training, therefore this variable was created for this study by adapting a previously developed subscale of overall job training satisfaction (Schmidt, 2004). The adapted measure consists of four items measured on a 5-point Likert scale (1=*Strongly disagree*, 5=*Strongly agree*), including, "Overall, the training I receive on the effects of vicarious trauma exposure meets my needs" and "Overall, I am satisfied with the amount of training I receive on the effects of vicarious trauma exposure." Schmidt's original subscale of training satisfaction has demonstrated adequate internal consistency, with a reported alpha of .8 5. Cronbach's alpha for this present study was .91.

Exposure to Client Growth (Independent Variable)

Exposure to client growth was operationalized by whether a sexual assault service provider engaged in repeated work with the same survivors, which would allow them the opportunity to witness a survivor's growth over time. There are no known validated instruments for measuring exposure to client growth. Thus, exposure to client growth was represented by one question, "In your work with clients, do you witness their growth?" to which participants responded either "yes" or "no."

Personal Trauma History, Length of Time in Role, and Agency Site (Control Variables)

Several variables (i.e., personal trauma history, length of time in role, and agency site) were included in the regression models as controls. Personal trauma history was measured by one 'yes/no' question: "Do you have a direct trauma history?" This variable has been operationalized and measured in similar ways in previous similar research with providers (Linley & Joseph, 2007; Pearlman & Mac Ian, 1995). The length of time a provider has been in their role was originally measured by asking "For how many years have you served in this role in your agency?" However, following the amendment to expand eligibility criteria from being in one's

role for at least two years to being in one's role for at least six months, this question was revised to "For how long have you served in this role in your agency?" Lastly, since the study examined individuals' perceptions of organizational-level factors, agency site was included as a control, which was measured through participants selecting the RCC they work or volunteer for from a list of all Illinois rape crisis centers.

Procedures

Sampling and Recruiting

Institutional approval was obtained from DePaul University's Institutional Review Board prior to beginning any sampling and recruitment procedures (Appendix A). Thirty-two Illinois RCCs were identified through the Illinois Coalition Against Sexual Assault website. Initially, ten rape crisis centers were selected randomly, and then additional rape crisis centers were selected as needed to ensure a sufficient sample size. From August 2021-August 2022, the researcher contacted all 32 agencies for recruitment purposes.

To recruit participants, the researcher first identified RCC leaders by searching agency websites for names and/or contact information of individuals, or through calling the agency directly. RCCs leaders included the following: advocacy and counseling center directors, executive directors, volunteer coordinators. Once a leader was identified, the researcher contacted them by email with a recruitment letter to explain the purpose of the study, a letter of support from the Illinois Criminal Justice Information Authority (Appendix D), participant eligibility criteria, and a request to forward the survey link to the staff and volunteer providers (e.g., counselors, advocates, and hotline workers) within their agency. The recruiting email script can be found in Appendix B. If there was no response from one individual, then another leader was identified and contacted. If an RCC leader agreed to send the survey link along to staff and

volunteers at their agency, the researcher followed up two additional times with requests to forward the survey again.

As previously mentioned in the Participants section, the eligibility criteria were expanded during the recruitment and data collection phase to allow participation from RCC staff and volunteers who had been in their role for less than two years. Thus, the eligibility criteria for the minimum length of time in one's role was amended from at least two years to at least six months. Once this amendment was approved by DePaul University's Institutional Review Board, the rape crisis centers that had been initially recruited under the original eligibility criteria were re-contacted with an explanation of this revision and were asked to send an updated recruiting email to their agencies' staff and volunteers (Appendix C).

Data Collection

The survey was administered online via Qualtrics, and prospective participants were first presented with an informed consent form explaining the purpose of the study, to which they either consented or declined participation in the study. Providers who provided their informed consent to participate then were screened for eligibility criteria. Eligible participants were taken to the full survey, wherein they responded to questions about experiences of VPTG, VT, perceptions of supervision, perceptions of peer support, perceptions of trauma-informed training, and additional factors (e.g., direct trauma exposure, witness to client growth, and demographic questions). Those who completed the survey and provided their email addresses were sent a $5 Amazon gift card as a thanks for their participation and were offered the option to request the study results once the researcher concluded. Additionally, participants were provided resources for support (i.e., phone number and online chat information for national sexual assault hotline) at

both the beginning and end of the survey in the event they experienced any distress as a result of their participation in the survey.

Results

The data were analyzed using IBM SPSS Statistics, version 26. Multiple linear regression was conducted to test Research Question 1 (i.e., do perceptions of supervision, peer relationships within organization, organizational support, and trauma-specific education predict vicarious posttraumatic growth among sexual assault service providers) and Research Question 2 (i.e., does witnessing clients' direct posttraumatic growth predict vicarious posttraumatic growth among sexual assault service providers?). Control variables (i.e., personal trauma history, length of time in role, and agency site) were also included in both regression models. Pearson correlation was used to examine to examine Research Question 3 (i.e., what is the nature of the relationship between vicarious traumatization and vicarious posttraumatic growth among sexual assault service providers?).

Missing data were treated through pairwise deletion because the data were determined to be missing completely at random (MCAR) and the level of missingness was low. For each individual variable, the level of missingness was below 3%, thus falling within recommended parameters for levels of missingness in data (i.e., 5%; Shafer, 1999). Additionally, Little's MCAR test indicating that the level of missingness could be treated as completely at random ($\chi 2 = 7.82$, $df = 10$, $p = .641$), indicating that the level of missingness could be treated as completely at random.

Preliminary analyses

The dataset consisted of 105 individuals from 20 Illinois RCCs. See Table 3 for a summary of the means, standard deviations, and bivariate correlations between the variables

included in the analyses. Categorical variables of interest (i.e., agency site, witnessing clients' growth, and direct trauma history) were all dummy coded for the regression analyses.

Table 3

Means, Standard Deviations, and Bivariate Correlations

	M	SD	1	2	3	4	5	6	7	8	9
1. Vicarious posttraumatic growth	2.78	.95									
2. Vicarious trauma	4.89	.99	-.18								
3. Supervision	4.24	.73	.06	-.10							
4. Peer support	5.63	1.15	.18	-.15	.52**						
5. Organizational support	5.24	1.69	.22*	-.34**	.41**	.33**					
6. Trauma-specific training	3.93	.94	.16	-.37**	.30**	.20*	.46**				
7. Length of time in role[a]	3.62	5.94	.18	-.12	-.08	.00	.07	.10			
8. Trauma history	.	.	-.08	.15	.14	.12	.17	.05	-.01		
9. Exposure to growth[b]	.	.	-.07	-.11	-.02	-.05	.28**	.14	-.10	-.11	

[a]measured in years *p<.05 **p<.01

[b]yes, n=71 (67.6%); no, n=32 (30.5%); 2 missing

Regression Diagnostics

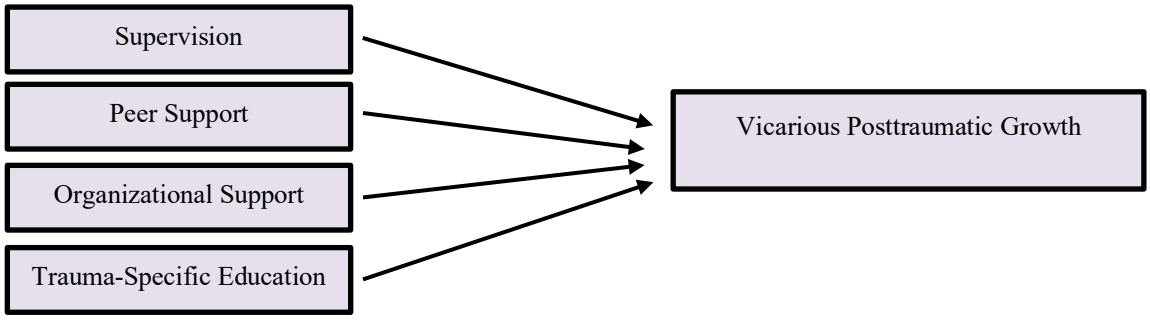
Multiple linear regression makes several key assumptions that must be met to ensure the appropriateness of the test. These assumptions include linearity, normality of the distribution, absence of multicollinearity, outliers/influential cases, and homoscedasticity. The assumption of linearity was checked by inspecting scatterplots between the continuous IVs and the DV. Normality of the distribution was evaluated by examining a P-P plot of the residuals as well as histograms for each of the variables. The absence of multicollinearity was confirmed through checking both variance inflation factor (VIF) and tolerance scores. All variables for the two regression models had a VIF less than 10 and tolerance greater than .2, indicating the absence of multicollinearity (Fields, 2017).

