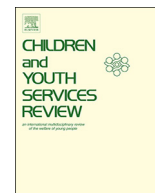




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## Stress among child protective service workers: Self-reported health consequences<sup>☆</sup>

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## ABSTRACT

High levels of stress have been associated with several physical and mental health problems including coronary heart disease, acute myocardial infarctions, poor survival from cardiac events as well as changes in the immune and nervous systems. Among stressful professions, social work, with its focus on difficult to serve populations and modest compensation, has received only limited research attention. There is a substantial gap in the literature on how job-related stress among child welfare workers is related to their health and health habits. This study uses self-reported data from a sample of public child welfare workers ( $n = 511$ ) to explore the impact of job-related stress and its perceived effect on their health and well-being.

Qualitatively, participants mentioned 586 unhealthy habits or behaviors that they attributed to the stress of their positions (e.g. unhealthy eating, substance use, disturbed sleep, lack of exercise, irritability, self-neglect, other troubling behaviors). Additionally, these child welfare professionals described mental health ( $n = 214$  mentions), physical health ( $n = 160$  mentions), and work-life imbalance issues ( $n = 68$  mentions) that they associated to the stress of their positions.

Using the qualitative mentions of unhealthy habits by person, a ratio level variable was used to test for mean differences. Findings revealed significant differences in the quantity of unhealthy habits and length of employment at the agency, intention to stay, and self-perception of health.

This study makes a first step toward understanding the relationship of job stress and health among child protective service workers. Study findings have potential implications for the high rate of turnover in this field. Policy-makers may need to consider workers' stress and ability to practice self-care as they examine ways to improve retention and protective service outcomes.

### 1. Introduction

High levels of stress have been associated with several physical health problems including coronary heart disease, acute myocardial infarctions, poor survival from cardiac events as well as changes in the immune and nervous systems (Stults-Kolehmainen, Tuit, and Sinha (2014)). Stress has many sources, including trauma exposures and secondary trauma, interpersonal and family conflicts and, most critically for this study, workplace difficulties where these and other problems can intersect (Dagan, Ben-Porat, & Itzhaky, 2016; Regehr, Hemsworth, Leslie, Howe, & Chau, 2004). Harvey et al. (2017) conducted a systematic meta-review of 37 review studies and concluded there is moderate level evidence from multiple-prospective studies that high job demands, low job control, high effort-reward imbalance, role stress, and

low social support in the workplace are associated with a greater risk of developing anxiety and depression symptoms.

Among stressful professions, social work, with its focus on difficult to serve populations and modest compensation, has received only limited research attention (Lloyd, King, & Chenoweth, 2002). More importantly, there is a gap in the literature on the relationship of workplace stress and health consequences and health-affecting personal habits among social workers – particularly social workers in child protective services agencies.

Workplace stress, which can stem from multiple sources, occurs when individuals experience responsibilities or demands that exceed personal and social resources (American Institute of Stress, 2017a). The sources can include duty overload, conflicting demands, lack of clarity in worker roles, and work-family conflict resulting from incompatibility

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in family and work responsibilities (Travis, Lizano, & Mor Barak, 2016). Additionally, Sonnentag, Pundt, and Albrecht (2014) identified four relevant categories of stressors that should be considered as stress sources: physical stressors (e.g., concerns for personal safety), task-related job stressors (e.g., time pressure and job complexity, poor tools (e.g., lack of information), role-stressors (e.g., overload and unclear expectations), social stressors (e.g., conflict and unpleasant interactions with those being served), career-related stressors (poor opportunities for advancement), and traumatic stressors (situations where others or workers are in harmful or extreme danger).

While research has explored the health consequences of the stress associated with police work and nursing, much less is known about stress for staff in child protective services. One study of police officers used heart rate monitors to gauge stress levels (Anderson, Litzenger, & Plecas, 2002) and the Pittsburgh Sleep Index to evaluate effects of stress (Neylan et al., 2002). Additionally, the literature on police officer stress has explored the value of effective coping strategies to address workplace stress (Hart, Wearing, & Headey, 1995; Menard and Arter, 2013).

