

**Secondary Traumatic Stress and Public Child Welfare Workers' Intention to Remain Employed in Child Welfare: The Interaction Effect of Job Functions**

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This is the author's manuscript of the work published in final form as:

Kim, J., Pierce, B., & Park, T. K. (2023). Secondary Traumatic Stress and Public Child Welfare Workers' Intention to Remain Employed in Child Welfare: The Interaction Effect of Job Functions. *Human Service Organizations: Management, Leadership & Governance*, 1–14.  
<https://doi.org/10.1080/23303131.2023.2263518>

### **Abstract**

High exposure to Secondary Traumatic Stress (STS) is a significant risk factor for public child welfare workers' intention to remain employed in child welfare. This study examined whether the negative effect of STS differs by workers' job functions by analyzing survey data collected from 1,053 public child welfare workers. STS was negatively associated with workers' intention to remain. Furthermore, The negative impact of STS was greater among ongoing case managers than among assessment case managers. We conclude that child welfare organizations should develop trauma-informed policies and organizational support targeted to different patterns of STS by job functions.

*Keywords:* secondary traumatic stress, job retention, job functions, public child welfare system

### **Practice Points**

- Child welfare organizations should tailor organizational approaches to prevent STS and mitigate its negative consequences based on the different job functions of case managers, taking into consideration their unique challenges and needs.
- Child welfare organizations should offer enhanced support to ongoing case managers due to their higher susceptibility to the adverse effects of STS.
- Child welfare organizations should create physically and emotionally safe working environments that allow case managers to address their STS and improve their well-being.
- Child welfare organizations should provide training to supervisors and other leaders to recognize the signs of STS and support their workers in managing their stress.

## Introduction

Retention in child welfare has been established to contribute to better outcomes for children and families involved in the child welfare system (Barth, 1999; Flower et al., 2005). Therefore, many studies have attempted to identify significant factors that affect workers' retention or their intention to remain employed in the child welfare system as a good proxy to measure actual retention (de Guzman et al., 2020; DePanfilis & Zlotnik, 2008). The factors affecting these outcomes are closely linked to a wide range of organizational and personal factors (Kim & Kao, 2014; Middleton & Potter, 2015; Mor Barak et al., 2001; Wilke et al., 2018).

One less well-studied area is the impact of Secondary Traumatic Stress (STS) experienced by child welfare workers. Work-related stress and strain have been documented to affect child welfare workers' well-being (Lizano et al., 2014). STS refers to psychological symptoms developing indirectly from working with or observing the trauma of others (Bride et al., 2004). STS is akin to post-traumatic stress and produces similar symptoms. Child welfare workers have an increased risk of experiencing STS given that they work with, hear, and see the traumatized children and families daily (Sprain et al., 2011). The National Child Traumatic Stress Network (NCTSN, 2016) estimates that 10 million children in the United States are traumatized due to adverse childhood experiences, and the professionals who care for them are at higher risk for STS. In the human service sector, workers themselves are often viewed as raw materials that produce the quality of services and enhance clients' well-being (Hasenfeld, 2010). Thus, it is important to understand the effects of STS on workers' outcomes as well as its long-term effect on their clients' outcomes.

Furthermore, the impact of STS on the intention to remain employed among child welfare workers may differ depending on job functions. For example, assessment case managers are

responsible for assessing the allegations of child abuse and neglect and have short-term but intensive work with children and families. In contrast, ongoing case managers are responsible for developing and managing case plans to achieve child welfare outcomes and have longer-term relationships with children and families. Because of these different job functions, child welfare workers may face distinct levels of frequency, intensity, and/or duration of contact with traumatized children and families. Studies of these distinctions have been lacking in the literature. The model of occupational stress originally developed by Cooper and Marshall (1976) argues that the impact of occupational stress on workers' outcomes may be moderated by individual or organizational characteristics, such as the duration of stressors experienced.

This study begins to fill the gap in the literature by assessing whether the effect of STS on the intention to remain employed in child welfare differs by job functions among child welfare workers. We expect that this study can advance existing knowledge by proposing trauma-informed policies and organizational supports targeted to different patterns of STS by job functions in enhancing workers' intention to remain employed in child welfare, ultimately leading to increased retention and reduced turnover.

## **Literature Review**

### **Child Welfare System and Workforce Development**

The child welfare system provides an array of services with three primary goals: ensuring child well-being, promoting safety, and establishing permanency. Child welfare services encompass a broad spectrum, including but not limited to child protective services, family support, foster care, adoption, case management, permanency planning, advocacy, and preventive measures. Each state operates its own unique child welfare system, featuring distinct administrative structures and specific procedures for delivering this diverse range of services. In

some states, partnerships are formed with private child welfare agencies or community-based organizations, while in others, child welfare agencies are under the jurisdiction of the state or county. Depending on the type of state system, the roles and responsibilities of child welfare workers may vary. Due to the extensive scope of child welfare services, child welfare systems are complex, giving rise to various challenges such as service quality and workforce stability. These challenges appear to be shared by both privately and publicly operated agencies. To address concerns related to service quality, the child welfare system can take measures for workforce development, including comprehensive training programs for new employees.

The child welfare system where the data were collected is a state-run organization operationalized across 18 regions that cover multiple counties, ranging from one to nine counties. Each region includes several local offices to provide child welfare services to children and families living in a specific geographical location. Although the state organization manages the entire child welfare system, regional offices are allowed to recruit and hire their child welfare workers by considering the total number of children involved in their region. This state hired candidates with undergraduate degrees in many disciplines and provided year-long training for all new employees regardless of their educational degrees. In most cases, the training involved a combination of classroom and agency experience. Title IV-E scholars were exempt from all but the first few weeks of training as their final year of the Bachelor of Social Work program (BSW) included a year-long field placement at the agency.