Influential outliers were assessed using Cook's distance and Leverage (hat) values. Regarding a cutoff point for Cook's distance Fox, 1991 states that $4/(n-k-1)$, where n=the sample size and k=the number of predictors, can be considered. Leverage values were also used to identify influential outliers, defined by $3(k+1)/n$ (Pituch & Stevens, 2016). For the first regression model, any Cook's distance values above 0.048 and Leverage values of .620 were determined to be influential outliers and thus removed from the analysis. For the second regression model, any cases with Cook's distance values and Leverage values above .046 and .543, respectively, were regarded as influential outliers. Given these criteria, a total of nine cases were removed for the first regression model and 11 cases for the second regression model.

Homoscedasticity was assessed by evaluating two scatterplots per each regression model: one wherein the standardized residuals were plotted against the predicted values, and another wherein the studentized residuals were plotted against the predicted values. An inspection of these two scatterplots initially suggested heteroscedasticity. However, upon re-running the two regression models following removal of the identified outliers, the scatterplots of residuals demonstrated homoscedasticity, suggesting the outliers/influential data points were contributing to this inequality of variances. Therefore, as previously stated, these influential cases were dropped from the two regression analyses.

Figure 1

Regression Model 1 Predictors of VPTG.



Regression Model 1 (Research Question 1)

It was hypothesized that, after controlling for length of time in role, personal trauma history, and agency site; perceptions of supervision, peer support, organizational support, and trauma-specific education will significantly predict higher levels of posttraumatic growth among sexual assault service providers (see Figure 1). Findings from multiple linear regression partially supported this hypothesis R^2=.326, *F*(20,76), 1.84, *p*=.031. Perception of organizational support significantly predicted VPTG scores (*B*=.17, SE=.07, 95% CI .03 to .31, *p*<.05) such that an increase in perceived organizational support predicted increased levels of vicarious posttraumatic growth. However, perception of supervision, peer support, and trauma-specific education were not found to significantly predict the VPTG scores. See Table 4 for the summary of findings for Regression Model 1.

Table 4

Multiple Linear Regression Results: Direct Effects of Perceptions of Supervision, Peer Support, Organizational Support, and Trauma-Specific Training on Vicarious Posttraumatic Growth.

Predictors	B	SE B	*p*	95% CI
Constant	1.29	.69	.07	[- .09, 2.67]
Supervision	-.13	.12	.29	[-.36, .11]
Peer support	.26	.15	.09	[-.04, .57]
Organizational support	.17	.07	.02	[.03, .31]
Trauma-specific education	-.04	.12	.78	[-.28, .21]
Length of time in role	.03	.02	.09	[-.01, .06]
Trauma history[a]	-.40	.21	.06	[-.82, .02]
Agency site 1[b]	-.20	.43	.65	[-1.05, .66]
Agency site 2	.54	.41	.19	[-.28, 1.37]
Agency site 3	.12	.48	.80	[-.84, 1.09]
Agency site 4	.92	.65	.16	[-.38, 2.23]
Agency site 5	.54	.33	.10	[-.11, 1.19]
Agency site 6	1.14	.65	.09	[-.16, 2.43]
Agency site 7	.51	.40	.21	[-.29, 1.31]
Agency site 8	.43	.41	.29	[-.38, 1.24]
Agency site 9	.47	.34	.17	[-.20, 1.14]
Agency site 10	.02	.70	.98	[-1.37, 1.41]
Agency site 11	-.05	.48	.92	[-1.01, .92]
Agency site 12	.34	.41	.42	[-.49, 1.16]
Agency site 13	1.55	.56	.01	[.432, 2.67]
Agency site 14	1.45	.53	.01	[.39, 2.52]

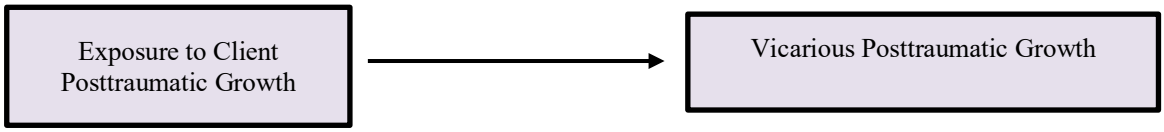
Note. n=96

[a] Dummy coding 0 = "no direct trauma history" 1.00 = "direct trauma history"

[b] Dummy coding 0 = *"no"* 1.00 = *"yes"*

Figure 2

Regression Model 2 Predictor of VPTG.



Regression Model 2 (Research Question 2)

The hypothesis for Research Question 2 posited that after controlling for length of time in role, personal trauma history, and agency site; exposure to client posttraumatic growth will

significantly predict higher levels of posttraumatic growth among sexual assault service providers (see Figure 2). The regression analyses revealed that exposure to client growth did not significantly predict the variance in VPTG scores, R^2=.244, F(17,77), 1.46, p=.13. However, one of the control variables, length of time in role, significantly predicted VPTG scores (B=.04, SE=.02, 95% CI .00 to .07, p=.03) such that an increase in the length of time service providers were in their role predicted increased levels of vicarious posttraumatic growth.

Table 5

Multiple Linear Regression Results: Effects of Exposure to Client Growth on Vicarious Posttraumatic Growth

Predictors	B	SE B	*p*	95% CI
Constant	2.24	.25	.00	[1.74, 2.74]
Exposure to client growth[a]	.18	.22	.42	[-.26, .63]
Length of time in role	.01	.02	.03	[.00, .07]
Trauma history	-.22	.22	.32	[-.65, .21]
Agency site 1[b]	.37	.46	.43	[-.55, 1.28]
Agency site 2	.43	.39	.27	[-.34, 1.20]
Agency site 3	-.51	.55	.36	[-1.61, .59]
Agency site 4	1.06	.66	.11	[-.25, 2.38]
Agency site 5	.74	.33	.03	[.08, 1.40]
Agency site 6	1.42	.66	.03	[.11, 2.73]
Agency site 7	.39	.38	.32	[-.38, 1.15]
Agency site 8	.35	.42	.40	[-.48, 1.18]
Agency site 9	.43	.33	.19	[-.22, 1.09]
Agency site 10	-.15	.69	.83	[-1.52, 1.22]
Agency site 11	.26	.45	.57	[-.63, 1.15]
Agency site 12	.46	.38	.23	[-.30, 1.21]
Agency site 13	1.48	.55	.01	[.38, 2.58]
Agency site 14	1.61	.90	.08	[-.18, 3.39]

Note. n=94

[a] Dummy coding 0 = "no exposure to client growth" 1.00 = "exposure to client growth"

[b] Dummy coding 0 = *"no"* 1.00 = *"yes"*

Correlation (Research Question 3)

A Pearson product-moment correlation coefficient was computed to explore the relationship between vicarious posttraumatic growth (VPTG) and vicarious traumatization (VT). The analysis revealed that the covariance between VPTG and VT was not statistically significant, $r(104) = -.18$, $p=.067$. However, an analysis of a scatterplot of these two variables suggests a potential curvilinear relationship between these two variables, suggesting that other statistical analyses may be better suited to the data.

Discussion

Overview

Sexual assault service providers can be negatively affected in numerous ways as a result of their work, such as experiencing burnout (Baird & Jenkins, 2003; Bemiller & Williams, 2011; Long, 2020; Ullman & Townsend, 2007), secondary traumatic stress (Baird & Jenkins, 2003; Dworkin et al., 2016), compassion fatigue (Voth Schrag et al., 2022), and vicarious traumatization (Clemans, 2004; Long, 2020; Mihelicova et al., 2019; Schauben & Frazier, 1995). To ameliorate these negative effects on trauma workers, trauma-informed organizational practices have been developed (Bell et al., 2003; Knight, 2018). More recently, however, greater attention has been paid to the possibility of trauma workers experiencing positive schematic changes as a result of engaging in their work, such as vicarious posttraumatic growth (VPTG; Arnold et al., 2005). Research has explored VPTG among professional populations such as counselors and psychotherapists (Arnold et al., 2005; Brockhouse et al., 2011), refugee aid-workers, (Rizkalla & Segal, 2020), interpreters (Splevins et al., 2010), labor and delivery nurses (Beck et al., 2016), military nurses (Doherty et al., 2020), substance abuse treatment providers (Cosden et al., 2016), and ambulance personnel (Kang et al., 2018), among others. However, to

this point, there is a paucity of research on VPTG and its associated predictors within the population of sexual assault service providers. As such, this research study sought to examine (1) factors that predict vicarious posttraumatic growth among rape crisis center staff and volunteers and (2) the relationship between vicarious posttraumatic growth and vicarious traumatization.

