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Successful Crisis Teams: Targeting Themes Related to Well-Being and Productivity

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Abstract

While high staff turnover rates within the suicide prevention field negatively impact service delivery, they are poorly understood. Hotlines and other crisis-focused organizations cannot pinpoint what impacts well-being and productivity reliably across organizations or, rather, what creates an intersection of high points of productivity and well-being. This study employed a qualitative phenomenological approach to identify the impact of well-being and productivity amongst current and former crisis workers at a statewide hotline. Results revealed three major themes expressed by participants surrounding well-being; management support, communication, and self-regulation. Specific to productivity, participants expressed skill set and empathy as important themes related to high rates of productiveness.

The findings contribute to the existing literature by providing insights into the factors that influence the well-being and productivity of crisis workers. The study underscores the significance of the themes in fostering positive outcomes for crisis workers. These results can inform the preliminary development of supportive strategies, interventions, and policies to enhance the well-being and productivity of crisis workers in crisis hotline settings. Bringing attention to the experiences of crisis workers can provide valuable insights into the work environment, skill set requirements, and implications for the field of crisis intervention. These insights can then guide future efforts to improve the support provided to crisis workers in their crucial task of assisting individuals in crisis situations.

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Abstract

While high staff turnover rates within the suicide prevention field negatively impact service delivery, they are poorly understood. Hotlines and other crisis-focused organizations cannot pinpoint what impacts well-being and productivity reliably across organizations or, rather, what creates an intersection of high points of productivity and well-being. This study employed a qualitative phenomenological approach to identify the impact of well-being and productivity amongst current and former crisis workers at a statewide hotline. Results revealed three major themes expressed by participants surrounding well-being; management support, communication, and self-regulation. Specific to productivity, participants expressed skill set and empathy as important themes related to high rates of productiveness.

The findings contribute to the existing literature by providing insights into the factors that influence the well-being and productivity of crisis workers. The study underscores the significance of the themes in fostering positive outcomes for crisis workers. These results can inform the preliminary development of supportive strategies, interventions, and policies to enhance the well-being and productivity of crisis workers in crisis hotline settings. Bringing attention to the experiences of crisis workers can provide valuable insights into the work environment, skill set requirements, and implications for the field of crisis intervention. These insights can then guide future efforts to improve the support provided to crisis workers in their crucial task of assisting individuals in crisis situations.

Keywords suicide prevention, burnout, well-being, productivity, crisis, employee turnover

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Introduction

To effectively respond to crises and provide appropriate interventions, hotline crisis workers must address the needs of the individuals they serve and effectively manage their well-being (Kitchingman et al., 2018). Initially, suicide prevention as a field focused mainly on supporting crisis workers through onboarding staff training (Joiner et al., 2007) and ongoing group and individual supervision. Onboarding training hours may vary from 40 to 100 depending on the hotline organization's staffing ability and funding. Much of those hours are dedicated to discussing suicide statistics worldwide and regionally, teaching best practice standardized screening and intervention (Gould et al., 2013; Cross et al., 2017), and reviewing access to resources to aid providers in connecting individuals we serve to the correct referrals. Towards the end of onboarding, there is typically time allotted for technology training and some discussion about self-care.

More recently, the field has highlighted the ongoing importance of more in-depth support of crisis workers over time, including addressing issues such as moral injury and secondary traumatic stress (STS) and providing resources and support during public health crises such as the COVID-19 pandemic. For example, a recent review found that professional self-care is critical for maintaining crisis workers' well-being and ensuring they can continue to provide adequate care to those in need. Professional self-care practices identified included maintaining social support, regular physical activity, getting enough sleep, and setting aside time to engage in stress-reducing activities such as meditation or mindfulness (Pfefferbaum et al., 2019).

Unfortunately, while in-depth support from training inception and throughout employment is an identified need, limited financial resources have resulted explicitly in staff training focusing on the efficacy and reliability of intervention services. This adherence primarily to protocols takes away from bolstering professional self-care practices or ensuring self-care activities are incorporated during a work shift. Adherence to protocols and other general productivity needs are often set from funding source demands, and it is typical to see these in a trickledown effect where crisis workers experience pressure to hit on topics throughout all calls they take. Recently, a systemic review of the literature on disaster behavioral health responders' preparedness and training needs found that crisis workers' training topics should specifically include crisis intervention, suicide prevention and intervention, and stress management. The authors note that substance abuse and homicidal ideation and behavior are essential topics to cover in crisis worker training (Makowski et al., 2021). Although, due to the varied nature of crisis worker training programs, it is difficult to ensure that all topics get the same amount of attention to guarantee a balance between confidence, competence, and the tools needed to maintain well-being once out of training.

Additionally, funding sources often mandate obtaining demographic information from callers, such as age, Veteran status, zip code, and pronoun or gender identification. Due to the level of call volume versus staffing, crisis hotline workers are encouraged to keep call times under a certain number of minutes unless the caller identifies an imminent risk for suicide or homicide and a safety plan or further action must be taken. Given the gravity of all information needed to be obtained during a crisis call, it is not surprising that there may be little time to discuss self-care or debrief.

The Centers for Disease Control and Prevention (CDC) provides various resources and information on crisis worker staff training to understand the rationale for focusing on intervention and competence over other themes, such as self-care. The Crisis and Emergency Risk Communication (CERC) training program offered by the CDC is designed to help crisis workers and public health professionals communicate effectively during emergencies and public health crises. The program covers crisis communication planning, audience analysis, and message development (Centers for Disease Control and Prevention, n.d.).

Crisis Communication planning is the process of developing strategies and protocols to effectively communicate during a crisis, ensuring timely and accurate information dissemination while managing reputation and stakeholder expectations (Centers for Disease Control and Prevention, n.d.). Audience analysis refers explicitly to gathering information about the audience's demographics, interests, beliefs, values, and preferences. Audience analysis helps tailor the message effectively to suit the specific characteristics and expectations of the target audience. By analyzing the audience, for example, the individuals we serve, communicators/crisis workers can better craft their messages and choose appropriate strategies to ensure that the intended audience receives, understands, and retains the information (Centers for Disease Control and Prevention, n.d.). Message development is the development of crafting content to communicate information, key points, and desired goals to the focused audience succinctly and transparently (Centers for Disease Control and Prevention, n.d.).

