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Austin Garrett Griffiths

University of Kentucky, austin.griffiths@wku.edu

Author ORCID Identifier:

 <https://orcid.org/0000-0002-6670-3150>

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Austin Garrett Griffiths, Student

Dr. David Royse, Major Professor

Dr. Chris Flaherty, Director of Graduate Studies

SERVICE BEFORE SELF:
THE HEALTH CONSEQUENCES OF WORKING IN PUBLIC CHILD WELFARE

DISSERTATION

A dissertation submitted in partial fulfillment of the
requirements for the degree of Doctor of Philosophy in
the College of Social Work at the University of Kentucky

By
Austin Garrett Griffiths

Lexington, Kentucky

Director: Dr. David Royse, Professor of Social Work

Lexington, Kentucky

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ABSTRACT OF DISSERTATION

SERVICE BEFORE SELF: THE HEALTH CONSEQUENCES OF WORKING IN PUBLIC CHILD WELFARE

Child welfare workers respond to human tragedy and the job stresses associated with their positions that may result in their own trauma, secondary traumatic stress, compassion fatigue, emotional exhaustion, and burnout. Workers continue to leave their positions at alarming rates, influencing service quality and the ability to meet the needs of vulnerable populations. Decades of research have attempted to solve this national crisis by identifying salient factors found to influence the child welfare worker's experience and intention to leave their position. However, the problem prevails.

Addressing a major gap in the literature, this mixed methods study took a unique approach by exploring how the stress of working in public child welfare affects workers' personal health. Using secondary data analysis from a statewide sample of public child welfare workers, qualitative thematic content analysis and binary logistic regression were used to explore what child welfare workers identified as unhealthy habits they have developed as a result of stress from their positions. Findings from this study provide clear evidence that the demands associated with working in this capacity negatively impact the health of the child welfare worker.

Qualitatively, five self-reported themes emerged when workers were asked to describe the health consequences of their work. Workers described their affinity for unhealthy consumption (e.g., food, alcohol, tobacco) and the development of a number of unhealthy behaviors (e.g., disturbed sleep, lack of exercise, angry outbursts) as a result of the stress of their positions. Workers also provided descriptions of the physical and mental health implications of working, compounded by the poor work-life balances reported.

Quantitatively, significant differences were found across all subscales of the Child Welfare Employee Feedback Scale (CWEFS) when examined by the current health status of the workforce. Workers reporting poorer health had worked at the agency longer and reported a greater intention to leave the agency in the next 12 months. Finally, a binary logistic regression identified Workload and Job Impact as factors predicting lower worker health outcomes. Although "marginally" significant, working outside of one's home county and working in an urban area were factors contributing to the stress-induced health impact associated with respondents' positions.

The profession must recognize the health implications associated with working in public child welfare and organizational efforts to allow these employees to self-care seems to be an absolute necessity. Future research should integrate the use of biometric screening and multidisciplinary collaboration to investigate organizational, supervisory, and individual level efforts to improve the situation.

KEYWORDS: Child Welfare, Health, Turnover, Retention, Workforce

Austin Garrett Griffiths

July 25, 2017

SERVICE BEFORE SELF:
THE HEALTH CONSEQUENCES OF WORKING IN PUBLIC CHILD WELFARE

By

Austin Garrett Griffiths

Dr. David Royse

Director of Dissertation

Dr. Chris Flaherty

Director of Graduate Studies

July 25, 2017

Date

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Chapter One: Introduction and Purpose of the Study

According to the U.S Department of Health and Human Services (2016), 3.6 million referrals were made alleging the maltreatment of 6.6 million children in the federal fiscal year of 2014. Approximately 1,580 children died during that timeframe as the result of child maltreatment. Confronting this social problem is the responsibility of the frontline child welfare workforce, consisting of professionals who devote their lives to protecting the well-being of our most vulnerable populations. A competent and committed child welfare workforce is a fundamental necessity in assuring that protective and treatment services are provided to those in need (DePanfilis & Zlotnik, 2008; McFadden, Campbell, & Taylor, 2015).

However, the nature of child welfare work has been shown to be stressful. Professionals operating in this capacity often work without recognition or acclaim yet their daily decisions directly impact human lives. Additionally, Blome & Steib (2014) found that child welfare agencies and their employees experience higher levels of scrutiny than other agencies providing social services and Kim (2011) found that public child welfare workers in California experienced higher workloads, more role conflict, and depersonalization than social workers operating in different capacities. Unfortunately, the demands of working in this environment result in the average tenure for child welfare workers being less than two years (GAO, 2003), resulting in a shortage of professional child welfare workers that has been recognized as a national problem (Cahalane & Sites, 2008).

Worker Turnover

Realizing the importance of having an experienced, stable, and skilled child welfare workforce, the rates at which workers leave their positions is alarming. Although it is difficult to obtain accurate percentages (Zlotnik, DePanfilis, Daining, & Lane, 2005), turnover rates average 22% (AHA, 2011), to 30-40% (GAO, 2003), and can be as high as 90% (Child Welfare Information Gateway, 2014). With workers leaving at such high rates, there are not enough staff to meet performance standards (Scannapieco & Connell-Carrick, 2007) and families face an unrelenting cycle of continually having a different worker (Cahalane & Sites, 2008). In addition to further placing families at risk, it is costly to recruit and train new workers (Ellet, Ellis, Westbrook, & Dews, 2007). On that note, the National Child Welfare Workforce Institute (2017) found that the estimated cost for every child welfare worker leaving the agency is \$54,000. It is clear that the cost of worker turnover has an impact in both human and economic terms, fortifying the relevance in addressing this social issue.

Why Do they Leave?

For more than a decade, researchers have examined why child welfare workers leave their positions. Workers abandon their positions for many reasons. On one hand, workers are nested inside of large and bureaucratic agencies with many policies and procedures. On the other, they are individual human beings with goals, families, and aspirations—often trying to find a way to balance work and family life. Yet this balance is difficult to obtain, and the associated conflict has consequences on the child welfare worker's performance and longevity in that role. In a cross-sectional study of 361 public child welfare workers, found that work-family conflict not only increased child welfare

workers' job burnout, but negatively influenced their well-being (Lizano, Hsiao, Barak, & Casper, 2014). Beyond these competing interests, studies have specified the most prevalent factors influencing workers to leave their positions and divided this body of work into both organizational and individual level variables.

Prominent individual-level variables that have influenced whether child welfare workers leave their positions include their professional commitment and job satisfaction (Ellett, Ellett, & Rugutt, 2003; Ellett et al., 2007; Faller, Grabarek, & Ortega, 2010; Williams, Nichols, Kirk, & Wilson, 2011). Additionally, the child welfare worker's self-efficacy (Chen & Scannapieco, 2010) and level of emotional exhaustion (Dickinson & Perry, 2002) have been found to influence worker retention. Organizational variables such as reasonable workloads and better pay (Zlotnik et al., 2005), co-worker support (Williams et al., 2011), and supervisor support (Dickinson & Perry, 2002; Nissly, Barak, & Levin, 2005; Barth, Lloyd, Christ, Chapman, & Dickinson, 2008) have been found to positively influence worker retention. Key factors associated with a negative influence are the lack of organizational support (Kim & Kao, 2014), and extremely large caseloads (Ellett et al., 2007). Recognizing the evident challenges of working as a professional child welfare worker, Blome & Steib (2014) have argued that the prevailing organizational structures may not be optimal for addressing the formidable tasks associated with employment in child welfare agencies. This may be true, as researchers have studied this problem for years with no solution in sight. However, any effort to bring change to child welfare organizations may need to include the implications of the stress associated with child welfare positions.

Job stress. In a study of 418 primarily female frontline public child welfare workers with graduate degrees, Nissly, Barak, and Levin (2005) explored the relationships of stress, social support, and worker intention to leave. This cross-sectional design study utilized linear regression analyses and found that organizational stress accounted for 18% of the variance in the samples' intention to leave ($p=.000$), supporting the relevance, but not the predominance of stress when exploring child welfare workforce turnover (Westbrook, Ellis, & Ellett, 2006).

Identifying a limitation in the current state of the literature related to turnover intention among child welfare workers, Kim and Kao (2014) conducted an influential meta-analysis. Quantitatively examining 36 predictor variables from 22 studies, it was determined that the factors related to worker perception and attitude carried the most weight when compared with the demographic variables in the analysis. Stress and burnout were both found to have a medium to high effect size when considering the child welfare worker's turnover intention.

Extreme job stress is a known commodity in this line of work, yet limited studies have sought to identify the factors that may mediate this condition. Boyas, Wind, and Kang (2012) focused on the impact of age and its contribution to job stress, burnout, and intention to leave. Utilizing a cross-sectional research design and a sample of 209 public child welfare workers, a path analysis revealed that social capital had a protective value for older workers when exploring the impact of social capital dimensions in mediating job stress. Although research has well established the prevalence of job stress, its implications on the child welfare worker are not as clear.

Decades of research have helped to identify a number of important factors that influence the worker's experience (Dane, 2000; Horwitz, 1998; Nelson-Gardell & Harris, 2003; Nissly, Barak, & Levin, 2005; Westbrook, Ellis, & Ellett, 2006), but has something been overlooked? A missing component in the expansive body of child welfare research literature is the individual health consequences of working in public child welfare, something that is beginning to gain attention in the police and nursing literature (Anderson, Litzenberger, & Plecas, 2002; Happell et al., 2013; Jordan, Khubchandani, & Wiblishauser, 2016; Neylan et al., 2002). It is unreasonable to expect that a child welfare practitioner can engage with multiple families in crisis on a daily basis and not have these experiences affect their health or desire to find work where there is less pressure, less responsibility, and where the stakes are not so high. To address the high rates of child welfare worker turnover, one must first understand the comprehensive mental and physical costs associated with working in this position. Before presenting a synthesis of the relevant literature in chapter 2, a case vignette has been created to illuminate the real-life stresses and dilemmas associated with the reality of working as a frontline public child welfare worker in today's child welfare system. Showing the comprehensive mental and physical costs associated with working as a frontline child welfare worker will provide context to this study, demonstrating the insurmountable issues that workers face every day. In reading this case, one will be able to see why Baumeister's theory of Ego Depletion (explained in the next chapter) is so relevant for understanding burnout among child welfare workers.

A First-Hand Account: Sarah's Story

After college, Sarah began her career as a public child welfare worker as a young, newly married individual with the primary goal of helping others in her community. Sarah's ambitious personality and physical abuse in her past drove her to this important position, ready to "pay it forward" and make a difference.

Sarah's training involved a deluge of policies and procedures involved with her new position. She did her best to remain focused on learning how to be effective in her new position, but found it difficult to remain engaged when she thought about the 25 cases she was assigned in her first month of employment. Although about 20% of her cohort had already resigned from their positions at the conclusion of training, she was ready to make a difference and began her career at the local office. Sarah immediately realized that her demanding job placed her in a unique position in her community. She was occasionally hassled at the grocery store and followed home by clients. Further, she was threatened by several clients and became the respondent in a large and unfounded lawsuit simply by following policy.

Sarah knew she was making a difference in the lives of people in her community, but some of the policies in place made it hard for her to feel like she was able to be honest. Specifically, Sarah was instructed to ask her clients to "negotiate" case plans with her that would include pre-determined treatment options that she knew the family would never be successful in either accessing or completing. The weight of these ethical dilemmas would often trouble her, but Sarah tried to focus on small successes to stay motivated.

With experience, Sarah tried to advocate for improved working conditions. Realizing the technological limitations of the agency, Sarah drafted a memo and suggested that completion of forms and paperwork could be completed faster with an investment in new tablets or laptops.

After making continuous suggestions, Sarah became discouraged by the lack of support she received from the agency but tried to not let these organizational barriers hinder her capacity to help those in her community.

With time, Sarah's perceptions began to change. High rates of turnover led to a constantly understaffed team, unreasonably high performance evaluation requirements, and irrational demands from the court system. As a loyal employee and a team player, Sarah was consistently "rewarded" by being assigned the most difficult and complex cases. Unable to provide the necessary time and effort to deal with the responsibilities associated with her position, she realized the prevailing organizational culture was focused on their own liability protection. The extreme toll from this daily grind became evident. Sarah and her colleagues would talk about how important it was to practice self-care, yet it did not occur. Barriers limited the opportunity to practice self-care in this position, and taking any leave time would place a further burden on her colleagues. Sarah began to notice that her once supportive colleagues were now beginning to engage in selfish behavior and survival techniques, including a number of seriously concerning unhealthy habits (e.g. alcohol use, caffeine, nicotine, overuse of prescribed medication). Sarah felt guilty for not being able to take care of herself first, but as social workers often do, she remained focused on meeting the needs of her clients and hoped that things would get better.

Consistently participating in highly stressful and difficult court testimonies, interviews, and uncomfortable conversations with children, Sarah remained mentally and physically exhausted. Functioning on a “drive through diet” and highly caffeinated energy drinks, the long hours and consistent stress led to significant weight gain and high blood pressure. She had recurring images of the home visit when she was attacked by a pitbull, couldn't sleep, and had migraines. She was prescribed anxiety medication, and ordered to sleep with a bi-pap machine. Sarah was falling apart. She considered taking a brief vacation, but remembered that the last time she left town with her family she continually received phone calls from her supervisor about her open cases.

Sarah's career as a frontline child protective services worker concluded with a moment of clarity. With her own mental and physical health in dire straits, Sarah realized even the most well-intended person could not sustain working in this environment. Feeling that her health was declining and also an absent parent to her own children, Sarah raised the white flag and resigned from her position like so many before her.

Purpose of the Study

The child welfare literature is saturated with studies focused on worker turnover and retention (Cahalane & Sites, 2008; Faller et al., 2010; Gonzalez, Faller, Ortega, & Tropman, 2009; Mor Barak, Levin, Nissly, & Lane, 2006). As we will see in the next chapter, many different variables have been proposed, examined, and found associated with worker turnover and job dissatisfaction. However, one potentially informative avenue about the results of job pressures on child welfare workers has not been explored in the literature.

The purpose of this study is to examine the self-reported health consequences of working in public child welfare. Although robust in a number of areas, the literature about the health consequences of working as a child welfare worker is almost nonexistent. With the real-world implications of this significant problem, addressing this gap in the literature will prepare agencies to serve their communities better. The results from this study will inform organizational wellness initiatives and may help in creating an optimal and stable workforce, focused on meeting their own needs *and* the needs of others.

Although the goal of providing information for improving the health of child welfare employees is rationale enough for this study, another timely reason can also be made. Many large government systems are finding their retirement systems on the brink of collapse and have begun providing different options in the private market. If child welfare workers are no longer “vested” in state retirement systems, retention issues may be further challenged unless agencies are able to address and improve upon the overall health and wellness of those persons working as child welfare workers. The future stability of the child welfare workforce may well be dependent on viewing the employee as a holistic entity with health and psychological needs that must be met.

Description of the Study

In the next chapter this study will begin with an exploration of the literature on the job demands and job resources that have been found to influence the child welfare worker’s experience. Special attention will be given to the personal characteristics that each individual brings to the table when working in this capacity. A deficiency in child

welfare research will be identified as studies of other high-stress professions focusing on their employee health and well-being will be reviewed.

This study involves the secondary analysis of cross-sectional data, obtained through a statewide electronic survey submitted in 2016 to the public child welfare workforce in a southern state. Developed in response to a pilot study where former workers mentioned that they left their positions due to not having a voice and the inability to practice self-care (Griffiths & Royse, 2017), this survey was conducted to assist the agency in obtaining insight from their workers and inform their efforts in addressing high rates of worker turnover. Workers not only shared their satisfactions, dissatisfactions, and suggestions for improving work-life balance, but also self-reported qualitative open-ended descriptions about the unhealthy habits they have developed due to the stress of their positions. Exactly 511 frontline child welfare workers participated in this voluntary and anonymous questionnaire. Originally approved by both the University and agency IRB, this dataset has been approved as exempt with the University of Kentucky for this dissertation. The previously *unheard voices* contained in this statewide sample of child welfare workers will address a gap in the literature by identifying the self-reported health consequences of working in public child welfare, and informing agency efforts to improve worker retention, work-life balance, and creating a healthy workforce.

Chapter Two: Analysis and Synthesis of Relevant Literature

High rates of child welfare worker turnover have become, unfortunately, an expectation. Worker turnover matters at all levels: in the community, and at the state, and national levels. Working in child welfare is alarmingly stressful, and the complex nature of the demands upon the individual worker heighten the difficulty of performing well and taking care of one's self. This chapter will begin by identifying the push and pull of factors that continue to shape the child welfare worker's experience. The influence of the child welfare worker's personal characteristics will be discussed, followed by an identification of the important resources that continue to support workers in this challenging position. Next, a comprehensive examination of the demands associated with working in child welfare positions will ensue, with a particular focus on the cost of caring. Finally, the chapter will detail a gap in the literature and discuss the necessity for recognizing the health consequences of working in public child welfare.

Logic Model

Although the literature is largely atheoretical, many theories have been used to attempt to understand the factors believed to influence the challenges associated with child welfare work. The logic model for this study is a child welfare specific modification of the distinguished and flexible Job Demands-Resources (JD-R) Model of Burnout framework (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001). The JD-R Model is a staple in the literature, and continues to inform explorations into the working conditions associated with burnout across a number of occupational settings. Cited approximately 1,500 times on the Web of Science Core Collection, this model not only serves as a framework for investigating the factors contributing to burnout but also can be

used as a flexible mechanism in explaining the push and pull of organizational factors that influence workforce outcomes. The JD-R Model frames the discussion of the pertinent child welfare literature by grouping the salient factors into two prominent categories of the model: job demands and job resources. However, an adaptation of the model will increase its applicability, as personal characteristics of the worker and the outcome measure used in this current study will be integrated (See Figure 1).

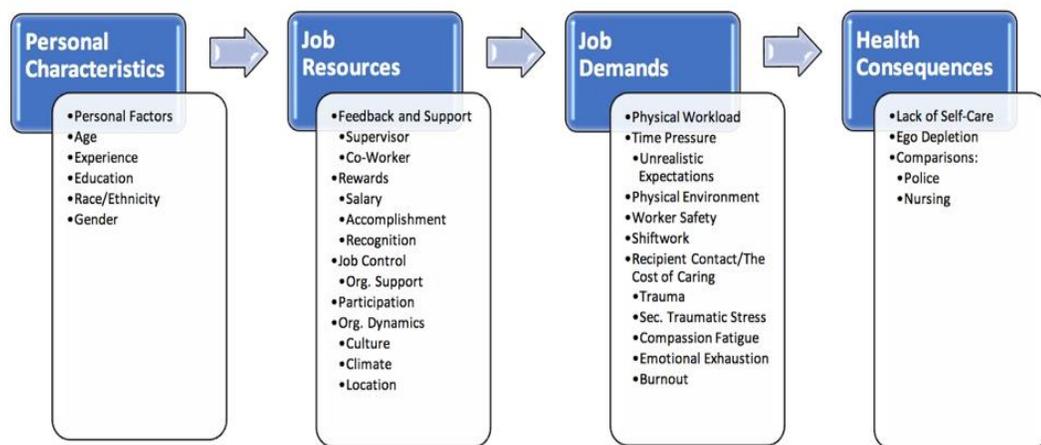


Figure 1. Logic model

Personal Characteristics

As diverse individuals, child welfare workers utilize their own perceptions, experiences, and strategies to guide decision-making while working in challenging environments. Some workers are better prepared than others. Further, child welfare professionals often begin this profession for a number of reasons, some very personal. It may be that high rates of turnover and the health consequences associated with this position can be attributed to the combination of the unique characteristics of the

individual conducting his or her duties and the volatile circumstances of this line of work. An exploration into this dynamic will ensue, shedding light into the realities involved with this profession.

While family of origin variables might incline an individual to consider social work and, in particular, child welfare as a career, it could also predispose the same individual to experience increased problems on the job performing in child protection. Seeking to investigate the contribution of background factors with the current well-being of 253 child welfare workers, Festinger and Baker (2010) retrospectively examined the prevalence of childhood emotional abuse. Findings of this unique exploration revealed that approximately 30% of the respondents disclosed experiencing childhood emotional abuse, with female respondents characterized as having experienced extreme emotional abuse almost four times more than their male colleagues. Importantly, the ongoing effects from the previous child maltreatment were found to significantly predict the current well-being of the child welfare workers in the sample.

In addition to the influence on an individual's well-being, research has identified associations between child welfare workers' personal factors, their job satisfaction, and their intention to leave the agency. Using objective measures to identify life satisfaction and stress-related symptoms in 145 child welfare workers in Canada, Shier et al. (2012) supported the influence of personal characteristics by finding that turnover and job satisfaction are not solely only determined by the working environment. Including the influence of age, gender, years of practice, and educational level resulted in a model that explained 38.7% of the variance in job satisfaction.

On that note, age, experience, and education are commonly investigated demographic variables that have been found to influence the child welfare worker's experience. Age has been found to predict child welfare workers leaving their positions, as Griffiths, Royse, Culver, Piescher, and Zhang (2017) used a multinomial logistic regression model and found an inverse relationship between age and likelihood of leaving the agency in the next 12 months. Much work remains to be done in this area, as anecdotal evidence suggests that the next generation of child welfare practitioners share unique generational differences that may influence their decision-making more than older workers. Prior experience does not appear to be an important factor when predicting turnover or retention (DePanfilis & Zlotnik, 2008).

In regard to education, social work and the child welfare system have shared a historical relationship (Barbee, Antle, Sullivan, Dryden, & Henry, 2012; Zlotnik & Pryce, 2013), guided by the assertion and evidence that social work education provides good preparation for the child welfare workforce (Folaron & Hostetter, 2007; J. L. Zlotnik, 2002). Rosenthal and Waters (2006) utilized a survival analysis with a sample of 839 child welfare workers and found that participation in a Title IV-E social work education program improved worker retention. Further, Madden, Scannapieco, and Painter (2014) used longitudinal data from 9,195 child welfare workers and found that social work education supported longevity at the agency. Mason, LaPorte, Bronstein, and Auerbach (2012) found that for every course taken in social work education there was a 50% increase in odds of remaining in child welfare. However, Nissly, Barak, and Levin (2005) discovered that child welfare workers with graduate degrees experienced higher

levels of stress and greater intent to leave their positions and Yankeelov et al. (2009) also found that child welfare workers with an MSW were more likely to leave the agency.

Research on the child welfare worker's experience and the impact of race and gender has been mixed. However, the lack of diversity in the workforce is clear. A national study of 1729 child welfare workers by Barth et al. (2008) highlighted the limited diversity in gender, race, and ethnicity existing in the child welfare workforce and found no strong associations for these variables when investigations examined worker job satisfaction. Yankeelov et al. (2009) looked at factors influencing worker intent to leave in a study of 448 Kentucky child welfare workers and found that race and gender were insignificant. One study did find differences. Faller, Grabarek, and Ortega (2010) found that workers of color were less committed to staying in their positions. Beyond intent to leave and job satisfaction, research has shown that child welfare workers feel an increased level of personal accomplishment through their ethnic communities (Smith & Clark, 2011). However, this is difficult to generalize, as the child welfare workforce in urban areas is more diverse than those in rural communities (Aguiniga et al., 2013).

Unraveling the complex influence of individual level characteristics is important, but the literature exploring the connection of these variables with worker health outcomes is almost nonexistent. In Sarah's story, the tipping point occurred when she realized that she wasn't able to parent her own children *and* that her health was in dire straits. When child welfare workers are at their breaking point, it's all the more important that resources are in place to improve their situation.

Job Resources

A resource is an asset, a supportive entity in professional sustainability. The job resources category includes factors that have been found to help expedite the completion of goals, development, learning and individual growth. Drawing from the JD-R Model, this section of the literature review will explore the impact of the original elements of the model that include feedback, rewards, job control, participation, and supervisor support. To update and modify this model to fit child welfare, this section will also discuss organizational dynamics.