### **The Effect of Secondary Traumatic Stress (STS)**

STS is recognized as an occupational hazard in child welfare that deteriorates the workers' well-being (Lizano et al., 2021). Figley (1995) defined STS as “the natural consequent behaviors and emotions resulting from knowing about a traumatizing event experienced by a

significant other – the stress resulting from helping or wanting to help a traumatized or suffering person” (p. 23). Individuals indirectly exposed to traumatic events experienced by others would exhibit symptoms identical to Post-Traumatic Stress Disorder (PTSD), such as intrusive images, avoidant responses, and increased arousal (Bride et al., 2004; Figley, 1995). Other studies used different terms in describing similar phenomena such as vicarious traumatization, compassion fatigue, and secondary PTSD, sometimes interchangeably and sometimes distinctively.

Compassion fatigue is a broader concept that encompasses STS, stress, and burnout caused by performing one’s job (Figley, 1995). Some scholars intend to differentiate vicarious traumatization and STS by focusing on the effects of vicarious traumatization on the professional’s cognitive ability to view the world about oneself and others (Middleton & Potter, 2015; Pearlman & Saakvitne, 1995). Given that those terms still share similar symptoms to STS, however, this study will review the literature that used all these terms.

Child welfare workers, particularly those who have regular, close contact with traumatized children and families, have higher risks of experiencing STS. Extensive literature has examined the effects of STS on the child welfare workforce, manifesting in issues such as retention, turnover, burnout, and workers’ physical and psychological well-being (King, 2022; Leake et al., 2017; Middleton & Potter, 2015; Rienks, 2020; Wilke et al., 2018). For example, STS may lead to negative coping mechanisms such as addictive disorders (Bourke & Craun, 2014), psychological distress, such as depression and anxiety (King, 2022), and professional and personal relationship issues (Yi et al., 2018). Also, it may be negatively associated with job performance and relationships with clients in human service organizations (Bock et al., 2020).

Similarly, STS has recently received attention from the study of retention and turnover in the child welfare workforce (Kim & Kao, 2014). For example, the Texas State Auditor’s Office

(2012) reported that poor working conditions such as exposure to STS were one of the most cited reasons for leaving child welfare organizations in that state. Middleton and Potter (2015) also indicate that child welfare workers with high vicarious traumatization were more likely to leave their organizations.

### **The Main Effects of Job Functions**

Among human service providers, child welfare workers demonstrate the highest turnover rates due to the uniqueness of their job functions (Dickinson & Perry, 2002). While estimated turnover rates in child welfare range between 20% to 60% with some rates exceeding 94%, the ranges of staff turnover rates in other human services settings such as mental health were estimated from 25% to 50% (Schweitzer et al., 2013). This draws attention to the potential differences among various human service positions relative to the criticality of the child welfare job to child safety and well-being. A study on turnover intention among social workers in hospital settings examined the effects of primary job functions on their intention to leave, showing that social workers whose primary role was to plan discharges from the hospital were more likely than those engaged in psychosocial support to leave (Pugh, 2016). However, research on child welfare workforce turnover and retention does not account for specific job functions or use them as a covariate in studies of job retention.

In the state where the data were collected, frontline child welfare workers in most counties are mainly categorized into two job positions: assessment case managers and ongoing case managers. The main functions of assessment case managers relate to the initial assessment of children and families to determine signs of child abuse, neglect, or abandonment, identify the sources of the threats, assess the capacity of the household to protect the child, and initiate in-home services for child protection and family preservation (Cohen et al., 2007). They must make

difficult decisions at times that separate children from their families for the well-being of those children. While facing stressful situations such as child removal and even child deaths on occasion, assessment case managers need to keep their emotions from interfering with their work. Without proper training to be ready for difficult cases, newly hired assessment case managers experience high stress and are more likely to leave the job (Wilke et al., 2018).

Whereas assessment case managers are often involved in the initial stages of child case management, ongoing case managers begin their work with children and families after child maltreatment has been substantiated and continue to work with the children and families in areas of family services, foster care, and adoption until the case closes. When compared to assessment case managers, ongoing case managers have longer-term and regular contact with the same children and family members in the system. Their job includes listening to experiences of children's trauma, sometimes heart-wrenching stories, such as physical and sexual abuse, neglect, and abandonment; talking to parent(s) of the child; developing a case plan for the child and family; identifying services available; assessing the progress; advocating for children and family; dismissing the case to either reunification with the family or if unable to reunify, assisting with the long-term guardianship or adoption of the child (Cohen et al., 2007).

Therefore, it is plausible to propose that the intention to remain employed in the child welfare system may differ between assessment and ongoing case managers, owing to their distinct responsibilities and unique experience with children and families who have experienced trauma.

### **The Interaction Effect of Job Functions**

The Job Demands-Resources (JD-R) model may provide a useful framework to better understand the role of job functions when child welfare workers' STS are associated with their intention to remain. Demerouti et al. (2001) argue that high job demands and low job resources

can cause worker burnout with symptoms of emotional exhaustion, depersonalization of clients, and low accomplishment. Bakker et al. (2004) also suggest that job resources can buffer the negative impact of job demands on burnout. In the JD-R model, STS is viewed as an emotional demand that directly affects burnout (Kim, 2017; Singh et al., 2020). Ongoing case managers may suffer more from the negative consequences of STS due to high job demands. Compared to assessment case managers, they often manage higher caseloads and have more frequent and prolonged contact with traumatized children and families until children exit from the child welfare system (Wagner et al., 2008). Hensel et al. (2015) conducted a meta-analysis to identify risk factors of STS and showed that professionals reported higher levels of STS when they were exposed to a high volume and frequency of managing trauma-related caseloads. Beehr (1998) also argues that the duration of stressors that workers have experienced may moderate the impact of occupational stress on workers' outcomes.