Another training program that covers topics such as assessing needs, providing emotional support, and connecting people to appropriate referrals is called the Psychological First Aid (PFA) training. The CDC provides this training and resources on PFA through an evidence-based approach focusing on providing immediate support to people who have experienced a traumatic

event (Centers for Disease Control and Prevention, n.d.). Overall, resources and training programs, such as CERC and PFA, help us understand the focus on intervention in crisis worker staff training in a few ways. First, the CERC training program emphasizes effective crisis communication during emergencies and public health crises. By providing crisis workers with skills and knowledge in crisis communication planning, audience analysis, and message development, the CDC aims to build clear communication that enables crisis workers to do their job more effectively. Effective communication aids in disseminating critical information, instructions, and both mental health and general resources for callers, facilitating a more coordinated, team-oriented response and reducing the impact of the crisis. Second, the PFA training program focuses on immediate support to individuals that have experienced a traumatic event (Centers for Disease Control and Prevention, n.d.). This emphasis on immediate intervention aligns with the CDC's goal of addressing direct and imminent needs. By training crisis workers in PFA techniques, interventions may be more precise and effective, alleviate acute distress, and promote resilience. These resources focus on intervention, although they do not negate the significance of self-care and well-being for crisis workers. Instead, they demonstrate to crisis worker trainees that the focus remains on intervention using available resources to aid them in their jobs. Intervention is essential in crisis response, and while prioritizing self-care to maintain mental health and well-being is encouraged, it seems that the rationale still stands that timely and competent intervention is stressed in training (Centers for Disease Control and Prevention, n.d.).

Regardless of the emphasis on competency, the suicide assessment and intervention process and its confounding factors may subject workers to increased stress (Berman & Silverman, 2014). Furthermore, although increased competence and skill set may reduce stress

levels, rules to maintain funding and best practice standards increase the level of stress experienced and questioning of said competence. A thematic analysis of staff perceptions of the challenges and support needs of mental health crisis services in the UK found this sentiment to be true. High levels of job stress were associated with lower levels of perceived competence, and the need to maintain funding and best practice standards added to the stress level experienced by crisis workers (Bouras & Holt, 2019).

Additionally, exposure to suicide and violence increases the prevalence of burnout among crisis intervention workers, and the turnover associated with staff burnout decreases staff morale overall (Menon et al., 2015). Because burnout increases the likelihood of staff turnover, it can negatively impact service delivery. The consequences of burnout are a financial liability as staff turnover "in large psychiatric rehabilitation organizations […] can result in over $100,000 a year in unnecessary costs (Selden, 2010, as cited in Sullivan et al., 2015)." Therefore, staff well-being is not only a moral concern but also a business-related one. Employee burnout and decreased well-being can result in reduced productivity, increased callouts, decreased quality of work, and health-related costs (Sullivan et al., 2015) that ultimately lead to higher rates of staff turnover.

Organizations are aware that these lost costs create a mutually conflicting condition. Lost costs from high turnover are seen as financial stress on the organizations (Sullivan et al., 2015). These organizations may know that while it would not solve all problems, additional funds that are saved from reducing turnover could be directed to providing more training for competency, more pay for a high quality of life, quarterly incentives to increase interest in productivity, and bonuses to increase morale and vested interest in the company. Overall, while it is known that stress and burnout manifest in crisis workers, little is known as to what explicitly creates the perfect storm of issues discussed that reduces well-being and leads to a lack of productivity. Past

research on this topic is limited in its scope, data, and generalizability (Yanchus et al., 2017). Additionally, staff perspectives on what creates or maintains morale are not well-identified. Without this information, it would be difficult to understand the timeline that causes a crisis worker to go from onboarding to leaving their position or the timeline from when a crisis worker is at their peak in productivity to when that starts to decrease and ultimately leads to resignation. In telephonic service delivery settings, the field will continue to be prone to high staff turnover rates due to decreased well-being and interest in the position, which can negatively impact service delivery and productivity levels (Yanchus et al., 2017) until more is known.

Literature Review

Crisis workers, by definition, can include mental health professionals, emergency responders, and other frontline workers, as implied above. It is important to note that crisis workers' specific roles and definitions may vary depending on the context, region, state, and organization. Also, different studies or articles may use varying terms or definitions to describe crisis workers based on the context of their work and the focus of the research objective (Blau et al., 2021). Regardless, these individuals face unique stressors and challenges in their work environments.

One study revealed several significant findings regarding the predictors of job satisfaction, emotional exhaustion, and turnover intention. They found job satisfaction was influenced by two key factors: civility, which encompasses courteous and respectful workplace behaviors, and supervisory support (Yanchus et al., 2017). Satisfaction, defined within the context of crisis work, as a positive emotion experienced after recognizing you are making a difference in the lives of others, is difficult to appreciate if the crisis worker is feeling unsupported or psychologically unsafe in their work environment (Willems et al., 2021). To

comprehend how to correct a lack of or a decline in civility and supervisory support, further research on the specific factors influencing the well-being and productivity of crisis workers is necessary.

A substantial body of literature exists that delves into the exploration of crisis worker well-being and productivity. However, compared to other areas of mental health research, there are relatively fewer studies specifically focused on crisis hotline workers, as revealed by literature review efforts. Fewer studies may be attributed to the fact that crisis hotline work is a specialized field, and the research in this area requires unique access to data and cooperation from crisis hotline organizations, many of which do not have embedded research departments or access to institutional review boards (IRBs).

Crisis hotline workers are crucial in providing support and assistance to distressed individuals. Research has provided compelling evidence regarding the effectiveness of crisis line services. Studies have shown that caller's stress levels are reduced both during and after their calls with a crisis hotline worker (Gould et al., 2007; Kalafat et al., 2007). Crisis lines services and their employees also prevent suicidality effectively (Gould et al., 2007; King et al., 2003) according to the literature. Therefore, understanding the factors affecting crisis hotline workers well-being and productivity is vital for improving their work environment and optimizing their continued effectiveness.

The research specific to hotline workers may not be as extensive as compared to crisis worker literature, but there have been studies that have explored various aspects related to crisis hotline workers' well-being and productivity and highlighted the gaps discussed above where further research is needed. Key areas that have been investigated include burnout and job satisfaction, organization-related factors, trauma exposure and secondary trauma, and self-care

and well-being interventions. Also, the same constructs and themes in the research for all crisis workers may be applied in telephonic crisis center settings given the overlapping qualities such as exposure to suicidality or system issues between mental health treatment settings and crisis intervention.

Working in telephonic crisis intervention services regularly exposes workers to some of the most challenging subjects in all mental health practice. The literature on **burnout** suggests that encountering people at risk for suicide is one of the most emotionally exhausting and challenging experiences clinicians encounter in mental health practice, leading to **secondary trauma**. Secondary trauma can be characterized as an enduring and intense response after being exposed to situations that pose a threat to life (Watts & Robertson, 2015). (Menon et al. (2015) report findings suggesting "clinicians were affected most powerfully by themes of patient suicide and violence [… and clinicians identified] themes of self-doubt most frequently in such scenarios."