This study sampled sexual assault service providers from Illinois rape crisis centers, and a total of 105 staff and volunteers who work with sexual assault survivors participated by completing a survey examining their perceptions of supervision, peer support, organizational support, and trauma-specific training, among other characteristics of their experiences in their work. The findings are discussed further in the following sections.

Research Question I

The first research question asked whether, after controlling for other factors (i.e., length of time in role, agency site, and personal trauma history), sexual assault service providers' perceptions of supervision, peer support, organizational support, and trauma-specific training would predict vicarious posttraumatic growth (VPTG). Findings revealed that participants' perceptions of organizational support (i.e., whether providers feel valued by their organization as a whole) did significantly predict an increase in VPTG among sexual assault service providers. This suggests that providers' perceptions of being a part of an organization that supports and appreciates them may be associated with more positive personal growth. The limited existing literature on correlates of VPTG both supports and refutes this finding, as research has yielded somewhat inconsistent results. Brockhouse et al.'s (2011) research with therapists did not find that organizational support significantly predicted VPTG. In contrast, in Rizkalla and Segal (2020), perceived organizational support did indeed predict an increase in VPTG. Furthermore, this finding is also consistent with the broader literature examining the benefits of organizational

support. Research has shown that perceived organizational support is associated with other increased compassion satisfaction among sexual assault advocates (Frey et al., 2016). Organizational support has also been identified as a trauma-informed practice to decrease vicarious traumatization (Bell et al., 2003). Thus, this study's findings contribute to the existing literature on associated benefits of organizational support and also extend the literature by being the first study to identify organizational support as a predictor of VPTG among rape crisis center staff and volunteers.

The other hypothesized independent variables in Research Question I—supervision, peer support, and trauma-specific training—did not significantly predict VPTG. This is somewhat inconsistent with previous literature on this topic. Social support is a key component of processing one's trauma with others, allowing for meaning making of one's experiences and subsequent personal growth. Both supervision and peer support are potential outlets wherein social support may occur. Previous research has found that supervision and VPTG are positively correlated (Linley & Joseph, 2007). Supervision is also considered to be a trauma-informed organizational practice that allows trauma workers to process their exposure and reactions to traumatic material, thus reducing their vicarious traumatization (Bell et al., 2003).

Likewise, previous research has found that peer support predicted vicarious posttraumatic growth with sexual assault advocates (Frey et al. 2016) as well as mental health providers (Brockhouse et al., 2011; Manning-Jones et al., 2016). Nevertheless, while this study did not find peer support to be a significant predictor of VPTG, it was trending in the direction of statistical significance. Given the relatively smaller sample size included in the regression analysis, it is possible that the study lacked sufficient statistical power to detect a significant relationship

between peer support and VPTG. This warrants additional research to determine whether peer support does indeed predict VPTG among sexual assault service providers.

Additionally, the timeframe in which this study was conducted may have also contributed to the nonsignificant findings of supervision, peer support, and training in the regression model. Data were collected between August 2021-August 2022, during which time the COVID-19 pandemic continued to be a ubiquitous concern. Due to the pandemic, many rape crisis centers operated at partial capacity and/or remotely for social distancing, and faced significant disruptions in their ability to provide services to survivors (Engleton et al., 2022). It is possible that during this time, rape crisis centers were unable to offer as many opportunities for supervision, peer support, and training opportunities. As such, providers may have had fewer outlets to process their exposure to trauma with those in their agency and offer/receive social support.

Research Question II

The second research question in this study focused on whether exposure to clients' growth would predict VPTG when controlling for other variables. Contrary to the hypothesis, the multiple regression analysis did not find exposure to clients' growth to be a significant predictor of VPTG. This finding contrasts other research which has found that witnessing a client's direct posttraumatic growth can indeed predict a provider's own vicarious growth (Cohen & Collens, 2013; Schauben & Frazier, 1995). However, in this study, exposure to client growth was measured with a dichotomous self-report yes/no variable (i.e., "In your work with clients, do you witness their growth?"). The structure of this question may have limited the ability to observe differences between roles in the extent to which providers witness the direct posttraumatic growth of their clients. Other research has measured growth in different ways, such as with

contact hours with clients (Manning-Jones et al., 2016). Therefore, operationalizing exposure to client growth differently (e.g., the number of hours each week or month that the respondent is typically engaged in working directly with survivors) may allow future researchers to observe a potential relationship more clearly between exposure to client growth and provider VPTG.

Unlike the first model, in this model, length of time in role also significantly predicted an increase in vicarious posttraumatic growth. This finding is consistent with the literature that posits that the longer a provider is in their role, the greater the opportunity to experience personal growth (Cohen & Collens, 2013). Similarly, other research has found that while a trauma worker may initially experience distress from indirect exposure to traumatic material, they may be able to process their observations over time and experience personal growth (Manning-Jones et al., 2015). This finding extends upon prior research to reveal that the relationship between length of time in role and VPTG also generalizes to the population of sexual assault staff and volunteers.

Research Question III

The third research question was focused on exploring the nature of the relationship between vicarious posttraumatic growth and vicarious traumatization. While the findings of a Person-product moment analysis did not reveal a statistically significant relationship between these two variables, a scatterplot revealed a potential curvilinear relationship between VPTG and VT, which suggests the need for follow-up analyses. This suggests that the effects of VT on VPTG are not consistent, and rather depend on the amounts of VT and VPTG. In this study, the scatter plot suggested that rates of VT and VPTG may both increase to a certain point, then beyond that peak, VPTG increases and VT declines, suggesting increasing VPTG may help buffer against more VT. Ultimately, quantitative research that focuses on the relationship between vicarious traumatization and vicarious posttraumatic growth is quite limited. Some

research has revealed a positive linear relationship between VT and VPTG (Cosden et al., 2016; Rizkalla & Segal, 2020). VPTG has also been found to have a curvilinear relationship with other detrimental impacts of trauma exposure, such as secondary traumatic stress (Ben-Porat, 2015; Manning-Jones et al., 2017). Thus, future research with trauma workers should further explore how the relationship between VT and VPTG manifests in their work.

Limitations and Implications for Future Research

There are several notable limitations of this study. One such limitation was the study sample size and the potential sampling bias. The sample size was relatively small and overwhelmingly white and women-identifying. While this is likely representative of the demographics of rape crisis centers, RCC staff and volunteers from marginalized backgrounds may face additional challenges that may impact their experiences of vicarious posttraumatic growth. For example, a queer provider of color may be uniquely and multiply impacted by witnessing the trauma and/or growth of survivors of similar backgrounds. They may also be subjected to racism or heterosexism from supervisors, colleagues, and the organization as a whole, which might not only hinder their ability to experience positive growth, but also create additional harm. Indeed, gender-based violence service providers exposed to workplace microaggressions are more likely to experience detriments like compassion fatigue (Voth Schrag et al., 2022). However, these nuances are not captured in this study due to the homogeneity of the sample. Additionally, given that this study utilized a convenience sampling approach, sampling bias may impact the generalizability of findings. Therefore, future research could seek to obtain a larger and more diverse sample. Larger scale projects in the future, especially those with more dedicated funding, could provide more incentives for participation to broaden and diversify the sample of sexual assault service providers.