To the authors' knowledge, no research examined whether the impact of STS on workers' intention to remain differs by job functions, such as assessment case managers and ongoing case managers employed in child welfare. However, broader literature on STS in other professional fields and practice settings suggests that the level of STS can be different based on job functions. For example, non-custodial staff members who more regularly assess the cases of offenders' crimes were more likely than custodial staff members to experience vicarious trauma (Campbell & Bishop, 2019). Seigfried-Spellar (2018) also examined the association between the different roles of forensic examiners and law enforcement investigators and experiences of psychological distress and STS. Some staff both examined and investigated the crimes, and some performed only one of those functions. The results demonstrated that individuals performing both duties exhibited significantly higher STS than those with only a single role. Similarly, assessment case

managers and ongoing case managers are required to perform separate functions from one another. Their distinct functions may bring distinct aspects of exposure to secondary trauma (e.g., frequency and duration) and eventually affect the way they react to secondary trauma as found in the previous literature on the relationship between job functions and STS among human service professionals.

Therefore, this study examines the dynamic effects of STS and job functions on child welfare workers' intention to remain employed in child welfare by testing the following hypotheses:

*Hypothesis 1: STS is negatively associated with child welfare workers' intention to remain employed in child welfare.*

*Hypothesis 2: Child welfare workers' intention to remain employed in child welfare differs by job function.*

*Hypothesis 3: Job function moderates the association between STS and child welfare workers' intention to remain employed in child welfare.*

## **Methodology**

### **Participants and Data Collection Procedure**

We tested the hypotheses discussed above by analyzing survey data collected from public child welfare workers in a midwestern state in the United States. An online survey was distributed to the entire child welfare workers ( $n = 2,310$ ) working as frontline case managers at the state child welfare organizations in June 2018. It was conducted as part of the Title IV-E Wavier Demonstration Project that evaluated child welfare policies, workforce, and services in the state. In particular, the online survey aimed to assess individual and organizational factors that affect their workforce outcomes, along with reporting their perceived accessibility,

useability, and effectiveness of the state's child welfare policies and programs. The invitation letter to participate in the online survey was emailed to the entire child welfare workers employed in the state child welfare organizations. Respondent's participation in the online survey was voluntary without any financial incentives. However, child welfare organizations allowed them to complete the survey during regular work hours. The IRB approval for this study was obtained from Indiana University-Purdue University Indianapolis (ID 1302010762).

About 67% of the child welfare workers initially completed the distributed survey. We excluded some responses if respondents did not have any active caseloads ( $n = 495$ ). This exclusion criterion was developed based on the assumption that child welfare workers without any active caseloads may not recognize or rarely experience STS as they do not interact directly with traumatized children and families. Most excluded respondents were newly hired workers involved in on-the-job training or those tasked with finding and licensing foster homes. As a result, the final sample included 1,053 front-line child welfare workers. Table 1 shows the demographic and work-related characteristics of the sample. Most of the survey respondents identified themselves as female (84.4%) and White (78.6%), with an average age of 35.0 ( $SD = 10.2$ ) with 12.4 percent of the respondents ( $n = 130$ ) holding master's degrees. On average, they had worked at the public child welfare organization for 3.2 years ( $SD = 4.5$ ). Sixty-nine-point-two percent of the respondents ( $n = 718$ ) were ongoing case managers, while thirty-point-eight percent were assessment case managers ( $n = 319$ ).

[Insert Table 1 Here]

## Measures

### *Intention to Remain Employed in Child Welfare*

In this study, workers' intention to remain was defined as workers' desire to remain employed in child welfare because of their high values, commitments, and benefits from their current position (Ellett, 2009). Workers' intention to remain was measured by three items selected from Ellett's scale (2009): (1) intend to remain in child welfare as my long-term professional career, (2) I will remain in child welfare even though I might be offered a position outside of child welfare with a higher salary, and (3) I am committed to working in child welfare even though it can be quite stressful at times. Respondents were asked to rate these items on a five-point Likert scale, ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Higher scores indicate workers' stronger intention to remain employed in child welfare (Cronbach's alpha = .835).

### ***Secondary Traumatic Stress (STS)***

STS can be defined as psychological symptoms acquired indirectly through exposure to persons suffering from trauma. It was measured by the validated scale of Bride et al. (2004) that reflected the three major symptoms of STS: intrusion, avoidance, and arousal symptoms. According to Bride et al., intrusion refers to an inability to keep the memories of someone's traumatic events from returning (e.g., my heart started pounding when I thought about my work with clients.). Avoidance indicates an attempt to avoid triggers that can bring the memories of someone's traumatic events back (e.g., I felt emotionally numb). Arousal reflects cognitive activities that cause irritability, hypervigilance, low concentrations, and/or difficulty sleeping (e.g., I had trouble sleeping). The scale includes 17 items rated on a five-point Likert scale from 1 (*never*) to 5 (*very often*), with higher scores indicating more frequent STS symptoms. The reliability of the scale was excellent (Cronbach's alpha = .950).

### ***Job Functions***

Job function was measured with one question that asked respondents to report their primary responsibility: 0 = ongoing case managers and 1 = assessment case managers.

### ***Control Variables***

Several control variables were included in major analyses based on the results of the literature review. Several meta-analyses and conceptual models for child welfare retention and turnover decisions consistently classified factors into several categories such as demographic and work-related characteristics (Kim & Kao, 2014; Mor Barak et al., 2001; Wilke et al., 2018). Under the socio-demographic characteristics, previous studies have shown that age has a strong relationship with job retention, and workers with higher degrees and male workers are more likely to leave (Kruzich et al., 2014). Race had no or negligible impacts in most of the studies (Faller et al., 2010; Kim & Kao, 2014). Work-related factors, tenure (work experience), professional self-care, and supportive supervision were found to be negatively associated with workers' turnover intention (Dreher et al., 2019; Julien-Chinn et al., 2021; Smith, 2005). Workload has been most extensively studied in retention and turnover and was found to have strongly negative impacts (Smith, 2005). Griffiths et al. (2020) demonstrated that the two major variables impacting retention were workload and support from their supervisors.

