“This is Not Easy Work’’: Examining Burnout and Secondary Trauma Among Forensic Interviewers

by

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ABSTRACT

Child advocacy centers provide a safe, child-friendly environment for the forensic interview and subsequent investigation of child victimization cases. However, very little research has examined the effects of burnout, secondary trauma, and organizational stressors on forensic interviewers. The goal of the present project was addressing the following research questions. Do forensic interviewers experience burnout and secondary trauma associated with their profession? How do organizational stressors mitigate or increase these effects among forensic interviewers? Data was collected by conducting an online survey of forensic interviewers working at child advocacy centers across the United States. Specifically, burnout was measured with the Oldenburg Burnout Inventory, and secondary trauma was measured with the Secondary Traumatic Stress Scale (STSS). The current study utilized bivariate correlations, and OLS regression models to analyze the effects of burnout, secondary trauma, and organizational stressors on forensic interviewers. The results indicate burnout and secondary trauma among interviewers in the sample. Job support, funding constraints, and heavy caseloads all influence the outcome measures. Policy recommendations include continued education, training, and mental health services for forensic interviewers. Future researchers should conduct qualitative interviews and expand on variables within the current dataset such as note taking, peer evaluations, and forensic interviewing protocols in order to gain further insight into this population.

DEDICATION

I would like to dedicate this thesis to my friends and former child advocacy center colleagues Patty Saunders, and Jayne Landacre. Thank you both for your unwavering dedication to improving the lives of victimized children and their families. I would also like to personally thank you, Jayne, for believing in my ability to succeed in graduate school and beyond. This research was inspired by both of you.

Patty, this project is especially for you and other forensic interviewers. I understand the demanding nature of this profession as well as the physical and emotional toll of this work on forensic interviewers. I hope this work improves your life and inspires future research in this area. For my friend Patty, you deserve all the admiration, appreciation, and gratitude for your work. Enjoy every motorcycle ride because you certainly deserve the time to decompress.

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Third, I would like to thank all of the forensic interviewers that took time out of their busy schedule to complete this survey. I greatly appreciate your participation and feedback throughout the data collection process. I hope this research helps to improve your life in some manner.

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INTRODUCTION

The National Children's Advocacy Center (NCAC) was created in 1985 to serve child victims of abuse and neglect in the United States. Since 1985 the NCAC has worked to establish over 1,000 child advocacy centers in the United States and more than thirty-three countries around the world (History-National Child Advocacy Center, 2018). Currently, child advocacy centers provide services to over 311,000 child victims of abuse annually (National Children's Alliance, 2014). The goal of child advocacy centers is to provide a safe, child-friendly environment for child victims of abuse and their protective caregivers (Cross, Jones, Walsh, Simone, & Kolko, 2007). The child advocacy center model involves a multidisciplinary team approach including forensic interviewers, police officers, child protective services workers, counselors, and medical professionals.

The multidisciplinary team approach is centered around the forensic interview at the child advocacy center. The forensic interview is an unbiased, structured interview with the child as part of a criminal investigation to uncover potential abuse. During the forensic interview, the child often reveals a deeply held secret that she/he has been physically, sexually, or emotionally abused usually by a trusted adult in their life. The forensic interviewer serves as the gatekeeper at the child advocacy center, she/he is directly involved with the child victim and is the point of contact for the law enforcement investigation. This one or series of forensic interviews is used to guide any subsequent criminal investigation, medical exam, or counseling service for the child. The multidisciplinary team approach is designed to avoid the revictimization of the child victim caused by repeating their story to multiple criminal justice professionals (Davies,

Cole, Albertella, Allen, & Kekevian, 1996). However, very little research has directly examined the effect of traumatizing interviews on forensic interviewers (Bonach & Heckert, 2012; Perron & Hiltz, 2006). This study addressed major gaps in the literature concerning forensic interviewers by examining burnout, secondary trauma, and organizational stressors.