Future research that approaches measurement of key variables in novel ways may also be particularly beneficial. First and foremost, there is still no measure that was developed and validated to measure VPTG specifically (Manning-Jones et al., 2015; Tsirimokou et al., 2022). Most quantitative research on VPTG, including this present study, has adapted Tedeschi and Calhoun's Posttraumatic Growth Inventory (2004) to measure vicarious posttraumatic growth among trauma workers and other professionals (for examples, see Beck et al., 2016; Brockhouse et al., 2011; Cosden et al., 2016; Doherty et al., 2020; Manning-Jones et al., 2016; Rizkalla & Segal, 2020). While there is evidence of reliability of this measure, it is possible that this is not fully capturing vicarious posttraumatic growth (Manning-Jones et al., 2015; Tsirimokou et al., 2022). A review of the literature on VPTG revealed that while direct and vicarious posttraumatic growth can involve positive changes in one's relationships, spirituality, personal strength, and personal values and priorities, these dimensions may manifest slightly differently following direct versus vicarious trauma exposure (Cohen and Collens, 2013; Manning-Jones et al., 2015). For example, Arnold et al. (2005) differentiated between the dimension of 'spiritual growth' for direct versus indirect (i.e., vicarious) posttraumatic growth. They noted that while some providers did indeed experience a personal deepening in their own spirituality as a result of their vicarious exposure to trauma (which is consistent with direct PTG), other providers instead grew more accepting of other spiritual paths different from their own (which differs from spiritual growth as a result of direct PTG). It is unlikely that such nuances would be adequately captured in the Posttraumatic Growth Inventory's current form given the items used to measure spiritual growth (i.e., "I have a better understanding of spiritual matters"; "I have a stronger religious faith"). Therefore, it is possible that simply adapting a measure originally designed for personal growth following direct trauma may not be able to accurately capture the nuances of how growth

manifests among individuals who are indirectly exposed to others' trauma, especially professionals who witness trauma in their work. Future research should seek to develop and validate a measure specifically for VPTG in order to better capture this phenomenon among trauma workers.

Similarly, future studies might consider different ways of measuring the predictors of this study. For example, this study operationalized organizational support as providers' perceptions that they are appreciated and valued by their rape crisis center; however, organizational support can also be defined by trauma-informed strategies like reducing workload, encouraging time off, and promoting self-care (Bell et al., 2003). Accordingly, future research should investigate whether these strategies significantly predict increased VPTG among sexual assault service providers. Likewise, other aspects of trauma-specific education could also be examined further beyond providers' satisfaction with training on vicarious trauma exposure. Future studies could explore training topics more explicitly aimed at information and strategies to promote vicarious posttraumatic growth. Finally, as previously mentioned, client growth could also be expanded beyond a dichotomous variable to better capture providers' experiences observing the growth of the survivors whom they support.

Lastly, this study took a cross-sectional approach by evaluating RCC staff and volunteers' experiences at one point in time. Research has also yet to explore the development of VPTG from a longitudinal perspective. Given that VPTG is understood to be the cumulative result of repeated engagement with others' trauma and growth (Brockhouse et al., 2011), it is likely that time itself is a salient predictor, and thus providers may report notable changes in vicarious posttraumatic growth across months or years. Therefore, future research could employ a longitudinal approach to examine how growth occurs with providers across time.

Implications for Policy and Practice

The results of this study have important considerations for policies and practices rape crisis centers may consider adopting in support of their volunteers and staff. This study found that organizational support was associated with VPTG. Thus, rape crisis centers should seek to develop ways to demonstrate appreciation and support of their volunteers and staff above and beyond promoting support from peers and supervisors. For example, RCC leadership could recognize and reward staff and volunteer contributions, and address staff and volunteer concerns as they arise. RCCs might also consider not only expressing their support of their staff and volunteer service providers, but also implementing organizational practices that are trauma-informed (Bell et al., 2003), which may increase perceived organizational support. Such practices might involve developing a culture that normalizes both the positive and negative impacts of trauma exposure, reducing and diversifying workloads, encouraging time off, and offering benefits and resources that extensively address mental health care needs (Bell et al., 2003).

Additionally, since length of time in role positively predicted VPTG, after controlling for exposure to growth, rape crisis centers could consider organizational practices that can help support providers and keep them in their roles long-term. In doing so, rape crisis centers may not only equip their volunteers and staff in coping with the negative effects of their work, but also expand the possibility of experiencing the positive effects of engaging in challenging and life changing work (like vicarious posttraumatic growth).

Broader support for rape crisis centers' work may also aid in promoting vicarious posttraumatic growth among sexual assault service providers. For example, state funders and coalitions could offer increased financial support and/or other resources to help RCCs in efforts

to promote VPTG within their staff and volunteers. These resources might include education for both RCCs as a whole as well as staff and volunteer providers about what VPTG is and what strategies may facilitate it when working with sexual assault survivors.

Conclusion

The purpose of this study was to explore vicarious posttraumatic growth within the sexual assault service provider population. More specifically, this study examined the following predictors of peer support, supervision, organizational support, and trauma-specific training. Additionally, this study explored the relationship between vicarious posttraumatic growth and vicarious traumatization. The findings of this study suggest that providers' perceptions of organizational support (i.e., that they are valued and respected by their broader organization) and the length of time they are in their roles may be associated with more positive changes as a result of their work. As such, organizations may consider strategies to communicate their appreciation of staff and volunteers and increase provider longevity to potentially facilitate positive personal changes among their support providers. Future research is necessary to further explore the associations with vicarious posttraumatic growth and the complex relationship between vicarious posttraumatic growth and vicarious traumatization.

References

Abel, L., Walker, C., Samios, C., & Morozow, L. (2014). Vicarious posttraumatic growth: Predictors of growth and relationships with adjustment. *Traumatology: An International Journal, 20*(1), 9-18. https://doi.org/10.1037/h0099375

Arnold, D., Calhoun, L., Tedeschi, R., & Cann, A. (2005). Vicarious posttraumatic growth in psychotherapy. *Journal of Humanistic Psychology, 45*(2), 239-263.

Baird, S. & Jenkins, S. (2003). Vicarious traumatization, secondary traumatic stress, and burnout in sexual assault and domestic violence agency staff. *Violence and Victims, 18*(1), 71-86.

Beck, C. T., Eaton, C. M., Gable, R. (2016). Vicarious posttraumatic growth in labor and delivery nurses. *Journal of Obstetric, Gynecologic & Neonatal Nursing, 45*(6), 801-812. https://doi.org/10.1016/j.jogn.2016.07.008

Bell, H., Kulkarni, S., & Dalton, L. (2003). Organizational prevention of vicarious trauma. *Families in Society: The Journal of Contemporary Human Services, 84*(4), 463-470.

Bemiller, M., & Williams, L. S. (2011). The role of adaptation in advocate burnout: A case of good soldiering. *Violence Against Women, 17*(1) 89–110. https://doi.org/10.1177/1077801210393923

Ben-Porat, A. (2015). Vicarious post-traumatic growth: Domestic violence therapists versus social service department therapists in Israel. *Journal of Family Violence, 30*(7), 923–933. https://doi.org/10.1007/s10896-015-9714-x

Berger, R., & Quiros, L. (2016). Best practices for training trauma-informed practitioners: Supervisors' voice. *Traumatology, 22*(2), 145-154. https://doi.org/10.1037/trm0000076

Brockhouse, R., Msetfi, R., Cohen, K., & Joseph, S. (2011). Vicarious exposure to trauma and growth in therapists: The moderating effects of sense of coherence, organizational

support, and empathy. *Journal of Traumatic Stress, 24*(6), 735-742. https://doi.org/10.1002/jts.20704

Campbell, R. (2006). Rape survivors' experiences with the legal and medical systems: Do rape victim advocates make a difference? *Violence Against Women, 12,* 1-16.

Clemans, S. (2004). Recognizing vicarious traumatization: A single session group model for trauma workers. *Social Work with Groups, 27*(2-3), 55-74. https://doi.org/10.1300/J009v27n02_05

Cliffe, T., Beinart, H., & Cooper, M. (2014). Development and validation of a short version of the Supervisory Relationship Questionnaire. *Clinical Psychology and Psychotherapy, 23*(1), 77-86. https://doi.org/10.1002/cpp.1935

Cohen, K., & Collens, P. (2013). The impact of trauma work on trauma workers: A metasynthesis on vicarious trauma and vicarious posttraumatic growth. *Psychological Trauma: Theory, Research, Practice, and Policy, 5*(6), 570 –580. https://doi.org/10.1037/a0030388

Cosden, M., Sanford, A., Koch, L., & Lepore, C. (2016). Vicarious trauma and vicarious posttraumatic growth among substance abuse treatment providers. *Substance Abuse, 37*(4), 619-624. https://doi.org/10.1080/08897077.2016.1181695

Cummings, C., Singer, J., Hisaka, R., & Benuto, L. (2018). Compassion satisfaction to combat work-related burnout, vicarious trauma, and secondary traumatic stress. *Journal of Interpersonal Violence, n.v.,* 1–16. https:/doi.org/10.1177/0886260518799502

Deaton, J. D., Wymer, B., & Carlson, R. G. (2021). Supervision strategies to facilitate vicarious posttraumatic growth among trauma counselors. *Journal of Counselor Preparation and*

Supervision, 14(4). Retrieved from https://digitalcommons.sacredheart.edu/jcps/vol14/iss4/12

Doherty, M. E., Scannell-Desch, E., & Bready, J. (2020). A positive side of deployment: Vicarious posttraumatic growth in U.S. military nurses who served in the Iraq and Afghanistan wars. *Journal of Nursing Scholarship, 52*(3), 233-241. https://doi.org/10.1111/jnu.12547

Dworkin, E., Sorell, N., Allen, N. (2016). Individual-and setting-level correlates of secondary traumatic stress in rape crisis center staff. *Journal of Interpersonal Violence, 31*(4), 743–752. https://doi.org/10.1177/0886260514556111

Eisenberger, R., Huntington, R., Hutchison, S., & Sowa, D. (1986). Perceived organizational support. *Journal of Applied Psychology, 71,* 500-507.