Public child welfare workers' socio-demographic characteristics include gender (0 = male, 1 = female), race/ethnicity (0 = non-White, 1 = White), age (years), and educational level (0 = Bachelor's degrees or lower, 1 = Master's degrees or higher). For work-related characteristics, work experience was measured by the total years of employment at public child welfare organizations. Professional self-care was measured by the scale of Lee et al. (2019) which asked respondents to report the level of engagement in organizational support activities that promoted their professional development, life balance, and well-being (e.g., I take small

breaks throughout the workday and I seek out professional development opportunities that appeal to me). All eight items were rated on a five-point Likert scale from 0 (*never*) to 4 (*very often*), with higher scores indicating more active engagement in professional self-care (Cronbach's  $\alpha = .809$ ). Supportive supervision refers to workers' perception of emotional support from their supervisor. This variable was measured by the valid scale of Fukui et al. (2014), including ten items rated on a five-point Likert scale from 1 (*never*) to 5 (*very often*). Examples of items include: my supervisor assisted in reducing my stress and my supervisor made me feel more positive about my job. Higher scores indicate supervisors' more frequent emotional support (Cronbach's  $\alpha = .970$ ). Workers' perception of manageable workload was measured with a single question that asked them to rate the manageability of their workload on a 5-point Likert scale (1 = extremely unmanageable to 5 = extremely manageable).

### **Data Analysis**

Descriptive statistics were used to describe respondents' socio-demographic and work-related characteristics. An independent sample t-test was also conducted to compare the mean differences in major variables related to workers' intention to remain employed in child welfare and STS between assessment and ongoing case managers. Finally, a series of multiple regression analyses were employed to test the main and interaction effects of STS and job functions on workers' intention to remain using SPSS 28. Model 1 was tested to examine the main effects of the major variables on workers' intention to remain after controlling for workers' socio-demographic and work-related characteristics. Model 2 was analyzed to explore whether the effect of STS differed by job function. This interaction effect was probed using the PROCESS Macro 4.1 for SPSS developed by Hayes (2022). More specifically, a pick-a-point approach, also known as a simple slope test, was used to examine the statistical significance of the interaction

effect at the specific value of the moderator (i.e., assessment case managers vs. ongoing case managers). The percentage of missing cases was very low, ranging from 0% to 5.5% among variables. Little's MCAR test also indicated that data were missing completely at random ( $\chi^2 = 38.28$ ,  $df = 27$ ,  $P = .074$ ). Therefore, simple list-wise deletion was used to treat missing cases.

## Results

### Mean Difference in Major Variables

Before testing major hypotheses, we explored whether there were mean differences in the major variables between ongoing case managers and assessment case managers. As seen in Table 2, the intention to remain was reported at a relatively higher level by ongoing case managers ( $M = 3.55$ ,  $SD = .89$ ) compared to assessment case managers ( $M = 3.48$ ,  $SD = .93$ ). However, this difference was not statistically significant. There was no significant difference in STS between the two groups although ongoing case managers' STS ( $M = 2.30$ ,  $SD = .78$ ) was slightly higher than assessment case workers' STS ( $M = 2.25$ ,  $SD = .86$ ). Ongoing case managers ( $M = 2.55$ ,  $SD = .58$ ) more actively engaged in professional self-care than assessment case managers ( $M = 2.44$ ,  $SD = .62$ ). This difference was statistically significant. Similarly, ongoing case managers ( $M = 3.15$ ,  $SD = 1.04$ ) were more likely than assessment case managers ( $M = 2.97$ ,  $SD = 1.03$ ) to perceive that their workload was manageable. The perception of supportive supervision was not statistically different between the two groups (ongoing case managers:  $M = 3.77$ ,  $SD = .97$ , assessment case managers:  $M = 3.78$ ,  $SD = .96$ ).

[Insert Table 2 Here]

### OLS Regression: Main and Interaction Effects

Table 3 depicts the results of the main and interaction effects on workers' intention to remain among public child welfare workers. For the main effects in Model 1, STS was

negatively associated with the intention to remain ( $B = -.225, p < .001$ ). Similar to the results of the t-test, the job functions appeared not to be a significant factor associated with workers' intention to remain ( $B = -.037, p > .05$ ). Among control variables, White workers were more likely than non-White workers to intend to remain employed in child welfare ( $B = .159, p < .05$ ). The intention to remain significantly increased for older workers ( $B = .023, p < .001$ ) and decreased when they hold master's degrees ( $B = -.190, p < .05$ ). Workers' intention to remain was positively associated with professional self-care ( $B = .168, p < .001$ ), supportive supervision ( $B = .167, p < .001$ ), and perceptions of manageable workload ( $B = .055, p < .05$ ).

[Insert Table 3 Here]

Model 2 shows the results of the interaction effect of STS and job functions on workers' intention to remain. The interaction term (STS  $\times$  job functions) was statistically significant ( $B = .152, p < .05$ ). A follow-up analysis using the PROCESS Macro provides a clear pattern of the interaction effects (see Figure 1). The effect of STS on workers' intention to remain was negative regardless of different job functions. However, the negative effect was statistically stronger among ongoing case managers (conditional effect =  $-.278, p < .001$ ) than among assessment case managers (conditional effect =  $-.126, p < .05$ ). In other words, ongoing case managers were more susceptible to the negative effect of STS on their intention to remain as compared to assessment case managers.

[Insert Figure 1]

### **Discussion**

Child welfare workers' job retention is essential for ensuring the high quality of services and achieving the safety, permanency, and well-being of children and families involved in the child welfare system. However, child welfare workers' low retention rates have been constantly

reported in many child welfare systems due in part to their higher level of workplace safety issues and stress. We first examined whether STS was associated with workers' intention to remain employed in child welfare and further explored how this negative impact of STS was moderated by job functions between assessment case managers and ongoing case managers.