Compassion fatigue, burnout, and vicarious trauma are interrelated concepts commonly experienced by professionals in high-stress occupations such as crisis hotline work. Compassion fatigue refers to the emotional and physical exhaustion resulting from prolonged exposure to others' trauma and suffering (Figley, 1995). Burnout, on the other hand, is defined by chronic exhaustion, cynicism, and reduced personal accomplishment due to work-related stressors (Maslach et al., 2001). Vicarious or secondary trauma, defined above, occurs when individuals indirectly experience the effects of trauma through exposure to others' stories or experiences (Pearlman & Saakvitne, 1995). These concepts have unique causes and manifestations, highlighting the importance of recognizing and addressing their impact.

Indeed, a systematic review of studies from 1990-2014 that examined the risk of those exposed to suicide found that anyone (i.e., not only kin) exposed to suicide is at a significantly higher risk of suicidal behavior (Maple et al., 2017). This only further highlights the importance of tracking the well-being of crisis workers, who are exposed to secondary trauma, such as suicidal thoughts and behavior, and potentially death by suicide, throughout their work.

In addition to compassion fatigue leading to burnout, moral injury is another critical factor to consider when trying to understand crisis hotline workers' experiences and well-being. While burnout is typically used to describe emotional and physical exhaustion, moral injury refers more to the psychological and emotional impact that occurs when individuals are involved in experiences that conflict with their value systems, moral beliefs, or professional ethics (Dean et al., 2019). Understanding the difference between burnout and moral injury among healthcare workers is essential as it can help differentiate between individual and organizational factors that may be impacting well-being.

Burnout is often discussed as an individual issue, referring to clinicians' challenges related to engaging in self-care activities and accessing resources available to them. Yet, moral injury shines a light on the **organizational factors** associated with the double binds of health care in general, which also applies to crisis organizations (Dean et al., 2019). When crisis hotline workers must ask themselves, do we take care of our caller, the funding source, the resource we are referring to, the system at large, or the productivity metrics first, it is difficult to know how this push and pull may negatively impact **productivity and job satisfaction**. For example, crisis hotline workers, along with other medical personnel, may hold the burden of upholding all demanding organizational factors in a way that manifests itself as moral injury in cases where

they are aware of an ideal resource that could be provided but can instead only provide an alternative option to a person in crisis (Čartolovni et al., 2021).

Another example of organizational factors weighing heavily on crisis workers, physicians, nurses, and other allied health professionals are when workers are faced with racism from callers, patients, patients' families, colleagues, or supervisors. These experiences of racial discrimination contribute to employment disparities and moral injury within the healthcare industry (Synder & Schwartz, 2019). One study that aimed to review recent literature on racial discrimination experiences from 2006 to 2016 found that most research focused on the experiences of Black and Latino physicians and nurses, identifying a lack of research on all allied health professionals identifying as people of color (Synder & Schwartz, 2019). Another scoping systematic review reported that racialized minorities often face inadequate healthcare and are frequently dismissed in healthcare interactions, leading to a lack of trust and delayed seeking of healthcare (Hamed et al., 2022). When thinking about this from a hotline crisis perspective, callers that wait longer to seek immediate help may experience more negative outcomes, leading to additional stress on both them and the crisis hotline worker.

Additionally, racialized minority healthcare staff experience racism from both healthcare users and colleagues in their workplace, with insufficient organizational support to address these issues effectively (Hamed et al., 2022). Research on healthcare staff's racial attitudes and beliefs reveals the presence of negative stereotypes toward racialized minority healthcare users, perceiving them as difficult. Studies on implicit racial bias demonstrate that healthcare staff exhibit a bias in favor of the majority group, which can have negative implications for medical decisions and life-saving calls related to imminent risk (Hamed et al., 2022). Furthermore, when reflecting on racism and undergoing antiracist training, healthcare staff tend to perceive

healthcare as impartial and often avoid discussing racism in their workplace (Hamed et al., 2022). It should also be emphasized that there is a lack of inclusion in the literature discussing the impact racism and marginalization has on crisis hotline workers. The need for leadership to address both overt and subtle racism to reduce moral injury, burnout, and create a more inclusive climate for people of color in healthcare careers and crisis hotlines is imperative.

Working with a suicidal individual as they are experiencing acute suicidal thoughts and behaviors requires a specific skill set, comfort in navigating the system at large to reduce moral injury, and emotional awareness to combat compassion fatigue and burnout. Identifying that first responders, crisis workers, case managers, and mental health professionals are likely to be exposed to suicide and secondary trauma, researchers sought to comprehend the relationship between these groups and their levels of depression, anxiety, and posttraumatic stress disorder (PTSD) that may occur. Through an online survey completed by 1,048 participants, they found two critical pieces of information. First, all first responders, crisis workers, and mental health professionals surveyed were exposed to suicide. Second, the results showed a significant impact on the mental health concerns measured (depression, anxiety, PTSD symptoms), but the level of impact varied depending on how close the individual was to the person who died by suicide (Aldrich & Cerel, 2020). This study aimed to address the significant research gap concerning the psychological well-being of crisis workers by identifying specific mental health concerns associated with crisis work, such as emotional exhaustion, burnout, and moral injury. The findings of this study could contribute to developing a comprehensive definition of well-being in the context of crisis workers (Aldrich & Cerel, 2020).

Being exposed to suicide and secondary trauma has physical implications for individuals working in crisis as well. Another study found that ambulance personnel, for example,

experience somatic symptoms such as headaches, gastrointestinal distress, sleep disruption, and fatigue due to the fast-paced and demanding nature of their work (Lawn et al., 2020). Musculoskeletal injuries, blood-borne pathogens, and needle-stick injuries are also prevalent risks in crisis work depending on the job duties. Sleep disturbances have been linked to physical fatigue, psychological effects, and various health conditions such as cardiovascular disease and metabolic syndrome (Lawn et al., 2020). Stress exposure can impact the endocrine system and lead to fluctuations in cortisol levels and pro-inflammatory cytokines, which have associations with depression, cardiovascular disease, and metabolic syndrome (Lawn et al., 2020).

For future research, investigators may look to provider perspectives when considering the well-being and job satisfaction of healthcare professionals across all settings. In a study conducted by Draper et al. (2014), interviews were conducted with a sample of 211 healthcare professionals to compare the impact of patient suicide and sudden death. The identification of cases came from sources such as deceased next of kin, colleagues, coroner files, and medical records. The interviews focused on exploring healthcare professionals' perspectives during their last contact with the patient and examining how that interaction impacted them. Researchers found that suicide deaths impacted healthcare professionals more in both their professional and personal lives than sudden deaths. It was also found that healthcare professionals with less than five years of experience were impacted more. This is illuminating when compared with turnover rates in crisis worker settings. Given that crisis workers often have less than five years of experience, this study illustrates the need to consider the impact on well-being a crisis worker will experience in their personal and professional lives.