Research has also examined the contributors to stress among nurses (Applebaum, Fowler, Fiedler, Osinubi, & Robson, 2010; Dominguez-Gomez & Rutledge, 2009; LeSergent & Haney, 2005) and the literature has identified the association of high stress with weight gain, tobacco use, headaches, sleep deprivation, poor eating habits, and other negative health outcomes (Colditz, Manson, & Hankinson, 1997; Lin, Huang, & Wu, 2007; Samaha, Lal, Samaha, & Wyndham, 2007; Sarna et al., 2008; Van der Heijden et al., 2008; Zapka, Lemon, Magner, & Hale, 2009). Happell et al. (2013) examined the use of unhealthy coping strategies (e.g. substance use, antisocial behaviors) and healthy ones (e.g. socializing, activities). Research has also explored how stress and coping styles affect health and work performance for professional nurses (Jordan, Khubchandani, & Wiblishauser, 2016).

The literature on the relationship of work-related stress and unhealthy behaviors is not extensive and much of it is also focused on nurses. Han, Trinkoff, Storr, and Geiger-Brown (2011) in a secondary data analysis found for nurses working for at least a year that being overweight or obese was significantly associated with long work hours. Kouvonen et al. (2005) in a large Finnish study involving 45,810 workers reported lower job control, higher job strain, and higher effort-reward imbalance were associated with a higher Body Mass Index (BMI). More specifically, higher job demands and higher strain were significantly associated with a higher BMI among teachers and nurses. Similarly, a 2-year cohort study of Japanese workers reported that for the group that gained BMI, the behavior of eating to satiety was positively correlated with psychological stress which was related to job demand (positively) and job latitude, negatively (Nishitani and Sakakibara (2007). Another study of registered nurses found that perceived stress was a predictor of health limiting activities, that work environment ratings were higher (better) with lower stress with fewer instances of snack or fast food consumption (Tucker, Harris, Pipe, & Stevens, 2010). Finally, in a small study in a Midwestern hospital, most nurses (92%) rated their stress as moderate to very high; the presumed effects were: consuming more junk food (70%), consuming more food than usual (63%), not exercising regularly (69%), and binge drinking (22%) (Jordan et al., 2016). Even so, Zapka et al. (2009) did not find a relationship between perceived job stress and nurses' BMI (although the data were not shown); they reported that nurses who strongly agreed that their job was stressful ate more servings of fruits and vegetables.

While these studies do not conclusively indicate that work-related stress may directly affect the unhealthy habits of employees working in stressful positions, they do establish the need to further investigate the possible connection—especially in a population of child welfare professionals. An examination of stress and unhealthy habits is grounded in the theory of ego-depletion (Baumeister, 2002; Baumeister, Bratslavsky, Muraven, & Tice, 1998). In essence, the capacity to self-regulate and to self-control impulses to over eat, smoke, use substances, or do high risk

behaviors is related to the demands placed on coping capacities of the person, thus reducing ego-strength. Work-related stress may tax internal resources of the self, such that unhealthy habits become harder to resist. This qualitative study examines the relation between unhealthy habits and self-reported work stress among child welfare workers.

## 2. Stress and the child welfare worker

In fact, little is known about the impact of stress on the child welfare worker. However, worker's frequent exposure to client trauma may result in high levels of what has been called secondary traumatization – a stressful condition. Bride (2007) reported that 70% of social workers experienced secondary traumatization in the prior week; half of a sample of Colorado child protection workers self-reported secondary traumatization at “high” or “very high” levels (Conrad & Kellar-Guenther, 2006). Since estimates are that child welfare workers on average stay with their agencies only between two and four years with many leaving after one year (Boyas, Wind, & Ruiz, 2013), the stress that child protection professionals are exposed to may be a factor in leaving their positions (Boyas et al., 2013; Mor Barak, Levin, Nissly, & Lane, 2006; Nissly, Barak, & Levin, 2005; Shier et al., 2012; Smith & Clark, 2011).

Indeed, a study of social service workers in the United Kingdom found that work-related stress was the largest single factor contributing to their decision to leave the field (Coffey, Dugdill, & Tattersall, 2004). Another study of children's services staff in the UK found that the overall level of stress was about 20% above the clinical cutoff point (Antonopoulou, Killian, & Forrester, 2017). A Canadian study (Shier et al., 2012) found that “the presence of physical symptoms of stress has a significant negative effect effective on social worker satisfaction and a significant positive effect on intention to leave” (p. 133). Another Canadian study of hospital-based child protection professionals found that almost 40% of those who left their employment did so because of job stress and feelings of being burned out (Bennett, Plint, Clifford, 2005).