Feedback and support (supervisor and co-worker). In the original JD-R Model, this element was designed to obtain respondents' perceptions about the quality of feedback they obtained as a worker. In the bureaucratic child welfare system, frontline workers have voiced the need for improved communication with upper management (Johnco, Salloum, Olson, & Edwards, 2014), resulting in a primary form of feedback coming from their coworkers and immediate supervisors. The importance of child welfare supervision is well documented as influencing satisfaction and retention. Child welfare supervisors are responsible for a number of critical tasks, and comprehensive supervision includes both giving quality feedback, providing support, and leadership. Child welfare worker supervisors have a difficult, yet critically important job.

In a national study of ongoing child welfare caseworkers, Barth, Lloyd, Christ, Chapman, and Dickinson (2008) identified the importance of quality supervision, as it was the strongest predictor of worker job satisfaction. Additionally, the support obtained by a supervisor matters.

Using a series of logistic regression models, Benton (2016) analyzed a statewide study of 1102 child welfare MSW Stipend recipients and identified the significant association between higher levels of supervision and improving the odds of retention. Chenot, Benton, and Hansung (2009) used multilevel modeling with a sample of 767 child welfare workers and found that supervisory support not only assisted in retaining child welfare workers in their agency, but in the field as a whole.

Supervisory support is a consistent variable found to positively influence worker retention (Dickinson & Perry, 2002), but today's child welfare system operates in a highly chaotic system that is significantly burdened by high rates of worker turnover. As a result, frontline supervisors are "in the trenches" and carrying cases with their workers on a daily basis—which can give them less time to provide supervision. Another closely related and valuable resource should be mentioned in this subsection: coworker support.

Williams, Nichols, Kirk, and Wilson (2011) used a 160-item self-administered survey in a sample of 260 public child welfare workers in Georgia and found coworker support as the only organizational factor in the study positively associated with retention. However, when discussing the effect of coworker support, context may matter. Curry, McCarragher, and Dellmann-Jenkins (2005) identified coworker support as a predictor of retention in a study of 416 child welfare workers, but primarily when it related to workers with less experience. When examining the resources of value in the child welfare system, feedback, supervisory support, and coworker support have been found as important factors that continuously influence the child welfare workers' experience and longevity at the agency.

Rewards. Rewarding individuals for their hard work and sacrifice is especially important in the child welfare arena, as enduring challenges and remaining positive can mean the difference in the safety of a child. Several themes in the literature relevant to this subheading are salary, accomplishment, and recognition. It is common knowledge that child welfare professionals generally do not begin their career for the money. However, the financial “reward” associated with this position is important and contributes to the worker’s overall experience. As one would expect, low levels of child welfare worker salary have often been found to influence child welfare workers’ job dissatisfaction and turnover (Zlotnik, DePanfilis, Daining, & Lane, 2005).

A qualitative study of 369 child welfare professionals in Georgia found results of 58 focus group interviews identified noncompetitive salaries as a primary factor influencing employee turnover (Ellett, Ellis, Westbrook, & Dews, 2007). Further, one study used a mixed methods approach and identified that only 3% of the public child welfare workers in the state of Georgia sample were satisfied with their salaries (Williams et al., 2011). Most of the literature surrounding this important factor is framed in a negative sense, involving dissatisfaction with salary and its association with turnover. Yet, it can be argued that there are other important avenues to consider for rewarding workers for performance in their jobs that may have just as much impact.

The literature identifies sense of accomplishment as a valuable component that influences the child welfare worker’s experience and assists in retention. In a study comprised of 305 child welfare workers who were graduates of the Title IV-E educational program at the University of Pittsburgh, personal accomplishment was found to predict retention (Cahalane & Sites, 2008). The results of this study are especially

important when comparing social workers in different settings, as Kim (2011) found significantly lower levels of personal accomplishment for child welfare workers in public settings. It is critically important that child welfare workers feel they are making a difference, but what if they are not recognized for the work they are doing?

Another closely related construct under this subheading found to shape the workers' experience is that of recognition, or the lack thereof. The importance of recognition is amplified when speaking about child welfare workers, as public perception has been found to be a key predictor of stress when working in this capacity (Zosky, 2010). Shim (2010) used retention data with a sample of 781 child welfare workers in New York and found that an organizational focus on rewards and incentives significantly minimized the employee's intentions of leaving. Without an effort to provide rewards, workers may feel undervalued, impacting their job satisfaction and leading to turnover (Barth et al., 2008; Cahalane & Sites, 2008; Ellett et al., 2007; Williams et al., 2011). The absence of rewards in this profession may be creating a significant barrier that must be addressed in order to stabilize the child welfare workforce and improve the health and well-being of those operating in this capacity.

Job control. As proposed in the JD-R Model, the job control section speaks to autonomy in a decision. Specifically, it refers to deciding for yourself how to conduct your work. In the modern child welfare system, this autonomy can best be understood by discussing the overlapping construct of having organizational support. Child welfare workers are constantly expected to make strenuous, exhausting, and difficult decisions without having sufficient information. They are often alone and must rely on their past experience to attempt to perform the insurmountable task of predicting human behavior.

However, having the support of the organization allows workers to feel like they are in a place of empowerment and autonomy. Unfortunately, this is not always reality and the absence of this vital element is a factor known to influence workers leaving their positions. For instance, a unique snowball sample of former public child welfare workers revealed that one of the primary reasons they left their positions was the lack of organizational support when working at the agency (Griffiths & Royse, 2017). While most of the turnover literature is *intent* based, these 54 workers had time to reflect on exactly why they left.

A longitudinal study also indicates the necessity for organizational support in the child welfare system. Madden, Scannapieco, and Painter (2014) used data from a sample of 9,195 public child welfare workers and found organizational support as a significant influence on longevity at the agency. Although this necessary resource seems rather self-evident, the need for organizational support continues to substantially influence the workers' experience and the landscape of the child welfare system.

Participation. *Participation* was originally intended in the original JD-R Model to capture whether or not the management was the only entity making the decisions. Although closely related to the resource of organizational support, participation can best be viewed in the child welfare system as having a voice. Especially when working in a bureaucratic child welfare agency, the ability to have a say in one's work is an important resource that has been found to influence whether or not child welfare workers will stay in their positions. In a rigorous empirical study of 418 workers in an urban child welfare agency, Mor Barak, Levin, Nissly, and Lane (2006) used structural equation modeling and found exclusion from the decision process as one of the strongest predictors of

intention to leave. If information only flows one way in an agency, issues will present themselves. In child welfare, workers must feel they like are a part of the solution, as one-way flow of information in bureaucracies ultimately limits the effectiveness of services provided to families and children.

Organizational dynamics. The dynamics involved with child welfare organizations have been found to shape the worker's experience and organizational outcomes. Organizational dynamics are identified in this model as a resource, but the absence of such presents a challenge when working in this position. Collins-Camargo and Royse (2010) illuminated the value of improving organizational performance strategies in a sample of 876 public child welfare workers and supervisors, especially related to their association with levels of worker self-efficacy and effectiveness of supervision.

Using retention data from the New York State Social Work Education Consortium (SWEC), Shim (2010) conducted a logistic regression model and found both organizational culture and organizational climate were significant factors influencing a child welfare employee's intent to leave. Within organizational culture, some feel that bureaucratic agencies function in a passive-aggressive nature. Chenot et al. (2009) proposed a unique sensitivity to this concern by suggesting a passive-aggressive organizational climate's negative effect was only pronounced when considering workers who were early in their careers. Other organizational factors, such as organizational stress, have been found to influence workers leaving their positions (Nissly, Barak, & Levin, 2005). Organizational assessments have also been used by child welfare researchers to not only identify factors predicting worker intent to leave, but to

comprehensively evaluate organizational effectiveness and develop strategies for improvement (Collins-Camargo, Ellett, & Lester, 2012).

What about location? It may be argued that working in an urban or rural area will also influence the organizational climate or present a unique set of challenges when working in child welfare, and some studies have had enough representation to explore this phenomenon. In a national study, regression results identified an association between child welfare worker job satisfaction and whether or not the practitioner was working in an urban or rural area (Barth et al., 2008). Greater satisfaction was found in rural areas. Aguiniga, Madden, Faulkner, and Salehin (2013) compared intention to leave in a sample of 2,903 public child welfare workers in Texas and did not find geographical location as a significant predictor for urban, small-town, or rural workers. However, they did find that workers in urban areas were more likely to have a master's degree and be a member of a minority group. Yankeelov, Barbee, Sullivan, and Antle (2009) explored a sample of 448 public child welfare workers in Kentucky and did not find any significant difference in longevity, but found greater supervisory support for child welfare workers in rural areas. Results from a study of 990 child welfare workers by Landsman (2002) suggest that rural child welfare agencies are more "agreeable workplaces" than what is experienced in larger and more urban areas. It appears that the influence of location is a mixed bag, but the organizational dynamics associated with working as a child welfare practitioner are important for consideration.

Overall, job resources are a vital component when ascertaining the influences that support workers protecting communities. They are an invaluable element that is necessary for conducting challenging and often overwhelming work. As described in

Sarah's story, the absence of such resources can have dramatic implications on the experience of the individual in this capacity.

Job Demands

Leaving the strengths-based view of resources, the literature contains many illustrations of the demands placed on professional child welfare workers--particularly in relation to their association with intent to leave. The JD-R Model's job demands category is an applicable structure for use as a tool in examining the organizational, psychological, physical, and social responsibilities of the position that require sustained effort in the child welfare system. Relevant subheadings from the original JD-R Model include the demands of workload, time pressure, physical environment, and shift work. However, the physical environment heading will be modified to include worker safety.

The final component of the Model, recipient contact, is where the JD-R Model falls short in failing to accurately portray the challenges associated with child welfare work. The demands of recipients in contact with the child welfare worker are better identified as the cost of caring.

Physical workload. As we will see in this section, overwhelming workloads have long been identified as a main factor contributing to workers leaving their positions. An inspection of the job demands associated with child welfare work must begin with workload and its relationship with the child welfare worker's experience and longevity at the agency.

On one hand, Zlotnik et al. (2005) was able to view this challenge as a strength, finding reasonable workloads as a factor contributing to retention. On the other, workloads for child welfare workers are extreme when compared to social workers in

other settings (Kim, 2011). In a study by Williams et al. (2011), only 12% of the sample of Georgia public child welfare workers felt that their workload was reasonable. Ellett et al. (2007) used focus groups with 369 child welfare workers and found that not only did extremely large caseloads lead to turnover, but that the burden associated with this dilemma resulted in front line workers and supervisors having to work more than 70 hours per week. Additionally, Gonzalez, Faller, Ortega, and Tropman (2009) coded open-ended responses and found that of the 69 departed child welfare workers participating in the study, 52% stated that if they had a manageable workload, they would have stayed. The demands placed upon child welfare workers due to the unmanageable caseloads are a root cause of a number of issues in this study.

Time pressure. This important factor was originally considered in the JD-R Model to reflect whether or not respondents had enough time to perform their tasks. Related to the child welfare worker, high rates of worker turnover and increasing workloads have left practitioners with limited time to perform job tasks associated with their positions. Yet the expectations have not decreased and workers face unrealistic expectations that have been found to influence their experience and longevity at the agency. In a mixed methods study by Griffiths & Royse (2017), former public child welfare workers described the effects of having unrealistic expectations as a primary reason that they left their positions at the agency. It is difficult for the child welfare worker to have enough time to meet the demands of their positions. Some workers felt punished for being unable to achieve expectations that are unattainable—and this drove them out of the agency.

Physical environment/worker safety. *Physical environment* identifies a category that was originally focused in the JD-R Model to explore whether or not the climate and design of the workplace were appropriate. Child welfare workers operate within a number of workplaces and environments, and this component will be adapted to reflect demands placed on the child welfare worker. Specifically, worker safety has been found to directly influence the child welfare worker's experience as child welfare work is dangerous and clients may be violent and retaliate when workers are performing their jobs. There are safety concerns in this line of work that are often unknown to those outside of the profession. Workplace violence is a significant problem, one with implications that are not yet clear especially when considered relative to the personal makeup of each individual employed in direct child welfare work and his or her ability to handle threats.

Zelnick et al. (2013) employed an anonymous internet-based survey to compile data about workplace violence for those in the social services in the fiscal year of 2009. The results from this study not only confirmed high rates of workplace violence, but also identified a significantly higher risk to those providing direct care. Additionally, qualitative data indicated the underreporting of assaults and threats, as respondents shared statements about possible liability and feared being blamed for the incident if they were to divulge these actions in their agency. Although not exclusively focused on the impact of workplace violence against child welfare workers, the results illustrate the problem when working in direct practice with unpredictable populations.

Seeking to drill-down into the risks associated with working as a child protective services worker specifically, Littlechild et al. (2016) launched a large survey in England

and captured data about the effects of the violence and aggression against child protective services workers. This extensive study used open and closed-ended questions to learn from 590 respondents, 72% of which worked in child protection and primarily in statutory agencies. Results indicated that child protective service workers frequently dealt with aggressive and resistive behaviors such as intimidation, abuse, and physical violence, etc. Of significant concern, 42% of the respondents reported receiving threats in the last six months and 50% identified having to deal with hostility and intimidation from parents at least one time every week. The effects of working in this challenging environment were demonstrated by workers discussing their loss of professional confidence and the negative influence on their ability to protect children. The majority of 390 respondents (66%) identified these behaviors not only making their work more difficult, but having a negative impact on their own families. Finally, the results detailed the specific dangers of the profession as 16% of the sample reported that their families had received threats, 8% received death threats, and 10% reported having been held captive.

Further specifying the types of workplace violence against child and family social workers, Robson, Cossar, & Quayle (2014) identified verbal threats and aggression as the most common forms, and client behavior as having the most adverse consequences. Are the risks of violence more prevalent for child welfare workers? An international study suggests that this is the case. Shin (2011) explored differences in client violence and work attitudes in a cross-sectional survey of 413 social workers in South Korea, comparing those employed in child protection and those working in community service settings. The results of this study indicated that child protective service workers had

greater exposure to and a higher frequency of client violence than community service workers. Further, the child protective service workers identified a need for agency support to increase their safety in their work environment. The effects of client violence had a pronounced impact on the work attitudes of the child welfare workers. The dangers associated with working as a child protective service professional seem to be similar in other countries as well as in the U.S.

Vogus, Cull, Hengelbrok, Modell, & Epstein (2016) conducted a rigorous empirical analysis to explore the safety culture in Tennessee's child welfare system. Drawing upon 1719 employees, the findings revealed significant regional similarity in the perceptions of safety in the worker's environment. The widespread safety issues associated with child protection positions are assumed to take a toll on the well-being of the child welfare worker, impacting their experience and longevity at the agency.

Shiftwork. The element of shift work was originally designed in the JD-R Model to discern whether the employees' work schedule interfered with their personal lives and whether or not their work schedules were "physically taxing." Child welfare workers, by nature, have chaotic work schedules. One may argue that they are never actually off the clock. Individuals can be on-call 24 hours a day for weeks on end and are expected to leave their personal responsibilities and immediately report to crisis events on a moment's notice.

In an influential statewide qualitative study of 369 child welfare workers, Ellett et al. (2007) shared insight from the workforce and the value of having a flexible work

schedule to address emergencies and personal obligations; it was identified as a primary factor that respondents suggested would help the agency retain workers.

Lately, some agencies are considering using a 2nd shift crew to work after hours and take on-call reports, and even allowing workers the option of working from home to better address responding to reports of abuse and neglect. The literature does not contain many studies exploring the impact of sleep disturbances on the overall health and well-being of the professional in this line of duty. The inability to rest or recharge in this position is a problem that can impact workers' health.

Recipient contact/the cost of caring. The child welfare “turnover” literature is robust in many areas, and the final element of the JD-R Model identifies the demanding nature of recipient contact as an important consideration. The original JD-R Model only used two Likert items to assess for the level of demand associated with the respondent's client contact, but client contact as a child welfare worker is more than just demanding. It has been said that there is a cost to caring, and working with traumatized populations can create an impact far beyond those directly involved in the experience. Given the exceptional stress in this line of work (Boyas et al., 2012; Mor Barak et al., 2006; Nissly et al., 2005; Shier et al., 2012; Smith & Clark, 2011), the literature identifies trauma, secondary traumatic stress, compassion fatigue, emotional exhaustion, and burnout as closely related conditions that workers experience in their positions.

Though closely related, one cannot presume that trauma, secondary traumatic stress, compassion fatigue, emotional exhaustion, and burnout involved with child welfare work are exactly the same concept. However, rather than attempting to parse out the complexities associated with these constructs, the following section will begin a

discussion of how each might contribute to the experience of the child welfare worker and their overall health and well-being.

The literature has revealed that secondary traumatic stress, compassion fatigue, and vicarious traumatization are all interchangeable constructs (Nelson-Gardell & Harris, 2003). Yet, it can be argued that each condition is a distinct entity (Newell & MacNeil, 2010). Although limited research has attempted to empirically parse out each of these valuable constructs, one study accessed a random sample of 236 social work practitioners in New York City after 9-11 and evaluated differences in the constructs of secondary trauma, job burnout, and compassion fatigue. Using established instruments, Adams, Figley, and Boscarino (2008) were able to find distinctions between job burnout and secondary trauma, and determined that both measured different aspects of compassion fatigue. In the end, all three of these concepts were found to be detrimental to the professional. Not only were they found to present psychological problems in the random sample, they were found to negatively influence job turnover, service delivery, and the continuity of care.

Traumatic experiences. Child welfare workers experience a variety of overpowering circumstances that can impact their level of functioning and influence their decision to stay in their positions. According to Horwitz (1998), child welfare workers experience both direct and indirect trauma through the course of their job duties that have a negative impact both personally and organizationally (e.g., turnover). Direct trauma for the child welfare worker was described as including threats, assaults, public blame, and the overwhelming organizational demands of the child welfare work environment. Indirect trauma was described as the effects of external events not specifically directed at

the social worker such as child death, a sense of responsibility, and feelings associated with adverse events in the organization that “it could have been me.”

In a particularly important study, Horwitz (2006) analyzed 54 survey items completed by 282 child welfare workers between 1994 and 1996 and examined the presence of negative workplace events and the effects of workplace trauma. To identify the presence of negative workplace events, items measured a number of areas including verbal abuse, physical assault, and property damage by clients. The Likert-type items assessed for workplace trauma associated with these events by soliciting feedback on sleep disturbance, intrusive thoughts, and difficulty in concentrating. An association was found between experiencing negative work-related events and the effects of workplace trauma ($R^2 = 0.344$), yet neither job support nor job satisfaction moderated this relationship. Although completed more than 10 years ago, this influential study supports the position that trauma interventions could be a valuable resource in working with the child protection workforce. This protective step may help in managing the effects of trauma, a vital element in keeping a healthy and productive child welfare workforce.

Child welfare professionals continuously create and receive detailed narratives from victims describing the atrocities they have experienced. Research has long identified that the impact of trauma is not only limited to those with direct contact with trauma. For instance, Lerias & Byrne (2003) defined vicarious traumatization as “the response of those persons who have witnessed, been subject to explicit knowledge of or, had the responsibility to intervene in a seriously distressing or tragic event (p.130),” and then identified re-experiencing the event, persistent avoidance, increased arousal, and impairment as difficult symptoms associated with this condition.

Particularly relevant to this literature review and its relationship with the lived experiences of professional child welfare workers, the authors summarized a number of predictors found to influence vicarious traumatization including: a history of previous trauma, life stress and mental health, age, gender, social support, socio-economic status, education, and coping styles. Lastly, the authors found that vicarious traumatization is directly related to child welfare workers leaving their positions. Middleton & Potter (2015) used structural equation modeling to examine the causal relationship between vicarious traumatization and intent to leave in a sample of 1,192 child welfare professionals, and found a significant relationship between the two. Not surprisingly, child welfare practitioners who experienced higher levels of vicarious traumatization were more likely to leave.

Awareness of the negative impact of vicarious trauma is understood, and efforts have been made to limit and address its influence in both the classroom and at local agencies. For instance, Dane (2002) integrated specific content focused on vicarious traumatization in a practice curriculum, proposing a framework for educators' use that includes material on trauma, attitudes and reactions, organizational awareness, and spiritual renewal. In addition to educational curricula, agencies also have a role to play in this important endeavor. An exploratory and qualitative study by Dombo & Blome (2016) used 60-minute interviews with state child welfare administrators to examine organizational responses to vicarious trauma in child welfare workers. A number of themes arose in this analysis, with the strengths primarily identified by several agencies who provided counseling sessions to their employees or utilized a screening process for the applicant's exposure to trauma in the hiring process. Yet, a number of barriers were

also identified in this study. Specifically, respondents identified the need for specialized training on trauma-informed practice for both supervisors and workers. Additionally, participants identified a need for clinical supervision and a lack of resources for adequately addressing the well-being of their workforce.

Secondary traumatic stress. Secondary traumatic stress has been identified as a consequential element in the child welfare worker's experience, one with serious implications for practice and turnover. According to Newell & MacNeil (2010), secondary traumatic stress describes the effects on the professional when hearing accounts of traumatizing events experienced by another. On that note, literature has examined factors found to predict this condition and the outcomes associated with it. Sprang, Craig, & Clark (2011) explored a national sample of helping professionals and found that holding a rural residence, having a lack of religious participation, being Hispanic, young, and male were factors predictive of developing secondary traumatic stress. Seeking to explore its prevalence in a random sample of 294 masters level social workers, Bride (2007) used a 17-item self-report instrument entitled the Secondary Traumatic Stress Scale (STSS). The results of the study supported the idea that social workers involved in direct practice with traumatized populations are likely to experience secondary traumatic stress. Of additional concern, 15.2% of the respondents in this study may have met the diagnostic criteria for Post-Traumatic Stress Disorder. The findings of this study are important when seeking to identify the impact of working with traumatized populations. Specifically, the sample in this study consisted of a majority of participants who were mental health or substance abuse practitioners and only 1.4% of the respondents worked in public child welfare.

Another study took a more personal assessment of the individual, and only focused on child welfare workers. In a sample of 166 child welfare workers, Nelson-Gardell & Harris (2003) explored the personal trauma and child maltreatment history of child welfare workers and how these factors related to secondary traumatic stress in the practitioner. Using multiple standardized measures, the findings revealed that child welfare workers were at a higher risk for secondary traumatic stress as professionals when they had a personal experience of childhood trauma (child abuse and neglect).

Dagan, Ben-Porat, & Itzhaky (2016) used complex multivariate analyses to examine the contributions of organizational, social, and personal factors and their association with secondary traumatization. Importantly, the sample of 255 social workers in Israel was able to provide a comparison between those working in child protective services (46.8%) and professionals working in other social service settings. Through the utilization of multiple hierarchical regression models, results indicated the uniqueness of working as a child welfare professional. Child welfare workers and those with higher levels of exposure to child abuse victims experienced higher levels of secondary traumatization. Also, respondents with a history of trauma were at a greater risk for developing secondary traumatization. Finally, years of work experience, role stress, and levels of mastery were found to significantly predict secondary traumatization, but no significant contribution was found when exploring the impact of social support and effective supervision. Secondary traumatic stress is an important factor to considering when identifying the experience of the child welfare worker, and diligent efforts must be made to recognize this condition and its implications.

Compassion fatigue. Compassion satisfaction has been described as the fulfillment of helping others, a purpose known to influence individuals working in the helping profession. Yet over time helping others may wear a professional down and influence the quality of their efforts and longevity in their positions. Newell and MacNeil (2010) describe compassion fatigue as the cumulative physical and emotional toll from the professional's unabated use of empathy with clients in despair, exasperated by the prevalence of organizational barriers in providing services. Especially alarming and relevant to this literature review, compassion fatigue reduces the capacity of the professional to bear the distress of others (Figley, 2002).