Seeking an even deeper understanding of the impact on well-being, researchers at the University of Wollongong, the Lifeline Research Foundation, and the University of Melbourne

conducted an international systemic review to explore whether telephonic crisis workers experience increased psychological distress (Kitchingman et al., 2018). To understand what literature is available to help inform strategies to support crisis workers through **self-care** and **well-being intervention**, three databases were searched. Researchers also employed a gray literature search and forward and backward citation chaining. There were 113 studies identified, but only seven were included in the review. To meet the inclusion criteria for the review, the selected studies needed to fulfill the following requirements. The studies needed to utilize a measure of psychological distress and/or impairment and focus specifically on telephone crisis support workers. Studies involving crisis callers, telephone line workers not engaged in crisis support (e.g., those handling smoking cessation or monitoring healthcare treatment compliance), as well as crisis workers who provide support via telephone (e.g., mobile crisis teams) were excluded from this definition (Kitchingman et al., 2018). Results pinpointed various types of psychological distress experienced by crisis workers, including vicarious or secondary traumatization, stress, burnout, and psychiatric disorders. Due to little available data, conclusions cannot be made. The existing research highlights a research gap concerning the impact of crisis workers' job responsibilities on their well-being and its implications on job effectiveness (Kitchingman et al., 2018).

Compared with the telephone helpline, working on an SMS platform was seen as even more demanding, suggesting that as job duties expand for crisis worker staff, more avenues of struggle and decline of well-being, both psychological and physical, could exist (Fildes et al., 2022). In July 2018, Lifeline Australia launched its first SMS crisis support services. The primary objective of the pilot program was to assess the experiences of the participating staff and determine the essential skills and support required to ensure the long-term viability of the

program beyond the initial pilot phase. Qualitative data analysis revealed that delivering crisis support via text initially posed challenges due to the need to adapt to the stress created because it was difficult to pick up on nonverbal signals. It was hard to gauge what was happening to the crisis texter during the pauses between texts and elevated levels of stress that would not be experienced the same way on a phone call (Fildes et al., 2022).

Moreover, a literature review focusing on vicarious traumatization or secondary traumatic stress (STS) in the workplace revealed that the research primarily centers around professionals employed in various fields such as trauma, victim assistance, mental health, law enforcement, fire response, emergency medical services, and other professions who are exposed to traumatic events (Molnar et al., 2017). Vicarious traumatization was defined in this literature review as the emotional and psychological distress experienced by individuals who are directly exposed to the traumatic experiences of others, often through hearing their stories or witnessing their suffering (Molnar et al., 2017). STS, also defined earlier, is the psychological and emotional distress experienced by individuals exposed to the trauma experiences by others, resulting from being empathetic or caregiving in response to the trauma (Figley, 1995, as cited in Maurya & DeDiego, 2023). Their goal in the literature review was to create clear strategies that avoid vicarious trauma or STS while working. They found insufficient conceptual clarity, validated instruments, or appropriate interventions in the literature to create strategies or a plan that can be employed reliably (Molnar et al., 2017). These results further clarify a large research gap as the authors could not make direct inferences to support crisis professionals.

As the literature reviewed provides valuable insights into various factors influencing well-being and productivity in telephonic crisis workers, we have identified concerns related to burnout/moral injury, job satisfaction, organization-related factors, vicarious or secondary

trauma, and self-care and well-being interventions. The specific organizational factors mentioned in the above text are not explicitly stated and vary in the literature. Although, based on the information provided, some organizational factors influencing the well-being and productivity of crisis workers could include support and resources provided by the organization, the nature of job demands and workload, the availability of training including diversity and racial discrimination training and other opportunities, the culture of the organization, and overall support and recognition received from the organization. While these factors are known to have potential impacts on well-being, their direct influence on productivity remains less explored in the existing literature. However, it is theorized that an individual's well-being significantly affects productivity.

To further strengthen these connections, it would be beneficial for further research studies that investigate the relationship between well-being and productivity in crisis hotline workers. There are several measures available that could be used to do so. Crisis hotline workers are among professionals working with trauma and in a high-stress environment, therefore the Vicarious Trauma Scale (VTS) may be an assessment to use that could measure the negative psychological effects experiences by individuals who work with trauma survivors, capturing symptoms such as intrusive thoughts and changes in worldview (Pealman & Saakvitne, 1995). The Professional Quality of Life Scale (ProQOL) may be another option that assesses both positive and negative aspects of trauma work, including compassion satisfaction, burnout, and STS (Stamm, 2005). The Trauma Exposure Impact Scale (TEIS) evaluates the impact of traumatic exposure on professionals, examining emotional and cognitive responses (Bridge, 2004), Additionally, to assess resilience in crisis workers, the Resilience Scale for Adults (RSA) or the Connor-Davidson Resilience Scale (CD-RISC) focus on personal competence, social

support, adaptability, and positive acceptance of change (Friborg et al., 2003; Connor & Davidson, 2003). Finally, the Brief Resilience Scale (BRS) measures an individual's ability to bounce back from stress and adversity (Smith et al., 2008). These measures provide valuable insights into the well-being and coping mechanisms of professionals in demanding roles.

In addition to the need for a standardized assessment measuring telephonic crisis workers' well-being, another valuable tool with similar intentions is The Telephone Crisis Support Skills Scale (TCSSS). The TCSSS measures the ability to use learned skills taught in training. The Telephone Crisis Support Skills Scale (TCSSS) has been developed to detect skills used depending on a caller's problem. Skills include engaging the caller's trust, being vigilant about signs of distress, assessing risk, and mobilizing safety steps (Kitchingman et al., 2015). The TCSSS was tested on 210 crisis workers who completed an online survey. TCSSS proved internally consistent, portraying a high sensitivity rate to detect skills used depending on the caller's problem (Kitchingman et al., 2015). The TCSSS holds the potential to provide reliability across different telephonic crisis worker organizations in the future. This tool can help determine the ideal timing during a crisis worker's tenure to simultaneously inquire about their well-being with one of the other assessments discussed above, thus establishing a comprehensive understanding of the relationship between skill utilization, well-being, and productivity.

Detecting skill utilization through the TCSSS can also be a step towards understanding how practical training promotes well-being amongst crisis staff. A naturalistic study that examined the difference in knowledge and confidence within a sample of participants (N=16,693) that received suicide gatekeeper training versus those who did not participate in training found that participants that had been present for a suicide gatekeeper training were more knowledgeable and confident in working with a suicidal individual. Participants were made up of

professionals in the field of behavioral health from seven states (Silva et al., 2016). Although, the differences in service delivery needs could make it impossible to compare the naturalistic study across different contexts, organizations, or populations. Intervention in crisis settings is focused on "[reducing] callers' current crises and/or suicidal states" (Gould et al., 2013), while mental health treatment can include a broad range of services such as psychiatry or therapy and case management (Sullivan et al., 2015). Long-term services and short-term crisis services each come with their challenges and triumphs, but it is still notable that suicide gatekeeper training produces a positive impact on knowledge and confidence levels. Although, it does not explicitly address how increased confidence may correlate with improved well-being, as empirical evidence demonstrating this direct correlation is scarce. However, it may be reasonable to hypothesize that heightened confidence resulting from training could contribute to enhanced well-being among crisis workers, which may empower crisis workers to effectively manage challenging situations, make informed decisions, engage in adequate documentation, and feel more competent in their role. These factors have the potential to positively influence their overall well-being.