In this country, child welfare workers in California were found to experience higher workloads, more role conflict, and greater depersonalization than social workers operating in different capacities (Kim, 2011). 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. Lee, Pang, Lee, & Melby (2017) in a study of child welfare workers found that almost two-thirds rated their work-related stress as either very high or high. Mor Barak et al. (2006) found that for child welfare workers four of the five strongest predictors of turnover intention involved lack of job satisfaction, low organizational commitment, high stress, and exclusion from the organizational decision-making processes.

Major gains have been made in understanding the demanding nature of working in child welfare, but little is known about the direct impact of these stressors on the worker's health. There is a substantial gap in the literature on how job-related stress in child welfare is related to the health and well-being of child welfare workers. A first step to a better understanding of the relationship of job-related stress to health among child welfare workers is to examine their own self-reported experiences with stress and how they see stress affecting their health.

## 3. Purpose of the study

This study was part of a broader study of job satisfaction among child protective service workers in one rural state. This part of the study focused on self-reports of job-related stress and worker's self-reported negative health habits in relation to their stress. This study examines how child protective service workers view their stress in relation to their perceived health and health habits. Thus, the study further advances the understanding of the self-reported effects of stress on health

**Table 1**  
Sample characteristics of child welfare workforce ( $n = 511$ ).

Worker characteristics	f (Valid %)	Range	M (SD)
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)		
Is this your first job in child welfare?			
Yes	365 (72.7)		
No	137 (27.3)		
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)		

and well-being among individuals in this high-stress occupation.

## 4. Methodology

### 4.1. Sample

A total of 877 child protective service workers (CPSWs) in the state's child welfare agency (CWA) participated in the study. Although data were also collected from administrators and supervisors, the sample of interest for this manuscript was composed of the frontline CPSWs with direct client contact and no supervisory responsibilities. Therefore, a total of 511 respondents met criteria for inclusion and represented 37.8% of the possible 1351 statewide frontline CPSWs employed at the time of the survey. The obtained response rate of 37.8% was similar to that of other large-scale studies designed to explore the experiences of the child welfare worker and factors contributing to turnover and retention (Augsberger, Schudrich, McGowan, & Auerbach, 2012).

As shown in Table 1, demographic characteristics of the sample in this study revealed little diversity with respect to gender, race, and ethnicity. The sample primarily identified as female (86.5%) and white (87.2%), with a small segment identifying as African-American (8.1%). The sample averaged 37.62 years of age (SD 9.86) and had a mean of 8.15 years of service at the agency (SD 7.52). Possibly reflective of geographic makeup in this southern state, 64.7% reported primarily working in a rural area, 51.2% primarily working in their home county, and 72.7% reported they had no previous child welfare experience before joining the agency.

Educationally, approximately two-thirds of the sample did not have a graduate degree ( $n = 341$ ). Forty percent had a Bachelor in Social

Work degree and 59.6% ( $n = 300$ ) of the sample reported having an undergraduate degree in a “related” field (i.e. Psychology, Criminal Justice, Sociology). Of those with a graduate degree, 122 had earned a Master of Social Work and 45 identified having a graduate degree in another area.

### 4.2. Design and data collection

In response to the aforementioned pilot study (Griffiths, Royse, Culver, Piescher, & Zhang, 2017; Griffiths, Royse, Piescher, & LaLiberte, 2018), the newly appointed Commissioner of the state's child welfare system supported a statewide survey of her child welfare workforce in January of 2016. Focused on capturing feedback and suggestions for systematic improvement and employee retention, the electronic survey used both closed and open-ended items and was administered through Qualtrics. The study was approved by the Institutional Review Boards at both the university and the state agency.

With respect to the research protocol, a preliminary email was distributed to the workforce by the Commissioner of the state's child welfare system. The email notified the workforce about the upcoming study, encouraged employee participation, and specified the research team's affiliation with public universities and not the state's child welfare agency. Approximately one week later, an administrator sent an email with a cover letter to each of the state's child welfare workers via their government email address. Describing the voluntary and anonymous nature of participation in the study, a hyperlink was embedded with access to the Qualtrics electronic survey. Finally, a one-time reminder email was sent two weeks later to prompt those who had not previously responded. The comprehensive electronic survey consisted of both open and closed-ended items and has produced prior reports (Griffiths, Royse, Culver, Piescher, & Zhang, 2017; Griffiths, Royse, Piescher, & LaLiberte, 2018).