Engleton, J., Goodman-Williams, R., Javorka, M., Gregory, K., & Campbell, R. (2022). Sexual assault survivors' engagement with advocacy services during the COVID-19 pandemic. *Journal of Community Psychology, 50*(6), 2644–2658. https://doi.org/10.1002/jcop.22819

Fallot, R., & Harris, M. (2006). Trauma-informed services: A self-assessment and planning protocol. Community Connections. Available from: http://www.theannainstitute.org/TISA+PPROTOCOL.pdf

Fields, A. (2017). *Discovering statistics using IBM SPSS statistics: North American Edition* (5th ed.). SAGE Publications Ltd.

Figley, C. R. (Ed.). (1995). *Compassion fatigue: Coping with secondary traumatic stress disorder in those who treat the traumatized.* New York, NY: Brunner Mazel.

Figley, C. (2002). Compassion fatigue: Psychotherapists' chronic lack of self-care. *Psychotherapy in Practice,* 58(11), 1433–1441. https://doi.org/10.1002/jclp.10090

Frey, L., Beesley, D., Abbott, D., & Kendrick, E. (2016). Vicarious resilience in sexual assault and domestic violence advocates. *Psychological Trauma: Theory, Research, Practice, and Policy,* n.v., 1-8. doi: 10.1037/tra0000159

Harris, M., & Fallot, R. (2001) Envisioning a trauma-informed service system: A vital paradigm shift. *New Directions for Mental Health Services, 89,* 3-22.

Iliffe, G. & Steed, L. (2000). Exploring the counselor's experience of working with perpetrators and survivors of domestic violence. *Journal of Interpersonal Violence, 15*(4), 393-412.

Kang, X., Fang, Y., Li, S., Liu, Y., Zhao, D., Feng, X., Wang, Y., & Li, P. (2018) The benefits of indirect exposure to trauma: The relationships among vicarious posttraumatic growth, social support, and resilience in ambulance personnel in China. *Psychiatry Investigation, 15*(5), 452-459. https://doi.org/10.30773/pi.2017.11.08.1

Killian, K. (2008). Helping till it hurts? A multimethod study of compassion fatigue, burnout, and self-care in clinicians working with trauma survivors. *Traumatology, 14*(2), 32-44. https://doi.org/10.1177/1534765608319083

Knight, C. (2018). Trauma-informed supervision: Historical antecedents, current practice, and future directions. *The Clinical Supervisor, 37*(1), 7-37. https://doi.org/10.1080/07325223.2017.1413607

Linley, P. A., & Joseph, S. (2007). Therapy work and therapists' positive and negative well-being. *Journal of Social and Clinical Psychology, 26*(3), 385–403. https://doi.org/10.1521/jscp.2007.26.3.385

Long, L. (2020). Rape medical advocates experience with vicarious trauma, burnout, and self-care. *Journal of Aggression, Maltreatment & Trauma, 29*(4), 421-441. https://doi.org/10.1080/10926771.2019.1578315

Manning-Jones, S., de Terte, I., & Stephens, C. (2015). Vicarious posttraumatic growth: A systematic literature review. *International Journal of Wellbeing, 5*(2), 125-139. https://doi.org/10.5502/ijw.v5i2.8

Manning-Jones, S., de Terte, I., & Stephens, C. (2016). Secondary traumatic stress, vicarious posttraumatic growth, and coping among health professionals: A comparison study. *New Zealand Journal of Psychology, 45*(1), 20-29.

Manning-Jones, S., de Terte, I., & Stephens, C. (2017). The relationship between vicarious posttraumatic growth and secondary traumatic stress among health professionals. *Journal of Loss and Trauma, 22*(3), 256–270. https://doi.org/10.1080/15325024.2017.1284516

Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. *Annual Review of Psychology, 52,* 397-422.

McCann, I. L., & Pearlman, L. A. (1990). Vicarious traumatization: A framework for understanding the psychological effects of working with victims. *Journal of Traumatic Stress, 3,* 131-149.

McCann, I. L., & Pearlman, L. A. (1992). Constructivist self-development theory: A theoretical framework for assessing and treating traumatized college students. *Journal of American College Health, 4,* 189-196. https://doi.org/10.1080/07448481.1992.9936281

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. https://doi.org/10.1080/10926771.2012.689422

Mihelicova, M., Wegrzyn, A., Brown, M., & Greeson, M. (2019). Stressors of rape crisis work from the perspectives of advocates with and without sexual assault victimization history. *Journal of Interpersonal Violence, n.v.,* 1-24. https://doi.org/10.1177/0886260519876715

Pearlman, L. A., & Mac Ian, P. S. (1995). Vicarious traumatization: An empirical study of the effects of trauma work on trauma therapists. Professional Psychology: Research and Practice, 26(6), 558-565.

Pearlman, L. A., & Saakvitne, K. W. (1995). Trauma and the therapist: Countertransference and vicarious traumatization in psychotherapy with incest survivors. New York: Norton.

Pituch, K. A., & Stevens, J. P. (2016). *Applied multivariate statistics for the social sciences: Analyses with SAS and IBM's SPSS* (6th ed.). Routledge.

Rauvola, R., Vega, D., & Lavigne, K. (2019). Compassion fatigue, secondary traumatic stress, and vicarious traumatization: A qualitative review and research agenda. *Occupational Health Science, 3,* 297-336. https://doi.org/10.1007/s41542-019-00045-1

Rizkalla, N., & Segal, S. (2020). Refugee trauma work: Effects on intimate relationships and vicarious posttraumatic growth. *Journal of Affective Disorders, 276,* 839-847. https://doi.org/10.1016/j.jad.2020.07.054

Schafer, J. (1999). Multiple imputation: A primer. *Statistical Methods in Medical Research, 8,* 3-15. http://dx.doi.org/10.1177/096228029900800102.

Schauben, L., & Frazier, P. (1995). Vicarious trauma: The effects on female counselors of working with sexual violence survivors. *Psychology of Women Quarterly, 19,* 49-64.

Schmidt, S. W. (2004). The Job Training and Job Satisfaction Survey technical manual. Retrieved from https://files.eric.ed.gov/fulltext/ED494451.pdf

Setti, I., Lourel, M., & Argentero, P. (2016). The role of affective commitment and perceived social support in protecting emergency workers against burnout and vicarious traumatization. *Traumatology, 22*(4), 261-270. https://doi.org/10.1037/trm0000072

Singer, J., Cummings, C., Boekankamp, D., Hisaka, R., & Benuto, L. (2020). Compassion satisfaction, compassion fatigue, and burnout: A replication study with victim advocates. *Journal of Social Service Research, 46*(3), 313-319. https://doi.org/10.1080/01488376.2018.1561595

Slattery, S., & Goodman, L. (2009). Secondary traumatic stress among domestic violence advocates: Workplace risk and protective factors. *Violence Against Women, 15*(11), 1358–1379. https://doi.org/10.1177/1077801209347469

Shaw, J., & Campbell, R. (2011). Rape crisis centers: Serving survivors and their communities. In T. Bryant-Davis (Ed.), *Surviving sexual violence: A guide to recovery and empowerment* (p. 112–128). Rowman & Littlefield.