LITERATURE REVIEW

Burnout

The term burnout refers to the psychological condition caused by a high demanding job with a lack of access to appropriate resources (Maslach, Schaufeli, & Leiter, 2001). The current study adhered to past research by operationalizing burnout as exhaustion and disengagement (Perron & Hiltz, 2006). Burnout across these two dimensions is linked to psychological issues such as depression or anxiety (Jayaratne, Chess, & Kunkel, 1986; Siebert, 2004) and even physical complaints (Kim, Ji, & Kao, 2011). The increased levels of burnout are also associated with high job turnover rates, especially among those in human services positions (Drake & Yadama, 1996; Kim et al., 2011). The body of literature examining burnout among forensic interviewers is very small.

Perron and Hiltz (2006) completed the only study that directly examines burnout among a sample of forensic interviewers. The researchers conducted online surveys with a sample of 66 forensic interviewers working at child advocacy centers across the United States. The study suggests that burnout is common among forensic interviewers. While organizational satisfaction was inversely correlated with burnout, neither the number of

conducted forensic interviews nor the length of employment significantly affected burnout (Perron & Hiltz, 2006). Despite the lack of burnout literature directly examining forensic interviewers, a vast amount of research finds burnout across other members of the criminal justice system.

For example, a large quantity of literature supports burnout among child protective services workers, child welfare workers, and social workers that deal with cases of child victimization (Daley, 1979; Drake & Yadama, 1996; Jayaratne & Chess, 1984; Jayaratne et al., 1986; Kim et al., 2011; Salloum, Kondrat, Johnco & Olson, 2015; Shannon & Saleebey, 1980; Sprang, Clark, & Whit-Woosley, 2007). Specifically, heavy caseloads (Daly, 1979; Jayaratne & Chess, 1984) and years of experience (Hamama, 2012; Yamatani, Engel, & Spjeldnes, 2009) are significant predictors of burnout among these populations. Burnout is also common among correctional officers. Scholars examining exhaustion and disengagement generally find that correctional officers experience high levels of burnout and depression associated with their profession (Carlson, Anson, & Thomas, 2003; Dowden & Tellier, 2004; Garland, Lambert, Hogan, Kim, & Kelley, 2014; Griffin, Hogan, Lambert, Tucker-Gail, & Baker, 2010; Hurst & Hurst, 1997; Lambert & Hogan, 2010; Lambert, Hogan, Griffin, & Kelley, 2015; Lambert, Hogan, & Jiang, 2010; Lambert, Kelley, & Hogan, 2013; Lambert & Paoline, 2008; Lindquist & Whitehead, 1986; Schaufeli & Peeters 2000; Wright & Saylor, 1991). Multiple researchers find that burnout is more common in less experienced correctional officers (Lambert, Altheimer, & Hogan, 2010; Morgan, Van Haveren, & Pearson, 2002)

and when officers are handling heavy caseloads (Dignam, Barrera, & West, 1986; Shamir & Drory, 1982; Triplett, Mullings, & Scarborough, 1996).

Police officers also experience the exhaustion and disengagement associated with burnout at an alarming rate (Burke, 1993; Burke, Shearer, & Deszca, 1984; Golembiewski, Lloyd, Scherb, & Munzenrider, 1992; Hawkins, 2001; Johnson, 1991; Kurtz, 2008; Martinussen, Richardsen, & Burke, 2007; Perez, Jones, Englert, & Sachau, 2010; Mccarty, Zhao, & Garland, 2007; Schaible & Six, 2016; Violanti et al., 2009). Perez and colleagues (2010) found that police officers working with cases of child sexual victimization are more likely to report high rates of burnout.

Finally, several scholars find evidence for the core dimensions of burnout--exhaustion and disengagement among probation and parole officers (Brown, 1986; Gayman & Bradley, 2013; Salyers, Hood, Schwartz, Alexander, & Aalsma, 2015; Simmons, Cochran, & Blount, 1997; Wells, Colbert, & Slate, 2006; White et al., 2015). Organizational stressors such as the lack of funding (Slate, Johnson, & Wells, 2000) and heavy caseloads (Lewis, Lewis, & Garby, 2013) are also significant correlates of burnout among probation and parole officers.