### 4.3. Data analysis process

A qualitative thematic content analysis was conducted to analyze data collected by the participants' text responses to the open-ended survey item “List any unhealthy habits you have developed because of the stress of your position.” A six-phase process ensued, following the guidelines of Braun and Clarke (2006). Further, qualitative data analysis software (MaxQDAPlus12) was used to open code the data line-by-line, response-by-response.

Expecting to find comparable maladaptive coping strategies and health consequences as in the Happell et al. (2013) nursing study, an a priori framework was put into effect. Particularly, the researcher expected to find that child protective service workers were using a variety of ways to displace their anger due to the stress that was associated with their positions. However, all additional themes were inductively generated using a data-driven process (Fereday & Muir-Cochrane, 2006).

## 5. Results

A total of 1028 items were extracted, as 472 (92.4%) of the 511 frontline child welfare workers responded to the open-ended text item. Responses were partitioned into four broad categories: (1) unhealthy habits or behaviors that workers attributed to their job stress; (2) mental health problems; (3) physical health problems they saw as related to their job stress and (4) work-life balance.

### 5.1. Unhealthy habits or behaviors attributed to job stress

The responses about unhealthy habits or behaviors were grouped into seven main topic areas: unhealthy eating, substance use, disturbed sleep, lack of exercise, irritability, self-neglect, and other troubling behaviors. There was a total of 586 mentions of some form of unhealthy habit or behaviors. Over half ( $n = 323$ ) of the mentions were about the

inability to maintain a healthy diet, making poor choices about their nutrition, and using a variety of substances to offset the stress associated with their positions. Activation of the brain's reward system, the nucleus accumbens and ventral tegmental area (Kalivas & Nakamura, 1999), mediate pleasure experiences and substance use and eating behaviors and can play a role as alternatives to stress.

#### 5.1.1. Unhealthy eating ( $n = 225$ )

Some respondents briefly mentioned “overeating” and “unhealthy eating,” but others gave more information about this behavior. For example, a 51-year old female child welfare worker described that she “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.” Also, a 16-year veteran at the agency described that her unhealthy habits involved “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.” Workers with less experience also felt this challenge. A 25-year-old frontline worker with only two years of experience mentioned “I don't eat good anymore since I am rarely hungry due to the stress of the unrealistic expectations,” and a 23-year-old male with only one year of service stated “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.)”

#### 5.1.2. Substance use ( $n = 98$ )

Professional child welfare workers described substance use as a subtheme consequence of the stress associated with their positions, identifying their consumption of smoking/tobacco ( $n = 51$ ), drinking alcohol ( $n = 31$ ), and using caffeine ( $n = 16$ ). Related to tobacco usage, a veteran of > 20 years at the agency sought relief by “smoking tobacco, as it appears to be the only way of relaxing.” Additionally, a 27-year-old frontline worker reported that she smoked “a pack of cigarettes a day.” As far as high-risk alcohol use, a worker provided a rationale when stating that she “began drinking more to help cope with the stress/trauma of hearing horrible things on a daily basis.” A 46-year-old with > 18 years of experience described seeking alleviation from job stress, 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.” Apparent in even less seasoned workers, a 24-year-old female simply stated that she dealt with the stress of her position through an “alcohol binge” while her 25-year-old urban colleague referenced the “overconsumption of alcohol regularly.” Finally, the continuous use of caffeine was described as an approach to mediate stress and keep moving forward. A 33-year-old male admitted “I take way too much caffeine. Basically, anything to stay awake and alert.” Additionally, a 12-year veteran described that she has been “drinking too much caffeine,” while her 46-year-old colleague with 18 years of service illustrated this reality by stating “I drink coffee in the morning and 1-2 Monsters a day.”

Beyond unhealthy consumption habits, this statewide study of child welfare workers revealed 263 items describing types of actions or conduct described as a consequence of the stress associated with their positions.