We found that the average score of STS was in the moderate range for child welfare workers. However, as we hypothesized, child welfare workers' self-reported STS was identified as a significant risk factor to reduce their intention to remain. Therefore, organizational efforts are necessary to prevent the negative effect of STS. This main finding is consistent with previous studies that showed the negative impact of STS on workforce outcomes (Bride et al., 2007; Cieslak et al., 2014; Middleton & Potter, 2015). For example, STS has a negative association with the intention to remain (Bride et al., 2007) and a positive association with the intention to leave (Middleton & Potter, 2015) among child welfare workers. Studies also found negative effects of STS on helping professionals' ability to perform their duties (Bock et al., 2020; Bride et al., 2007; Middleton & Potter, 2015). Therefore, child welfare organizations should address the psychological needs of workers through strategies such as professional self-care, supervisors' support, and manageable caseloads, which can improve child welfare workers' willingness to remain employed in child welfare (Wilke et al., 2018).

Furthermore, we hypothesized job functions significantly moderated the association between STS and the intention to remain. The interaction effect of job functions was significant in our study although the job functions, themselves, were not directly associated with the intention to remain. More specifically, STS was negatively associated with both assessment and ongoing case managers' intention to remain, but the negative impact of STS was stronger among ongoing case managers. There is a possible explanation for this important finding based on the

JD-R model. This model argues that extensive caseloads and workloads may have a negative impact on workers' outcomes (Demerouti et al., 2001). Ongoing case managers often interact with a larger number of children and families with traumatic histories more continuously than assessment case managers (Cohen et al., 2007). As a result, the negative impact of STS may be more detrimental to ongoing case managers due to their cumulative and long-term exposure to the same traumatized children and families as compared to assessment case managers who interact with children and families within a relatively short-term period.

Interestingly, our study provides somewhat contradictory results that support the potential hypotheses discussed above. Ongoing case managers' workload (job demand) appears to be more manageable and engage more actively in professional self-care (job resource) than assessment case managers. It is important to note that we did not assess all job demands and resources relating to STS and its outcomes. It is possible that other types of job demands and resources, other than workload and supportive supervision, may be more important in understanding the different patterns of the effects of STS and the intention to remain between child welfare workers' job functions. Furthermore, workers' reports on their job demands and resources may not be assessed accurately because of the use of workers' self-reported measures. Demerouti et al. (2001) argue that self-reports may result in less reliable assessments of job demands and resources than observer ratings. In other words, workers may report different levels of job demands even if they perform the same functions. This reliability issue may be more problematic in comparing job demands and resources between different job functions (Demerouti et al., 2001). Therefore, additional research is needed to identify specific job demands and resources that better explain the different effects of STS between ongoing and assessment case managers using more objective and reliable data.

## **Limitations**

Some limitations are worth highlighting. First, we used the intention to remain as a proxy to measure workers' job retention. It may be logical to assume that child welfare workers are more likely to remain employed in the child welfare system if they have a higher level of intention to remain. However, some longitudinal studies (e.g., Chao & Lu, 2020) indicated that the significant factors of the intention to remain were different from those of actual retention despite the substantial correlation between the intention to remain and actual retention. Therefore, future research should use longitudinal data to examine if STS leads to actual retention. The second limitation is related to the generalizability of our study's findings because the data were collected from child welfare workers working in the public child welfare system operated in one mid-western state. The prevalence and outcomes of STS between job functions may vary according to different child welfare systems and organizational contexts. For example, although many child welfare organizations assign case managers' job functions based on specialization (e.g., assessment vs. ongoing service) some organizations assign case managers to perform multiple functions from assessment to ongoing services for any given case (General Accounting Office, 2003). Therefore, the findings of our study should be interpreted with caution in applying them to other child welfare systems with different job functions. Finally, due to limited information in the data analyzed, we did not control for the characteristics of trauma experienced by children and families with whom child welfare workers worked, such as the severity of trauma. We also did not control for the characteristics of child welfare workers' contact with traumatized children and families, such as the frequency, intensity, and duration of contact. These characteristics may compound the effects of STS on the intention to remain.

## **Practical Implications**

Knowledge of secondary exposure to trauma in child welfare workers is well understood. Our findings demonstrate the negative effect of STS among all child welfare workers. In particular, we found the potential importance of longer-term exposure to higher STS in ongoing case managers and its effect on the intention to remain. Self-care has been promoted as one way for child welfare workers to mitigate response to STS. In particular, we found that professional self-care was a protective factor that significantly increased workers' intentions to remain. Professional self-care is different from personal self-care given that it indicates "the process of purposeful engagement in practices that promote effective and appropriate use of self in the professional role" (Lee & Miller, 2013, p. 98). Lee and Miller suggest common strategies for professional self-care, including (a) effective workload and time management (e.g., taking vacations), (b) attention to reactions to work (e.g., journaling), (c) social support (e.g., professional networks), (d) professional development (e.g., attending training), and (e) sustaining energy (e.g., acknowledging success).

Furthermore, organizations have a responsibility to develop physically and emotionally safe and supportive working environments (Bunting et al., 2019; Xu et al., 2023). For example, they can extend extra benefits for mental health care such as employee assistance programs, provide adequate time off to rest and recuperate, and facilitate open communication to discuss concerns and grievances. In this study, emotional supervision was positively associated with workers' intention to remain employed in child welfare. Emotionally supportive supervisors can enable child welfare workers to recognize and respond to their STS and other job stress (Collings-Camargo & Antle, 2018). They can also model the approach they expect from their workers so they should demonstrate healthy lifestyles and support healthy organizational lifestyles.

Organizational readiness and change for building healthy trauma-informed organizations are not universal but must become so for workers' emotional safety and health with regard to the retention of well-trained child welfare workers. For example, child welfare organizations should provide them with training to understand the signs of STS and support their workers to manage their stress. Furthermore, organizations must change their systemic structures to promote workers' empowerment. This organizational change can encourage child welfare workers to engage in developing trauma-informed policies and services to prevent their STS and reduce its negative consequences.