Considering the complexity of the work environment, it becomes challenging to pinpoint the exact manifestations and appearances of burnout and moral injury. The interplay of various factors within the work context makes it difficult to identify the specific outcomes and implications of these phenomena. However, it is crucial to recognize that the feeling of self-doubt, which can arise from insufficient training or supervision, may also be grounded in the complexities of the suicide risk assessment process. Suicide risk assessment is inherently tricky, and there is no well-established method for predicting suicide. One study (Berman & Silverman, 2011) found that "only between 30% and 40% [… of clinical suicidology experts] rated patients correctly at imminent risk" (Berman 2011, as cited in Berman & Silverman, 2014) after experts

were presented with two client scenarios in which the client had died by suicide. Crisis workers, who likely have less training than suicidology experts, yet work with a high volume of high-risk clients and have relatively limited decision-making power, may tend to feel more strain, which increases the likelihood of burnout, moral injury, secondary trauma, and turnover from lack of overall job satisfaction (Andrews & Wan, 2009).

Workers who are living this experience of decreased well-being and productivity may begin to feel a sense of depersonalization or alienation from others at the workplace. This feeling is defined as feeling isolated or misunderstood by colleagues and supervisors (Menon et al., 2015). The lack of connection to the workplace, strengthened by a lack of support from one's organization, may lead workers to feel underappreciated. As this sense of isolation and lack of support increase, the likelihood of staff turnover increases (Beidas et al., 2016).

A key component of burnout is compassion fatigue as noted previously, which can negatively impact well-being and the ability to maintain productivity levels needed to perform a telephonic crisis worker role. Compassion fatigue is emotional and physical exhaustion and reduced ability to empathize and provide emotion-centric, compassionate care (Figley, 1995, as cited in Maurya & DeDiego, 2023). The diminished capacity to emotionally connect with the complex experiences of others leads to increased apathy (Menon et al., 2015). The complicated decision-making processes, cumbersome documentation policies, and other specified daily tasks that are inherent to the crisis intervention service delivery model and mental health care settings create conditions that are proven to increase the occurrence of stress (Berman & Silverman, 2014), emotional exhaustion (Yanchus et al., 2017), and eventually burnout (Menon et al., 2015). To develop a greater understanding of the experience of crisis line staff members, and more specifically, how they perceive burnout, job satisfaction, organization-related factors, secondary

trauma, self-care, and well-being interventions that work, we seek to answer the following research questions: 1) What impacts well-being? and 2) What impacts productivity?

The evidence in the literature supports the importance of understanding the well-being and productivity of crisis workers, and there is a significant body of literature exploring the well-being of crisis workers, but fewer studies specifically focus on crisis hotline workers. Crisis hotline workers face many overlapping stressors and challenges in their work environments like crisis workers overall, including burnout, job satisfaction, organization-related factors, trauma exposure, secondary trauma, and the need for self-care and well-being interventions. Although, little is known about how these stressors affect crisis hotline workers specifically. One unique stressor is continuous exposure to suicide, and working with individuals at risk for suicide can be emotionally exhausting and challenging, leading to protentional secondary trauma.

Moral injury, which refers to the psychological and emotional impact of individuals involved in experiences that conflict with their values, moral beliefs, or professional ethics, is another important factor to consider (Griffin et al., 2019). Lack of resources and challenges in the work environment, such as complex decision-making processes, can contribute to decreased job satisfaction, increased emotional exhaustion, and potential moral injury (Griffin et al., 2019). Training programs, such as suicide gatekeeper training, can enhance crisis workers' knowledge and confidence, potentially improving their well-being and effectiveness. Although, there is a need for standardized assessments to measure telephonic crisis workers' well-being and track their productivity to bolster training program outcomes.

Straightforward strategies to avoid vicarious trauma or secondary traumatic stress in crisis professionals are also needed, as a research gap is highlighted (Molnar et al., 2017). Consulting other literature, strategies to avoid trauma or secondary traumatic stress involve a

combination of individual and organizational approaches that can inform further studies. Clear strategies include practicing self-care activities, such as exercise and mindfulness, and maintaining work-life balance while being self-aware of signs of distress and seeking support when needed (Trippany et al., 2004). Regular supervision and debriefing sessions with experienced professionals or peers can provide an opportunity to process challenging cases, share experiences, and receive guidance and emotional support (Pearlman & Saakvitne, 1995). Setting clear boundaries between personal and professional life, managing workloads effectively, and practicing time management help prevent excessive exposure to traumatic material (Huggard & Huggard, 2001). Receiving comprehensive education and training on trauma, diversity, self-care strategies, and resilience-building techniques enhances coping skills and understanding of vicarious trauma (Figley, 2002). Lastly, cultivating a supportive organizational culture that acknowledges the potential impact of vicarious trauma, provides resources for self-care, and encourages open communication and peer support contributes to the well-being of crisis professionals (Trippany et al., 2004).

Because the literature also does not clarify the specific challenges and triumphs faced by crisis workers in long-term and short-term crisis services. The availability of validated instruments and appropriate interventions to address vicarious traumatization or secondary traumatic stress would aid in the association between the utilization of crisis support skills and well-being among crisis workers (Molnar et al., 2017). Overall, further research is needed to fill these knowledge gaps and provide a more comprehensive understanding of the well-being and productivity of crisis workers (Molnar et al., 2017).

The literature calls for more comprehensive research to understand the specific factors or themes impacting the well-being and productivity of crisis workers. This study below attempts to

address the gaps in the current literature by investigating the impacts of well-being (Aim 1) and productivity of crisis hotline workers (Aim 2). More specifically, Aim 1 focuses on understanding the factors that influence the well-being of crisis hotline workers. By conducting research in this area, we aim to identify the variables that contribute to their well-being, such as workload, work environment, social support, coping strategies, and job satisfaction. This information will help fill the gap in knowledge regarding the well-being of crisis hotline workers.

Regarding Aim 2, we examined the factors that affect productivity among crisis hotline workers. By investigating variables such as workload, stress levels, organizational support, training, and personal factors, we hoped to gain insights into the factors that enhance or hinder productivity in this specific workforce. Understanding these influences may contribute to the existing knowledge by identifying strategies and interventions to improve productivity among crisis hotline workers.