#### 5.1.3. Disturbed sleep ( $n = 112$ )

Child abuse is not a respecter of persons or hours of the day. On that note, child welfare workers must *answer the call* at all hours. However, workers described how the stress associated with their positions left them unable to sleep and some reported having nightmares when attempting to rest. For example, a female with only two years at the agency mentioned that she has “nightmares about cases at night, [and is] unable to sleep due to worry about [the] safety of children” and a rural counterpart with five years of experience stated “[I] no longer sleep through the night. When I do sleep, I have nightmares.” Also, a 28-year-old with prior child welfare experience before working at this agency wrote “I have severe issues with sleeping at night due to constantly worrying about what work needs to be completed the next

day.” Summarizing the essence of this subtheme, a 12-year veteran of the agency asked: “Ever dream about work? I do most nights.”

#### 5.1.4. Lack of exercise/movement ( $n = 79$ )

In this subtheme, child welfare workers reported that the demands of their positions resulted in limited physical activity. An experienced worker with 14 years of service described the problem this way, “I do not exercise because I am too tired at the end of the day to do anything else but collapse.” A rural worker recapitulated this topic, stating “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.” Finally, a younger worker with only 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.”

#### 5.1.5. Irritability ( $n = 37$ )

As a result of the stress associated with their positions, frontline child welfare workers described displacement of anger and projecting it onto others. A 24-year-old female recounted “snapping at my husband” and a male worker with two years of experience stated “my temper and patience is short at home, directed at innocent parties.” Additionally, a 37-year-old with 13 years of experience stated that she is “using more obscene language” and her 27-year-old colleague mentioned “I tend to take some of my frustration from the job out on others who are not involved.”

#### 5.1.6. Self-neglect ( $n = 22$ )

Child welfare workers' selflessness in meeting the needs of others may have personal repercussions. For example, a rural child welfare professional admitted 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.” A male worker recognized the profound implications of this decision, stating that “I put the needs of others above my own even in times and circumstances when it is of great harm to myself.” These child protection professionals reported disregarding their own medical appointments to serve others and their decisions resulted in “letting health issues go, [I am] not following up with medical appointments due to a fear of not being able to catch back up.”

A male worker with one year of experience stated “I don't even have time to visit the doctor to see if I have any physical problems with my body” and a seasoned worker with eight years of experience voiced the same challenge by stating that she “will miss doctor appointments for the fear of getting behind on my work, as I know mandatory overtime will be the consequence.” Finally, a 29-year-old professional who primarily works in an urban area described the nature of this subtheme by stating “I feel so worn-out and drained I have forgotten to shower or bathe 3 days straight.”

#### 5.1.7. Other troubling behaviors ( $n = 13$ )

Child welfare workers reported engaging in a variety of other behaviors that did not fit into the aforementioned subsections. Specifically, a 22-year-old urban child welfare professional described that her “spending habits have increased,” while one worker who commutes to work from a neighboring county identified that the stress of her position resulted in “grinding my teeth.” Another worker identified “gambling” that he saw as a consequence of the stress of working as a frontline protective services worker.

### 5.2. Mental health problems

The child protective service workers provided 214 responses regarding their mental health related to their job stress (e.g. anxiety, depression, withdrawal, outlook, panic attacks, Post-Traumatic Stress Disorder, etc.).

### 5.2.1. Anxiety ( $n = 54$ )

Some workers identified major anxiety resulting from doing their jobs. A 29-year-old urban worker stated that “the stress and anxiety have negatively affected my relationships and my health,” while a 12-year veteran of the agency stated that the work resulted in “anxiety which has escalated to two trips to the emergency room.” Another worker with three years of experience stated that “I have panic attacks because I’m so overwhelmed.” Even an emotional roller coaster was described, as a worker with only one year of experience stated “I continually feel that I am on the verge of crying, or laughing, and can’t decide which one would be best.”

### 5.2.2. Depression ( $n = 41$ )

Respondents also stated that they were “depressed,” but a 17-year veteran presented feelings of deeper hopelessness by stating that she’s “always had a good attitude when others haven’t. I’ve gotten way past that and can’t even fake an upbeat attitude that I always have had in the past.” Another worker shared feelings of despair and the inability to practice self-care, 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.” Workers also gave other statements that suggested feelings of depression by stating that their “view of the world is no longer positive” and they were “assuming the worst in people or of situations.”