Lastly, child welfare organizations must understand the impact of STS and its consequences on workers with various job functions. Our study demonstrated STS in both assessment and ongoing case managers, so organizations need to mitigate this stress for all their workers. Yet, those with long-term exposure need to have more emotionally supportive supervision. By assessing and intervening early, organizations can tailor approaches so they can mitigate the effects of STS and retain their highly trained and skilled workforce. For example, supervisors can ensure that the mixture of cases in any ongoing case manager's caseload does not include all highly traumatized children such as those who have been sexually abused. Also, they can do emotional check-ins during supervision with their ongoing case managers and facilitate peer support and collaborative case management.

### **Conclusion**

Overall, the study findings shed light on the detrimental effects of STS on child welfare workers' intention to remain employed in the child welfare system. Furthermore, we found the different effects of STS on workers' outcomes according to their job functions. The negative outcomes of STS can be more prevalent and serious among ongoing case managers than among

assessment case managers. We propose that future research is necessary to develop a comprehensive and contextual mechanism that better explains what specific types of job demands and resources prevent STS and then reduce its negative effect on child welfare workers' job retention using more objective data. It is also equally important to further explore how these comprehensive mechanisms are similar or different between job functions.

**Funding**

This work was supported by the Indiana Department of Child Services (Grant number: A93-3-13-4F-C0-0981).

**Declaration of Interest Statement**

The authors report there are no competing interests to declare.

### References

- Bakker, A. B., Demerouti, E., & Verbeke, W. (2004). Using the job demands-resources model to predict burnout and performance. *Human Resources Management, 43*(1), 83-104.  
<https://doi.org/10.1002/hrm.20004>
- Barth, R. P. (1999). After safety, what is the goal of child welfare services: Permanency, family continuity or social benefit? *International Journal of Social Welfare, 8*(4), 244-252.  
<https://doi.org/10.1111/1468-2397.00091>
- Beehr, T. (1998). An organizational psychology meta-model of occupational stress. In C. L. Cooper (Ed.), *Theories of organizational stress* (pp. 6-27). Oxford University Press.
- Bock, C., Heitland, I., Zimmermann, T., Winter, L., & Kahl, K. G. (2020). Secondary traumatic stress, mental state, and work ability in nurses—Results of a psychological risk assessment at a university hospital. *Frontiers in Psychiatry, 11*(2020), 298.  
<https://doi.org/10.3389/fpsy.2020.00298>
- Bourke, M. L., & Craun, S. W. (2014). Coping with secondary traumatic stress: Differences between UK and US child exploitation personnel. *Traumatology: An International Journal, 20*(1), 57-64. <https://doi.org/10.1037/t06768-000>
- Bride, B. E., Jones, J. L., & MacMaster, S. A. (2007). Correlates of secondary traumatic stress in child protective services workers. *Journal of Evidence-Based Social Work, 4*(3-4), 69-80.  
[https://doi.org/10.1300/J394v04n03\\_05](https://doi.org/10.1300/J394v04n03_05)
- Bride, B. E., Robinson, M. M., Yegidis, B., & Figley, C. R. (2004). Development and validation of the secondary traumatic stress scale. *Research on Social Work Practice, 14*(1), 27-35.  
<https://doi.org/10.1177/1049731503254106>

- Bunting, L., Montgomery, L., Mooney, S., MacDonald, M., Coulter, S., Hayes, D., & Davidson, G. (2019). Trauma informed child welfare systems—A rapid evidence review. *International Journal of Environmental Research and Public Health*, *16*(13), 2365.  
<https://doi.org/10.3390/ijerph16132365>
- Campbell, J., & Bishop, A. (2019). The impact of caseload and tenure on the development of vicarious trauma in Australian corrective services employees. *Psychotherapy and Counselling Journal of Australia*, *72*(2), 1-15. <https://doi.org/10.59158/001c.71247>
- Chao, S. F., & Lu, P. C. (2020). Differences in determinants of intention to stay and retention between younger and older nursing assistants in long-term care facilities: A longitudinal perspective. *Journal of Nursing Management*, *28*(3), 522-531.  
<https://doi.org/10.1111/jonm.12952>
- Cieslak, R., Shoji, K., Douglas, A., Melville, E., Luszczynska, A., & Benight, C. C. (2014). A meta-analysis of the relationship between job burnout and secondary traumatic stress among workers with indirect exposure to trauma. *Psychological Services*, *11*(1), 75.  
<https://doi.org/10.1037/a0033798>
- Cohen, B. J., Kinnevy, S. C., & Dichter, M. E. (2007). The quality of work life of child protective investigators: A comparison of two work environments. *Children and Youth Services Review*, *29*(4), 474-489. <https://doi.org/10.1016/j.childyouth.2006.09.004>
- Collins-Camargo, C., & Antle, B. (2018). Child welfare supervision: Special issues related to trauma-informed care in a unique environment. *The Clinical Supervisor*, *37*(1), 64-82.  
<https://doi.org/10.1080/07325223.2017.1382412>

- Cooper, C. L., & Marshall, J. (1976). Occupational sources of stress: A review of the literature relating to coronary heart disease and mental ill health. *Journal of Occupational Psychology*, *49*(1), 11-28. <https://doi.org/10.1111/j.2044-8325.1976.tb00325.x>
- de Guzman, A., Carver-Roberts, T., Leake, R., & Rienks, S. (2020). Retention of child welfare workers: staying strategies and supports. *Journal of Public Child Welfare*, *14*(1), 60–79. <https://doi.org/10.1080/15548732.2019.1683121>
- Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands-resources model of burnout. *Journal of Applied Psychology*, *86*(3), 499-512. <https://doi.org/10.1037/0021-9010.86.3.499>
- DePanfilis, D., & Zlotnik, J. L. (2008). Retention of front-line staff in child welfare: A systematic review of research. *Children and Youth Services Review*, *30*(9), 995-1008. <https://doi.org/10.1016/j.chilyouth.2007.12.017>
- Dickinson, N. S., & Perry, R. E. (2002). Factors influencing the retention of specially educated public child welfare workers. *Journal of Health & Social Policy*, *15*(3-4), 89-103. [https://doi.org/10.1300/J045v15n03\\_07](https://doi.org/10.1300/J045v15n03_07)
- Dreher, M. M., Hughes, R. G., Handley, P. A., & Tavakoli, A. S. (2019). Improving retention among certified nursing assistants through compassion fatigue awareness and self-care skills education. *Journal of Holistic Nursing*, *37*(3), 296-308. <https://doi.org/10.1177/0898010119834180>
- Ellett, A. J. (2009). Intentions to remain employed in child welfare: The role of human caring, self-efficacy beliefs, and professional organizational culture. *Children and Youth Services Review*, *31*(1), 78-88. <https://doi.org/10.1016/j.chilyouth.2008.07.002>