Splevins, K. Cohen, K., Joseph, S., Murray, C., & Bowley, J. (2010). Vicarious posttraumatic growth among interpreters. *Qualitative Health Research, 20*(12), 1705-1716. https://doi.org/10.1177/1049732310377457

Stamm, B. H. (2010). The Concise ProQOL Manual, 2nd Ed. Pocatello, ID: ProQOL.org. Accessed from: https://proqol.org/uploads/ProQOLManual.pdf

Tedeschi, R. G., & Calhoun, L. G. (1996). The Posttraumatic Growth Inventory: Measuring the positive legacy of trauma. *Journal of Traumatic Stress, 9*(3), 455-471. http://dx.doi.org/10.1002/jts.2490090305

Tedeschi, R., & Calhoun, L. (2004). Posttraumatic growth: Conceptual foundations and empirical evidence. *Psychological Inquiry, 15,* 1-18.

Trippany, R., White Kress, V., & Wilcoxon, S. A. (2004). Preventing vicarious trauma: What counselors should know when working with trauma survivors. *Journal of Counseling & Development, 82,* 31-37. https://doi.org/10.1002/j.1556-6678.2004.tb00283.x

Tsirimokou, A., Kloess, J. A., & Dhinse, S. K. (2022). Vicarious post-traumatic growth in professionals exposed to traumatogenic material: A systematic literature review. *Trauma, Violence, & Abuse, n.v.,* 1-19, https://doi.org/10.1177/15248380221082079

Ullman, S., & Townsend, S. (2007). Barriers to working with sexual assault survivors: A qualitative study of rape crisis center workers. *Violence Against Women, 13*(4), 412-443. https://doi.org/10.1177/1077801207299191

Voth Schrag, R. J., Wood, L. G., Wachter, K., & Kulkarni, S. (2022). Compassion fatigue among the intimate partner violence and sexual assault workforce: Enhancing organizational practice. *Violence Against Women, 28*(1), 277–297. https://doi.org/10.1177/1077801220988351

Vrklevski, L. & Franklin, J. (2008). Vicarious trauma: The impact on solicitors of exposure to traumatic material. *Traumatology, 14*(1), 106–118. https://doi.org/ 10.1177/1534765607309961

Wasco, S., Campbell, R., & Clark, M. (2002). A multiple case study of rape victim advocates' self-care routines: The influence of organizational context. *American Journal of Community Psychology, 30*(5), 731-760. https://doi.org/10.1023/A:1016377416597

Wasco, S., Campbell, R., Howard, A., Mason, G., Staggs, S., Schewe, P., & Riger, S. (2004). A statewide evaluation of services provided to rape survivors. *Journal of Interpersonal Violence, 19*(2), 252-263. https://doi.org/10.1177/0886260503260246

Worley, J., Fuqua, D., & Hellman, C. (2009). The Survey of Perceived Organizational Support: Which measure should we use? *SA Journal of Industrial Psychology, 34*(1), 112-116. https://doi.org/10.4102/sajip.v35i1.754

Appendix A: IRB Initial Approval and Amendment Approval Letters

DEPAUL UNIVERSITY

Office of Research Services
1 East Jackson Boulevard
Chicago, Illinois 60604-2287

Research Involving Human Subjects
NOTICE OF INSTITUTIONAL REVIEW BOARD ACTION

To:Annie Wegrzyn, Psychology

Date: March 02, 2022

Re: Research Protocol # IRB-2021-338

Title: Examining Predictors of Vicarious Posttraumatic Growth among Sexual Assault Service Providers in Rape Crisis Centers

Please review the following important information about the review of your proposed research activity.

Review Details

This submission is an Amendment.

Approval Details

Includes: Amendment involves: 1) expanding the inclusion criteria for staff and volunteers; 2) revisions to the applicable materials to reflect these changes; and 3) the addition of an email recruitment script for past agency partners.

Funding from the Graduate Research Fund from CSH.

Level of Review for Amendment: Designated Review

Amendment Approval date: March 02, 2022

Please note: Under the revised regulations, protocols requiring expedited review no longer require continuing review at least annually. If we have approved your protocol under the revised regulations, you will not see an expiration date of one year later. However, if any changes are made to your research at any time while it is being conducted, you still need to submit an amendment prior to initiating the amendment changes.If we approved your research under the revised regulations, but the IRB specifically required continuing review for this protocol, you will see an expiration date related to the specifically assigned approval period. If any changes are made to your research, you still need to submit an amendment prior to initiating the amendment changes.

Approved Study Documents: See the attachments tab in the protocol application online.

Number of Approved Subjects: See the approved protocol application online
You should not exceed the total number of subjects without prospectively submitting an amendment to the IRB requesting an increase in subject number.

Findings: 1. Expedited Category 7 - #(7) Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies.#
2. Waiver of Documentation of Consent C 1 (ii) - Waiver of Documentation of Signed Informed Consent Granted under 45 CFR 46.117(c) 1 (ii) -The research presents no more than minimal risk of harm to subjects and involves no procedures for which written consent is normally required outside of the research context.

Reminders

- If you have approved documents, such as consent, parent/legal guardian permission, assent or recruitment materials, the approved versions are listed on the attachment tab in specific protocol in eProtocol. When you no longer need certain documents, they should be deleted from the attachment tab as not being used any longer. You may do this at the time of submitting an amendment or continuing review submission or we will delete them as part of the review process. Historically approved documents can be seen in the event history section for a specific protocol.
- Any changes to the funding source or funding status must be sent to the IRB as an amendment.
- Prior to implementing revisions to project materials or procedures, you must submit an amendment application detailing the changes to the IRB for review and receive notification of approval.

DEPAUL UNIVERSITY

Office of Research Services
1 East Jackson Boulevard
Chicago, Illinois 60604-2287

Research Involving Human Subjects
NOTICE OF INSTITUTIONAL REVIEW BOARD ACTION

To: Annie Wegrzyn, Psychology

Date: May 28, 2021

Re: Research Protocol # IRB-2021-338

Title: Examining Predictors of Vicarious Posttraumatic Growth among Sexual Assault Service Providers in Rape Crisis Centers

Please review the following important information about the review of your proposed research activity.

Review Details

This submission is an initial submission.

Your research project meets the criteria for Expedited review under 45 CFR 46.110.

Approval Details

Your research protocol was reviewed and approved on May 28, 2021.

Approval Date: May 28, 2021

Please note: Under the revised regulations, protocols requiring expedited review no longer require continuing review at least annually. If we have approved your protocol under the revised regulations, you will not see an expiration date of one year later. However, if any changes are made to your research at any time while it is being conducted, you still need to submit an amendment prior to initiating the amendment changes. If we approved your research under the revised regulations, but the IRB specifically requiredcontinuing review for this protocol, you will see an expiration date related to the specifically assigned approval period. If any changes are made to your research, you still need to submit an amendment prior to initiating the amendment changes.

Approved Study Documents: See the attachments tab in the protocol application online.

Number of Approved Subjects: See the approved protocol application online.
You should not exceed the total number of subjects without prospectively submitting an amendment to the IRB requesting an increase in subject number.

Findings:1. Expedited Category 7 - #(7) Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies.#
2. Waiver of Documentation of Consent C 1 (ii) - Waiver of Documentation of Signed Informed Consent Granted under 45 CFR 46.117(c) 1 (ii) -The research presents no more than minimal risk of harm to subjects and involves no procedures for which written consent is normally required outside of the research context.

Includes: Funding from the Graduate Research Fund, College of Science & Health, PI Annie Wegrzyn.

Reminders

- If you have approved documents, such as consent, parent/legal guardian permission, assent or recruitment materials, the approved versions are listed on the attachment tab in specific protocol in eProtocol. When you no longer need certain documents, they should be deleted from the attachment tab as not being used any longer. You may do this at the time of submitting an amendment or continuing review submission or we will delete them as part of the review process. Historically approved documents can be seen in the event history section for a specific protocol.
- Any changes to the funding source or funding status must be sent to the IRB as an amendment.
- Prior to implementing revisions to project materials or procedures, you must submit an amendment application detailing the changes to the IRB for review and receive notification of approval.
- You must promptly report any problems that have occurred involving research participants to the IRB in writing.
- **Once the research is completed, you must send a final closure report for the research to the IRB.**

The Board would like to thank you for your efforts and cooperation and wishes you the best of luck on your research. If you have any questions, please contact Jessica Bloom, Assistant Director of Research Complianceby telephone at (312) 362-6168 or by email at jbloom8@depaul.edu.

For the Board,

Appendix B: Recruiting Email to Agency Leaders

I hope you are well! I am inviting staff and volunteers from [agency] to participate in a study exploring the effects of providing services to sexual assault survivors. This study will be used to help inform ways to support rape crisis center staff and volunteers.