### 5.2.3. Obsession/worry/unrest ( $n = 32$ )

Respondents described the stress of their positions producing feelings of obsession and worry. A professional with 17 years of experience detailed 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.”

A 38-year-old male with 13 years of service illustrated feelings of being overwhelmed, stating “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.” Additionally, the mental health impact of the demands of this position were cataloged by a worker who described that “I find myself checking emails obsessively.” Another worker stated that “I stay up at night either worrying about all I still need to accomplish [or] worrying about the safety of my clients.”

### 5.2.4. Isolation/withdrawal ( $n = 22$ )

This statewide sample of public child welfare workers also discussed feelings of isolation and withdrawal, made clear by a 64-year-old professional who stated that “the job causes me to want to isolate myself from others when not working.” A 23-year-old male spoke of this same circumstance, stating “I seldom leave my house after work and never go out with friends as I really no longer have any.” Another worker with only one year of experience mentioned that she was “Shutting down at home. Withdrawing from my family. Not being sociable.”

### 5.2.5. Other mental health problems ( $n = 65$ )

Respondents self-reported various mental health issues that did not fit into the aforementioned subthemes. Specifically, a 23-year-old worker with limited experience at the agency mentioned that “I have engaged in self-harm due to workplace stress.” A 10-year veteran of the agency reported that “I had to start seeing a therapist and psychiatrist as a result of the stress from this job.” Additionally, some workers describe that they felt they had acquired Post-Traumatic Stress Disorder. A 55-year-old male stated that he identified “symptoms of PTSD-agitation, nervousness, lack of sleep, hyper startled response” due to the stress associated with his position, and a male with 13 years of service to the agency stated that he “would dare say I have some PTSD.” Discussed within the context of their mental health, workers attributed “crying” ( $n = 9$ ) and taking medication ( $n = 34$ ) as

consequences of the stress associated with their positions. Clearly put, a professional with seven years of experience, stated that she is “one of many that are on psychotropic medications due to the stress.”

## 5.3. Physical health problems in relation to job stress

One hundred-sixty child protective service worker responses addressed physical health problems related to their job stress including fatigue, weight gain, other conditions, high blood pressure, and headaches.

### 5.3.1. Fatigue/exhaustion ( $n = 48$ )

The largest subtheme in this section was exhaustion. Many workers echoed the sentiment of a female worker with six years of experience who stated “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.” A 48-year-old with over 18 years of experience described a 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.” Lastly, a consensus developed as a four-year veteran of the agency stated that the stress of her position leaves her “wanting to do nothing but sleep when at home.” A female worker stated that “when I get home I have enough energy to crawl into bed.”

### 5.3.2. Weight gain ( $n = 38$ )

Unfortunately, but not surprising, respondents discussed gaining weight as a health consequence of their stress. Professionals described gaining weight throughout their experience at the agency. An 18-year veteran reported she “gained over thirty pounds since starting this job” and another worker with the same amount of experience stated that “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.” Additionally, a worker described her problem fraught with health consequences by stating that she had “gained 100 pounds since being employed here.”

### 5.3.3. Other conditions ( $n = 45$ )

A subtheme was developed to capture a medley of various self-reported physical health consequences that did not fit other subthemes. For example, one 10-year veteran described that she has “physically developed psoriasis of the scalp due to my anxiety over going into filthy homes.” A 45-year-old male related 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.”

Other workers illustrated the physical toll of the stress by stating that they have developed “a nervous tick,” will “lose large wads of hair at times,” and another reported 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].” Other conditions also included taking medication ( $n = 5$ ) and staying sick ( $n = 8$ ). An example of these respondents’ comments is well-stated in the words of a 24-year-old female professional who noted that “my health is declining daily from common sicknesses.” One worker with only one year of experience stated that she is “being sick a lot more than I ever have.”

### 5.3.4. High blood pressure ( $n = 16$ )

High blood pressure was reported as a physical health consequence of working as a child welfare worker. One 12-year veteran stated that she is “now on 4 different blood pressure medications.” Another colleague noted that “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.”

5.3.5. Headaches (n = 13)

Workers reported that the stress of their positions included the development of headaches. A primary example of this physical health consequence was iterated by a 29-year-old male, who stated that he has “frequent migraines that are diagnosed and triggered due to stress.”