- Faller, K. C., Grabarek, M., & Ortega, R. M. (2010). Commitment to child welfare work: What predicts leaving and staying?. *Children and Youth Services Review*, 32(6), 840-846.  
<https://doi.org/10.1016/j.childyouth.2010.02.003>
- Figley, C. R. (1995). Compassion fatigue as secondary traumatic stress disorder: An overview. In C. R. Figley (Ed.), *Compassion fatigue: Coping with secondary traumatic stress in those who treat the traumatized* (pp. 1-20). Routledge.
- Flower, C. F., McDonald, J., & Sumski, M. S. (2005). *Review of Turnover in Milwaukee County Private Agency Child Welfare Ongoing Case Management Staff*. Milwaukee, WI: Bureau of Milwaukee Child Welfare.  
<http://dcf.wisconsin.gov/bmcw/progserv/Initiatives/turnoverstudy.pdf>.
- Fukui, S., Rapp, C. A., Goscha, R., Marty, D., & Ezell, M. (2014). The perceptions of supervisory support scale. *Administration and Policy in Mental Health and Mental Health Services Research*, 41(3), 353-359. <https://doi.org/10.1007/s10488-013-0470-z>
- General Accounting Office (2003). *Child welfare: HHS could play a greater role in helping child welfare agencies to recruit and retain staff*. Washington, DC: Author.  
<https://www.gao.gov/assets/gao-03-357.pdf>
- Griffiths, A., Murphy, A., Desrosiers, P., Harper, W., & Royse, D. (2020). Factors influencing the turnover of frontline public child welfare supervisors. *Journal of Public Child Welfare*, 14(5), 553–569. <https://doi.org/10.1080/15548732.2019.1652719>
- Hasenfeld, Y. (2010). *Human services as complex organizations* (2nd Ed.). Sage Publications.
- Hayes, A. F. (2022). PROCESS macro for SPSS (Version 4.1) [Computer software]  
<http://processmacro.org/download.html>.

- Hensel, J. M., Ruiz, C., Finney, C., & Dewa, C. S. (2015). Meta-analysis of risk factors for secondary traumatic stress in therapeutic work with trauma victims. *Journal of Traumatic Stress, 28*(2), 83-91. <https://doi.org/10.1002/jts.21998>
- Julien-Chinn, F. J., Katz, C. C., & Wall, E. (2021). An examination of coping strategies and intent to leave child welfare during the COVID-19 pandemic. *Child and Adolescent Social Work Journal, 40*, 1-10. <https://doi.org/10.1007/s10560-021-00800-w>
- Kim, H., & Kao, D. (2014). A meta-analysis of turnover intention predictors among US child welfare workers. *Children and Youth Services Review, 47*(2014), 214-223. <https://doi.org/10.1016/j.childyouth.2014.09.015>
- Kim, Y. J. (2017). Secondary traumatic stress and burnout of North Korean refugees service providers. *Psychiatry Investigation, 14*(2), 118-125. <https://doi.org/10.4306/pi.2017.14.2.118>
- King, E. A. (2022). Work-related trauma exposure: Influence on child welfare workers' mental health and commitment to the field. *Traumatology*. Advance online publication. <https://doi.org/10.1037/trm0000419>
- Kruzich, J. M., Mienko, J. A., & Courtney, M. E. (2014). Individual and work group influences on turnover intention among public child welfare workers: The effects of work group psychological safety. *Children and Youth Services Review, 42*, 20-27. <https://doi.org/10.1016/j.childyouth.2014.03.005>
- Leake, R., Rienks, S., & Obermann, A. (2017). A deeper look at burnout in the child welfare workforce. *Human Service Organizations: Management, Leadership & Governance, 41*(5), 492-502. <https://doi.org/10.1080/23303131.2017.1340385>

- Lee, J. J., & Miller, S. E. (2013). A self-care framework for social workers: Building a strong foundation for practice. *Families in Society, 94*(2), 96-103. <https://doi.org/10.1606/1044-3894.4289>
- Lee, J. J., Miller, S. E., & Bride, B. E. (2019). Development and initial validation of the Self-Care Practices Scale. *Social work, 65*(1), 21–28. <https://doi.org/10.1093/sw/swz045>
- Lizano, E. L., He, A. S., & Leake, R. (2021). Caring for our child welfare workforce: A holistic framework of worker well-being. *Human Service Organizations: Management, Leadership & Governance, 45*(4), 281-292. <https://doi.org/10.1080/23303131.2021.1932658>
- Lizano, E. L., Hsiao, H. Y., Mor Barak, M. E., & Casper, L. M. (2014). Support in the workplace: Buffering the deleterious effects of work–family conflict on child welfare workers’ well-being and job burnout. *Journal of Social Service Research, 40*(2), 178-188. <https://doi.org/10.1080/01488376.2013.875093>
- Middleton, J. S., & Potter, C. C. (2015). Relationship between vicarious traumatization and turnover among child welfare professionals. *Journal of Public Child Welfare, 9*(2), 195-216. <https://doi.org/10.1080/15548732.2015.1021987>
- Mor Barak, M. E., Nissly, J. A., & Levin, A. (2001). Antecedents to retention and turnover among child welfare, social work, and other human service employees: What can we learn from past research? A review and meta-analysis. *Social Service Review, 75*(4), 625-661. <https://doi.org/10.1086/323166>
- National Child Traumatic Stress Network (2016). *Secondary trauma and child welfare staff: Guidance for supervisors and administrators*. <https://www.nctsn.org/resources/secondary-trauma-and-child-welfare-staff-guidance-supervisors-and-administrators>.