Moving from a broader look at the relationship between compassion fatigue and the helping professional to a glimpse of its impact on the child welfare worker, Geoffrion, Morselli, and Guay (2016) argue that compassion fatigue is influenced by professional identity. Specifically, they state that compassion fatigue is not only a reaction to the external environment, but its impact comes from the subjective meaning applied to a certain circumstance. The authors posit that compassion should be understood as a continuum and that child welfare workers do have a certain degree of control of how they interpret the pressures in their positions. However, the volatile nature of the events experienced by child welfare workers may limit positive influences suggested by this strengths-based model.

Seeking to better understand the risk of compassion fatigue and its relationship with job burnout in child protective services workers, Conrad and Kellar-Guenther (2006) utilized a self-report instrument with a sample of 363 child welfare workers in Colorado. Although the study found that approximately 50% of the workers surveyed suffered from

high amounts of compassion fatigue, the researchers asserted that compassion satisfaction may help to mitigate the effects of both compassion fatigue and burnout. In direct response to this study, an invited commentary by DePanfilis (2006) discussed the importance of the findings and encouraged researchers to explore the specific pathways between the factors of burnout, compassion satisfaction, compassion fatigue, emotional exhaustion, and their relationship with worker turnover through the use of structural equation modeling and advanced statistical procedures. However, very few studies have been able to explore these specific connections. One study used structural equation modeling with a sample of 177 Missouri child protective services workers to identify pathways between job depersonalization, emotional exhaustion, and job exit (Drake & Yadama, 1996). However, the researchers identified the need for future research to include additional latent constructs to better understand the array of factors resulting in job exit.

Emotional exhaustion. The trauma, stress, and compassion fatigue associated with the daily experiences of the child welfare professional have been found to leave an individual emotionally exhausted, a condition that influences their decision to leave. Shim (2010) utilized records from the state of New York to explore factors influencing child welfare workers' intent to leave their positions. This study was unique in that it utilized data from a two-year collection period (2002-2003) which was collected in 25 participating counties in New York state. When seeking to identify the factors that contributed to workers intending to leave their positions, 766 respondents participated. A regression analysis identified that of the four unique compartments related to

organizational climate, emotional exhaustion was the only statistically significant predictor.

Additionally, research has linked exhaustion with burnout, further supporting its relevance to the child welfare worker's experience. According to Maslach, Schaufeli, and Leiter (2001), exhaustion is not only a central tenant in the definition of job burnout, but along with depersonalization and reduced personal accomplishment is one of the three main dimensions.

Understanding that emotional exhaustion has been known to cause individuals to leave their positions, Lizano and Barak (2012) conducted a longitudinal research study to identify which factors related to the workplace are actually predicting job burnout among an availability sample of 335 public child welfare workers. Employing a series of growth curve models for multivariate statistical analyses, this unique study identified the relevance of workplace demands by finding that job stress significantly predicted burnout among public child welfare workers.

Burnout. Research has explored the effects of job burnout on a number of human service professionals in different capacities, yet child welfare workers are at the forefront of this discussion and are at higher risk. In a sample of 669 professionals, Sprang, Craig, and Clark (2011) used the Professional Quality of Life IV and found that when compared with all other behavioral healthcare professionals, status as a professional child welfare worker was significantly more likely to predict compassion fatigue and burnout. Also, job burnout can manifest itself in a number of areas. Wilson (2016) argues that there are six main antecedents for this condition: values, fairness, workload, control, reward, and community. These aspects are known to consistently wear on the seasoned child welfare

worker, as the complex nature of frontline child welfare work is highlighted by the presence of ethical dilemmas and epistemological binds (Hardesty, 2015). Related to community, one study investigated the impact of a number of relevant demographic factors on the impact of job burnout with child welfare workers. Smith and Clark (2011) examined the presence of job burnout in a sample of 1001 child welfare workers by exploring the influence of job resource loss. Overall, findings revealed high levels of emotional exhaustion (44.3%) and positive associations between stress and burnout for the sample. Yet, there were mixed results related to the influence of job resource loss. On one hand, having the support of their ethnic community was associated with higher personal accomplishment for Hispanic, Caucasian, and Asian-American child welfare workers. On the other, the loss of a cohort member was not associated with burnout but did significantly increase the odds of a worker leaving. Additionally, research has identified other demographic factors that have been found to influence high rates of burnout, such as being a young male (Sprang, Craig, & Clark, 2011).

Burnout has been known to influence turnover. Using a sophisticated statistical analysis to explore the effects of role of stress on burnout and turnover, Hansung and Stoner (2008) controlled for age, salary, tenure, and gender through structural equation modeling. Although this advanced multivariate technique utilized a cross-sectional design and only included 17.2% of child welfare workers in their total sample of 346 registered social workers in California, the findings solidified the importance of burnout, as it was found to significantly mediate the relationship between the social worker's perception of role stress and their intention to quit. Burnout's impact on the practitioner is also of grave concern. In a large systematic review of the literature on burnout, Lizano

(2015) discussed common themes found in the empirical literature related to job burnout and its impact on wellbeing in human services workers. Synthesizing the 19 articles meeting criteria for inclusion, psychological well-being as the primary outcome, the Maslach Burnout Inventory (MBI) as the preferred instrument, and the primary usage of cross-sectional research designs was identified. Although not inclusively related to studies only involving child welfare workers, this important review included empirical articles for over 40 years, supporting the impact of job burnout on the well-being (psychological, physiological, and behavioral) of human service workers.

With the historical knowledge of the negative effect of job burnout on the professional, what can agencies do to proactively address the impact of burnout before it's too late? The results of a study by Sprang, Clark, and Whitt-Woosley (2007) suggest the protective value in improving knowledge and professional education. Exploring the relationship between burnout, compassion satisfaction, and compassion fatigue in a sample of 1,121 mental health providers, the investigation revealed that specialized trauma training not only reduced levels of compassion fatigue and burnout, but increased compassion satisfaction. A meta-analysis by Maricutoiu, Sava, and Butta (2016) examined the empirical literature to determine the effectiveness of controlled interventions on employee burnout. This expansive search included 47 empirical studies, with a number of important findings relevant to each dimension associated with burnout. First, the results of the meta-analysis revealed significant intervention efficacy related to exhaustion and general burnout. However, the effects on exhaustion were significant even after 6 months or more. Secondly, differences were found in modality, as relaxation and cognitive-behavioral techniques were only found to be effective related to addressing

emotional exhaustion. Finally, the results of the empirical analysis posited that much improvement is needed to create methods to address the additional two dimensions (depersonalization and personal accomplishment) of job burnout.

Researchers have also attempted to assess as to whether or not the personality type matters when examining the presence and influence of burnout. Utilizing the Myers-Briggs Type Indicator (M-BTI) and the Maslach Burnout Inventory, Zosky (2010) used a non-probability sample of 85 frontline child welfare workers to explore whether child welfare workers who had personality styles that were more cognitive in nature would better endure the difficulties of the position than those with emotional personality styles. Although taking a unique perspective in exploring the personalities of the workforce, the findings of the study did not demonstrate any significant differences when considering these personality types. Additionally, the study explicitly suggested to not recommend using the M-BTI in any employee selection process.

Child welfare workers are at risk of experiencing trauma, secondary traumatic stress, compassion fatigue, emotional exhaustion, and burnout in the course of their professional duties. The impact of these closely related constructs has been found to be detrimental to the individual's work experience and longevity. However, the research has not explicitly examined the effects of these prevailing demands on the health of those conducting this work. Almost entirely, and for good reason, the historical research has been focused on how these conditions influence the worker's intent to stay at the agency. After Sarah's realized her health was failing, she quit. In order to address the challenges associated with this type of work, we must recognize the health implications of the

stresses and pressures involved, and create appropriate and effective coping strategies to improve the well-being of those involved in this important work.

Health Consequences: A New Direction

The demanding nature of working in child welfare is understood, but little is known about the direct impact of these stressors on the worker's health. The next section of this chapter will begin by describing self-care, its purpose, and the potential consequences with its absence. The chapter will end with an exploration of the literature focused on the health and well-being of allied professionals in other high stress positions. Although researchers have yet to delve fully into the health consequences of working in child welfare, there may be value in examining the research on other professions that experience high levels of stress.

Self-Care: Its Relevance and Absence

It's not a secret, child welfare work is demanding. How are professionals able to work in high stress positions, and meet the needs of the most vulnerable populations while taking care of themselves and their families? The practice of self-care is highly recommended as a remedy, but a closer look will reveal that the systematic barriers in place are limiting its implementation and opportunity for workforce improvement. Self-care has been broadly defined as actions purposefully orchestrated to contribute to wellness and stress reduction (Bloomquist, Wood, Friedmeyer-Trainor, & Kim, 2016). It is a construct with flexible means of application. For example, running may be a valuable technique to conduct self-care and minimize the stress associated with work as a child welfare worker, but others may find meditation or journaling just as productive. One thing is for certain, self-care is highly recommended for addressing the difficulties

associated with working in high stress environments and with traumatized populations (Newell & MacNeil, 2010) and its importance to social work has been chronicled for the last decade (Lee & Miller, 2013). Further, professional organizations have sanctioned self-care as an appropriate avenue for offsetting the detrimental impact of working as a professional social worker (CSWE, 2016; NASW, 2014). While this is a proactive approach, Wilson's summarization of the NASW Code of Ethics (2016), suggests *the professional social worker is responsible* for his/her own continuous oversight and steps must be taken to address any personal issues that may produce any harm to the client.

Researchers have suggested the implementation of self-care as a technique for improving the well-being and longevity of the child welfare workforce. Salloum, Kondrat, Johnco, and Olson (2015) examined the benefits of trauma-informed self-care when assessing for burnout, secondary trauma, and compassion satisfaction in a sample of 104 child welfare professionals. This study asked participants to provide feedback about their levels of participation on 14 self-care practices, including peer support, attending trainings, stress management, etc. Findings revealed that participation in trauma-informed self-care was associated with reducing the risk of burnout and improving levels of compassion satisfaction, but there was no significant improvement related to the conditions of secondary trauma. However, the authors stressed the differences in the creation and actual implementation of self-care plans—especially important considering the bureaucratic hurdles present in child welfare agencies. Griffiths and Royse (2017) found this same set of challenges, as respondents indicated that a primary reason they left their positions was due to their inability to practice self-care. The findings indicate that workers realized the necessity for practicing self-care in

maintaining their personal and professional well-being, but contended that the agency did not legitimately focus on or encourage this critical activity.

Although great accord exists in the relevance of self-care as a restorative and preventative measure, research depicts an environment of uncertainty related to its implementation. Bloomquist et al. (2015) surveyed a convenience sample of 786 professional social workers, asserting that their CSWE-accredited MSW Programs valued self-care but did not provide instruction on how to effectively engage in its execution. If professionals feel unprepared or unable to engage in the practice of self-care, the risk of unhealthy consequences prevail. Viewing the practice of self-care as a positive coping skill (Adams, 2008), the absence of this important support may have detrimental consequences upon the individual, the agency, and most importantly upon the community as when the professional becomes burned out.

The literature reflects the importance of examining coping skills when working in stressful positions, and these have been explored in child welfare. Lee, Forster, and Rehner (2011) examined the role of organizational culture and coping strategies in a sample of 234 frontline child welfare workers, finding that both were significant predictors of worker retention. Further, a meta-analysis of turnover intention by Kim and Kao (2014) found that child welfare workers with better coping skills showed lower turnover intention. However, neither study delved into the specific avenues that workers are using to cope or if they were associated with better health outcomes. This is important to know especially when the prevailing working conditions in child welfare do not often create reasonable avenues for implementing positive coping strategies, and it

has been argued that coping strategies are resource dependent (Kraaij, Garnefski, & Maes, 2002).

In an older study, Dane (2000) used focus groups to explore the effects of chronic exposure to trauma on a sample of ten child welfare workers in a diverse metropolitan area. Workers primarily reported detachment, staying busy, accepting limitations, setting limits, and “cutting off” as primary coping skills used to reduce further stress in their positions. The study developed a framework for intervention that included strategies for using soft music, prayer, and yoga as self-care mechanisms, but the small and nonrandom convenience sample limits the generalization of the results. Further, none of the found studies explored any negative aspects of employing coping strategies used to reduce stress—such as other workers’ becoming jealous or complaining about the “down time” they didn’t have.

Veteran child welfare professionals would argue that today’s modern child welfare system faces different challenges than in days past. The pilot study by Griffiths and Royse (2017) asked the small sample of front line workers how they managed their stress. Some of them identified using unhealthy habits (using alcohol, unhealthy eating, crying, etc.) to deal with the work stresses associated with their positions. Such behaviors could have long-lasting detrimental consequences that could amplify or create worse problems. These negative coping responses, which according to Steed and Downing (1998) are actions intended to improve an individual’s response to distress, actually result in increasing the individual’s level of severity. The review by Lerias and Byrne (2003) stated that negative coping strategies have been found to increase the

detrimental impact of posttraumatic distress. This connection is alarming, and may be better explained through the work of Dr. Roy Baumeister and his work on Ego Depletion.

Ego Depletion: Willpower as a Limited Resource

Examining this challenging dynamic may be explained through the lens of Ego Depletion. This pertinent psychological theory has been utilized in numerous studies. Baumeister, Bratslavsky, Muraven, and Tice (1998) conducted four separate experiments with unrelated tasks and have suggested that the capacity for active volition is dependent upon the allocation of a common and limited resource. The authors used experiments to demonstrate that a preliminary act of resisting temptation (not eating chocolate) or responsibility (giving a counter-attitudinal speech under high or low choice conditions) would undermine an unrelated and frustrating task of self-regulation (giving up on a frustrating puzzle). The results of this study suggest an internally located and limited resource is used when exercising self-control, and with its depletion, will power is compromised.

The implication for child welfare workers is that the daily grind of operating in this position can tax even the most mentally and physically fit individual. One can only bang his/her head against a block wall for so long, and when the energy for mental activity is low, self-control is impaired. The organizational barriers to implementing self-care may well be amplifying the condition of the workforce and leading to higher rates of turnover and lower job satisfaction. The ramifications associated with this situation are evident and important. If agencies are unwilling to provide opportunities for workers to exercise self-care and improve their physical and emotional health, how long can they expect workers to survive in this environment? Even if workers did stay, how are they

able to effectively serve the clients who are desperately in need of a healthy and skilled workforce? As mentioned in chapter 1, it is possible that the next generation of child welfare workers who are not “stuck” and waiting for retirement may be quick to look for other positions. It is believed that their health will play a greater role in their decision to remain in child welfare. The absolute necessity for addressing high rates of worker turnover and improving services to families and communities relies on an understanding of the health consequences of working as a professional in child welfare.

Health Consequences in Comparable Professions

A clear limitation in the child welfare research is the absence of data on the health consequences of working in this position, yet some fields are already making this connection. Utilizing the Web of Science as the preferred search engine, the current literature related to police officers and nurses was examined. Although the experiences of the EMT, ambulance personnel, and first responders were considered, the prevailing literature did not provide the depth needed for any meaningful consideration. It is understood that there are differences when attempting to compare police officers and nurses to child welfare workers, yet several relevant similarities must be considered. Specifically, police officers and nurses work around the clock, face significant stress, and deal with daily crises. Further, they are liable, face legal mandates, and the challenges of bureaucratic minutia. Fortunately, researchers have begun to explore the connection between stress, coping, and health outcomes for both police officers and nurses.

Police officers. Police work is difficult, and a number of factors contribute to the occupational stresses associated with this profession, including trauma, injury, and illness (Webster, 2013). Using structural equation modeling, Hart, Wearing, and Headey (1995)

found that organizational experiences (e.g. administration, workload, supervision) contributed more to the police officers' perceived quality of life than operational experiences (e.g. danger, complaints, frustration). Further, police officers working in child abuse investigations identified collaboration with different professionals and heavy caseloads as particularly consequential sources of work-related stress (Wright, Powell, & Ridge, 2006). Gender has also been found to influence stress as a police officer, as workplace problems were found to be related to "token status" as a female officer (Morash, Kwak, & Haarr, 2006). Further, Bar, Pahlke, Dahm, Weiss, and Heuft (2004) reviewed 250 potentially traumatic incidents and found a higher rate of PTSD for males and that females were more likely to be diagnosed with "other" mental illnesses.

Beyond the prevalent stress, there is research to begin to describe the health consequences of working as a police officer. Seeking to substantiate the impact of acute stressors on police officers in the line of duty, Anderson, Litzenberger, and Plecas (2002) used heart rate monitors to confirm self-reported data about the psychosocial and physical stresses associated with this position. Using heart rate as a tool to differentiate between physical and psychosocial stresses, the results indicated higher heart rates when officers were in the presence of a suspect and had to place their hand on a holstered gun. Additionally, officers experienced double the heart rate and a maintained state of hyper-vigilance when speaking to a suspect following a critical incident. Also, the stress involved in police work has also been found to influence the officer's sleep. Neylan et al. (2002) examined the health impact of job stress in police officers by using the Pittsburgh Sleep Quality Index, finding that life-threatening experiences led to nightmares and "routine" stressors led to decreased sleep quality.

Researchers have identified the value of police officers using effective coping strategies. Menard and Arter (2013) found that appropriately coping with job stress mediated the relationship between critical incidents and alcohol use in a study of police officers. When using hierarchical OLS regression, the authors also indicated that coping was directly and indirectly associated with PTSD symptoms in a sample of 750 police officers in the United States. However, the types of coping used by police officers has resulted in mixed outcomes, as Hart et al. (1995) found that problem-focused coping improved work experiences and that emotion-focused coping resulted in the opposite.

Although the use of biometric screening to begin describing the health consequences in this line of work is promising, the coping literature is not highly developed. For example, an examination of the specific coping strategies employed by police officers would add a robust depth to this trajectory. Are there barriers to engaging in self-care as a police officer, and to what extent do they practice self-care?

While an examination of the literature on the stress and health consequences of police work is important, there are major differences between police officers and child welfare workers. For example, police officers may be viewed more positively in some circles, often they operate from a punitive perspective, their interactions can involve other persons carrying or wielding a firearm, and historically they have been a profession primarily consisting of males. The contrast with child welfare workers who have limited ability to protect themselves from threats and personal harm is very different.

Nursing: The gold standard. The best example of literature describing the health consequences of a stressful position can be found when exploring the research associated with the profession of nursing. Nursing is challenging, and a number of studies have

identified similar stressors that also shape the child welfare worker's experience. For example, research has identified the stress of environmental factors (Applebaum, Fowler, Fiedler, Osinubi, & Robson, 2010), workload (LeSergent & Haney, 2005), secondary trauma (Beck, 2011; Dominguez-Gomez & Rutledge, 2009), and compassion fatigue (Cocker & Joss, 2016; Hooper, Craig, Janvrin, Wetsel, & Reimels, 2010) as potential implications associated with this working in this profession.

However, the nursing literature is unique in that it is robust with explorations into the health consequences of working in this capacity. On that note, the Nurses' Health Study has largely contributed to this body of knowledge (Colditz, Manson, & Hankinson, 1997). This important study has not only examined employment-based variables, but the health behavior of individuals. For example, Sarna et al. (2008) examined this data and found concerning associations with nurses and smoking tobacco. Although the rate of smoking in nurses has declined since 1976, this behavior not only negatively affects the individual's health but also decreases their professional capacity to provide cessation intervention to patients (Sarna et al., 2008).

Additionally, focusing on health outcomes as a variable has been valuable in nursing research. Van der Heijden, Demerouti, and Bakker (2008) used a 5-point self-reported general health measure and found that increased job demand leads to higher levels of work-home interference, revealing health deterioration in their sample of 753 Registered Nurses. Further, in a study of 386 nursing staff in Taiwan, Lin, Huang, and Wu (2007) found a concerning association between stress and headaches.

Stressful occupations can also promote health issues with weight gain. Given the perception of nurses as "role models" in healthy living, Zapka, Lemon, Magner, and Hale

(2009) examined lifestyle behaviors and weight in a study of 194 hospital-based nurses. This highly informative study examined cholesterol levels, amount of fruits and vegetables eaten, caloric intake, and physical activity. Unfortunately, the majority of these nurses were overweight and obese (81%), and 13.6% reported hypertension. Further, in a study of 435 nurses in Ohio, King, Vidourek, and Schwiebert (2009) found an association between high levels of perceived job stress, low levels of body satisfaction, and disordered eating.

Issues related to the health impact of sleep disturbances related to working as a nurse are evident (Daurat & Foret, 2004; Ferri et al., 2016). Kashani, Eliasson, Chrosniak, and Vernalis (2010) recognized the impact of the stress of nursing at an acute military center, as these 255 nurses identified sleeping only 5.5 hours per night. For nurses, their regret involved in healthcare related decisions that produced insomnia (Schmidt et al., 2015). This is important, as sleep deprivation can lead to decreased cognitive abilities (Johnson, Brown, & Weaver, 2010) and poor sleep quality in shift-work nurses leads to fatigue (Samaha, Lal, Samaha, & Wyndham, 2007). Related to gender differences and working the nightshift, Lawson and Arber (2014) used the qualitative accounts of 20 nurses in the United Kingdom to explore gender differences, finding that obtaining a successful pattern of “domestic responsibility” was a valuable coping mechanism for female nurses. Nursing has traditionally been a female profession, and further exploration into the coping mechanisms for this profession may unearth relevant strategies for child welfare workers to improve their conditions.

The nursing literature provides a wealth of information related to the coping strategies that these professionals utilize and the implications for their health. Happell et

al. (2013) made a significant contribution to the nursing literature by utilizing six focus groups in Australia to explore how nurses cope with occupational stress outside of their workplace. Although the results of the study are difficult to generalize, the authors argue that their findings provide a broader range of coping strategies than previously described in the literature. A thematic analysis of the focus group transcripts identified four themes of coping, two of which are proposed to be adaptive options (engaging in other activities, socializing with colleagues) and two of which are unhealthy options (substance use, antisocial behaviors). The unhealthy coping strategies of drinking alcohol, smoking tobacco, avoiding people, and displacing anger were identified as having undesirable health consequences and contributing to negative health outcomes.

McMeekin, Hickman, Douglas, and Kelley (2017) provided more evidence about the contribution of coping strategies and health implications by identifying four negative coping behaviors (self-distraction, denial, self-blame, and behavioral engagement) as significantly predicting the severity of PTSD symptoms in a sample of 490 critical care nurses who had participated in a cardiopulmonary resuscitation attempt within the preceding year.

One study sought to bridge the gap between a number of related concepts, as Jordan, Khubchandani, and Wiblishauser (2016) reported data on the relationships between stress, coping, health, and work performance in a pilot study of 120 nurses in a Midwestern hospital. Overall the nurses were “not healthy,” with 92% reporting moderate-to-very high levels of stress. The majority of these nurses (78%) slept less than 8 hours per day, and 69% did not exercise regularly. Additionally, 22% were classified as binge drinkers and the majority of the sample reported overeating (63%) and eating

unhealthy (70%) as a means of coping with workplace stress. The nurses reporting “high stress/poor coping” exhibited the highest risk health behaviors and most detrimental health outcomes. This study is important because it clearly bridges the gap between stress, coping, and health, and it provides a comprehensive view of the importance of holistically viewing the impact on employees working in stressful positions.

Although the nursing profession may be the *gold standard* when it comes to an adequate body of literature about the health consequences of working in a stressful position, there are some differences when compared to child welfare that must be considered. Specifically, nurses may be viewed more favorably by the public, may spend more time in the hospital as opposed to working with clients in their home, and make more money than child welfare workers. However, if stress and choice of coping mechanisms influence the work performance and health of nurses (Jordan, Khubchandani, & Wiblishauser, 2016), child welfare researchers must pay attention.

Rationale for the Proposed Study

By nature, child welfare workers put others first. A motto for the U.S. Air Force, “Service before self,” also describes the child welfare worker’s continuously sacrificing on the frontlines to improve the well-being of the most vulnerable populations. Given child welfare workers’ important role in combating social problems facing society, it is a little surprising that while researchers have long established a number of conditions known to influence the child welfare workers’ experience and longevity in their positions, there are essentially no studies of how child welfare workers’ health is impacted by their jobs. The previous literature review has shown how stress affects

health. It is therefore important to begin examining the question of how the stress of employment in child welfare affects the health of these workers.