The survey should take providers 15 minutes to complete. The first [#] volunteers/staff to complete this survey will receive a **$5 Amazon gift card** as a token of appreciation.

The survey will be available to your agency's volunteer or staff providers who:

1. Received 40-hour Illinois Coalition Against Sexual Assault (ICASA)-approved advocacy training
2. Work directly with sexual assault survivors (i.e., providing advocacy, crisis intervention, case management, and/or counseling services)
3. Have served in their role at your agency for at least six months
4. Have provided services to at least one survivor

If you are interested in [agency] being involved, please let me know and send the recruiting email below to your staff and volunteer providers.

I have also attached a letter of support from my collaborator at the Illinois Criminal Justice Information Authority. If you have any questions or would like to talk more about the study, please contact me at awegrzy1@depaul.edu.

Thank you for your time and consideration!

Hello,

I am inviting you to complete a confidential online research survey on the effects of providing services to sexual assault survivors. This study will be used to help inform ways to support rape crisis center staff and volunteers.

The survey should take approximately 15 minutes to complete. The first 20 people from your agency to complete this survey will receive a **$5 Amazon gift card** as a token of appreciation.

You are being asked to complete this research survey because you are a volunteer or staff sexual assault service provider at an Illinois rape crisis center. You are able to complete this survey if you:

1. Received 40-hour Illinois Coalition Against Sexual Assault (ICASA)-approved advocacy training (or equivalent training from another state)
2. Work directly with sexual assault survivors (i.e., providing advocacy, crisis intervention, case management, and/or counseling services)
3. Have served in your role at your agency for at least six months
4. Provided services to at least one survivor

Your agency will not be notified whether you participated in this research study. Your personal responses to the questions in this survey will not be shared with anyone within or outside of your agency other than members of the research team.

If you would like to participate, please follow the link below to the survey. If clicking the link does not work, try copying and pasting the link into a new browser window.

http://depaul.qualtrics.com/jfe/form/SV_e2utSHfe5xSXAfI

If you have any questions, please contact Annie Wegrzyn at awegrzy1@depaul.edu.

Thank you for your consideration!

Appendix C: Follow-Up Email to Agency Leaders Following Amendment

Dear _____,

I hope this email finds you well! I have updated my study to include more volunteers and staff.
****Now volunteers and staff who have been in their role for six months or more can participate.****

Due to this important change, can you please send the updated recruiting email below to your staff and volunteers?

As you may remember, I am conducting a study exploring the effects of providing services to sexual assault survivors. Previously the study was limited to those in their role for at least two years, but we have expanded it to include the perspectives of more providers.

This survey will still take about 15 minutes to complete, and the first [#] people from your agency to complete this survey will receive a $5 Amazon gift card as a token of appreciation.

As a reminder, this survey is available to volunteers and staff who:

- Received 40-hour Illinois Coalition Against Sexual Assault (ICASA)-approved advocacy training (or equivalent training from another state)
- Work directly with sexual assault survivors (i.e., providing advocacy, crisis intervention, case management, and/or counseling services)
- Have served in their role at your agency for **at least six months**
- Provided services to at least one survivor

I have also attached a letter of support from my collaborators at the Illinois Criminal Justice Information Authority (ICJIA).

Could you please forward this below message to your staff and volunteer providers?

Thank you for your consideration!

We are still looking for participants for our confidential online research survey exploring the effects of providing services to sexual assault survivors. **We have expanded this study to now include volunteers and staff who have been in their role for at least six months.**

The survey should still take approximately 15 minutes to complete. The first [##] people from your agency to complete this survey will receive a **$5 Amazon gift card** as a token of appreciation.

You are invited to complete this research survey because you are a volunteer or staff sexual assault service provider at an Illinois rape crisis center. **You are able to complete this survey if you:**

- Received 40-hour Illinois Coalition Against Sexual Assault (ICASA)-approved advocacy training (or equivalent training from another state)
- Work directly with sexual assault survivors (i.e., providing advocacy, crisis intervention, case management, and/or counseling services)

- Have served in your role at your agency for **at least six months**
- Have provided services to **at least one survivor**

Your agency will not be notified whether you participated in this research study. Your personal responses to the questions in this survey will not be shared with anyone within or outside of your agency other than members of the research team.

If you would like to participate, please follow the link below to the survey. If clicking the link does not work, try copying and pasting the link into a new browser window.

http://depaul.qualtrics.com/jfe/form/SV_e2utSHfe5xSXAfI

If you have any questions, please contact Annie Wegrzyn at (awegrzy1@depaul.edu).

Thank you for your consideration!

Appendix D: Letter of Support from Illinois Criminal Justice Information Authority

ILLINOIS
CRIMINAL JUSTICE
INFORMATION AUTHORITY

300 W. Adams Street • Suite 200 • Chicago, Illinois 60606 • (312) 793-8550

February 28, 2022

This letter is in support of Annie Wegrzyn's dissertation on the effects on rape crisis staff and volunteers of providing services to sexual assault survivors. Annie is currently a Doctoral Candidate of Community Psychology at DePaul University. Since late 2018, Annie has previously collaborated with the Illinois Criminal Justice Information Authority (ICJIA)'s Center for Victim Studies on initiatives focused on addressing vicarious trauma among victim service providers.

As part of her graduate training at DePaul, Annie worked with ICJIA's Center for Victim Studies on an organizational evaluation to address staff vicarious trauma with three domestic violence agencies in Illinois in 2019. This evaluation assessed agencies' capacity to address their staff's vicarious trauma using the Office of Victims of Crime (OVC)'s Vicarious Trauma Toolkit-Organizational Readiness Guide (VT-ORG). Annie helped prepare and distribute the Qualtrics survey that assessed organizational domains such as leadership and mission, management and supervision, employee empowerment and work environment, training and professional development, and staff health and wellness. She collaborated with the Center in tailoring action plans for each domestic violence agency based on their respective VT-ORG findings, developing action steps, and compiling resources for each agency's respective areas for growth. Annie also worked with the Center to disseminate the findings and action plans to each agency with individualized reports and tailored presentations.

When ICJIA researchers extended this initiative in 2021 to develop a vicarious trauma learning cohort, Annie offered support by assisting ICJIA researchers to identify additional strategies and resources for areas for growth based on the VT-ORG. This information was then disseminated to service providers involved in this learning cohort.

In her work on these initiatives with ICJIA's Center for Victim Studies, Annie has demonstrated her commitment to exploring the vicarious effects of engaging in victim service work and her commitment to supporting victim service providers around this work.

Sincerely,

Amanda L Vasq

Amanda L. Vasquez, MA
Acting Research Manager
Center for Victim Studies, Research & Analysis
Cell phone: 773-351-4460
Email: Amanda.L.Vasquez@illinois.gov

Appendix E: Survey Questionnaire

Thank you for taking the time to complete this survey. The purpose of this survey is to explore the effects of engaging in your current work with sexual assault survivors. You are being asked to complete this survey because you have been identified as a sexual assault service provider by your agency. Your agency will not be notified that you participated in this study. Your personal responses to all of the questions will not be shared with anyone within or outside of your agency other than members of the research team. For each of the following questions, please provide the response that best characterizes you and your work within your agency.

1. What is your age? _____

2. Have you completed at least 40 hours of advocate training?
    a. Yes
    b. No

3. What agency do you volunteer/work for? _____

4. Please select the option that most closely describes your current, primary role in working with survivors in your agency:
    a. Advocate(yes/no)
    b. Hotline (yes/no)
    c. Counselor (yes/no)
    d. Other (yes/no): _____

5. For how long have you served in this role at your agency?
    a. Using the dropdown menus, select number, then select unit of time

#	Unit
1-50	Months Years

6. Approximately how many survivors have you directly served in your current role? _____.

7. Please select whether you are a paid staff member or volunteer for your agency:
    a. Paid staff member
    b. Volunteer

8. *Logic: Hidden unless participant indicates they are a staff member in Question #7.* OR STAFF MEMBERS: On average, how many hours do you work per week? _____

9. *Logic: Hidden unless participant indicates they are a volunteer in Question #7.* FOR VOLUNTEERS: On average, how many hours do you work per month? _____

In case you feel any distress upon participating in this study, please consider reaching out to the following nationally based resources for support:

RAINN National Sexual Assault Hotline
Confidential Online 24/7 Chat: Online.rainn.org
Confidential Phone 24/7 Hotline: 800.656.4673

Vicarious Posttraumatic Growth Inventory

You will now be asked about personal changes you have experienced as a result of your work with sexual assault survivors in your current role. Please read the following statements and indicate for each of the statements the degree to which each change occurred in your life as a result of your work with sexual assault survivors.