5.4. Work-life balance

The final theme in this data analysis included 68 responses that focused on the imbalance between personal and professional lives. A 28-year-old described “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.” A 32-year-old mother reported that “I bring my kids to work with me on the weekends,” and her colleague stated 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 selfless 39-year-old professional with one year of experience at the agency spoke with a hint of despair when 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.” (Table 2).

5.5. Further analysis

The primary purpose of this study was to identify and describe the unhealthy habits reported by a statewide sample of child welfare workers. While a total of 472 individuals responded to the open-ended question designed to capture this information, 81 (17.1%) simply listed only the health consequences they attributed to their work stress (e.g. blood pressure, anxiety) without actually providing any information about their unhealthy habits. To gain a better perspective of the data, a ratio level variable was created to reflect the quantity of unhealthy habits mentioned by respondents meeting criteria for inclusion (n = 391).

Overall, this group mentioned an average of 1.5 unhealthy habits (SD = 0.99) resulting from the stress of their positions. To explore mean differences with respect to unhealthy habits and age, years at the agency, intent to leave, and self-reported health, this ratio level variable

**Table 2**  
Thematic content analysis: themes, subthemes, and number of items.

Theme	Subtheme	n
Unhealthy Habits or Behaviors		586
	Unhealthy Eating	225
	Substance Use (e.g. tobacco, alcohol, caffeine)	98
	Disturbed Sleep	112
	Lack of Exercise/Movement	79
	Irritability	37
	Self-Neglect	22
Mental Health	Other Troubling Behaviors	13
		214
	Anxiety	54
	Depression	41
	Obsession/Worry/Unrest	32
Physical Health	Isolation/Withdrawal	22
	Other Mental Health Problems	65
		160
	Fatigue/Exhaustion	48
	Weight Gain	38
Work-life balance	Other Conditions	45
	High Blood Pressure	16
	Headaches	13
		68

**Table 3**

Analysis of selected variables by number of unhealthy habits mentioned (One-Way ANOVAs).

	No Mentions (n = 57)	1–2 Mentions (n = 283)	3+ Mentions (n = 51)	Total (n = 391)	F	p
Age	40.33	37.07	37.96	37.66	2.49	0.084
Years at Agency	5.72	8.39*	9.08	8.10	3.30	0.038
Intent to Leave	1.91	2.73***	2.82***	2.62	11.88	0.000
Health Status	1.88***	2.50***	2.98***	2.47	29.00	0.000

\* p < .05 (For Years at Agency, significant relationship was between No Mentions and 1–2 Mentions).

\*\*\* p < .001 (For Intent to Leave, significant relationships were only between No Mentions and 1–2 Mentions, and No mentions and 3+ Mentions).

was recoded into three groups for use as the independent variable in a series of One-Way ANOVAs. The groups for this analysis were based on the number of mentions of unhealthy habits for each respondent (“No Mentions,” “1–2 Mentions,” and “3+ Mentions”). Age and years at the agency were both captured as the participant’s numerical response to the “Age” and “Years at the Agency” variables in the survey. Intent to leave was defined by the participant’s response to the following Likert-type item (1- Strongly Disagree, 2- Disagree, 3- Neutral, 4- Agree, 5- Strongly Agree) in the survey: “I plan on leaving this agency within the next 12 months.” Finally, each respondent was able to contribute the perception of their own health status through the utilization of a nominal/ordinal variable. Self-reported health status was defined as the respondent’s response (1- Excellent; 2- Good; 3- Fair; 4- Poor) to the following question: “How would you rate your current health status?”. (See Table 3).

No meaningful differences were found with respect to age. However, a significant pattern of differences emerged when exploring unhealthy habits and tenure, intention to leave, and self-reported health. Specifically, as the number of unhealthy habits increased, child welfare workers were more likely to leave the agency and had a worse perception of their self-reported health. Not surprisingly, longer tenure at the agency was associated with higher quantities of unhealthy habits.

6. Discussion

This study of child protective service workers in a large state agency reveals important findings about how the workers describe the presumed consequences of job stress.

The first important finding is that the stress of working in public child welfare results in the development of unhealthy habits and behaviors. Four themes emerged through the open-coding of 1028 extracted mentions from 472 workers responding to the open-ended survey item, “List any unhealthy habits you have developed because of the stress of your position.”. The most mentions (n = 586) described unhealthy eating, substance use, disturbed sleep, lack of exercise, irritability, self-neglect, and other troubling behaviors.