There is also practically nothing in the literature about self-care in the child welfare workforce. This gap in the literature is evident when utilizing the Web of Science database. A title search for the words “self-care” and “social work” only produced 10 articles and a large portion of these involved patient self-care. Searching for “self-care” as a title and “child welfare” as a topic, produced only one article. There were no “hits” when “child welfare” and “unhealthy habits” were searched as topics. Searching for “child welfare worker” and “health” only produced seven articles, with very limited applicability. Finally, a search for “coping” and “child welfare” only identified 44 articles, with the relevant and applicable studies having already been discussed in this chapter.

Limited research has provided any insight into the strategies that child welfare workers have reported finding helpful in coping with the difficulties of their positions (Westbrook, Ellis, & Ellett, 2006; Alford, Malouff, & Osland, 2005). In that study, there is no adequate documentation of what these workers were doing when they were unable to practice self-care as a child welfare professional—or even when they are. Students and others considering employment as child welfare professionals need to know about the health consequences of working as a public child welfare worker, and agencies must be receptive to information about how their employees are affected by their positions in order to devise organization efforts to reduce negative impacts of their jobs.

Accordingly, an important place to start this process of exploration is to identify the unhealthy habits that workers have developed due to the stress of their positions. No literature could be located on the unhealthy habits of child welfare workers.

If we don't know what workers are doing to seek relief from their stresses, how can we design prevention and assist them with self-care efforts to address job pressures? This study will analyze the self-reported health perceptions of a sample of child welfare workers, informing decisions to improve the health, longevity, and productivity of the child welfare workforce. This information is important in this era when newer workers are no longer "stuck" in the retirement system and may have less consequential decisions to make when considering to change jobs and leave the agency. Addressing this lack of research in the literature is an absolute necessity, and its exploration may improve child welfare worker retention efforts as organizations begin to focus more on this area as a way to maintain their seasoned staff.

Research Questions

This exploratory study will focus on examining several key elements that are missing from the current child welfare research, grouped for convenience.

Qualitative thematic content analysis question

RQ1. What are the unhealthy habits that workers report developing due to the stress of their positions?

Quantitative bivariate questions

RQ2: Does the self-reported current health status of the public child welfare worker differ with respect to the categorical variables of gender, race/ethnicity, working in home county, working in an urban/rural area, or having a social work education?

RQ3: Does the self-reported current health status of the public child welfare worker differ with respect to the scale variables of age, intent to leave, years employed at the agency, or to their job satisfaction as measured by the CWEFS and its subscales?

RQ4: Are there differences associated with job satisfaction, age, years at the agency, and intention to leave for workers, with respect to workers reporting higher/lower levels of health?

Quantitative multivariate analysis: Binary logistic regression

RQ5: Which of the components of the Child Welfare Employee Feedback Scale (Salary, Workload, Recognition, Professional Development, Accomplishment, Peer Support, Job Impact, and Supervision) and pertinent demographic variables best predict whether or not the frontline public child welfare worker will identify his/her current health status as “fair/poor?”

Chapter Three: Methodology

Data Collection

Following a pilot study where former child welfare workers who had left their positions reported leaving primarily due to emotional exhaustion, workloads, and generally feeling disenfranchised (Griffiths & Royse, 2017), the state's new administration supported a statewide effort to collect feedback from the workforce and assist the agency in retention efforts and improving systematic processes.

Drawn from the salient factors in the literature, an electronic questionnaire with both open and closed-ended questions was electronically disseminated to employees of Kentucky's child welfare system in January of 2016 via their government email distribution listserv. Of the 1351 statewide frontline child welfare workers at the agency at the time of distribution, a total of 511 participated in the study (37.8%). The voluntary study was approved as Exempt by the Institutional Review Boards of both the Principal Investigator's employer (Western Kentucky University) and the agency. Data were captured by the Principal Investigator's Qualtrics account and a total of 877 employees in various agency capacities participated in the study. Analysis of that data primarily involved examination of employees' satisfactions and dissatisfactions with their child welfare positions along seven subscales (Workload, Salary, Recognition, Professional Development, Accomplishment, Peer Support, and Supervision), the 25-item overall measure (called the Child Welfare Employee Feedback Scale, CWEFS), and a single item regarding their intent to leave the agency in the next 12 months. After the dissertation committee's approval and IRB approval at the University of Kentucky, unanalyzed

variables in this secondary dataset were used to explore the self-reported health consequences of working in public child welfare.

Several key strengths of this exploratory study of worker feedback are evident in this dataset: a) it is timely and relevant for the current challenges being faced in today's child welfare system; b) it involves a large sample size and a cross-sectional design that allows for contrasting differences by various demographic variables; c) it allows investigation of unexplored questions arising from gaps in the literature; d) it utilizes both open and closed-ended questions that, as a mixed method study, provides considerable depth for exploring the research questions.

Conceptual and Operational Definitions

Qualitative data analysis. Child welfare workers operate under the complexities of multiple systems. Based on the information gleaned from the previous pilot study that suggested the stress of workers' positions prevented them from practicing self-care and instead contributed to the development of unhealthy habits, this study will analyze the self-reported unhealthy consequences of working as a child welfare worker. Unhealthy habits will be operationally defined as the employee's text response to the open-ended electronic survey item: "List any unhealthy habits you have developed because of the stress of your position."

The qualitative thematic content analysis of the open-ended question followed the guidelines of Braun & Clarke (2006). Specifically, the six-phase process involved becoming familiar with the data, generating initial codes, searching for themes, reviewing themes, defining and naming themes, and producing the report that utilized this qualitative thematic content analysis. Qualitative data analysis software (MAXQDAPlus

12) was used to open code the responses, line-by-line, and response-by-response. An a priori framework was implemented, as the researcher expected to find similar unhealthy themes and maladaptive coping strategies as identified in the results of the Happell et al. (2013) study. Specifically, the researcher expected to find that workers were using alcohol and tobacco, and that they were participating in behaviors of anger displacement and projecting emotions due to the stress of their positions. However, additional themes were generated inductively through a data-driven approach (Fereday & Muir-Cochrane, 2006).

Quantitative data analysis. A series of univariate, bivariate, and multivariate analyses were conducted to comprehensively answer the research questions associated with this study.

Primary dependent variable.

Perceived health status. A uniquely important aspect of this investigation is the utilization of a nominal/ordinal variable that measures the self-reported current health status of the child welfare professionals participating in the study. Health was operationally defined as the participant's ordinal level response (1- Excellent; 2- Good; 3- Fair; 4- Poor) to the following question: "How would you rate your current health status?"

Categorical variables of interest. The categorical variables are largely demographic items commonly found in most surveys. They allow the data to be "sliced" and understood from different perspectives and points of view.

Home county. Public child welfare workers serve communities and protect the vulnerable. Some work in their home county, others make longer commutes to their

work area. Anecdotally, child welfare workers have reported that working in their home county can be either a strength or a disadvantage. While this variable rarely appears in child welfare literature, it seems important to consider it as potentially having an impact on the practitioner's experience. Respondents responded to the question "Do you primarily work in your home county?" with a dichotomous choice: (1- Yes; 2- No).

Race and ethnicity. Race and ethnicity have been explored as demographic factors that contribute to the child welfare worker's experience and longevity, with mixed results (Aguiniga et al., 2013; Barth et al., 2008; Faller et al., 2010; Smith & Clark, 2011; Yankeelov et al., 2009). In this study, the respondent's response to the question: "How do you describe yourself?" was operationally defined in terms of seven categories: (1- White; 2- Hispanic or Latino; 3- Black or African American; 4- Native American or American Indian; 5- Asian/Pacific Islander; 6- Biracial; 7- Other).

Gender. Assessing for the influence of gender on the child welfare worker's experience has produced mixed results as well, possibly amplified by the limited diversity found in the child welfare workforce (Aguiniga et al., 2013; Barth et al., 2008; Yankeelov et al., 2009). The respondent's categorical selection to the item "Gender" resulted in the operational definition of this independent variable in terms of three categories (1- Male; 2- Female; 3- Other).

Location. Child welfare systems are known to function differently across regions, and research has examined differences in the child welfare worker's experience and longevity with respect to working in either a rural or urban area (Aguiniga et al., 2013; Landsman, 2002; Yankeelov et al., 2009). The respondent's categorical selection to the question "Which best describes the area in which you work?" allowed for this

independent variable to be operationally defined in terms of two categories (1- Basically Rural; 2- Basically Urban).

Education. Education has been explored as an element of interest related to the child welfare workforce, especially given the profession's historical relationship with persons holding social work degrees (Barbee et al., 2012; Folaron & Hostetter, 2007; Madden et al., 2014; Mason et al., 2012; Nissly et al., 2005; Rosenthal & Waters, 2006; Yankeelov et al., 2009; Zlotnik & Pryce, 2013). The current survey assessed for type of education with two separate items. First, respondents had the option of categorically describing their "Undergraduate Degree" through the choice of two options (1- Social Work; 2- Other). Second, respondents were able to categorically select their "Graduate Degree" through the choice of three options (1- Social Work; 2- Other; 3- None).

Scale/Interval level variables of interest.

Age. The child welfare worker's age has been found to influence their experience and intention to leave their position (Griffiths et al., 2017). Age was operationally defined as the respondent's numerical response to the "Age" variable included in this dataset.

Years at the agency. Experience is always an important construct for consideration (Cahalane & Sites, 2008; Madden et al., 2014), especially relevant for child welfare workers. Experience was operationally defined as the respondent's numerical response to the item that asked for the number of years employed with the agency.

Intent to leave. The child welfare literature commonly uses intent to leave as an important consideration for child welfare workers leaving their positions. Although intending to leave does not actually mean that workers will leave their positions (Gonzalez et al., 2009), this variable remains an important one for predicting turnover

and retention in the child welfare workforce (Auerbach, Schudrich, Lawrence, Claiborne, & McGowan, 2014). Intent to leave was operationally defined as the participant's response to the Likert-type item in the survey (1- Strongly Disagree, 2- Disagree, 3- Neutral, 4- Agree, 5- Strongly Agree) to the following statement: "I plan on leaving this agency within the next 12 months."

Job satisfaction. Job satisfaction provides a comprehensive measure of the holistic perception of the child welfare worker's satisfactions and dissatisfactions with his or her work experience. Job satisfaction is often found to influence longevity (Cahalane & Sites, 2008; Faller et al., 2010; Mor Barak et al., 2006). Overall job satisfaction was operationally defined by scores on the CWEFS (see next section) and also by examining the eight subscales of the larger instrument (workload, job impact, salary, recognition, professional development, accomplishment, peer support, and supervision).

Child Welfare Employee Feedback Scale (CWEFS). A 25-item survey instrument was developed from key concepts found in the literature to influence the child welfare workers' experience and longevity in their positions. Subscales that are a part of this instrument include: *salary, workload, job impact, recognition, professional development, accomplishment, peer support, and supervision.* These items are a combination of those drawn and modified from published instruments measuring these and similar constructs (Auerbach, McGowan, Ausberger, Strolin-Goltzman, & Schudrich, 2010; Cahalane & Sites, 2008; Chen & Scannapieco, 2010; Ellett, Ellett, & Rugutt, 2003; Koeske, Kirk, Koeske, & Rauktis, 1994; Shim, 2010). Further, consultation on the items was obtained from faculty members and the total instrument was reviewed by current and past supervisors from the state's child welfare agency.

This 25-item comprehensive scale with a theoretical range of 25 to 125 has been determined to have a strong internal consistency ($\alpha = .910$). Items on the Child Welfare Employee Feedback Scale (CWEFS) were positively framed in the majority. A strengths-based approach was utilized to assess for job satisfaction and dissatisfaction through the use of five-point Likert-type response scales for each item (1=Strongly Disagree, 2= Disagree, 3= Neutral, 4= Agree, 5= Strongly Agree). The overall variable measuring job satisfaction will be operationally defined as the respondent's score as reported on the CWEFS.

A Principal Components Analysis of the CWEFS has established the eight separate subscales with acceptable coefficient alphas ranging from .705 to .919, described below.

Salary. Child welfare workers are involved in challenging work, and their salary has long been a resource found to influence whether or not these professionals stay in their positions (Ellett et al., 2007; Williams et al., 2011; Zlotnik et al., 2005). The *salary* subscale consists of two items (e.g. "Our salaries are competitive with similar jobs"), with a possible score range of 2-10 and an alpha of .705. This variable was operationally defined as the respondent's score on the salary subscale.

Workload. The major demand associated with the workload that child welfare practitioners feel shapes the professional's experience and longevity at the agency (Ellett et al., 2007; Gonzalez et al., 2009; Kim, 2011; Williams et al., 2011; Zlotnik et al., 2005). The workload subscale consists of five items (e.g., "I have a manageable client caseload"), with a possible score range of 5-25 and an alpha of .850. One item in this subscale were reverse coded, to avoid double negatives in the question (e.g., "What the

agency expects of child welfare workers is unrealistic”). This variable was operationally defined as the respondent’s score as reported on the workload subscale.

Job impact. The original *workload* subscale in the CWEFS consisted of 8 items, but after discussion during the proposal defense, three items were pulled from the workload subscale to create the job impact subscale. Job impact has been found to influence worker turnover and satisfaction (Hansung & Stoner, 2008; Lizano, 2015; Smith & Clark, 2011). The job impact subscale consists of three items (e.g., “I am emotionally exhausted from my job”), with a possible score range of 3-15 and an alpha of .812. Some items were reverse coded to avoid double negatives in the question (e.g., “I am burned out from my job”). This variable was operationally defined as the respondent’s score as reported on the job impact subscale.

Recognition. Child welfare workers are often undervalued, and the important resource of recognition continues to influence the worker’s experience (Barth et al., 2008; Cahalane & Sites, 2008; Ellett et al., 2007; Shim, 2010; Williams et al., 2011). The recognition subscale consists of three items (e.g., “I earn recognition from doing a good job”), with a possible score range of 3-15 and an alpha of .790. This variable was operationally defined as the respondent’s score as reported on the *recognition* subscale.

Professional development. The opportunity to advance, laterally transfer, and obtain additional training are posited to improve the work experience and longevity of the child welfare professional (Ellett et al., 2007). The *professional development* subscale consists of four items (e.g., “I am satisfied with the opportunities for promotion”), with a possible score range of 4-20 and an alpha of .721. This variable was operationally defined as the respondent’s score as reported on the professional development subscale.

Accomplishment. Accomplishment is an important resource that has been found to influence the child welfare worker's experience and longevity in their position (Cahalane & Sites, 2008; Kim, 2011). The *accomplishment* subscale consists of two items (e.g., "I have a sense of accomplishment from doing my job"), with a possible score range of 2-10 and an alpha of .787. This variable was operationally defined as the respondent's score as reported on the accomplishment subscale.

Peer support. Working in the dangerous and confidential environment of public child welfare is challenging, but having the resource of co-worker or peer support has been shown to offset the difficulties of this position and assist in retention (Curry et al., 2005; Williams et al., 2011). The *peer support* subscale consists of two items (e.g., "I have sufficient support from my co-workers"), with a possible score range of 2-10 and an alpha of .806. This variable was operationally defined as the respondent's score as reported on the peer support subscale.

Supervision. One of the major resources found to influence the child welfare workers' experience and longevity in their position is the impact of supervision (Barth et al., 2008; Benton, 2016; Chenot et al., 2009; Dickinson & Perry, 2002). The *supervision* subscale consists of four items (e.g., "I have a competent supervisor"), with a possible score range of 4-20 and an alpha of .919. This variable was operationally defined as the respondent's score as reported on the supervision subscale.

The text analyses on child welfare workers' self-reported health and unhealthy habits are original to this study and will address a major gap in the literature.

Chapter Four: Results

The sample in this study was composed of 511 frontline public child welfare workers, and their demographic characteristics are discussed below to provide context for the qualitative thematic content analysis portion of this mixed methods study.

The sample had limited diversity, as the respondents were primarily female (86.5%) and white (87.2%), with a small portion identified as African-American (8.1%). The mean age for the sample was 37.62 years (SD 9.86) and respondents had worked for the agency for an average of 8.15 years (SD 7.52) at the time of the study.

The statewide study captured some geographical data as well, as 51.2% primarily worked in their home county and 65% primarily worked in a rural area. Educationally, individuals can be hired in this position if they have degrees in social work or in a “related” field. As far as undergraduate education, 40.4% had a Bachelor in Social Work and 300 (59.6%) had a degree in a “related” field (i.e. Sociology, Criminal Justice, Psychology). Two-thirds of these frontline workers ($n = 341$) did not have a graduate degree. However, 112 (21.9%) had a Master of Social Work and 45 (9.0%) had a graduate degree in another area.

The data also provided an impression of the current self-reported health status of the child welfare worker through a categorical variable, as about sixty percent of the respondents reported their health to be either “excellent” ($n= 51$) or “good ($n= 254$). The rest of the sample’s perceptions about their current health status were not as positive, as 157 individuals stated that their health was “fair” and 48 reported it to be “poor” (See Table 1).

Table 1 *Sample Characteristics of Child Welfare Workforce (n = 511)*

Worker Characteristics	<i>f (Valid %)</i>	<i>Range</i>	<i>M (SD)</i>
Age		22-64	37.62 (9.86)
Years worked at agency		1-45	8.15 (7.52)
Gender			
Female	441 (86.5)		
Male	68 (13.3)		
Other	1 (0.2)		
How do you describe yourself?			
White	442 (87.2)		
Black or African American	41 (8.1)		
Hispanic or Latino	2 (0.4)		
Native American or American Indian	2 (0.4)		
Asian/Pacific Islander	3 (0.6)		
Biracial	8 (1.6)		
Other	9 (1.8)		
Do you primarily work in your home county?			
Yes	260 (51.2)		
No	248 (48.8)		
Which best describes the area in which you work?			
Basically Rural	326 (64.7)		
Basically Urban	178 (35.3)		
Undergraduate Degree			
Social Work	203 (40.4)		
Other	300 (59.6)		
Graduate Degree			
Social Work	112 (22.5)		
Other	45 (9.0)		
None	341 (68.5)		
How would you rate your current health status?			
Excellent	51 (10.0)		
Good	254 (49.8)		
Fair	157 (30.8)		
Poor	48 (9.4)		

Qualitative Results

Research Question 1: What are the unhealthy habits that workers report developing due to the stress of their positions?

Public child welfare workers in this statewide study were asked to “Please describe the unhealthy habits you have developed due to the stress of your position.” To capture detailed responses from the frontline workforce, individuals were provided with an open-ended text box for responses. Of the frontline public child welfare workers who responded on this survey (n=511), a total of 472 (92.4%) shared details about the health consequences of working in their positions in this qualitative portion of the questionnaire. Although some workers provided more than one health consequence in their response, and decisions were made to address issues of overlap, the following quantitative figures identify each independently coded and relevant item included in each respective theme/subtheme.

MAXQDA software was used to extract a total of 1,028 items from open-ended text responses in this qualitative thematic content analysis. The guidelines of Braun and Clarke (2006) were used in reviewing the data, coding the features of interest across the dataset, collating codes into potential themes, verifying the relevancy of the themes in relation to the coded extracts, refining the specifics of each theme, and producing the final analysis of the selected extracts in the dataset. Five overarching themes emerged in the self-reported data (e.g. unhealthy consumption, behavioral responses, mental health, physical health, and work-life balance), as the respondents provided a holistic description of the impact of working in their frontline child welfare positions.

For visual clarity, Figure 2 has been created to depict five themes arising from the child welfare workers' self-reported experiences.

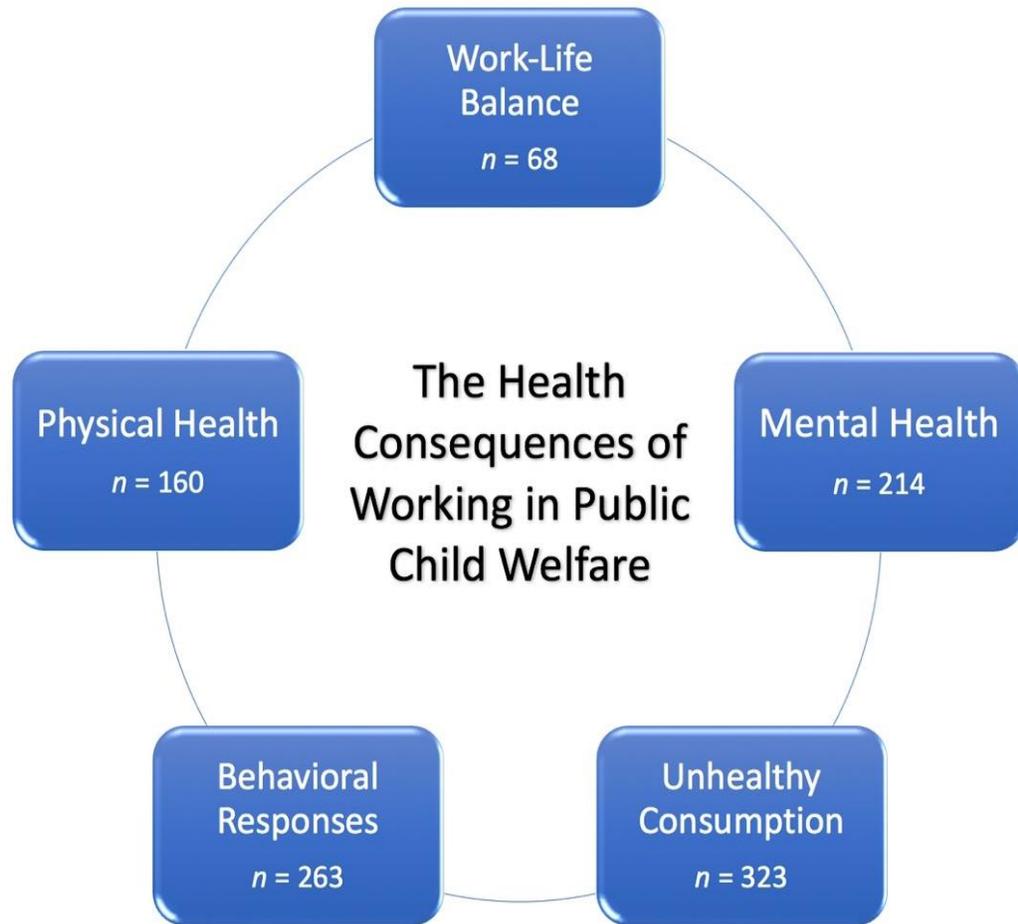


Figure 2: Public child welfare worker self-reported health consequence themes

Each of the five themes associated with the health consequences of working in public child welfare will be described and the subthemes associated with each will be illuminated through the actual statements made by respondents (See Table 2).

Table 2 *Thematic Content Analysis: Themes, Subthemes, and Number of Items*

Theme	Subtheme	n
Unhealthy Consumption		323
	Unhealthy Eating	225
	Substance Use (e.g. tobacco, alcohol, caffeine)	98
Behavioral Responses		263
	Disturbed Sleep	112
	Lack of Exercise/Movement	79
	Irritable/Angry/Impatient	37
	Self-Neglect	22
	Additional Responses	13
Mental Health		214
	Anxiety	54
	Depression	41
	Obsession/Worry/Unrest	32
	Isolation/Withdrawal	22
	Various Mental Health Issues	22
	Additional (e.g. crying, taking medication)	43
Physical Health		160
	Fatigue/Exhaustion	48
	Weight Gain	38
	Various Physical Health Ailments	32
	Blood Pressure	16
	Headaches	13
	Additional (e.g. taking medication, staying sick)	13
Work-Life Balance		68

Unhealthy consumption. A total of 323 items were extracted that met the criteria for inclusion as self-reported *unhealthy consumption*. Child welfare workers described making poor decisions about their nutrition and being unable to maintain a healthy diet. Additionally, the subtheme of substance use was integrated into this section, as workers reported using tobacco, drinking alcohol, and consuming large amounts of caffeine as unhealthy habits they had developed due to the stress of their positions. These items were collapsed into one overarching theme as both eating behaviors and substance use are both mediated by the brain's reward system, the nucleus accumbens (Kalivas &

Nakamura, 1999). Activation of the reward system is a common response when individuals experience over-activation of the arousal system, the brain's registration of stress.