By addressing these two aims, this study contributes to filling the gaps in understanding well-being and productivity among crisis hotline workers. The findings can inform the development of evidence-based interventions, policies, and practices to promote the well-being and productivity of crisis hotline workers, ultimately benefiting both the workers and the individuals they serve.

Methodology

Study Design

This preliminary qualitative study was an open-ended exploratory survey composed of seven questions to gain a better understanding of how crisis hotline workers described their own

experiences and how their productivity and overall well-being are affected. The survey questions are listed in Table 1 as follows:

Table 1. Survey Questions

1.	What brought you to work as a crisis line and support staff member?
2.	Please describe any specific qualities about yourself or your colleagues that you feel increase a person's ability to engage in crisis and support work for an on-going period of time:
3.	Given your experience and observations of colleagues, describe the characteristics or behaviors of crisis and support staff that may increase challenges in performing crisis work:
4.	Please identify anything that helps reduce stress during a typical shift at the contact center:
5.	Please describe your experiences with stress while working as a crisis and support line staff member:
6.	Please describe your experiences of managing work-related stress outside of the crisis center during your time as a crisis and support staff member:
7.	Thinking about your experience as a crisis line and support staff member, please identify any guiding principles or personal perspectives that have contributed to your ability to engage in crisis work for an on-going period of time:

Setting

The recruitment and research for this survey occurred online via email sent to participants that were identified through the Rocky Mountain Crisis Partners (RMCP) system, the organization that houses the Denver statewide hotline. The survey was launched in March 2019 and remained open for one month, closing in April 2019.

Sample Characteristics

Participant characteristics, as stated, include limited position-based only demographics. All participants answered questions about job title, employment status, whether they were a former or current employee, any licensures they hold, and how they came to apply to work at RMCP.

These characteristics may be informative in the future as it accounts for the triage service delivery model formerly used by RMCP at the time of the study. The triage model comprises

three positions, triage specialist, crisis clinician, and peer support specialist. Each of these positions plays a different role in the triage model.

Triage specialists are the first to answer incoming calls, and their initial suicide risk assessment dictates the necessity to transfer callers to crisis clinicians. Triage specialists, typically, are bachelor-level counselors that were trained in working with low-risk to moderate-risk callers.

Crisis clinicians work primarily with callers expressing suicidal ideation or planning (sometimes callers present as a suicide in progress). While they sometimes assist triage specialists during high-volume caller periods, crisis clinicians generally take fewer calls than triage specialists (15-20 per shift) yet take much longer with each caller (some calls take as much as 90 minutes or more). Crisis Clinicians were required to hold at least a master's degree and were trained more extensively in working with high-risk callers.

Peer support specialists play a unique, separate role in talking to callers who prefer to speak with someone who has also lived experience with mental health concerns and/or substance use concerns. Peer support staff generally spend 15-30 minutes with each of their callers. Peer support staff were not required to have a behavioral health related degree, although it was strongly recommended upon application.

Participants and Procedures

The recruitment process for the open-ended survey was open to all current Rocky Mountain Crisis Partner (RMCP) staff having experience operating crisis lines. Student investigators worked with RMCP investigators to compile a list of former employees having left the company within the last year in good standing with at least three months of on-the-job experience. Former employees who meet these requirements were also invited to participate via

email during the four-week data collection period, using the email address on record. The primary recruitment mechanism was the initial email which included a link to an online survey. That email was delivered through the RMCP system, and participants were given a synopsis of the study in the online survey, and informed consent was obtained in the introductory portion of the online survey. Investigators sent approximately 100 emails with a desired 50% response rate. Seventy-four consented, and two declined to participate after reading the informed consent. A total of 50 surveys were completed, and responses were gathered (N = 50). Due to the nature of open-ended questioning, it was impossible to know the approximate time participants needed to complete the survey. It is approximated that the survey took between 20 and 50 minutes to complete. There was no incentive to complete this survey. However, participants were reminded before the survey began that the purpose of the study was to better inform what affects crisis worker well-being and productivity. In addition to explaining the purpose of the study, before the survey began, participants were provided with a prompt to complete informed consent procedures covering the benefits and risks of participating. Responses to the survey were 50%.

The study period was four weeks, and the second reminder email was sent two weeks after the first email to prompt others to participate. The research team opted to collect limited demographic information. We did not want participants to feel concerned that we could readily identify them, so limited demographic information, solely position based, with no identifiable data, was chosen to encourage full transparency from participants. Instead, the online survey gathered descriptive information, including the current/former position, duration of employment, level of education, and any professional credentials from each participant. This study was approved by the University of Denver's institutional review board and complied with the American Psychological Association's ethical standards for human subjects research.

Qualitative Analysis

To ensure alignment with the aims of the study, the coding process followed a phenomenological inquiry approach to maintain rigor and minimize bias. It was designed to capture and analysis participants' responses in relation to the research objectives. Researchers employed a hybrid inductive-deductive thematic analysis (Fereday & Muir-Cochrane, 2006), involving multiple steps such as familiarization with the data, generating initial codes, searching for themes, reviewing, and defining themes, and finally producing a comprehensive report (Braun & Clarke, 2006). Initially, two independent reviewers conducted an inductive analysis, where codes and themes were generated directly from the participants' responses using audit trails, coding forms, and carefully coding definitions. This process allowed for an exploration of participants' experiences and perspectives in relation to their well-being and productivity. This was followed by a deductive analysis, where the inductive themes were organized into categories based on Reschovsky, Rich, and Lake's (2015) conceptual model of factors influencing evidence use in clinical decision making. This deductive analysis helped to examine how the identified themes aligned with broader theoretical frameworks and allowed for a comprehensive understanding of the factors impacting crisis hotline workers' well-being and productivity. The integration of both inductive and deductive approaches facilitated a nuanced analysis that directly addressed research aims.

Research Team

The research team and reviewers were comprised of a research methods and statistics doctoral student with training in qualitative methods and suicide prevention (Mark Leveling, MSW) and a clinical psychology doctoral student with extensive training in suicide prevention within the crisis system (Dana Rae Vessio, MA). Throughout the study, the team consulted with

Mr. Leveling's faculty mentor, Denis Dumas, PhD to ensure accuracy regarding qualitative design and analysis. Saturation was achieved when no new themes emerged, and the absence of disagreement among the reviewers eliminated the need for a third reviewer.