Respondents chose to describe issues associated with their physical health (n = 160 mentions), mental health (n = 214 mentions), and shared accounts of the difficulty in managing a work-life balance (n = 68 mentions). Related to physical health, workers attributed fatigue, weight gain, other conditions, high blood pressure, and headaches as a result of job stress. With regard to the mental health impact associated with this position, respondents gave accounts of anxiety, depression, obsession, isolation, and other mental health problems.

The second important finding from this study is that higher levels of unhealthy habits were associated with the worker’s length of experience, intention to remain in their position, and perceived health status.

This unique study used the qualitative mentions, *by person*, and coded a ratio level variable to reflect the actual number of unhealthy habits that respondents identified in their open-ended responses.

Excluding 81 respondents who didn't list an unhealthy habit but a symptom of how the job stress affected their physical health, mental health, or work-life balance, a subsample of 391 child welfare workers allowed for exploration of the association between unhealthy habits and the stress of their positions. The subsample averaged 1.5 unhealthy habits per person, with a range of 0–5. In this group, 57.5% of the child welfare workers identified unhealthy eating and 28.6% described the disruption of sleep as a result of the stress associated with their position. When examined in a bivariate analysis, the number of unhealthy habits mentioned by respondents revealed that CPS workers with more experience at the agency reported significantly more unhealthy habits than less experienced workers. Further, workers describing that the stress of their positions resulted in a larger quantity of unhealthy habits or behaviors had a significantly greater intention of leaving the agency as well as a worse perception of their own health status.

In summation, not only did respondents describe ways their own health had been affected by job stress, the study found an association between unhealthy habits and intention to leave, years at the agency, and the perception of their own health. The emergence of the variety of problems described here that *could* be job stress-related suggests that additional studies of CPS work and health should be conducted.

### 6.1. Limitations

There are several limitations to this study's findings. First, all the data are self-reported by the CPSWs in a large state agency. While 37.8% of potentially available front-line workers responded to this survey, the participation rate limits generalizability of findings. Also, the reliance on open-ended questions means that respondent language may or may not fit well with actual disorders or health conditions, thus limiting the conclusions about actual health conditions. The fact that someone says they have depression does not necessarily mean they actually have the disorder.

Another limitation is how to relate the self-reported mental health and health problems among this sample of child welfare workers to larger populations. Since this was not a quantitative study but a qualitative one, the data were not collected in a prevalence-seeking way. However, the mentions of problems stand in relation to a growing concern of the prevalence of mental disorders in the general U.S. population. For example, the CDC reports that among full-time employed persons, 2.8% of the age-adjusted over-17 year old U.S. population experiences feelings of nervousness or serious psychological distress and 9.7% report feelings of sadness and worthlessness (Centers for Disease Control, 2016). Both of these measures may relate to anxiety and depression. In addition, among bachelors' level persons in the U.S., only 0.9% of respondents to the National Health Interview Survey reported poor health (Centers for Disease Control, 2016). The employed workers in this study report unhealthy behaviors and many mentions of health problems but the study did not examine overall prevalence of disorders among the workers.

### 7. Conclusions

This study provides new information about how child welfare workers see themselves in relation to their jobs. While this study cannot make any statements about the actual health or mental health of the workers, it provides important findings about how self-reported job stress may affect the development of unhealthy habits that, in turn, may reflect on poorer health among the workers. In addition, their perception of mental health and physical health problems in relation to job stress may fuel much of the staff turnover that plagues child protective services. The study also sheds light on how workers attribute their unhealthy life habits to job stress. As stated above, the actual

relationship of these behaviors to job stress is unclear. What is clear is that the workers in this study saw a relationship and, as with mental health and physical health outcomes, the self-report of unhealthy habits in relation to job stress suggests that agency directors might need to become more proactive in addressing employees' self-care—such as offering onsite exercise or preventive health options for the workers. The remedy for ego-depletion includes opportunities for restoration of coping capacities and this can be accomplished in various ways. If demands on workers cannot be reduced, then other remedies in the form of greater staff support, more opportunities for workshop training events or other debriefing exposures might help. As policy makers begin exploring ways to counter high staff turnover and to improve child protective service outcomes, it may be necessary to more closely examine the health and well-being of the protective service workers.

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