Unhealthy eating (n = 225). The largest subtheme found in this qualitative content analysis involved workers' descriptions of engaging in unhealthy eating habits as a response to the stress associated with their positions. In this particular category, a number of the responses were very brief (i.e. "unhealthy eating," "overeating"). However, several substantive quotes illustrate this common health consequence of this behavior. For instance, a female worker with 16 years of experience at the agency stated that her unhealthy habits included "stress eating, and since I am on the road so much and little time for lunch or dinner, I am driving through fast food a lot so I don't miss my next appointment." Additionally, a 51-year-old female who reported that her current health status is only "fair" identified that she has "developed terrible eating habits due to the fact that I eat a lot driving down the road on my way to a home visit or another meeting."

An experienced worker with a Masters in Social Work echoed these challenges, stating that "I don't eat right, often having to skip lunch because I have too much to do, or missing dinner because I am still out making home visits." Yet, workers with less experience in the agency also described this phenomenon. A white 25-year-old female who has worked for the agency for two years stated "I don't eat good anymore since I am rarely hungry due to the stress of the unrealistic expectations." Finally, a 23-year-old male with only one year of service described this challenge as a phenomenon within the agency, stating "I think I speak for everyone in the profession when I say unhealthy eating habits (whether unhealthy foods, or eating at unhealthy times of the day.)."

Workers making comments about unhealthy eating habits due to the stress of their positions were more than twice as large as the comments in the next subtheme.

Substance use (n = 98). In addition to the consumption of unhealthy food and inability to maintain a healthy diet, workers described engaging in the risky behavior of consuming substances as a health consequence. A total of 98 self-reported items met the criterion for inclusion in *substance abuse*, under which the elements of *smoking/tobacco*, *drinking alcohol*, and over-use of *caffeine* became apparent.

Smoking/tobacco (n = 51). Tobacco use emerged as a subtheme from the data. A 57-year old veteran worker of 20 years appeared to speak from experience by stating that "smoking tobacco, as it appears to be the only way of relaxing." Unfortunately, she also reported that her current health status was "poor." Two much younger individuals also provided similar comments. A 27-year-old female reported that she smoked "a pack of cigarettes a day" and her 24-year-old male colleague reported dealing with stress through "excessive tobacco use."

Drinking alcohol (n = 31). Child welfare workers also described drinking alcohol as a high-risk health consequence associated with the demands of their positions. A worker with nine years of experience described the rationale behind this trajectory by stating, "I began drinking more to help cope with the stress/trauma of hearing horrible things on a daily basis." A 46-year-old child welfare worker with 18 years of experience described seeking relief from the job pressures stating, "I drink alcohol far more often and drink to the point of intoxication to try to forget about this job and the stress it creates." In addition to those with more experience at the agency, statements from younger and more diverse workers also identified these same health consequences. A 25-

year-old female child welfare worker stationed in an urban location identified that the stress of her positions results in the "overconsumption of alcohol regularly." Another urban child welfare employee, a 24-year-old African-American female who described her current health status as "poor," provided a clear indication of the health consequences of this position by stating that her unhealthy habit is an "alcohol binge."

Caffeine (n = 16). A final subtheme that emerged was that of using caffeine as an unhealthy habit to deal with the stress of working in public child welfare. A 33-year-old front line worker with only two years of experience described his current health status as "poor" and admitted, "I take way too much caffeine. Basically, anything to stay awake and alert." A worker with three years of experience at the agency described "increased caffeine consumption" as a health consequence. Workers with more experience at the agency also shared this behavior as a 46-year-old urban worker with 18 years of with the agency stated "I drink coffee in the morning and 1-2 Monsters a day." Also, a 12-year veteran of the agency with a Bachelors in Social Work summarized this element by stating that due to the stress associated with her position she has been "drinking too much caffeine."

Behavioral Responses. A total of 263 items were extracted that met the criteria for inclusion as *behavioral responses*. A *behavioral response* was considered an action or type of conduct that a child welfare worker reported (excluding consumption) *as a consequence* of the stress of their employment in child welfare. This section encompasses a full spectrum of behaviors such as insomnia, lack of exercise, being angry, self-neglect, cursing, and crying.

Disturbed sleep (n = 112). Responding to child abuse is not limited to daytime hours. Although child welfare workers are often required to provide after-hours services, the comments in this subtheme describe how their description of stress has left the worker with the inability to rest. A 28-year-old white female with previous child welfare experience at a different agency stated "I have severe issues with sleeping at night due to constantly worrying about what work needs to be completed the next day." Further, a 27-year-old worker reported "poor" health status and stated that "I do not sleep well, I often wake up in the middle of the night finding myself either remembering something I need to do for a case, or I have dreamt that I was working a case all night." A veteran female worker with 20 years of experience reported that she has "poor sleeping habits due to working at all hours of day and night. On occasions when we do have an opportunity for a full night's sleep, you can't due to the worries of all that needs to be accomplished on the next working day."

Child welfare workers also mentioned having nightmares. A newer worker, with only two years of experience at the agency, stated that she has "nightmares about cases at night, [and is] unable to sleep due to worry about [the] safety of children." A 29-year-old rural child welfare worker with five years of experience stated, "I no longer sleep through the night. When I do sleep, I have nightmares." Unfortunately, a 38-year-old rural child welfare worker with 12 years of experience identified health consequences of this position through a simple question: "Ever dream about work? I do most nights."

Lack of exercise/movement (n = 79). An experienced worker with a Masters in Social Work and 14 years of service stated "I do not exercise because I am too tired at the end of the day to do anything else but collapse." A 29-year-old rural child welfare

worker who described having “poor” health status reiterated this theme by acknowledging "I skip the gym at times because I have not slept or I feel the need to go in early so that I can work on the paperwork." Newly hired employees also felt this challenge, as a 24-year-old female with one year at the agency stated "when I get home I have enough energy to crawl into bed, with no energy to exercise or get the things done I used to get done before working this job."

Irritable/impatient/angry (n = 37). The displacement of anger was also identified as a subtheme as some workers reported projecting their emotions onto others. A 27-year veteran at the agency illuminated this unhealthy habit by stating, "I tend to take some of my frustration from the job out on others who are not involved." Child welfare workers with much less experience also identified this health consequence from the stress of their positions. A 30-year-old male with two years at the agency stated, "my temper and patience is short at home, directed at innocent parties." Finally, a 24-year-old African-American with a Masters in Social Work stated that the stress of her position has resulted in the habit of "snapping at my husband."

Child welfare workers reported feeling irritable, impatient, and angry by describing the use of profanity as an unhealthy habit. A 37-year-old worker with 13 years of experience stated that she has started "using more obscene language." Additionally, a 39-year-old urban child welfare worker solidified this subtheme by stating that she has been "cussing, and I hate to cuss."

Self-neglect (n = 22). Child welfare workers are known to focus on providing for others, even at their own expense. A subtheme became apparent in this analysis reflecting unhealthy priorities individuals make in dealing with the stresses associated with their

positions. The most accurate comment reflecting this tendency was made by a 33-year-old male with six years of service at the agency, who stated that "I put the needs of others above my own even in times and circumstances when it is of great harm to myself." Additionally, a rural child welfare worker with seven years of experience stated that she has been "putting myself and my health on the back burner because I have no time to take off to take care of myself." Respondents also explicitly stated they are skipping medical appointments and are unaware of their own health needs. A 26-year-old male with only one year of experience at the agency stated that "I don't even have time to visit the doctor to see if I have any physical problems with my body." A seasoned worker with eight years at the agency stated that she "will miss doctor appointments for the fear of getting behind on my work, as I know mandatory overtime will be the consequence." Her colleague, a rural child welfare worker that works in her home county mentioned that she is "letting health issues go, [I am] not following up with medical appointments due to a fear of not being able to catch back up." This situation was also identified by the comments of a 29-year-old urban child welfare worker with only one year at the agency, stating that "I feel so worn-out and drained I have forgotten to shower or bathe 3 days straight."

Additional behavioral reactions (n = 13). Several uniquely unhealthy behavioral responses were identified that did not fit into the previously established subthemes. A 55-year-old African-American male who described his health as "poor" identified "gambling" as an unhealthy habit he has developed. An African-American female working in a neighboring county described a different behavior, stating that due to the stress of her position she has been "grinding my teeth." Lastly, a 22-year-old urban child

welfare worker with a Bachelor's degree in Social Work identified a different behavioral response by stating that her "spending habits have increased" due to the stress of her position.

Mental health. The next two themes include the self-reported mental and physical health problems of child welfare workers. A total of 214 items were extracted that formed the theme of *mental health*. This theme includes all items associated with self-reported conditions experienced by the worker that have a mental health association (e.g. anxiety, depression, withdrawal, outlook, panic attacks, Post-Traumatic Stress Disorder, etc.). Workers may not have the capacity to self-diagnose, but the comments below provide a context to their reports.

Anxiety (n = 54). A 37-year-old who had worked at the agency for 12 years described his health as "poor" and stated that the demands of this job have resulted in having "anxiety which has escalated to two trips to the emergency room." In addition to trips to the hospital, the anxiety was also associated with interpersonal challenges. A 29-year-old urban child welfare worker who does not work in her home county reflected on the demands of working in public child welfare by stating, "the stress and anxiety have negatively affected my relationships and my health."

A few individuals described that their anxiety from the stress of their positions resulted in legitimate collapse. Especially concerning, the panic attacks identified by these workers was not only apparent with individuals who have been at the agency for an extended amount of time. A worker with three years of experience and a Masters in Social Work described that "I have panic attacks because I'm so overwhelmed." One of her colleagues with only one year of experience at the agency described being on an

emotional roller coaster, stating "I continually feel that I am on the verge of crying, or laughing, and can't decide which one would be best."

Depression (n = 41). Respondents discussed feelings of depression. While it cannot be determined if their symptoms are of such a nature to definitely indicate a clinical problem, the fact that they self-report depression should be a concern. A child welfare worker with a Masters in Social Work not only identified the presence of depression, but it's ability to prevent self-care by stating "I'm depressed but don't have time to talk to anyone about it, because if I take off time from work my numbers suffer." Additionally, a 17-year veteran of the agency described feelings of despair by stating that she's "always had a good attitude when others haven't. I gotten way past that and can't even fake an upbeat attitude that I always have had in the past." In a related way, a 17-year veteran of the agency stated that her "view of the world is no longer positive." Also, a 26-year-old female with a Bachelors in Social Work and only one year of experience at the agency described her changed perception by stating that she is "assuming the worst in people or of situations."

Obsession/worry/unrest (n = 32). The mental health issues described by this statewide sample of front-line child welfare workers also discussed how the stressful demands of their position created prolonged feelings of obsession and worry. A few respondents identified obsessive behavior primarily related to work-related tasks. An African-American urban worker with 17 years of experience stated she engages in the "time consuming behavior of checking and double-checking my work and other people's work out of fear that if something was overlooked or a risk is not properly assessed or

information not properly gathered, then I place the children and families at risk and then the agency ends up as front page news in the media for not doing their job."

However, the majority of respondents speaking to this subtheme identified prevailing worries and obsessions that occurred away from the office. Specifically, a 38-year-old male with 13 years of service described his issue, "I think about my clients when I wake up at night, in the shower, at the dinner table, it consumes me. I think of what I have to do the next day at work."

A colleague of his with seven years of experience and a Bachelor's degree in Social Work stated that "I stay up at night either worrying about all I still need to accomplish, worrying about the safety of my clients." Younger workers are experience this difficult scenario as well, as a 28-year-old child welfare worker who works outside of her home county stated that due to the stress of her position, "I find myself checking emails obsessively."

Isolation/withdrawal (n = 22). A number of substantive quotes specifically identified isolation and withdrawal, made clear by a 64-year-old veteran worker who described having "poor" health and that "the job causes me to want to isolate myself from others when not working." A male worker with 23 years of experience at the agency described a change in his social life and support system by stating that "I seldom leave my house after work and never go out with friends as I really no longer have any." A 28-year-old worker affirmed this circumstance by stating that "I no longer participate in church or community activities in fear of running into a client in public." Further, a 23-year-old colleague with only one year of experience at the agency stated that the stress of her position has resulted in her "Shutting down at home. Withdrawing from my family.

Not being sociable." For child welfare workers who are never really off the clock, going home, completely expended, and shutting down is of grave concern. A 47-year-old urban child welfare worker with six years of experience at the agency summarized this subtheme with a long account of his behavior and its effect on his/her support system.

Due to our work, we are constantly on the phone and talking to people, so when I go home I absolutely dislike talking on the phone. My family has told me that I never call or pick up my phone since I started this job. I know I do it and I know I avoid picking up because some people I know are talkers and LOVE to be on the phone. It is like fingernails on a chalkboard. I just can't do it, so I just avoid. This has caused a huge strain on relationships with family and friends. I just want to go home and have quiet and peace. Unless you do SW, I don't think anyone would get it. It is draining to be on the phone and putting out fires, etc. It just feels good to just "be." I regret that I do it.

Various mental health issues (n =22). A number of responses did not explicitly fall into the previously identified categories but seemed to identify other possible mental health problems. After only working at the agency for one year, a 23-year-old woman stated "I have engaged in self-harm due to workplace stress." Another 35-year-old worker with 10 years of experience at the agency reported "I had to start seeing a therapist and psychiatrist as a result of the stress from this job." Further, some workers explicitly identified experiencing posttraumatic stress disorder as a health consequence of working in public child welfare. A 55-year-old child welfare worker that works outside of his home county stated, he is experiencing "symptoms of PTSD-agitation,

nervousness, lack of sleep, hyper startled response." Finally, a child welfare worker with 13 years of experience that the agency stated that he "would dare say I have some PTSD."

Overall, this theme identified a litany of mental health issues reported by the statewide sample of frontline child welfare workers. These workers are formally trained to assess for the prevailing mental health issues in clients, and not only did they use this skillset to self-report their own problems, they provided an account of the implications associated with these circumstances. For example, they reported crying ($n = 9$) and taking medication ($n = 34$) to manage the mental health challenges associate with the stress of their positons. A 41-year-old worker with 18 years of experience reported, "it's not uncommon for me to cry myself to sleep at night thinking about the children I have dealt with earlier in the day." Another worker with five years of experience stated that she "cried a lot, at work, and at home about work. I felt overwhelmed at work with 60 investigations that were past due, so I cried." This emotional roller coaster was also identified through the comments of a 24-year-old urban child welfare worker with only one year at the agency, who stated that the demands of her position involves "continued crying, but I can stop on an instant."

A female child welfare worker with two years of experience at the agency stated that the stress of working in her position resulted in her "having panic attacks, and placed on medication to help me control such symptoms." Further, another worker with only two years of experience at the agency stated that she "had to start taking an anxiety medication due to becoming sick in the morning which included vomiting and diarrhea due the stress." The mental health concerns associated with the stress of this position are compounded by the presence of real physical symptoms. A female who works in a rural

county reported “poor” health and that "every time I go the doctor for another illness, I am told it is stress-related. For example, I have been diagnosed with high blood pressure, and my doctor is saying this has been caused by being in a stressful environment for too long; I have been diagnosed with stomach issues and have also been told by my doctor that this is caused by stress." This challenging climate is best encapsulated by the words of an African-American child welfare worker who has been with the agency for seven years, identifying that she is "one of many that are on psychotropic medications due to the stress."

Physical health. A total of 160 self-reported items were extracted that met the criteria for inclusion as *physical health*. This section includes all items child welfare workers provided related to the pain, exhaustion, and sickness they have experienced due to the stress of their position. Further, workers continually described additional subthemes associated with the health consequences of working in this capacity, gaining weight and having to take medication to treat a variety of physical symptoms.

Fatigue/exhaustion (mental and physical) (n = 48). The largest subtheme in the *physical health* of the child welfare worker’s responses reflected the exhaustion from the demands of this position. Child welfare workers spoke of both mental and physical exhaustion, accurately described by a female worker with six years of service at the agency as "I go home and sit down. I lack the physical and emotional drive to keep moving and even doing the things I like to do, cooking and hobbies." In a similar vein, a 48-year-old worker with 18 years of experience stated that due to the demands of her job she has developed the unhealthy habit of "going home and just sitting due to the fact that I am so emotionally exhausted that I don't want to do anything when I arrive home at

night except for sit and sleep." The results of the energy expended in this position remained consistent in the analysis, as a biracial female worker in an urban setting stated, "when I get home I have enough energy to crawl into bed." Finally, a 30-year-old worker with four years of experience at the agency described health consequences of working in public child welfare by stating that she is "wanting to do nothing but sleep when at home."

Gained weight (n = 38). Earlier, the theme of consumption was highlighted by a description of unhealthy eating habits. An additional, and related, health consequence workers reported was gaining weight. A 45-year-old worker with 18 years of experience at the agency not only described the accumulation of body weight, but the associated trajectory by stating, "I gained 40 lbs. within the first 3 months of starting this job many years ago. That weight gain has continued to the point that I am now severely obese." An 18-year veteran who reported having "poor" health identified that she had "gained over thirty pounds since starting this job," and her colleague with less experience described that she has "gained 70 lbs. in 7 yrs. since I began working here." Finally, one professional child welfare worker identified extreme weight gain as a result of the stress associated with her position, identifying that she had "gained 100 pounds since being employed here."

Various physical health ailments (n =32). A subtheme comprised of various physical health ailments emerged throughout the analysis, as the statewide sample of public child welfare workers offered a portrayal of the unique responses that may be involved with the stress associated with this position. A 10-year veteran of the agency who reported having "poor" health described that she has "physically developed psoriasis

of the scalp due to my anxiety over going into filthy homes." Additionally, a 45-year-old male who commutes to his county of work described a different experience, stating that he has "developed blood clots in my legs from the amount of time I spend sitting at my desk and driving long distances to see children in care. At times, I become so stressed do to my job that my body breaks out in hives and sores due to stress."

Describing other physical health ailments, a 53-year-old female worker said that she has developed "a nervous tick" due to the stress of her position, and her colleague with 7 years of experience at the agency mentioned that she will "lose large wads of hair at times." The impact of stress resulting in "hair loss" was described by a 17-year-veteran of the agency, as well as by a 30-year-old urban child welfare worker who reported, "due to the stress of being told I was transferring to being told I was no longer transferring, my hair felt out due to anxiety." Finally, a 39-year-old worker with seven years of service at the agency stated that she will "get ulcers in my mouth that my dentist and family doctors told me are caused by stress that I never had prior to working [here]."

Blood pressure (n = 16). Stress, demands, and high blood pressure are interrelated. Several workers described this development, as a 12-year veteran who reported having "poor" health advised that she is "now on 4 different blood pressure medications." Additionally, a 45-year-old female with 18 years of service and "poor" health stated that due to the demands of this profession, "I have high blood pressure and take two different medications for that. I never had blood pressure issues, but within the first year of working in this agency I was on medication for blood pressure."

Headaches (n = 13). Working in child welfare was also reported to generate headaches in a portion of the respondents, as a 29-year-old African-American male stated that he has "frequent migraines that are diagnosed and triggered due to stress."

Overall, the stress associated with working in public child welfare resulted in a number of negative physical health consequences, including workers taking medication for relief ($n = 5$) and staying sick ($n = 8$). A 30-year-old female worker with five years of experience stated that she "had to see my doctor and then had to be referred to a dermatologist because my hair loss was so severe." A 49-year-old with 21 years of service at the agency reported that she is in "poor" health and that she has "developed fibromyalgia due to the stress that flares up with increased stress on a regular basis. I have to see a specialist for this condition at least twice a year." A 24-year-old African-American female with only one year of experience at the agency identified a weakened immune system by stating that "my health is declining daily from common sicknesses." Another younger worker with only one year of experience reported that she had "poor" health and that due to the stress of her position she is "being sick a lot more than I ever have."

Work-life balance. The unhealthy behaviors seen with overconsumption and the mental and physical health implications of working in stressful child welfare positions are apparent. However, we have barely recognized that child welfare workers are individuals with families and personal lives. The final theme to emerge in this thematic qualitative content analysis describes the struggle of attempting to manage personal affairs when working in child protection. A total of 68 items were extracted that met the criteria for inclusion as a theme encompassing *work-life balance*.

Managing one's own personal obligations and interests when working as a public child welfare worker presents a number of challenges, as a 63-year-old urban child welfare worker reported that she has "no life outside of my job. This job feels like a numbers game; without adequate staff. I think we get penalized for not having the amount of staff needed to do the job to the standards I can live with. Because of this I find myself working lots of overtime in order to live with myself."

A younger worker with only three years of experience was also having this experience, stating, "there is no time to have with your family or friends because you are working until 7-9 every night to make sure your visits are done." Balancing these often-competing interests resulted in individuals making decisions to try to manage both at the same time, as a 32-year-old mother reported that "I bring my kids to work with me on the weekends." A 12-year veteran at the agency mentioned, "I work late almost every night to do home visits which takes time away from my own children." A 39-year-old worker with only one year at the agency reported the same challenges by stating, "I work longer hours resulting in less down time for myself. Also, the added work time lessens the time I get to spend with my own family. I end up spending more time at work and with my clients than I do my own family."

Finally, stress of working in child welfare was self-reported as placing additional pressure on personal relationships with significant others, as identified by a 28-year-old child welfare worker who stated, "the stress of my job often puts a strain on my marriage and I have less time to devote to my family as a result of working late hours and dealing with high risk situations and people."

The five identified themes in this analysis present a realistic (because it came from the workers themselves) view of the possible cost of working as a child protection worker. The importance of these self-reported health consequences and suggestions for systematic improvement will be made in Chapter Five.

Quantitative Results

Sample demographics were presented earlier to provide a context to the study and to frame the qualitative results, however, additional univariate descriptions will set the table for the bivariate and multivariate analyses also included in this chapter. On that note, child welfare workers were asked about their current health status by the question “How would you rate your current health status?” The four options (1=Excellent, 2=Good, 3=Fair, 4=Poor) created an ordinal variable. When used as an ordinal variable, the self-reported mean health status of the 511 frontline workers was 2.40 (SD .793), below the midpoint and reflecting an overall rating on the “fair” side of “good.”

Related to the sample’s satisfaction with a number of relevant factors found to influence their positions, item means were examined for the CWEIFS and each of its eight independent subscales. Five subscales had mean falling below the neutral 3.0 — indicating dissatisfaction or problems with Salary, Workload, Job Impact, Recognition, and Professional Development. The highest levels of satisfaction for the sample related to their perceptions on Supervision, followed by Peer Support, and Accomplishment (See Table 3).

Table 3 *Item Means and Cronbach's Alphas for Subscales and Global Scale*

Subscale	Item Mean	# Items	Possible Score	Alpha
Salary	1.87	2	2-10	.705
Workload	2.12	5	5-25	.850
Job Impact	2.44	3	3-15	.812
Recognition	2.57	3	3-15	.790
Professional Dev.	2.85	4	4-20	.721
Accomplishment	3.53	2	2-10	.787
Peer Support	3.97	2	2-10	.806
Supervision	4.19	4	4-20	.919
CWEFS	2.90	25	25-125	.910

Research Question 2: Does the self-reported current health status of the public child welfare worker differ with respect to the categorical variables of gender, race/ethnicity, working in home county, working in an urban/rural area, or having a social work education?

Independent samples t-tests were conducted to assess for mean differences between the categorical demographic variables of gender, race/ethnicity, working in home county, working in a rural/urban area, and having a social work education and the 4-point ordinal child welfare worker health status variable.