A score of 1 indicates you did not experience this change as a result of your work at all, whereas a score of 6 indicates you experienced a particular change as a result of your work to a very great degree.

As a result of my work with sexual assault survivors:	1 Not at all	2 To a very small degree	3 To a small degree	4 To a moderate degree	5 To a great degree	6 To a very great degree
I changed my priorities about what is important in life.						
I have a greater appreciation for the value of my own life.						
I developed new interests.						
I have a greater feeling of self-reliance.						
I have a better understanding of spiritual matters.						
I more clearly see that I can count on people in times of trouble.						
I established a new path for my life.						
I have a greater sense of closeness with others.						
I am more willing to express my emotions.						
I know better that I can handle difficulties.						
I am able to do better things with my life.						
I am better able to accept the way things work out.						
I can better appreciate each day.						
New opportunities are available which wouldn't have been otherwise.						

I have more compassion for others.						
I put more effort into my relationships.						
I am more likely to try to change things which need changing.						
I have a stronger religious faith.						
I discovered that I'm stronger than I thought I was.						
I learned a great deal about how wonderful people are.						
I better accept needing others.						

Vicarious Trauma Scale

The next questions refer to exposure to trauma you experience as a result of working with 'clients' or sexual assault survivors. **Here, 'job' refers to your current volunteering or work in your rape crisis center.**

Please read the following statements about exposure to trauma in your work or volunteering and indicate on a scale of 1 (strongly disagree) to 7 (strongly agree) the extent to which you agree with each statement.

	1 Strongly disagree	2 Disagree	3 Slightly disagree	4 Neither agree nor disagree	5 Slightly agree	6 Agree	7 Strongly agree
My job involves exposure to distressing material and experiences.							
My job involves exposure to traumatized or distressed clients.							
I find myself distressed by listening to my clients' stories and situations.							
I find it difficult to deal with the content of my work.							
I find myself thinking about distressing material at home.							
Sometimes I feel helpless to assist my clients in the way I would like.							
Sometimes I feel overwhelmed by the workload involved in my job.							
It is hard to stay positive and optimistic given some of the things I encounter in my work.							

Colleague Support

The following statements refer to the extent to which you feel supported by your current **colleagues (i.e., other staff members or other volunteers) within your rape crisis center**.

Please read each of the following statements about colleague support and rate the extent to which you agree with each on a scale of 1 (strongly disagree) to 5 (strongly agree).

	1 Strongly disagree	2 Disagree	3 Neither agree nor disagree	4 Agree	5 Strongly agree
I would say that I get along with my colleagues					
I would say that my colleagues get along with one another					
I feel that my colleagues are supportive of me and my work					
If I wanted to talk to someone about a work-related problem I could rely on one or more of my colleagues to listen					
If I needed to talk to someone about a personal problem I could rely on one or more of my colleagues to listen					

Supervision

The following statements describe some of the ways a volunteer or staff member may feel about **the supervisor with whom you currently work most closely at your rape crisis center.**

To what extent do you agree or disagree with each of the following statements about your relationship with your supervisor at the agency you work or volunteer for?

For each item, please indicate which option matches your opinion most closely on the scale of 1 (strongly disagree) to 7 (strongly agree).

	1 Strongly Disagree	2 Somewhat disagree	3 Disagree	4 Neither agree nor disagree	5 Somewhat agree	6 Agree	7 Strongly Agree
My supervisor is approachable							
My supervisor is respectful of my views and ideas							
My supervisor gives me feedback in a way that felt safe							
My supervisor is enthusiastic about supervising me							
I feel able to openly discuss my concerns with my supervisor							
My supervisor is non-judgmental in supervision							
My supervisor is open-minded in supervision							
My supervisor gives me positive feedback on my performance							
My supervisor has a collaborative approach in supervision							

	1 Strongly Disagree	2 Somewhat disagree	3 Disagree	4 Neither agree nor disagree	5 Somewhat agree	6 Agree	7 Strongly Agree
My supervisor encourages me to reflect on my practice							
My supervisor pays attention to my unspoken feelings and anxieties							
My supervisor draws flexibly from a number of theoretical models							
My supervisor pays close attention to the process of supervision							
My supervisor helps me identify my own learning/training needs							

	1 Strongly Disagree	2 Somewhat disagree	3 Disagree	4 Neither agree nor disagree	5 Somewhat agree	6 Agree	7 Strongly Agree
Supervision sessions are focused							
Supervision sessions are structured							
My supervision sessions are disorganized							
My supervisor makes sure that our supervision sessions are kept free from interruptions							

Organizational Support

The statements below represent possible opinions you may have about **working or volunteering at your rape crisis center at this point in time.** Please indicate the degree of your agreement or disagreement with each statement by selecting the option that best represents your point of view about your agency from a scale of 1 (strongly disagree) to 7 (strongly agree).

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

Training

The following statements describe your perceptions of training you have **ever received** on vicarious exposure to trauma in your role working with sexual assault survivors. **Vicarious trauma** refers to the indirect exposure to other's trauma (e.g., your clients). Please rate your level of agreement with each of the following statements on a scale from 1 (strongly disagree) to 5 (strongly agree).

	1 Strongly disagree	2 Disagree	3 Neither agree nor disagree	4 Agree	5 Strongly agree
Overall, the training I have received on the effects of vicarious trauma exposure is applicable to my role working with sexual assault survivors					
Overall, the training I have received on the effects of vicarious trauma exposure meets my needs					
Overall, I am satisfied with the amount of training I have received on the effects of vicarious trauma exposure					
I am generally able to use what I have learned in training on the effects of vicarious trauma exposure in my role working with sexual assault survivors					

Exposure to Growth

Below are two questions related to the extent to which you engage in follow-up with clients, or witness their growth. Here, 'clients' refer to sexual assault survivors you have provided support or services to.

1. Do you engage in any follow-up care with clients (i.e., work with the same client more than once)?
    a. Yes
    b. No

2. In your work with clients, do you witness their growth?
    a. Yes
    b. No

Remaining Demographic Questions & Follow Up

Thank you for completing the following questions. Lastly, below are several remaining questions about your personal identity and experiences. Once again, your personal responses to these questions will not be shared with anyone in your agency nor anyone outside of your agency, and you may skip a question if you do not feel comfortable answering. Please choose the response that best describes you and your experiences.

1. Do you have a direct trauma history?

   a. Yes
   b. No

2. Which of the following best describes your gender identity?
   a. Woman (includes transgender and cisgender women)
   b. Man (includes transgender and cisgender men)
   c. Non-binary
   d. Prefer to self-describe_____
   e. Prefer not to respond

3. Do you identify as a member of the LGBTQ+ community?
   a. Yes
   b. No
   c. Prefer not to respond

4. What of the following best describes your racial/ethnic identity? Please select all that apply:
   a. Black or African American
   b. Latinx or Hispanic
   c. Asian
   d. Native Hawaiian or Pacific Islander
   e. Native American or Alaskan Native
   f. White/Caucasian
   g. Other _____
   h. Prefer not to respond

5. What is the highest level of education you have completed?
   a. Some high school without degree
   b. High school/GED
   c. Some college without degree
   d. Associates degree
   e. Bachelors degree
   f. Masters degree
   g. Professional or Doctorate degree (e.g. PhD, EdD, MD etc.)

Closing Message

Thank you for taking the time to complete this survey! If you were among the first individuals in your agency to complete the study, you will receive a $5 electronic Amazon gift card as a token of appreciation for your participation. Please share an email address the gift card can be sent to. This email address will not be used for any other communication purpose without your consent. If you do not receive your gift card within 2-3 weeks of participation, please contact awegrzy1@depaul.edu.

a. Email address:
b. Backup email address:

Would you be willing to be contacted again for the possibility to participate in a future follow-up study on the vicarious effects of working with survivors within the next three years? If you agree to be contacted again, please share a first name, email address, and phone number you can be reached at. Your answer to this question will not affect whether you receive the $5 gift card for this study.

a. Yes, I am willing to be contacted for a future research study opportunity
    i. First name:
    ii. Email address:
    iii. Backup email address:
    iv. Phone number
    v. Backup phone number
b. No, I am not willing to be contacted again for a future research study opportunity