- Pearlman, L. A., & Saakvitne, K. W. (1995). *Trauma and the therapist: Countertransference and vicarious traumatization in psychotherapy with incest survivors*. W.W. Norton & Co.
- Pugh, G. L. (2016). Job satisfaction and turnover intent among hospital social workers in the United States. *Social Work in Health Care, 55*(7), 485-502.  
<https://doi.org/10.1080/00981389.2016.1186133>
- Rienks, S. L. (2020). An exploration of child welfare caseworkers' experience of secondary trauma and strategies for coping. *Child Abuse & Neglect, 110*(2020), 104355.  
<https://doi.org/10.1016/j.chiabu.2020.104355>
- Schweitzer, D., Chianello, T., & Kothari, B. (2013). Compensation in social work: Critical for satisfaction and a sustainable profession. *Administration in Social Work, 37*(2), 147-157.  
<https://doi.org/10.1080/03643107.2012.669335>
- Seigfried-Spellar, K. C. (2018). Assessing the psychological well-being and coping mechanisms of law enforcement investigators vs. digital forensic examiners of child pornography investigations. *Journal of Police and Criminal Psychology, 33*(3), 215-226.  
<https://doi.org/10.1007/s11896-017-9248-7>
- Singh, J., Karanika-Murray, M., Baguley, T., & Hudson, J. (2020). A systematic review of job demands and resources associated with compassion fatigue in mental health professionals. *International Journal of Environmental Research and Public Health, 17*(19), 6987. <https://doi.org/10.3390/ijerph17196987>
- Smith, B. D. (2005). Job retention in child welfare: Effects of perceived organizational support, supervisor support, and intrinsic job value. *Children and Youth Services Review, 27*(2), 153-169. <https://doi.org/10.1016/j.childyouth.2004.08.013>

- Sprang, G., Craig, C., & Clark, J. (2011). Secondary traumatic stress and burnout in child welfare workers. *Child Welfare, 90*(6), 149-168. <https://doi.org/10.2307/48625374>
- State Auditor's Office of Texas. (2012). An annual report on classified employee turnover for Fiscal Year 2012, Report No. 13-704. <http://www.sao.texas.gov/reports/main/13-704.pdf>
- Wagner, D., Johnson, K., & Healy, T. (2008). Agency workforce estimation: A step toward more effective workload management. *Protecting Children, 23*(3), 6-19.
- Wilke, D. J., Radey, M., King, E., Spinelli, C., Rakes, S., & Nolan, C. R. (2018). A multi-level conceptual model to examine child welfare worker turnover and retention decisions. *Journal of Public Child Welfare, 12*(2), 204-231.  
<https://doi.org/10.1080/15548732.2017.1373722>
- Xu, Y., He, N., Lu, W., & Jedwab, M. (2023). Secondary Traumatic Stress and Burnout Among Child Welfare Social Workers in Southern China: Focusing on Resilience and Social Support. *Human Service Organizations: Management, Leadership & Governance*. Advance online publication. <https://doi.org/10.1080/23303131.2023.2231057>
- Yi, J., Kim, J., Akter, J., Molloy, J. K., Ah Kim, M., & Frazier, K. (2018). Pediatric oncology social workers' experience of compassion fatigue. *Journal of Psychosocial Oncology, 36*(6), 667-680. <https://doi.org/10.1080/07347332.2018.1504850>

**Table 1***Descriptive Information about Sample Characteristics*

	Frequency/Mean	Percent/Standard Deviation
Gender		
Female	870	84.4
Male	161	15.6
Race		
White	814	78.6
Non-White	221	21.4
Age	35.0	10.2
Educational Level		
Bachelor's degrees or lower	921	87.6
Master's degrees or higher	130	12.4
Work Experience (year)	3.2	4.5
Position		
Ongoing case managers	718	69.2
Assessment case managers	319	30.8

**Table 2***Mean Differences in Major Variables by Job Positions*

	Overall	Ongoing Case managers	Assessment Case Managers	t
	M (SD)	M (SD)	M (SD)	
Intention to remain	3.53 (.90)	3.55 (.89)	3.48 (.93)	1.133
STS	2.28 (.81)	2.30 (.78)	2.25 (.86)	.857
Professional self-care	2.51 (.59)	2.55 (.58)	2.44 (.62)	2.663**
Supportive supervision	3.77 (.97)	3.77 (.97)	3.78 (.96)	-.226
Manageable workload	3.10 (1.04)	3.15 (1.04)	2.97 (1.03)	2.586**

\*p &lt; .05, \*\*p &lt; .01, \*\*\* p &lt; .001

**Table 3***Regression Analysis for Main and Interaction Effects on Intention to Remain*

Variables	Model 1		Model 2	
	B	SE	B	SE
Gender (Female=1)	.126	.072	.120*	.072
Race (White=1)	.159*	.064	.162*	.064
Age	.023***	.003	.023***	.003
Educational level (Master's degrees=1)	-.190*	.083	-.180*	.083
Work experience (year)	.000	.007	.000	.007
Professional self-care	.168***	.049	.169***	.049
Supportive supervision	.167***	.029	.167***	.029
Manageable workload	.055*	.027	.056*	.027
STS	-.225***	.036	-.278***	.043
Job functions (Assessment worker=1)	-.037	.057	-.382*	.163
STS × Job functions			.152*	.067
F	27.570***		25.639***	
R <sup>2</sup>	.226		.230	

\*p &lt; .05, \*\*p &lt; .01, \*\*\* p &lt; .001

**Figure 1**

*Interaction Effect of STS and Job Functions on Intention to Remain*