A few items were collapsed by the researcher to prepare for analysis. The majority of the sample identified themselves as “White,” and the limited representation of other ethnic backgrounds resulted in the creation of a dichotomous coding structure where those who did not identify as “White” were distinguished as “Professionals of Color.”

Related to gender, the single response who identified as “other” was removed from the analysis.

With its long history of educating child welfare workers, social work education remains a viable area of analysis. To clearly examine the impact of having a social work education, the “undergraduate degree” and “graduate degree” variables were collapsed, and every respondent who had either an BSW or MSW was coded as a 1 (yes) or 0 (no) as to whether or not they have a social work education.

When examined by the demographic variables described in this section, there was a striking similarity in the mean scores, as none of the t-tests produced a significant difference. (See Table 4.)

Table 4 *Independent Samples T-Test with Perceived Health Status and Demographics*

Categorical Variable	Dichotomous Response Option		t	p
Gender	Male (<i>n</i> = 68) 2.51 (.855)	Female (<i>n</i> = 441) 2.38 (.783)	1.317	.189
Race/Ethnicity	White (<i>n</i> = 442) 2.40 (.791)	Prof. of Color (<i>n</i> = 64) 2.39 (.838)	-.071	.943
Home County	Yes (<i>n</i> = 259) 2.35 (.794)	No (<i>n</i> = 248) 2.44 (.793)	-1.363	.174
Location	Rural (<i>n</i> = 325) 2.42 (.819)	Urban (<i>n</i> = 178) 2.35 (.746)	1.031	.303
Social Work Education	Yes (<i>n</i> = 238) 2.39 (.829)	No (<i>n</i> = 261) 2.40 (.761)	-.049	.961

* **p < .05**, ** **p < .01**

Research Question 3: Does the self-reported current health status of the public child welfare worker differ with respect to the variables of age, intent to leave, years employed at the agency, or to their job satisfaction as measured by the CWEFS and its subscales?

Bivariate correlation analysis was conducted to assess for differences between the variables of age, intent to leave, years at the agency, and job satisfaction measured by the global CWEFS and each of its independent subscales, and the 4-point ordinal child welfare worker health status variable. With the exception of age, each of the other variables were significantly associated with the self-reported current health status of the public child welfare worker. A significant association was found between intention to leave and reporting worse health. Further, a significant association was found with longer years at the agency and reporting worse health. With respect to the CWEFS and its individual subscales, the bivariate correlation analysis revealed that nine out of nine relationships were negative and significant. As respondents were more satisfied with the various aspects of their positions, perhaps because they were more engaged, dedicated, or long-term employees, the poorer were their self-reported health ratings. Moderate significant relationships were found for the Workload, Job Impact, and Recognition subscales and the other subscales produced weak, yet significant, results (See Table 5).

Table 5 *Bivariate Correlations with Perceived Health Status*

Variable	<i>n</i>	<i>Correlation</i>	<i>p</i>
Age	478	-.015	.736
Years at Agency	495	.123	.006**
Intent to Leave in Next 12 Months	509	.258	.000**
Accomplishment Subscale	508	-.290	.000**
Job Impact Subscale	507	-.442	.000**
Peer Support Subscale	506	-.148	.000**
Professional Dev. Subscale	507	-.280	.000**
Recognition Subscale	507	-.306	.000**
Salary Subscale	507	-.212	.000**
Supervision Subscale	505	-.135	.000**
Workload Subscale	503	-.377	.000**
CWEFS	485	-.428	.000**

* $p < .05$, ** $p < .01$

Research Question 4: Are there differences associated with job satisfaction, age, years at the agency, and intention to leave for workers, with respect to workers' dichotomized current health ratings?

Using a 4-point health variable as an ordinal measure allowed the researcher to explore possible differences in categorical variables. However, the results of those quantitative analyses have left much to be desired—due to the self-reported current health status variable only having four response options. Conceptually, a dichotomized health variable may provide more information if the options were collapsed and used as a grouping variable.

Consequently, “How would you rate your current health status?” was recoded to create two groups: workers reporting better health and workers reporting worse health. The respondents reporting a more positive perception of their current health status (1=excellent, 2=good) were categorized as “excellent/good.” Those reporting a more negative perception of their current health status (3=fair, 4=poor) were categorized as “fair/poor.” Using this variable as the grouping mechanism, research question 4 assessed for any differences in the worker’s job satisfaction with a number of salient factors found to influence their positions, their age, years at the agency, and intention to leave with respect to their reported health status.

Identifying the same pattern of results in RQ3, this analysis provides a better illustration of the stratified pattern of differences based on the self-reported current health status of the workforce. Specifically, child welfare workers in the “fair/poor” current health status group scored significantly lower on the CWEFS and each of its eight independent subscales. Again, age was far from significant, but interestingly, workers with longer tenure at the agency self-reported significantly poorer health. Intention to leave mattered as well, as workers who had worse ratings of self-reported health identified a significantly higher intention of leaving the agency in the next 12 months.

With the large sample size in this study, Cohen’s *d* was utilized to measure the magnitude of mean differences within the independent samples t-tests (Cohen, 1988). Related to the most pronounced differences of each individual subscale, Job Impact produced a “very large effect” and a “large effect” was found with respect to worker perceptions of Professional Development, Recognition, and Workload. Additionally, intention to leave had a “medium effect” and the overall CWEFS established the greatest magnitude with a “very large effect” size of .924 (See Table 6).

Table 6 *Independent Samples T-Tests for Dichotomous Health Response Option*

Scale Variable	Dichotomous Health Response Option		<i>t</i>	<i>d</i>	<i>p</i>
	“Excellent/Good”	“Fair/Poor”			
Age	37.47 (10.07) (<i>n</i> = 288)	37.83 (9.58) (<i>n</i> = 190)	.391	.036	.696
Years at Agency	7.24 (7.00) (<i>n</i> = 292)	9.47 (8.10) (<i>n</i> = 203)	3.193	.295	.002**
Intent to Leave	2.29 (1.09) (<i>n</i> = 305)	3.00 (1.31) (<i>n</i> = 204)	6.46	.589	.000**
Accomplishment	7.48 (1.65) (<i>n</i> = 304)	6.48 (2.04) (<i>n</i> = 204)	-5.87	.539	.000**
Job Impact	8.39 (2.97) (<i>n</i> = 302)	5.79 (2.53) (<i>n</i> = 205)	-10.60	.942	.000**
Peer Support	8.18 (1.65) (<i>n</i> = 301)	7.62 (2.02) (<i>n</i> = 205)	-3.26	.304	.001**

Table 6 Continued

Professional Dev.	12.18 (3.10) (<i>n</i> = 304)	10.19 (3.19) (<i>n</i> = 203)	-6.96	.630	.000**
Recognition	8.37 (2.70) (<i>n</i> = 303)	6.76 (2.57) (<i>n</i> = 204)	-6.71	.611	.000**
Salary	3.93 (1.59) (<i>n</i> = 302)	3.46 (1.40) (<i>n</i> = 205)	-3.46	.314	.001**
Supervision	17.26 (3.47) (<i>n</i> = 302)	16.07 (3.85) (<i>n</i> = 203)	-3.60	.322	.000**
Workload	11.89 (4.44) (<i>n</i> = 300)	8.80 (3.47) (<i>n</i> = 203)	-8.74	.775	.000**
CWEFS	77.67 (14.27) (<i>n</i> = 288)	65.09 (12.93) (<i>n</i> = 197)	-9.90	.924	.000**

* $p < .05$, ** $p < .01$

Multivariate Analysis: Binary Logistic Regression

Research Question 5: Which of the components of the Child Welfare Employee Feedback Scale (Salary, Workload, Recognition, Professional Development, Accomplishment, Peer Support, Job Impact, and Supervision) and pertinent demographic variables best predict whether the frontline public child welfare worker will identify his/her current health status as “fair/poor?”

A binary logistic regression analysis was conducted to explore which salient factors associated with working in child welfare best predict whether or not the frontline public child welfare worker will identify his or her current health status as “fair/poor.”

Self-care and retention efforts must be informed by evidence, and an exploration into these factors is not in the literature.

Outcome variable. The outcome variable in this binary logistic regression model is the binary recoded variable identifying whether or not public child welfare workers rated their current health status as “fair/poor.” A dichotomous coding structure was used for the outcome variable, as the “excellent/good” groups was the reference category (1 = “fair/poor”; 0 = “excellent/good”).

Predictor variables. The previously identified eight subscales from the CWEFS were included as predictor variables, along with two geographic variables that were recoded for binary use in the model to explore the contribution of geographic factors that could influence the self-reported health perception of the child welfare worker. Specifically, does the strain of working outside of one’s home county predict reporting worse health as a child welfare worker? Also, urban areas are highly specialized and experience rampant turnover, especially in this state. Does working in an urban area predict that a child welfare worker will report a poorer health status? The respondent’s location of employment, specifically related to rural and urban differences, was recoded into a dummy variable (1 = Primarily Urban). The respondent’s identification of working outside of their home county (1 = Yes) was also recoded into a dummy variable for use in the model. The assumptions of multicollinearity, linearity, and independence were confirmed (Lemeshow, Sturdivant, & Hosmer, 2013).

Participants. A total of 476 frontline public child welfare workers were included in the analysis, as 284 (59.7%) reported their health as meeting criteria for the “excellent/good” group and 192 (40.3%) self-reported their current health status as

meeting criteria for inclusion in the “fair/poor” group. Of these respondents, 169 (35.5%) described their work area as “basically urban” and about half of the sample (n=234) primarily worked outside of their home county. The sample in this analysis also contained limited diversity, as the majority (86.7%) of the frontline workers were white (n=319) and female (86.7%, n=319).

Results. SPSS Version 24 was utilized to conduct a binary logistic regression analysis to examine whether the 8 subscales found in the Child Welfare Employee Feedback Scale (CWEFS) would, along with the geographic variables, predict if a frontline public child welfare worker’s self-reported current status of health would be in the “fair/poor” group. The initial -2 Log Likelihood score was 641.985 and the overall percentage correctly classified was 59.7%. After the eight predictive subscale variables of interest (e.g. Accomplishment, Job Impact, Peer Support, Professional Development, Recognition, Salary, Supervision, Workload) and both of the binary categorical predictive variables of interest (i.e. working primarily in an urban area, and working primarily outside of your home county) were added, the model produced a lower -2 Log Likelihood score of 530.096 and improved the correctly classified percentage to 73.3%. A statistically significant Omnibus Chi Square score ($X^2 = 111.886$, $p < .000$) confirmed an improvement between Block 0 and Block 1. Additionally, the Hosmer and Lemeshow test revealed a goodness of fit between the predictor variables and the dependent variable in the model ($X^2 = 5.587$, $p = .693$). Finally, the Nagelkerke’s R^2 identified that the model contributed 28.3% of the variance in dependent variable (Nagelkerke, 1991). (See Table 7.)

Table 7 *Regression Coefficients for Predictors of Perceived “Fair/Poor” Health Status (N = 476)*

Predictor	B	Wald	Odds Ratio	p-value
Accomplishment	-0.025	0.141	0.975	.708
Job Impact	-.212	17.016	0.809	.000***
Peer Support	-0.066	1.146	0.936	.284
Professional Development	-0.063	2.166	0.939	.141
Recognition	-0.025	0.229	0.976	.632
Salary	0.004	0.003	1.004	.959
Supervision	-0.026	0.649	0.974	.420
Workload	-0.076	4.268	0.809	.039*
Outside of Home County	-0.372	3.055	1.451	.080
Urban Area	0.390	2.921	1.477	.087

* $p < .05$, ** $p < .01$, *** $p < .001$

The model identified two (2) of the subscales as statistically significant predictors of public frontline child welfare workers reporting their current health status in the “fair/poor” group. The most significant predictor was the Job Impact (Wald = 17.016, $p < .000$), followed by their perception of the Workload (Wald = 4.268, $p = .039$). Given that the CWEFS is strengths based, the significant inverse relationships with these two subscales indicate the dissatisfaction workers felt in each respective area contributed to the likelihood of reporting poorer health.

Although only “almost” significant, the results suggest that geographic variables are an important consideration. For example, child welfare professionals working outside

of their home county were 1.45 times more likely (OR = 1.451, $p = .080$) to be in the “fair/poor” group. Further, individuals working in an urban area were 1.48 times more likely (OR = 1.477, $p = .087$) to report poorer health status.

The child welfare research abounds with detailed explorations and validations of pertinent factors that have been found to influence the worker’s experience. Related to this exploratory study, all available and relevant factors were considered in this binary logistic regression model. However, the inclusion of age, years, gender, race, and social work education did not provide a valuable contribution to the model. Finally, it was not conceptually sound to enter intention to leave as a variable when the research question is focused on the prediction of reporting current health status. Therefore, the above model describes the most parsimonious approach to using this secondary dataset to answer the research question associated with this exploratory study.

Chapter Five: Discussion

Does the job stress of their position affect the child welfare worker's health?

According to the workers it does. The results of this study provide an explicit description of the self-reported health consequences of working in public child welfare. The mixed methods approach provided a robust analysis that adequately represented the *voices* from this statewide sample of child welfare workers—voices that had been previously unheard.

Qualitatively, the five prevailing themes of unhealthy consumption, behavioral responses, mental health, physical health, and work-life balance emerged from the thematic content analysis as self-reported health consequences of working in child welfare.

Quantitatively, the Child Welfare Employee Feedback Scale identified that perceived unmanageable demands associated with both Workload and Job Impact were found to predict poorer self-reported health status. The results from this study suggest, in a variety of ways, that child welfare workers are sacrificing their own health and well-being in attempting to meet the needs of their positions and communities. The qualitative comments strongly point to work stress and little opportunity to practice self-care as affecting workers' perceived health and the quantitative analysis supported this conclusion. Overall, the results of this study are aligned with the findings of Jordan et al. (2016), who identified an interrelation between work-related stress, coping, and health outcomes in a study of nurses.

Researchers have studied child welfare issues for a number of years and great strides have been made in understanding factors that contribute to worker turnover. However, workers leave their positions for a number of reasons and one may argue that

not all turnover is in fact “bad.” This study takes a different approach, conducting a holistic examination of the self-reported health consequences associated with child protection positions and identifying factors which predict current health status in a statewide sample of public child welfare workers.

The logic model used in this study was created to categorize the current status of the child welfare literature, and may be a valuable tool for researchers moving forward. Yet, there is room for improvement. On one hand, the model illustrated the importance of the job demands placed on the child welfare worker. On the other, future explorations can improve this model and its applicability by including factors that are shown to offset work stress and improve health (i.e. coping mechanisms, self-care techniques).

As enlightening as the results of this study appear, frontline public child welfare workers actually face these health consequences every day and would not find these results “groundbreaking” or “shocking.” What is alarming is that this information is not in the literature. The results of this study address a major gap in the literature. The issues reported by the workforce are real, consistent, and continue to affect these selfless individuals.

Qualitative Results

Qualitatively, workers identified that the stressful demands of working in public child welfare had real consequences associated with their physical and mental health. Workers identified an affinity for unhealthy consumption of food and drink to deal with the stresses of their positions. They described a full spectrum of other impacts and behavioral responses resulting from their stress. Similar to the nursing literature, child welfare workers identified job demands as negatively impacting their current health.

Unhealthy consumption (n = 323). Child welfare workers made it clear that they felt the stresses associated with their positions resulted in unhealthy eating and the use of substances, the largest theme is the qualitative thematic content analysis. Unfortunately, these strategies for coping with stress can have drastic negative effects on the human body. Unhealthy eating, for example, can result in a number of diseases (e.g. heart disease, cancer, type 2 diabetes) that contribute to approximately 678,000 deaths per year in the United States (Murray et al., 2013).

Cigarette smoking produces long-term consequences, as the U.S. Surgeon General has identified this activity as directly linked to lung cancer, chronic obstructive pulmonary disease, heart disease, stroke, and diminished health status of nearly every organ found in the human body (U.S. Department of Health and Human Services, 2014).

Alcohol use follows suit, as it has been identified as a main health risk throughout the world and a contributing factor to more than 60 diseases (World Health Organization, 2011). Additionally, alcohol use has been found to produce serious problems associated with the user's mental health, memory, and family (Castaneda, Sussman, Westreich, Levy, & O'Malley, 1996; Leonard & Rothbard, 1999; Miller, Naimi, Brewer, & Jones, 2007).

The excessive use of caffeine can also have health implications. According to WebMD (2017), caffeine can cause insomnia, nervousness, restlessness, stomach irritation, nausea, vomiting, and increased heart rate and respiration, with larger doses possibly causing headaches, anxiety, agitation, chest pain, and ringing in the ears. Further, individuals have died from the overconsumption of caffeine. According to a recent article in the USA Today (2017), a teen in South Carolina died from a “caffeine-

induced cardiac event causing a probable arrhythmia” after consuming too much caffeine in a two-hour period.

However, the child welfare workers’ responses are not entirely unique. Specifically, nurses have been found to engage in unhealthy eating, drinking alcohol, and smoking tobacco (Happell et al., 2013; Jordan et al., 2016) as a means of coping with workplace stress. Moving forward, a better understanding of the unhealthy consumption practiced by child welfare workers is necessary to inform effective intervention strategies. This study did not explore when problematic consumption began.

Behavioral responses (n = 263). Public child welfare workers reported a range of different behavioral impacts upon their lives associated with the stress of their positions. The second largest theme in this study included the description of disruption of sleep, lack of exercise, being angry or irritable, neglecting oneself, and a few unique scenarios where workers described gambling and shopping. Sleep deprivation is a concern for professionals working in high stress environments (Johnson et al., 2010; Samaha et al., 2007), also found in the police and nursing literature (Daurat & Foret, 2004; Ferri et al., 2016; Kashani et al., 2010; Neylan et al., 2002). Specifically, research has found that sleep deprivation has a negative impact on the individual's well-being, efficiency, and control (Naitoh, Kelly, & Englund, 1990). Additionally, sleep disruption is connected with a number of significant and long-term health conditions such as diabetes, cardiovascular disease, and even mortality (Sigurdson & Ayas, 2007).

Child welfare workers spend a great deal of time either at their desk or in the car, a concern because lack of physical activity has been identified as a primary cause of “most” of the chronic diseases found in the modern era (Booth, Roberts, & Laye, 2012).

Consistent with nursing literature (Happell et al., 2013), child welfare workers described engaging in antisocial behaviors to deal with the stresses associated with their positions. Not only is anger associated with high blood pressure (Rosenman, 1986), it may possible that this condition has the capacity to influence the child welfare worker's marriage. Although the results of this study do not specifically provide this link, over 30 years ago Jayaratne, Chess, and Kunkel (1986) found that child welfare worker burnout produced lower marital satisfaction in a sample of 75 child welfare workers and their husbands.

Finally, a few workers described that they engaged in the high risk and potentially addictive behaviors of gambling and shopping in response to the stresses associated with their positions. Further, gambling has been found to have health related consequences that include anxiety and depression (CAMH, 2017) as well as general weakness, withdrawal, and difficulty breathing (Griffiths, 2004). Excess shopping, diagnosed as compulsive buying disorder (CBD), leads to distress or impairment and is associated with a number of impulse control disorders such as eating disorders, and substance use disorders (Black, 2007).

In the end, the stress associated with working in public child welfare seem to have resulted in a number of risky behaviors associated with long-term negative health implications. It is obvious that these professionals were unable to practice self-care, and the self-neglect descriptions illuminate this scenario. The importance of proactively engaging in self-care strategies must be recognized and implemented—especially when a popular form of self-care, exercise, has been found to influence quality of sleep, blood pressure, the treatment of depression, and improve the immune system (Atkinson &

Davenne, 2007; Hoffman-Goetz & Pedersen, 1994; Martinsen, 1990; Staffileno, Minnick, Coke, & Hollenberg, 2007).

Mental health (n = 214). Social work and child welfare research has long identified the presence of trauma, vicarious trauma, secondary traumatic stress, compassion fatigue, burnout, and emotional exhaustion associated with front line work (Badger, Royse, & Craig, 2008; Bride, 2007; Conrad & Kellar-Guenther, 2006; Dagan et al., 2016; Dombo & Blome, 2016; Drake & Yadama, 1996; Hansung & Stoner, 2008; Horwitz, 2006; Lizano & Barak, 2012; Middleton & Potter, 2015; Nelson-Gardell & Harris, 2003; Shim, 2010; Smith & Clark, 2011; Sprang et al., 2011). However, the qualitative feedback goes beyond the quantitative counting of individuals. Child welfare workers' own words described the extent of anxiety and depression felt as a result of the stress from their positions. Workers described the need to take medication to function, continually obsessing about workplace obligations and decisions, and withdrawing from their families and from the public at large.

Although one might say that it is good to see some that some workers have sought appropriate medical treatment for the mental health issues associated with this position, working in an environment that is not conducive to self-care may deter any sustainable improvement. Treatment and/or medication may work for some, but the Mayo Clinic (2017) identifies self-management (e.g. avoiding alcohol, being physically active, limiting caffeine and tobacco, stress management techniques, eating healthy, sleeping) as an important lifestyle change that can make a difference in offsetting the impact of these conditions. Child welfare workers must be able to make critical decisions on a daily basis, regarding the most vulnerable of populations. While we are unable to consider the

respondent's predisposition or mental health status before working in this capacity, the implementation of appropriate organizational self-care strategies is vital to sustaining an optimal workforce.

Physical Health (n = 160). Child welfare workers are exposed to extreme stress, which can produce a number of negative physical health consequences (Schnurr & Green, 2004). The qualitative feedback from this sample of child welfare workers identified a number of similarities with the physical health consequences reported by nurses, including weight gain, high blood pressure (Zapka et al., 2009), and headaches (Lin et al., 2007). Additionally, a number of individuals mentioned that they were experiencing "hair loss." Exhaustion, weight gain, increased blood pressure, and headaches present a vicious cycle of biological ailments that must be addressed. Holistically, child welfare workers can only maintain their ability to help others for so long if their minds and bodies are not well.

Work-life balance (n = 68). The final theme associated with the qualitative findings from this study speaks to the previous child welfare literature, in that, challenges with work life balance have been shown to influence the public child welfare workers' experience and longevity at the agency (Ellett et al., 2007; Lizano et al., 2014). Sacrificing one's own family for the job is a slippery slope, and these respondents seemed to recognize this even as they performed their jobs. For example, exhausted workers shared that they took their kids to work on Saturdays and that their personal and familial relationships suffered from the self-reported health consequences associated with their job. According to the Mayo Clinic (2017), a poor work-life balance increases stress, and may cause fatigue, poor health, lost time with loves ones, and increase expectations

at work. Child welfare workers are involved with families in difficult times, and the ability to balance/manage personal and professional responsibilities is a key element in sustaining a healthy workforce.

Braun & Clarke (2006) suggest “keyness” of the identified themes from a thematic analysis is not purely quantitatively driven. Some of the most concerning findings in this study relate to the mental anguish and mental health issues workers described as problems in the numerically smaller subthemes. Some workers, possibly those better able to deal with the stress of their positions, described skipping appointments at the gym as an unhealthy consequence. On the other end of the spectrum, a young worker responded to this stress by engaging in self-harm. One thing is for sure, the self-reported unhealthy habits that public child welfare workers report due to the stress of their positions must be a “wakeup call” for not only child welfare administrators, but for legislators to appropriate sufficient funding in addressing too many staff vacancies and other unfunded initiatives.

Quantitative Results

Corresponding with the research conducted on a sample of registered nurses (van der Heijden, Demerouti, & Bakker, 2008), the quantitative results obtained from this study of public child welfare workers revealed that heavy job demands are associated with self-reported worker health deterioration. Related to the statistically significant Workload and Job Impact subscales, workers identifying that job demands and characteristics were not only unmanageable but predicted a negative self-reported health status. Workload and Job Impact (composed of burnout and emotional exhaustion items) have been reported in the child welfare literature to influence the workers’ experience

and intention to leave (Ellett et al., 2007; Gonzalez et al., 2009; Hansung & Stoner, 2008; Kim, 2011; Lizano, 2015; Lizano & Barak, 2012; Shim, 2010; Smith & Clark, 2011; Sprang et al., 2011; Williams et al., 2011; Zlotnik, 2005). These two variables have now also been identified as factors that affect the self-reported health of the child welfare worker.