Results

Participant Results

Job titles (N=50) were analyzed to understand the organization's distribution of roles. Within the organization, 34 participants were current employees, and 16 were former employees. The results revealed that the most common job title was "Crisis Clinician," with 20 employees holding this position. "Triage Specialist" and "Peer Support Staff" were identified among participants, with ten and six individuals, respectively, holding these positions. Most participants (34 out of 50) hold professional licenses or certifications related to behavioral health. Although, a variety of credentials were reported. The most frequently mentioned licenses were Licensed Professional Counselor (LPC) and Licensed Clinical Social Worker (LCSW). Other certifications noted included Eye Movement Desensitization and Reprocessing (EMDR), Mental Health First Aid Certification, National Certified Addiction Counselor I (NCAC I), Certified Addiction Counselor (CAC) II, and Certified Peer and Family Specialist. Some participants (N=3) also mentioned pursuing and completing master's degrees without specific licensure. Most participants (39) were employed full-time, working 30 or more hours per week. In contrast, 11 participants held part-time positions, working less than 30 hours per week. Many participants (28 individuals) reported working at the organization for two or more years, while a significant proportion (17) had been employed for six months to one year.

These findings provide insights into the diverse range of roles and education within the organization, emphasizing the significance of Crisis Clinicians, Triage Specialists, and Peer

Support staff in delivering crisis support services. The findings also highlight a predominance of full-time positions and indicate a mix of long-term and relatively shorter-term tenures among the workforce. However, the generalizability of these findings to other crisis support organizations requires further research with larger sample sizes and a broader scope.

Qualitative Results

Themes and descriptive quotes are described for each Aim below. Please see Table 1 above for further clarity related to questions driving the qualitative results.

Aim 1: What Impacts Well-Being

Most current and former employees indicated three major themes when considering how their well-being had been impacted. First, researchers identified **Management Support** as playing a major role in maintaining their well-being**.** Management Support was defined as support from leadership ranging from supervision to encouragement of taking breaks, being flexible with time off, or the absence of pressure to perform under time constraints. Specifically, one participant stated that "supervisors encouraging the team to take breaks, especially during high call volume," was a key indicator of stress reduction during a shift. There were also responses indicating that transparency throughout the organization created comfort, leading to well-being. Conversely, lack of transparency and support impacted employees negatively. One participant commented on their experience when management was unable to provide a positive experience and supportive experience stating “I did not feel supported by management, especially with traumatic calls. They did touch base with me, but no time off was really offered. It would be stressful, to be trained in addictions and trauma, to hold clear boundaries, and then get mixed messages from leadership about how to handle familiar voices that call over and over.”

A second theme identified by the researchers was **Communication.** Participants – particularly those that reported positive perceptions of their experience at RMCP – described communication as a component that elongated their tenure. Communication was described in various ways and identified as beneficial throughout a given shift. Participants appreciated the ability to chat with co-workers during downtime in between calls which increases rapport, during calls when needing support, and during critical debriefs after a call. All identified responses encoded as communication continued to encapsulate the idea of comradery. Specifically, participants reported that "speaking with co-workers about tough calls and getting support" was beneficial. They also indicated comradery and communication through comfort with each other, explaining that "dark humor is particularly helpful." One participant reported “My coworkers were very supportive and communicative, and I feel that those relationships were crucial in being able to sustain. Humor and constant communication with coworkers was very helpful during shifts.”

Self-Regulation refers to monitoring, managing, and adjusting one's thoughts, emotions, and behaviors to achieve desired goals or outcomes. One participant described self-regulation as the ability to “shake things off and move on.” Self-regulation is the third theme that impacts well-being based on the data. The researchers acknowledged that crisis workers who did not have their well-being negatively affected discussed various coping mechanisms after high-risk or identified “tough” calls. These coping mechanisms included employing good self-care skills, utilizing the “ability to compartmentalize,” and engaging in “self-care and maintaining a personal perspective that thoughts and feelings are temporary and can change.” One participant also highlighted a decrease in well-being when other co-workers were unable to regulate explaining “colleagues seemed to have trouble regulating their own emotions after a lot of calls,

which can be draining.” This portrays that the regulation of co-workers around you also affected self-regulation as it relates to well-being.

Aim 2: What Impacts Productivity of Crisis Hotline Workers

Reviewing Aim 1, researchers acknowledged all three themes (**Management Support, Communication, and Self-Regulation**) that impacted well-being also impacted productivity. Although, two additional themes impacted productivity; **Skill Set** and **Empathy**. Per coding definition, skill set is the collection of skills and abilities gained through training and previous experience that can be applied to crisis work. Best described, one participant highlighted their excitement in the training process by stating “I enjoy the pace of crisis work, and the skills that I have learned through this job are skills that you do not typically get much experience in as a therapist - in particular, I would have never gained this level of comfort and competence with risk assessments and interventions for suicidal/self-harming clients without this job.” Another participant further endorsed previous experience aiding in productivity by stating, "I previously was a caseworker. I loved doing crisis intervention in that position, so I moved to crisis-only work."

The ability to understand and share the feelings of another, express passion for crisis work, and hold an open-minded approach to suicide and other crisis situations defined the theme **of Empathy.** A quote that summarizes the theme of empathy would be, “I think compassion, empathy, and a lot of patience is required to do this job and feel like all my colleagues have those qualities. I feel that each employee here is resilient or has the ability to bounce back and adapt to some extremely emotional situations. Having a good knowledge of basic counseling is good but i think the most important part of that is just having unconditional positive regard and being strengths-based.” Another participant encapsulated the theme of empathy by reporting "my

supervisor always reminded me how beautiful it is to sit with someone in crisis and be with someone who feels comfortable enough to be vulnerable with you. I think this is very important and necessary work." Specifically, many participants expressed an outright genuine calling for crisis management work and suicide prevention as a reason for applying at the crisis center. It was clear that many individuals who chose to work at the hotline portrayed a "passion for helping people [and] a desire to alleviate suffering," demonstrating an innate ability to empathize with another.

Discussion

Examining the responses from our participants, one begins to see that being an effective crisis worker requires a plethora of skills while maintaining well-being. Aim 1 explores the factors impacting the well-being of crisis workers. Three major themes emerged from the data: management support, communication, and self-regulation. These themes align with previous research highlighting the significance of organization support and self-care practices for crisis worker well-being (Pfefferbaum et al., 2019). Our findings also resonate with the trauma-informed literature, which emphasizes the importance of creating supportive environments that address the needs of individuals who have experienced trauma (Harris & Fallot, 2001). While not directly focused on telephone crisis workers, the principles of trauma-informed care are relevant to the well-being of crisis workers who frequently interact with individuals in distress.

This study ultimately extends the existing trauma-informed literature by explicitly examining the well-being of crisis workers in the context of telephone crisis intervention. The findings highlight the relevance of trauma-informed principles in supporting crisis workers' well-being. For example, the theme of management support underscores the importance of supervisors

creating a supportive and empathetic work environment, which aligns with trauma-informed practices prioritizing safety, trust, and collaboration (Harris & Fallot, 2001).