The quantitative results also included predictive variables associated with the geographic location of the child welfare worker, an often-explored construct that has been found in the literature to influence the child welfare worker's experience (Aguiniga et al., 2013; Barth et al., 2008; Landsman, 2002; Yankeelov et al., 2009). Although neither of the two geographic variables was found to be statistically significant in this study, both were significant at the $p < .10$ level and may want to be used by other researchers moving forward. If working outside of one's home county contributes to less than optimal health, that is a risk factor not only for the individual but also for the agency. In child welfare circles, it is known that some workers find support by working in their home county. Having family, support with child care, and a shorter drive are all pluses. However, those who work in their home counties may also run the risk of being identified in the grocery store or harassed at the local restaurant. Some find working outside of their home county a "buffer" that serves to protect their personal lives from the work they do. Yet, the results speak to reporting worse current health status for those in this circumstance. Perhaps time for self-care is eaten up by the necessity to drive long distances back and forth to work? Further research should also examine why workers in urban areas are 1.47 times more likely to report more negative health status. Urban areas in this state have highly specialized child welfare workers, and at the time of this study

there were much higher rates of turnover in these locations. It is logical to assume that the large turnover rates of employees in these areas may be responsible for a poor work-life balance for those who stay, influencing worker perception of their health status.

The quantitative findings in this study serve to support the qualitative results. Employees with longer years in the agency reported poorer health; those with a higher intention of leaving the agency also self-rated poorer health. Additionally, when comparing the experiences of child welfare workers reporting “excellent/good” health and those with “fair/poor” health, a pattern of dissatisfaction emerged related to all of the separate subscales of the Child Welfare Employee Feedback Scale—those reporting “fair/poor” health were more dissatisfied. Although the original data collection strategy and its secondary utilization in this dissertation did not afford the capability to infer causality, the qualitative responses highlight many of the health consequences that child welfare workers reported experiencing across-the-board.

Limitations

A primary limitation when utilizing secondary data is the possibility of missing data, issues related to the methods used for data collection, and challenges associated with reliability. Using secondary data may also present other issues, as the information contained may not effectively expedite the evaluation of the proposed research question. None of these problems are believed to have affected the current study. However, the data from this study only represents one state. Regardless, the analyses in this study were based on a large number of state-wide responses which gives it more credibility than studies of a smaller scale.

This cross-sectional survey was distributed through an agency email distribution listserv to all of its front-line workers. Although participation in this study was voluntary, anonymous, and not collected by an employee of the agency, it is possible that some respondents may have felt hesitant to fully disclose any health consequences associated with their jobs. Thus, the negative impacts upon the child welfare employees may constitute more of a conservative estimate of the effects of job-related stress rather than a high or actual level.

Possibly, if a series of focus groups had been conducted, different health consequences or a different pattern of themes might have emerged, but there is no guarantee of that. In exploring the health consequences through a single open-ended question, it is reasonable to assume that responses were limited both in length and detail. Future studies might want to employ individual interviews to obtain great depth of understanding not only the health implications of this line of work, but also critical issues such as when problems began and whether any existed before working in child welfare. Once rapport is established with the interviewer, it may be easier for respondents to “open up” and fully report health issues.

Future Research Directions

Future research should expand on this self-reported study of health consequences by utilizing objective data to analyze for causation. Also, any number of established scales could be included to improve the design and to document relevant constructs such as compassion fatigue and secondary traumatic stress. The self-reported health outcome variable must also be refined and measured more objectively. We need to know more about the current health of the child welfare worker such as when any health problems

began, efforts made to address the problems, and the contribution of pre-existing conditions. Experimental designs that involve measures of stress and utilize control groups of new hires and comparative data from professionals in other stressful positions will help us better understand the relationship between job stress and child welfare worker health.

Future researchers may want to capture information such as the Body Mass Index (BMI), and the number of medical appointments in the last 6 months. Future efforts must include comprehensive biometric screening instruments (e.g. blood pressure, aerobic fitness, cholesterol, weight, etc.), something that is beginning to take place with police officers (Anderson et al., 2002). Future child welfare research should also consider integrating the Pittsburgh Quality Sleep Index to explore the contribution of work stress and sleep quality (Neylan et al., 2002). Viewing the child welfare worker as a holistic entity affords researchers an opportunity for multidisciplinary collaboration (e.g. dietitians, physical therapists, psychotherapists, physicians, etc.) to address this concern.

Modeling the work of Hart and colleagues (1995), future research should focus on developing a child welfare specific Perceived Quality of Life (PQOL) framework that comprehensively explores the interplay between personality, coping, as well as positive and negative work experiences. It is unrealistic to assume that workers are not attempting to address their stress, and efforts should focus on identifying and assessing the value of coping strategies used by child welfare employees to help mediate the health consequences associated with this profession. The impression that one gets from this study is one of the workers being overwhelmed with the responsibilities of their positions. They are in deep water, struggling to stay afloat.

Implications for Practice

The primary implication from the results of this study is the absolute necessity for the creation of effective and appropriate organizational wellness initiatives for child welfare workers. Organizational wellness initiatives must be informed by those within the system, as workers must be able to engage in purposeful self-care, while on the job, without fear of repercussions. They *must* have time to engage in self-care. Self-care must become a priority and must be modeled by the agency. With the current barriers that limit the implementation of self-care in the child welfare system, individuals will continue to engage in risky and unhealthy behaviors to seek relief from the stresses associated with their positions unless major organizational changes are made assist them at work. Continuing the status quo with the use of unhealthy coping mechanisms is known to produce undesirable health consequences and further amplify the severity of mental health conditions (Happell et al., 2013; McMeekin et al., 2017).

Innovative approaches for proactively addressing the needs of the workforce has given rise to organizational wellness programs as a topic of discussion. Originally designed to both promote good health and to identify and address any health concerns (Wolfe, Parker, & Napier, 1994), these programs are beneficial to the employee and to the agency. A great example can be found at the corporation Johnson & Johnson, as the cumulative savings of their employee wellness programs saved the company \$250 million in health care costs in a decade. Further, between 2002-2008 the company identified a return of \$2.71 for every dollar spent (Berry, Mirabito, & Baun, 2010). Additionally, a meta-analysis by Parks and Steelman (2008) revealed that participation in

an organizational wellness program was significantly associated with decreased employee absenteeism and increased job satisfaction.

With the multifaceted value shown in these efforts, social services agencies could be prime locations for research and implementation. While some efforts have been conducted to simply begin the conversation of how to develop an organizational model of self-care (Maltzman, 2011), researchers have now begun to use sophisticated concept mapping strategies to develop highly informed employee wellness programs in social services agencies across a number of states (Miller et al., 2016).

Child welfare agencies are responsible for the policies and practices that influence the child welfare worker's experience (Chenot et al., 2009; Collins-Camargo et al., 2012; Kim & Kao, 2014; Nissly et al., 2005; Shim, 2010). Although some have argued that the current organizational structures are not fit to deal with the challenges associated with today's child welfare system (Blome & Steib, 2014), the statements made by the respondents in this study should trouble every supervisor and administrator in child welfare. They make a strong case for immediate remediation.

The child welfare workers in this study were spread across 120 counties. Despite any regional and cultural differences across the state, workers reported that the demands of this profession are detrimental to their health. Large agencies can decide to invest in the health and well-being of their workforce, or they can continue to spend approximately \$54,000 for each child welfare worker who walks out the door (NCCWI, 2017) while knowing that other workers who stay are suffering and perhaps not able to execute their responsibilities at an optimal level.

Organizational efforts. Organizationally, substantial change must begin at the top. Agencies must develop a greater awareness of the personal and work-related factors that lead to individual stress (Shier et al., 2012). A change in culture must occur, and agency leadership must begin to actualize effective self-care systems for employees (Salloum et al., 2015). For example, changing the term “sick leave” to “self-leave” would remove a negative stigma of taking time purposeful time to recharge. Organizations can mitigate the job stress associated with working as a child welfare professional by managing caseloads and excessive duty hours by hiring additional employees (Johnco et al., 2014). Utilizing a job rotation (Westbrook, Ellis, & Ellett, 2006) or implementing a second shift could immediately contribute to resolving the sleep disruption, exhaustion, and other relevant and prevailing physical and mental health concerns. The informative results of this study provide some support to the argument that child welfare workers may deserve hazardous duty pay for the consequences associated with working in their positions.

Public child welfare agencies have access to a number of resources that can be used to benefit employees, and providing employees with both emotional resources and intervention techniques to relieve exhaustion is critical (Lizano, 2015). Organizations can create a climate of health and appreciation by providing making nutritionists available for consultation (e.g., to discuss healthy alternatives to “fast food”). Also, electronic newsletters are an inexpensive avenue for distributing important tidbits about self-improvement strategies (e.g. walking during lunch to help with blood pressure and stress). Ventilation and debriefing sessions ought to be established and scheduled on a weekly basis at each office.

Cahalane and Sites (2008) suggest that agencies must develop an environment that “encourages innovation.” Workers must be provided appropriate technology. Specifically, they need tablets with real-time server access and the ability to electronically sign documents from the field. Using dictation software could increase the quality of documentation, yet decrease the time associated with completing this important task. Finally, child welfare agencies must change the way they view their employees—not as expendable or as someone who can be replaced in the next hiring. Child welfare agencies need to find ways to reward employees for the stresses and strains in the system (Johnco et al., 2014). If not monetarily, then with recognition and letters of thanks, personal invitations to have lunch with the director, and other relatively inexpensive expressions. The evaluation of employees must change, recognizing quality and context (Johnco et al., 2014). Agencies should shift from looking at those who don’t reach certain “objective” levels of performance with the submission of paperwork and so forth to looking at ways the agency can help the employee to better manage stress, find more time for self-care, and acknowledge heavy workloads. Specifically, more time off should be given whenever individuals are assigned an overload of cases. The organization could also include the completion and continual participation in a self-care plan as a part of the child welfare worker’s employment evaluation. Organizations are responsible for taking steps to address the profound health consequences identified in this study, and a shift in culture is of primary importance.

Supervisor efforts. Supervisors are the leadership on the frontlines, asked to be responsible for the challenges associated with the workforce on a local level. Many say that frontline supervisors have the most important positions, and their experience and

support has been found to create positive worker outcomes (Barak, Travis, Pyun, & Xie, 2009). While it is understood that supervisors must cooperate with agency guidelines, they must also advocate for changes that will lessen negative health consequences affecting their supervisees.

Cahalane and Sites (2008) suggested “individually oriented supervision,” which should include the continual and formal monitoring of occupational stress and employee trauma. If it becomes apparent that a worker is suffering and needs assistance, supervisors should be trained to recognize this and have the ability to reach out for external support to address this situation. Additionally, supervisors can help to create a local culture of support and appreciation by facilitating or simply allowing peer support groups for workers to meet in the office.

Supervisors can align schedules to allow workers to spend one day per week away from the field. If a second shift cannot be created in the agency, the capacity to knock out paperwork one day per week provides significant mental relief for the overworked child welfare professional. They, possibly more than anyone else, may recognize the detrimental health impact of this position on their workforce and its implication in practice. Supervisors must be supported in initiating steps to for improvement.

Individual efforts. The professional child welfare worker is the most important individual in this scenario. They must to be appreciated by their supervisors but also have a self-awareness to realize the possible consequences of being continually stressed and the necessity to proactively seek help. The worker must develop a self-care plan that is realistic, operational, and fully supported by the agency. This individualized plan must be designed by the individual to reflect his/her own insight and preferences. This

proactive and transparent avenue for self-restoration should include non-work hobbies like journaling, walking, and other personal strategies for self-care.

Workers must be able to shut off their phones and not return email correspondence after hours, without fear of consequences. There must be downtime, including the assurance that workers can take lunch breaks and have time with co-workers. However, none of the aforementioned strategies are feasible unless the agency utilizes a non-punitive approach to their evaluations. Workers cannot continually pick up the slack for the massive turnover of fellow employees without their own health and work-life balance being affected. Child welfare agencies must not accept the “revolving door” problem of employees leaving their employ but must take drastic steps to put employees’ well-being first. Legislators and governors must realize that this problem is not only expensive, but it will not go away without real and substantive efforts. It is hoped that the results of this study will allow organizations and researchers to build upon these beginning efforts to document the dramatic impact of child welfare positions on the health and well-being of those striving to protect our nation’s at risk children.

Conclusion

The motto for the United States Air Force, “Service Before Self,” might characterize professionals working in public child welfare, as this study suggests they see their occupational service as associated with detriments to their own health. Extreme rates of turnover have left agencies understaffed and unable to effectively serve their communities and greatly burden the workers who have not yet left.

The findings from this study address a gap in the literature and describe the self-reported unhealthy habits and health consequences among one state’s child welfare

workers who also saw their health as related to job stress. The policy implications of this study include the importance of addressing worker's experiences of job-related stress along with their self-reported health and personal habits that may affect their health. The implications for future research would include a more detailed examination of the specific relationship of job-related stress and health outcomes, controlling for pre-existing conditions, personal lifestyle choices, and so forth. This study fills a gap in the literature by directly examining worker's own perceptions of their health in relation to job stress and thus suggests the importance of the topic for future study.

Appendix A: *Child Welfare Employee Feedback Scale by Subscale (CWEFS)*

Salary ($\alpha = .705$)

I am satisfied with the salary and benefits

Our salaries are competitive with similar jobs

Workload ($\alpha = .850$)

I have a manageable client caseload

I have a manageable paperwork load

I am able to spend enough time working with my clients

My job pressures do not overlap with my personal life

What the agency expects of child welfare workers is unrealistic*

Job Impact ($\alpha = .812$)

I am emotionally exhausted from my job*

I am burned out from my job*

My personal health is impacted by the demands of my job*

Recognition ($\alpha = .790$)

I earn recognition from doing a good job

The agency is held in high regard in the community

I am satisfied with the recognition of my work

Professional Development ($\alpha = .721$)

I am satisfied with the opportunities for promotion

I receive sufficient training to complete my job effectively

There are adequate professional development opportunities

I am satisfied with my ability to laterally transfer (if desired)

Accomplishment ($\alpha = .787$)

I have a sense of accomplishment from doing my job

I feel like I am making a difference

Peer Support ($\alpha = .806$)

The people I work with treat each other with respect

I have sufficient support from my co-workers

Supervision ($\alpha = .919$)

I have frequent contact with my supervisor

I have an available supervisor

I have a competent supervisor

I have sufficient support by my supervisor in debriefings

*Recoded

References

- Adams, R. E., Figley, C. R., & Boscarino, J. A. (2008). The compassion fatigue scale: Its use with social workers following urban disaster. *Research on Social Work Practice, 18*(3), 238-250.
- Aguiniga, D. M., Madden, E. E., Faulkner, M. R., & Salehin, M. (2013). Understanding intention to leave: A comparison of urban, small-town, and rural child welfare workers. *Administration in Social Work, 37*(3), 227-241.
- Alford, W. K., Malouff, J. M., & Osland, K. S. (2005). Written emotional expression as a coping method in child protective services officers. *International Journal of Stress Management, 12*(2), 177-187.
- American Humane Association, The nation's voice for the protection of children & Animals. (2011). *Child Welfare Policy Briefing: Child Welfare Workforce, 2, 3.*
- Anderson, G. S., Litzenberger, R., & Plecas, D. (2002). Physical evidence of police officer stress. *Policing- An International Journal of Police Strategies & Management, 25*(2), 399-420.
- Applebaum, D., Fowler, S., Fiedler, N., Osinubi, O., & Robson, M. (2010). The impact of environmental factors on nursing stress, job satisfaction, and turnover intention. *Journal of Nursing Administration, 40*(7-8), 323-328.
- Atkinson, G., & Davenne, D. (2007). Relationships between sleep, physical activity and human health. *Physiology & Behavior, 90*(0), 229-235.
- Auerbach, C., McGowan, B. G., Ausberger, A., Strolin-Goltzman, J., & Schudrich, W. (2010). Differential factors influencing public and voluntary child welfare workers' intention to leave. *Children & Youth Services Review, 32*(10), 1396-1402.
- Auerbach, C., Schudrich, W. Z., Lawrence, C. K., Claiborne, N., & McGowan, B. G. (2014). Predicting turnover: Validating the Intent to Leave Child Welfare Scale. *Research on Social Work Practice, 24*(3), 349-355.
- Badger, K., Royse, D., & Craig, C. (2008). Hospital social workers and indirect trauma exposure: An exploratory study of contributing factors. *Health & Social Work, 33*(1), 63-71.
- Bar, V. O., Pahlke, C., Dahm, P., Weiss, U., & Heuft, G. (2004). Secondary prevention for police officers involved in job-related psychological stressful or traumatic situations. *Zeitschrift Fur Psychosomatische Medizin Und Psychotherapie, 50*(2), 190-202.
- Barak, M. E. M., Travis, D. J., Pyun, H., & Xie, B. (2009). The impact of supervision on worker outcomes: A meta-analysis. *Social Service Review, 83*(1), 3-32.

- Barbee, A. P., Antle, B. F., Sullivan, D. J., Dryden, A. A. A., & Henry, K. (2012). Twenty-five years of the Children's Bureau investment in social work education. *Journal of Public Child Welfare*, 6(4), 376-389.
- Barth, R. P., Lloyd, E. C., Christ, S. L., Chapman, M. V., & Dickinson, N. S. (2008). Child welfare worker characteristics and job satisfaction: A national study. *Social Work*, 53(3), 199-209.
- Baumeister, R. F., Bratslavsky, E., Muraven, M., & Tice, D. M. (1998). Ego depletion: Is the active self a limited resource? *Journal of Personality & Social Psychology*, 74(5), 1252-1265.
- Beck, C. T. (2011). Secondary traumatic stress in nurses: A systematic review. *Archives of Psychiatric Nursing*, 25(1), 1-10.
- Benton, A. D. (2016). Understanding the diverging paths of stayers and leavers: An examination of factors predicting worker retention. *Children and Youth Services Review*, 65, 70-77.
- Berry, L. L., Mirabito, A. M., & Baun, W. B. (2010). What's the hard return on employee wellness programs? *Harvard Business Review*, 88(12), 104-112.
- Black, D. W. (2007). A review of compulsive buying disorder. *World Psychiatry*, 6(1), 14-18.
- Blome, W. W., & Steib, S. D. (2014). The organizational structure of child welfare: Staff are working hard, but it is hardly working. *Children and Youth Services Review* 44, 181-188.
- Bloomquist, K., Wood, L., Friedmeyer-Trainor, K., & Kim, H.-W. (2015). Self-care and professional quality of life: Predictive factors among MSW practitioners. *Advances in Social Work*, 16(2), 292-311.
- Booth, F. W., Roberts, C. K., & Laye, M. J. (2012). Lack of exercise is a major cause of chronic diseases. *Comprehensive Physiology*, 2(2), 1143-1211.
- Boyas, J., Wind, L. H., & Kang, S.-Y. (2012). Exploring the relationship between employment-based social capital, job stress, burnout, and intent to leave among child protection workers: An age-based path analysis model. *Children & Youth Services Review*, 34(1), 50-62.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101.

- Bride, B. E. (2007). Prevalence of secondary traumatic stress among social workers. *Social Work, 52*(1), 63-70.
- Cahalane, H., & Sites, E. W. (2008). The climate of child welfare employee retention. *Child Welfare, 87*(1), 91-114.
- Castaneda, R., Sussman, N., Westreich, L., Levy, R., & O'Malley, M. (1996). A review of the effects of moderate alcohol intake on the treatment of anxiety and mood disorders. *Journal of Clinical Psychiatry, 57*(5), 207-212.
- Centre for Addiction and Mental Health. (2017). The effects of gambling. Retrieved from: <https://www.problemgambling.ca/EN/AboutGamblingandProblemGambling/Pages/TheEffectsOfGambling.aspx>
- Chen, S.-Y., & Scannapieco, M. (2010). The influence of job satisfaction on child welfare worker's desire to stay: An examination of the interaction effect of self-efficacy and supportive supervision. *Children & Youth Services Review, 32*(4), 482-486.
- Chenot, D., Benton, A. D., & Hansung, K. (2009). The influence of supervisor support, peer support, and organizational culture among early career social workers in child welfare services. *Child Welfare, 88*(5), 129-147.
- Child Welfare Information Gateway. (2014). *Child Maltreatment 2012: Summary of key findings*. Washington, DC: U.S. Department of Health and Human Services, Children's Bureau.
- Cocker, F., & Joss, N. (2016). Compassion Fatigue among healthcare, emergency and community service workers: A systematic review. *International Journal of Environmental Research and Public Health, 13*(6).
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Lawrence Earlbaum Associates.
- Colditz, G. A., Manson, J. E., & Hankinson, S. E. (1997). The Nurses' Health Study: 20-year contribution to the understanding of health among women. *Journal of Women's Health, 6*(1), 49-62.
- Collins-Camargo, C., Ellett, C. D., & Lester, C. (2012). Measuring organizational effectiveness to develop strategies to promote retention in public child welfare. *Children and Youth Services Review, 34*(1), 289-295.
- Collins-Camargo, C., & Royse, D. (2010). A study of the relationships among effective supervision, organizational culture promoting evidence-based practice, and worker self-efficacy in public child welfare. *Journal of Public Child Welfare, 4*(1), 1-24.

Conrad, D., & Kellar-Guenther, Y. (2006). Compassion fatigue, burnout, and compassion satisfaction among Colorado child protection workers. *Child Abuse & Neglect*, 30(10), 1071-1080.

Council on Social Work Education. (2016). Educational Policy and Accreditation Standards. Retrieved from www.cswe.org

Curry, D., McCarragher, T., & Dellmann-Jenkins, M. (2005). Training, transfer, and turnover: Exploring the relationship among transfer of learning factors and staff retention in child welfare. *Children and Youth Services Review*, 27(8), 931-948.

Dagan, S. W., Ben-Porat, A., & Itzhaky, H. (2016). Child protection workers dealing with child abuse: The contribution of personal, social and organizational resources to secondary traumatization. *Child Abuse & Neglect*, 51, 203-211.

Dane, B. (2000). Child welfare workers: An innovative approach for interacting with secondary trauma. *Journal of Social Work Education*, 36(1), 27-38.

Dane, B. (2002). Duty to inform: Preparing social work students to understand vicarious traumatization. *Journal of Teaching in Social Work*, 22(3/4), 3-20.

Daurat, A., & Foret, J. (2004). Sleep strategies of 12-hour shift nurses with emphasis on night sleep episodes. *Scandinavian Journal of Work Environment & Health*, 30(4), 299-305.

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.

DePanfilis, D. (2006). Compassion fatigue, burnout, and compassion satisfaction: Implications for retention of workers. *Child Abuse & Neglect*, 30(10), 1067-1069.

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.

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.

Dombo, E. A., & Blome, W. W. (2016). Vicarious trauma in child welfare workers: A study of organizational responses. *Journal of Public Child Welfare*, 10(5), 505-523.

Dominguez-Gomez, E., & Rutledge, D. N. (2009). Prevalence of secondary traumatic stress among emergency nurses. *Journal of Emergency Nursing*, 35(3), 199-204.

Drake, B., & Yadama, G. N. (1996). A structural equation model of burnout and job exit among child protective services workers. *Social Work Research*, 20(3), 179-187.

- Ellett, A.J., Ellett, C.D. & Rugutt, J.K. (2003). Executive summary: A study of personal and organizational factors contributing to employee retention and turnover in child welfare in Georgia. Athens, GA: University of Georgia, School of Social Work.
- Ellett, A. J., Ellis, J. I., Westbrook, T. M., & Dews, D. (2007). A qualitative study of 369 child welfare professionals' perspectives about factors contributing to employee retention and turnover. *Children and Youth Services Review*, 29(2), 264-281.
- 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.
- Fereday, J., & Muir-Cochrane, E. (2006). Demonstrating rigor using thematic analysis: A hybrid approach of inductive and deductive coding and theme development. *International Journal of Qualitative Methods*, 5(1), 1-11.
- Ferri, P., Guadi, M., Marcheselli, L., Balduzzi, S., Magnani, D., & Di Lorenzo, R. (2016). The impact of shift work on the psychological and physical health of nurses in a general hospital: A comparison between rotating night shifts and day shifts. *Risk Management and Healthcare Policy*, 9, 203-211.
- Festinger, T., & Baker, A. (2010). Prevalence of recalled childhood emotional abuse among child welfare staff and related well-being factors. *Children and Youth Services Review*, 32(4), 520-526.
- Figley, C. R. (2002). Compassion fatigue: Psychotherapists' chronic lack of self-care. *Journal of Clinical Psychology*, 58(11), 1433-1441.
- Folaron, G., & Hostetter, C. (2007). Is social work the best educational degree for child welfare practitioners? *Journal of Public Child Welfare*, 1(1), 65-83.
- Geoffrion, S., Morselli, C., & Guay, S. (2016). Rethinking compassion fatigue through the lens of professional identity: The case of child-protection workers. *Trauma Violence & Abuse*, 17(3), 270-283.
- Gonzalez, R. P., Faller, K. C., Ortega, R. M., & Tropman, J. (2009). Exit interviews with departed child welfare workers: Preliminary findings. *Journal of Public Child Welfare*, 3(1), 40-63.
- Government Accountability Office (2003). *Child welfare: HHS could play a greater role in helping child welfare agencies recruit and retain staff* [GAO-03-357]. Washington DC: Author.
- Griffiths, A. G. (2016). *Child welfare workers respond: Satisfactions, dissatisfactions, and possible solutions*. Oral presentation at the Annual Program Meeting of the Council on Social Work Education in Atlanta, GA.

Griffiths, A. G., & Royse, D. (2017). Unheard voices: Why former child welfare workers left their positions. *Journal of Public Child Welfare*, 11(1), 73-90.

Griffiths, A. G., Royse, D., Culver, K., Piescher, K., & Zhang, Y. (2017). Who stays, who goes, who knows? A state-wide survey of child welfare workers. *Children and Youth Services Review*, 77, 110-117.

Griffiths, M. (2004). Betting your life on it: Problem gambling has clear health related consequences. *British Medical Journal*, 329(7474), 1055-1056.

Hansung, K., & Stoner, M. (2008). Burnout and turnover intention among social workers: Effects of role stress, job autonomy and social support. *Administration in Social Work*, 32(3), 5-25.

Happell, B., Reid-Searl, K., Dwyer, T., Caperchione, C. M., Gaskin, C. J., & Burke, K. J. (2013). How nurses cope with occupational stress outside their workplaces. *Collegian*, 20(3), 195-199.

Hardesty, M. (2015). Epistemological binds and ethical dilemmas in frontline child welfare practice. *Social Service Review*, 89(3), 455-498.

Hart, P. M., Wearing, A. J., & Headey, B. (1995). Police stress and well-being- Integrating personality, coping, and daily work experiences. *Journal of Occupational and Organizational Psychology*, 68, 133-156.

Hoffman-Goetz, L., & Pedersen, B. K. (1994). Exercise and the immune system: A model of the stress response? *Immunology Today*, 15(8), 382-387.

Hooper, C., Craig, J., Janvrin, D. R., Wetsel, M. A., & Reimels, E. (2010). Compassion satisfaction, burnout, and compassion fatigue among emergency nurses compared with nurses in other selected inpatient specialties. *Journal of Emergency Nursing*, 36(5), 420-427.

Horwitz, M. (1998). Social worker trauma: Building resilience in child protection social workers. *Smith College Studies in Social Work*, 68(3), 363-377.

Horwitz, M. J. (2006). Work-related trauma effects in child protection social workers. *Journal of Social Service Research*, 32(3), 1-18.

Jayarathne, S., Chess, W. A., & Kunkel, D. A. (1986). Burnout- its impact on child-welfare workers and their spouses. *Social Work*, 31(1), 53-59.

Johnco, C., Salloum, A., Olson, K. R., & Edwards, L. M. (2014). Child welfare workers' perspectives on contributing factors to retention and turnover: Recommendations for improvement. *Children and Youth Services Review*, 47(0), 397-407.

- Johnson A., Brown K, Weaver M. (2010). Sleep deprivation and psychomotor performance among night-shift nurses. *American Association of Occupational Health Nurses*, 8(4):147–54.
- Jordan, T. R., Khubchandani, J., & Wiblishauser, M. (2016). The impact of perceived stress and coping adequacy on the health of nurses: A pilot investigation. *Nursing Research and Practice*, 1-11.
- Kalivas, P. W., & Nakamura, M. (1999). Neural systems for behavioral activation and reward. *Current Opinion in Neurobiology*, 9(2), 223-227.
- Kashani, M., Eliasson, A., Chrosniak, L., & Vernalis, M. (2010). Taking aim at nurse stress: A call to action. *Military Medicine*, 175(2), 96-100.
- Kim, H. (2011). Job conditions, unmet expectations, and burnout in public child welfare workers: How different from other social workers? *Children and Youth Services Review*, 33(2), 358-367.
- Kim, H., & Kao, D. (2014). A meta-analysis of turnover intention predictors among US child welfare workers. *Children and Youth Services Review*, 47, 214-223.
- King, K. A., Vidourek, R., & Schwiebert, M. (2009). Disordered eating and job stress among nurses. *Journal of Nursing Management*, 17(7), 861-869.
- Koeske, G. F., Kirk, S. A., Koeske, R. D., & Rauktis, M. B. (1994). Measuring the Monday blues: Validation of a job satisfaction scale for the human services. *Social Work Research*, 18(1), 27-35.
- Kraaij, V., Garnefski, N., & Maes, S. (2002). The joint effects of stress, coping, and coping resources on depressive symptoms in the elderly. *Anxiety, Stress, and Coping*, 15(2), 163–177.
- Landsman, M. J. (2002). Rural child welfare practice from an organization-in-environment perspective. *Child Welfare*, 81(5), 791-819.
- Lee, J., Forster, M., & Rehner, T. (2011). The retention of public child welfare workers: The roles of professional organizational culture and coping strategies. *Children and Youth Services Review*, 33(1), 102-109.
- Lee, J. J., & Miller, S. E. (2013). A self-care framework for social workers: Building a strong foundation for practice. *Families in Society the Journal of Contemporary Social Services*, 94(2), 96-103.
- Lemeshow, S., Sturdivant, R. X., & Hosmer, D. W. (2013). *Applied logistic regression* (Wiley Series in probability and statistics). Wiley.

- Leonard, K. E., & Rothbard, J. C. (1999). Alcohol and the marriage effect. *Journal of Studies on Alcohol Supplement*, 13, 139-146.
- Lerias, D., & Byrne, M. K. (2003). Vicarious traumatization: Symptoms and predictors. *Stress and Health*, 19(3), 129-138.
- LeSergent, C. M., & Haney, C. J. (2005). Rural hospital nurse's stressors and coping strategies: A survey. *International Journal of Nursing Studies*, 42(3), 315-324.
- Lin, K. C., Huang, C. C., & Wu, C. C. (2007). Association between stress at work and primary headache among nursing staff in Taiwan. *Headache*, 47(4), 576-584.
- Littlechild, B., Hunt, S., Goddard, C., Cooper, J., Raynes, B., & Wild, J. (2016). The effects of violence and aggression from parents on child protection workers' personal, family, and professional lives. *Sage Open*, 6(1).
- Lizano, E. L. (2015). Examining the impact of job burnout on the health and well-being of human service workers: A systematic review and synthesis. *Human Service Organizations Management Leadership & Governance*, 39(3), 167-181.
- Lizano, E. L., & Barak, M. M. (2015). Job burnout and affective wellbeing: A longitudinal study of burnout and job satisfaction among public child welfare workers. *Children and Youth Services Review*, 55, 18-28.
- Lizano, E. L., & Barak, M. E. M. (2012). Workplace demands and resources as antecedents of job burnout among public child welfare workers: A longitudinal study. *Children and Youth Services Review*, 34(9), 1769-1776.
- Lizano, E. L., Hsiao, H.-Y., Barak, M. E. M., & 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.
- Lowson, E., & Arber, S. (2014). Preparing, working, recovering: Gendered experiences of night work among women and their families. *Gender Work and Organization*, 21(3), 231-243.
- Madden, E. E., Scannapieco, M., & Painter, K. (2014). An examination of retention and length of employment among public child welfare workers. *Children and Youth Services Review*, 41(0), 37-44.
- Maltzman, S. (2011). An organizational self-care model: Practical suggestions for development and implementation. *The Counseling Psychologist*, 39(2), 303-319.

- Maricutoiu, L. P., Sava, F. A., & Butta, O. (2016). The effectiveness of controlled interventions on employees' burnout: A meta-analysis. *Journal of Occupational and Organizational Psychology*, 89(1), 1-27.
- Martinsen, E. W. (1990). Benefits of exercise for the treatment of depression. *Sports Medicine*, 9(6), 380-389.
- Mason, S. E., LaPorte, H. H., Bronstein, L., & Auerbach, C. (2012). Child welfare workers' perceptions of the value of social work education. *Children & Youth Services Review*, 34(9), 1735-1741.
- Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. *Annual Review of Psychology*, 52(1), 397.
- MAXQDA, software for qualitative data analysis, 1989-2016, VERBI Software – Consult – Sozialforschung GmbH, Berlin, Germany.
- Mayo Clinic. (2017). Anxiety: Self-management. Retrieved from <http://www.mayoclinic.org/diseases-conditions/anxiety/manage/ptc-20168185>
- Mayo Clinic. (2017). Work-life balance: Tips to reclaim control. Retrieved from <http://www.mayoclinic.org/healthy-lifestyle/adult-health/in-depth/work-life-balance/art-20048134>
- McFadden, P., Campbell, A., & Taylor, B. (2015). Resilience and burnout in child protection social work: Individual and organizational themes from a systematic literature review. *British Journal of Social Work*, 45(5), 1546-1563.
- McMeekin, D. E., Hickman, R. L., Douglas, S. L., & Kelley, C. G. (2017). Stress and coping of critical care nurses after unsuccessful cardiopulmonary resuscitation. *American Journal of Critical Care*, 26(2), 128-135.
- Menard, K. S., & Arter, M. L. (2013). Police officer alcohol use and trauma symptoms: Associations with critical incidents, coping, and social stressors. *International Journal of Stress Management*, 20(1), 37-56.
- 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.
- Miller, J. J., Grise-Owens, E., Addison, D., Marshall, M., Trabue, D., & Escobar-Ratliff, L. (2016). Planning an organizational wellness initiative at a multi-state social service agency. *Evaluation and Program Planning*, 56, 1-10.
- Miller, J. W., Naimi, T. S., Brewer, R. D., & Jones, S. E. (2007). Binge drinking and associated health risk behaviors among high school students. *Pediatrics*, 119(1), 76-85.

- Morash, M., Kwak, D. H., & Haarr, R. (2006). Gender differences in the predictors of police stress. *Policing- An International Journal of Police Strategies & Management*, 29(3), 541-563.
- Mor Barak, M. E., Levin, A., Nissly, J. A., & Lane, C. J. (2006). Why do they leave? Modeling child welfare workers' turnover intentions. *Children and Youth Services Review*, 28(5), 548-577.
- Murray, C. J., Atkinson, C., Bhalla, K., Birbeck, G., Burstein, R., Chou, D., . . . Murray. (2013). The state of U.S. health, 1990-2010: Burden of diseases, injuries, and risk factors. *Journal of the American Medical Association*, 310(6), 591-608.
- Nagelkerke, N. J. (1991). A note on a general definition of the coefficient of determination. *Biometrika*, 78(3), 691-692.
- Naitoh, P., Kelly, T. L., & Englund, C. (1990). Health-effects of sleep-deprivation. *Occupational Medicine-State of the Art Reviews*, 5(2), 209-237.
- National Association of Social Workers. (2014). Code of Ethics of the National Association of Social Workers. Washington, DC: Author. Retrieved from <http://www.naswdc.org/pubs/code/code.asp>
- National Child Welfare Workforce Institute. (2017). Why the Workforce Matters. Retrieved from https://ncwwi.org/files/Why_the_Workforce_Matters.pdf
- Nelson-Gardell, D., & Harris, D. (2003). Childhood abuse history, secondary traumatic stress, and child welfare workers. *Child Welfare*, 82(1), 5-26.
- Newell, J. M., & MacNeil, G. A. (2010). Professional burnout, vicarious trauma, secondary traumatic stress, and compassion fatigue: A review of theoretical terms, risk factors, and preventive methods for clinicians and researchers. *Best Practice in Mental Health*, 6(2), 57-68.
- Neylan, T. C., Metzler, T. J., Best, S. R., Weiss, D. S., Fagan, J. A., Liberman, A. I., Rogers, C., Vedantham, K., Brunet, A., Lipsey, T. L., & Marmar, C. R. (2002). Critical incident exposure and sleep quality in police officers. *Psychosomatic Medicine*, 64(2), 345-352.
- Nissly, J. A., Barak, M. E. M., & Levin, A. (2005). Stress, social support, and workers'intentions to leave their jobs in public child welfare. *Administration in Social Work*, 29(1), 79.
- Parks, K. M., & Steelman, L. A. (2008). Organizational wellness programs: A meta-analysis. *Journal of Occupational Health Psychology*, 13(1), 58-68.

- Robson, A., Cossar, J., & Quayle, E. (2014). Critical commentary: The impact of work-related violence towards social workers in children and family services. *British Journal of Social Work*, 44(4), 924-936.
- Rosenman, R. H. (1986). Health consequences of anger and implications for treatment. *Activitas Nervosa Superior*, 28(1), 1-23.
- Rosenthal, J. A., & Waters, E. (2006). Predictors of child welfare worker retention and performance: Focus on Title IV-E funded social work education. *Journal of Social Service Research*, 32(3), 67-85.
- Salloum, A., Kondrat, D. C., Johnco, C., & Olson, K. R. (2015). The role of self-care on compassion satisfaction, burnout and secondary trauma among child welfare workers. *Children and Youth Services Review*, 49, 54-61.
- Samaha, E., Lal, S., Samaha, N., & Wyndham, J. (2007). Psychological, lifestyle and coping contributors to chronic fatigue in shift-worker nurses. *Journal of Advanced Nursing*, 59(3), 221-232.
- Sarna, L., Bialous, S. A., Jun, H. J., Wewers, M. E., Cooley, M. E., & Feskanich, D. (2008). Smoking trends in the Nurses' Health Study (1976-2003). *Nursing Research*, 57(6), 374-382.
- Scannapieco, M., & Connell-Carrick, K. (2007). Child welfare workplace: The state of the workforce and strategies to improve retention. *Child Welfare*, 86(6), 31-52.
- Schmidt, R. E., Cullati, S., Mostofsky, E., Haller, G., Agoritsas, T., Mittleman, M. A., Perneger, T. V., Courvoisier, D. S. (2015). Healthcare-related regret among nurses and physicians is associated with self-rated insomnia severity: A cross-sectional study. *Plos One*, 10(10).
- Schnurr, P. P., & Green, B. L. (2004). *Trauma and health: Physical health consequences of exposure to extreme stress*. Washington, DC, US: American Psychological Association.
- Shier, M. L., Graham, J. R., Fukuda, E., Brownlee, K., Kline, T. J. B., Walji, S., & Novik, N. (2012). Social workers and satisfaction with child welfare work: Aspects of work, profession, and personal life that contribute to turnover. *Child Welfare*, 91(5), 117-138.
- Shim, M. (2010). Factors influencing child welfare employee's turnover: Focusing on organizational culture and climate. *Children and Youth Services Review*, 32(6), 847-856.

- Shin, J. (2011). Client violence and its negative impacts on work attitudes of child protection workers compared to community service workers. *Journal of Interpersonal Violence, 26*(16), 3338-3360.
- Sigurdson, K., & Ayas, N. T. (2007). The public health and safety consequences of sleep disorders. *Canadian Journal of Physiology and Pharmacology, 85*(1), 179-183.
- Smith, R. J., & Clark, S. J. (2011). Does job resource loss reduce burnout and job exit for professionally trained social workers in child welfare? *Children and Youth Services Review, 33*(10), 1950-1959.
- Sprang, G., Clark, J. J., & Whitt-Woosley, A. (2007). Compassion fatigue, compassion satisfaction, and burnout: Factors impacting a professional's quality of life. *Journal of Loss & Trauma, 12*(3), 259-280.
- Sprang, G., Craig, C., & Clark, J. (2011). Secondary traumatic stress and burnout in child welfare workers: A comparative analysis of occupational distress across professional groups. *Child Welfare, 90*(6), 149-168.
- Staffileno, B. A., Minnick, A., Coke, L. A., & Hollenberg, S. M. (2007). Blood pressure responses to lifestyle physical activity among young, hypertension-prone African-American women. *Journal of Cardiovascular Nursing, 22*(2), 107-117.
- Steed, L., & Downing, R. (1998). A phenomenological study of vicarious traumatization amongst psychologists and professional counsellors working in the field of sexual abuse/assault. *Australasian Journal of Disaster and Trauma Studies, 2*, 1-8.
- U.S. Department of Health and Human Services, Administration for Children and Families, Administration on Children, Youth and Families, Children's Bureau. (2016). *Child Maltreatment 2014*. Available from: <https://www.acf.hhs.gov/sites/default/files/cb/cm2014.pdf>
- U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health. (2014). *The Health Consequences of Smoking: 50 Years of Progress. A Report of the Surgeon General*. Available from: <https://www.surgeongeneral.gov/library/reports/50-years-of-progress/full-report.pdf>
- USA Today. (2017). This is how much caffeine it takes to kill an average person. Retrieved from: <https://www.usatoday.com/story/news/nation-now/2017/05/16/southcarolina-teen-dies-caffeine-how-much-coffee-can-kill-you/99975022/>
- Van der Heijden, B., Demerouti, E., Bakker, A. B., & Grp, N. S. (2008). Work-home interference among nurses: Reciprocal relationships with job demands and health. *Journal of Advanced Nursing, 62*(5), 572-584.

- Vogus, T. J., Cull, M. J., Hengelbrok, N. E., Modell, S. J., & Epstein, R. A. (2016). Assessing safety culture in child welfare: Evidence from Tennessee. *Children and Youth Services Review*, 65, 94-103.
- WebMD. (2017). Caffeine. Retrieved from: <http://www.webmd.com/vitamins-supplements/ingredientmono-979-caffeine.aspx?activeingredientid=979>
- Webster, J. H. (2013). Police officer perceptions of occupational stress: The state of the art. *Policing- An International Journal of Police Strategies & Management*, 36(3), 636-652.
- Westbrook, T. M., Ellis, J., & Ellett, A. J. (2006). Improving retention among public child welfare workers: What can we learn from the insights and experiences of committed survivors? *Administration in Social Work*, 30(4), 37-62.
- Williams, S. E., Nichols, Q. I., Kirk, A., & Wilson, T. (2011). A recent look at the factors influencing workforce retention in public child welfare. *Children and Youth Services Review*, 33(1), 157-160.
- Wilson, F. (2016). Identifying, preventing, and addressing job burnout and vicarious burnout for social work professionals. *Journal of Evidence-Informed Social Work*, 13(5), 479-483.
- Wolfe, R., Parker, D., Napier, N. (1994). Employee health management and organizational performance. *Journal of Applied Behavioral Science*, 30, 22-42.
- World Health Organization. (2011). Global status report on alcohol and health. (WHO Technical Report). Geneva, Switzerland: Author.
- Wright, R., Powell, M. B., & Ridge, D. (2006). Child abuse investigation - An in-depth analysis of how police officers perceive and cope with daily work challenges. *Policing- An International Journal of Police Strategies & Management*, 29(3), 498-512.
- Yankeelov, P. A., Barbee, A. P., Sullivan, D., & Antle, B. F. (2009). Individual and organizational factors in job retention in Kentucky's child welfare agency. *Children and Youth Services Review*, 31(5), 547-554.
- Zapka, J. M., Lemon, S. C., Magner, R. P., & Hale, J. (2009). Lifestyle behaviours and weight among hospital-based nurses. *Journal of Nursing Management*, 17(7), 853-860.
- Zelnick, J. R., Slayter, E., Flanzbaum, B., Butler, N. G., Domingo, B., Perlstein, J., & Trust, C. (2013). Part of the job? Workplace violence in Massachusetts social service agencies. *Health & Social Work*, 38(2), 75-85.

Zlotnik, J. L. (2002). Preparing social workers for child welfare practice: Lessons from an historical review of the literature. *Journal of Health and Social Policy*, 15(3-4), 5-21.

Zlotnik, J. L., DePanfilis, D., Daining, C., & Lane, M. (2005). Factors influencing retention of child welfare staff: A systematic review of research. Washington, DC: Institute for the Advancement of Social Work Research.

Zlotnik, J. L., & Pryce, J. A. (2013). Status of the use of Title IV-E funding in BSW and MSW programs. *Journal of Public Child Welfare*, 7(4), 430-446.

Zosky, D. L. (2010). Wearing your heart on your sleeve: The experience of burnout among child welfare workers who are cognitive versus emotional personality types. *Journal of Public Child Welfare*, 4(2), 117-131.

VITA

Austin Griffiths, MSW, CSW

EDUCATION

Western Kentucky University
Master of Social Work, 2011
Bachelor of Arts, 2006
Major: Sociology
Minor: Psychology

PROFESSIONAL EXPERIENCE

2013- Present **Western Kentucky University**
Department of Social Work
Child Welfare Support Coordinator
Part-Time Instructor

2007-2013 **State of Kentucky**
Cabinet for Health and Family Services
Department of Community Based Services
Division of Protection and Permanency
Social Services Clinician
Child Protective Services
Adult Protective Services

PUBLICATIONS

- Griffiths, A. G., & Royse, D.** (2017). Unheard voices: Why former child welfare workers left their positions. *Journal of Public Child Welfare, 11*(1), 73-90.
- Griffiths, A. G., Royse, D., Culver, K., Piescher, K., & Zhang, Y.** (2017). Who stays, who goes, who knows? A state-wide survey of child welfare workers. *Children and Youth Services Review, 77*, 110-117.
- Griffiths, A. G., Murphy, A. L., & Harper, W.** (2017). Child sexual abuse and the impact of rurality on foster care outcomes: An exploratory analysis. *Child Welfare, 95*(1), 57-76.
- Murphy, A. L., Harper, W., **Griffiths, A. G., & Joffrion, C.** (In press). Family reunification: A systematic review of interventions designed to address co-occurring issues of child maltreatment and substance use. *Journal of Public Child Welfare.*

Funge, S. P, Robinson-Nkongola, A., DeLancey, L., & **Griffiths, A. G.** (In press).
Dropped in without a parachute: Library managers' supervision experiences.
Journal of Library Administration.

AWARDS & HONORS

- 2017 Recipient, Staff Advisor/Student Services Support Award, Western Kentucky University, College of Health and Human Services
- 2016 Nominee, WKU Outstanding Student Services Award
- 2016 Recipient, Hometown Hero, Modern Woodmen of America
- 2011 Recipient, Western Kentucky University Department of Social Work, MSW Legacy Award
- 2011 Recipient, Western Kentucky University, Department of Social Work, MSW Distinguished Graduate Award
- 2010 Inductee, Phi Alpha Delta Mu Social Work Honor Society
- 2009 Recipient, Commonwealth of Kentucky, Two Rivers Region, MSW Stipend Award