Additionally, the theme of self-regulation resonates with trauma-informed approaches that recognize the impact of vicarious trauma on service providers (Cohen & Collens, 2013). Crisis workers, like other professionals working with trauma and suicide prevention, need strategies to manage their emotional responses and prevent burnout. This study underscores the need for crisis hotline workers to engage in self-care practices and develop coping mechanisms to process the emotional toll of their work, which aligns with trauma-informed principles of self-care and professional resilience.

Aim 2 examined the factors influencing the productivity of crisis workers. The themes identified in Aim 1 (management support, communication, and self-regulation) also affect productivity. Organizations that adopt trauma-informed approaches recognize the link between worker well-being and productivity (Harris & Fallot, 2001). By providing adequate management support, fostering transparent communication, and promoting self-regulation, organizations can create an environment that supports both well-being and productivity of crisis workers.

Two new themes emerged in Aim 2 as well: skill set and empathy. Both themes have relevance within the trauma-informed literature. Participants highlighted the importance of having the necessary skills and experience for crisis work and emphasized the significance of empathy in effectively assisting individuals in crisis. This aligns with a trauma-informed approach prioritizing continued professional development and specialized training for working with trauma survivors (Cohen & Collens, 2013). Also, the significance of empathy in effectively assisting individuals in crisis aligns with trauma-informed care principles that emphasize

empathy, compassion, and understanding as key components of the therapeutic relationship (Harris & Fallot, 2001).

The study provides insights into the factors that impact the well-being and productivity of crisis workers in a crisis hotline, and the connections between the findings and the trauma-informed literature are highlighted. By recognizing the relevance of trauma-informed principles and practices, our findings contribute to a more comprehensive understanding of how crisis workers can be better supported, highlighting how vital management support, communication, self-regulation, skill set, and empathy are in their work.

Limitations

The investigators are aware of several limitations to the study. One limitation is the lack of demographic information collected from the participants. While it was a deliberate choice for anonymity and limited position-based-only demographics, it could have provided some valuable insights into the characteristics of crisis hotline workers and how they might differ in their experiences and well-being based on gender, age, ethnicity, and race. Additionally, the study's small sample size (N=50) limits the generalizability of the findings. The study's focus on crisis hotline workers from a single organization also limits the generalizability of the findings to crisis hotline workers across the United States and abroad. Also, the study's reliance on self-report data may raise questions about the accuracy of participants' responses and potential biases.

The investigators also acknowledge the potential significance of the organization's identity from which the crisis hotline workers were recruited. With most organizations, the organization's specific culture and operating system may have influenced the experiences and well-being of the participants. It is essential to recognize that different organizations may have distinct cultures and systems that can impact crisis workers differently. While this study focused

on crisis hotline workers from a single organization, caution should be exercised when generalizing the findings beyond this context.

The investigators further acknowledge that results from the survey may reflect a level of bias, meaning the participants that may be interested in participating could be overly enthusiastic or disgruntled, continuing to provide a lack of representation to the entire crisis worker population. It should be noted that the participants included in the survey were those who left the crisis line in good standing. However, despite their positive exit status, it is possible that some of these individuals may have experienced high levels of burnout during their tenure at RMCP. They are also aware of the time-consuming nature of reviewing the data, the inability to replicate the qualitative phases of the study nationally on its own, and the need for a quantitative phase in the future. Finally, because this survey was conducted before the COVID-19 pandemic, there will be some reflections on how the data may change due to the pandemic stressors while working in crisis.

Future Research

While the present study provides valuable insights into the well-being and productivity of crisis workers in a crisis hotline, future research beyond what is found in our literature review and through this study is needed to build upon these findings and contribute to a deeper understanding of the topic. Future research should further explore the intersection between trauma-informed care and crisis intervention to develop tailored strategies that promote the well-being and productivity of crisis workers in telephone crisis settings.

Future research in the field of crisis worker well-being and productivity should also consider the impact of the COVID-19 pandemic. Investigators collected data pre-COVID, and

while this provided a baseline understanding, exploring how the pandemic has affected crisis workers' experiences and well-being is essential.

Additionally, longitudinal studies tracking changes in well-being and productivity during and after the pandemic can provide valuable insights into the unique challenges and adaptations made by crisis workers. Longitudinal studies allow for examining changes in the well-being and productivity of crisis workers over an extended period. Researchers can identify potential fluctuations, patterns, and long-term impacts on crisis workers by assessing these factors multiple times. To further enhance understanding, future research should consider incorporating demographic variables such as age, gender, race, and experience level. Examining how these factors interact with the identified themes and current diversity considerations post-COVID may provide a more nuanced comprehension of the challenges and strengths experienced by different subgroups of crisis workers.

Investigating the effectiveness of interventions tailored to the specific needs arising from the pandemic, such as addressing increased workloads, remote work, and the emotional toll of the crisis would also be important. Moreover, promoting well-being and enhancing productivity among crisis workers is imperative. Researchers may want to explore the impact of interventions such as stress management programs, resilience-building workshops, diversity seminars, or peer support initiatives on crisis workers' overall well-being and job performance. It would be beneficial to also examine organizational factors' role in shaping crisis workers' well-being and productivity. Organizational factors could involve exploring the impact of organizational culture and demographic variables, leadership styles, workload distribution, and resource availability on crisis workers' experiences. Understanding the organizational factors, including organizational culture, demographic variables, leadership styles, workload distribution, and resource

availability, and not just the ones discussed in our study (management support, communication, and self-regulation) that contribute to a supportive and conducive work environment can inform interventions and policies to enhance crisis workers' outcomes.

Comparing the experiences of crisis workers in different types of crisis hotlines or mental health settings could provide valuable insights into the unique challenges and strengths associated with specific contexts. Comparisons between different triage models or crisis intervention approaches could shed additional light on the impact of service delivery models on crisis worker well-being and productivity. A mixed-methods study assessing the effectiveness and impact of peer support interventions on the well-being and productivity of crisis hotline workers, with a focus on understanding the mechanisms through which peer support influences their experiences could also contribute to the development of evidence-based interventions that enhance support systems for crisis workers and promote overall well-being and productivity. Also, with the increasing use of technology in crisis interventions, future research could explore the impact of digital platforms, such as text-based or chat-based crisis hotlines, on the well-being and productivity of crisis workers. Understanding how technological innovations affect their experiences and identifying potential advantages or challenges can guide the development and implementation of technology-driven interventions.

Future research should focus on conducting longitudinal studies, considering demographic factors, exploring intervention effectiveness, investigating organizational factors, conducting comparative studies, and examining the impact of technological innovations. Expanding research in these areas will contribute to a more comprehensive understanding of the well-being and productivity of crisis workers and inform evidence-based strategies to support their crucial work in crisis intervention settings.

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