The literature is supportive that burnout, the psychological condition caused by a high demanding job with a lack of access to appropriate resources, is common among various actors in the criminal justice system including: child protective services workers, child welfare workers, social workers (Daley, 1979; Drake & Yadama, 1996; Jayaratne & Chess, 1984), correctional officers (Carlson et al., 2003; Dowden & Tellier, 2004), police officers (Burke, 1993; Burke et al., 1984), and parole/probation officers (Brown, 1986;

Gayman & Bradley, 2013). Also, burnout is linked to psychological issues such as anxiety and stress, physical complaints, and high job turnover (Drake & Yadama, 1996; Kim et al., 2011; Jayaratne et al., 1986; Siebert, 2004).

Research examining forensic interviewers suggests that burnout is common among this population (Perron & Hiltz, 2006). Specifically, researchers find that while organizational satisfaction was associated with burnout, neither the number of conducted forensic interviews nor the length of employment were significant (Perron & Hiltz, 2006). However, more research is still needed in order to understand predictive factors of burnout such as the effect of job support, funding constraints, and heavy caseloads. An understanding of potential predictive factors can help decrease the adverse consequences of burnout improving the everyday lives of forensic interviewers and ensuring that child victims of abuse and neglect continue to receive high-quality services. Literature examining secondary trauma among various practitioners in the criminal justice system has found similar results.

Secondary Trauma

The term secondary trauma refers to the trauma experienced by those in continued and prolonged direct contact with survivors of abuse or trauma (Bride, Jones, & Macmaster, 2007). The adverse effects associated with secondary trauma are nearly indistinguishable from exposure to primary trauma (Figley,1995; Salloum et al., 2015). The exposure to secondary trauma can lead to psychological distress, avoidance behaviors, and in severe cases post-traumatic stress disorder (Bride, Robinson, Yegidis, & Figley, 2004). Furthermore, past literature has found that exposure to secondary

trauma may have worse outcomes for those dealing with child victims of abuse (Bride, 2007; Jayaratne & Chess, 1984; Patterson, 2009). Although as mentioned above very little research has examined the effects of secondary trauma on forensic interviewers that may experience negative emotions associated with interviewing child victims of abuse.

Only two studies have directly examined secondary trauma among forensic interviewers (Bonach & Heckert, 2012: Perron & Hiltz, 2006). Bonach and Heckert (2012) utilized the Secondary Traumatic Stress Scale (STSS) to conduct an online survey with 257 forensic interviewers working at child advocacy centers in the United States. Specifically, the researchers were interested in predictive factors of secondary trauma including organizational issues such as job support, job efficacy, and mentoring. Perron and Hiltz (2006) also surveyed forensic interviewers and found that although secondary trauma was a problem within the sample neither the number of conducted interviews nor the years of experience affected this outcome. However, previous scholars did not account for the effects of heavy caseloads or funding constraints as potential predictive factors of secondary trauma (Bonach & Heckert, 2012: Perron & Hiltz, 2006).

While only two studies directly examine forensic interviewers, several other researchers have found support for secondary trauma among social workers, child protective services workers, and child welfare workers (Bride, 2007; Jayaratne & Chess, 1984; Patterson, 2009; Salloum et al., 2015; Tavormina & Clossey, 2017). Bride (2007) using the Secondary Traumatic Stress Scale (STSS), surveyed social workers directly exposed to the traumatic victimization of children at work. The researcher found that approximately (70.2%) of the sample self-reported at least one symptom of secondary

trauma in the previous week, and (15.2%) met the diagnostic criteria for post-traumatic stress disorder (Bride, 2007). Another researcher also found similar results utilizing a sample of child welfare workers. Salloum and colleagues (2015) surveyed 104 child welfare workers to determine the effects of secondary trauma. The researchers found that almost one-third (28.8%) reported high levels of secondary trauma. While these studies do not focus on forensic interviewers directly, the results do suggest that similar levels of secondary trauma will be observed in the present sample given the similarities in the exposure to child victims of abuse. Also, several scholars have linked years of experience with secondary trauma.

Specifically, lower levels of secondary trauma have been associated with more experienced social workers, child protective services workers, and child welfare workers (Dagan, Ben-Porat, & Itzhaky, 2016; Sprang et al., 2007). In one study Dagan and colleagues (2016) surveyed child protective services workers and found that years of experience were negatively correlated with secondary trauma. The researchers hypothesized that child protective services workers with more experience had developed better coping skills compared to their less experienced counterparts (Dagan et al., 2016). The burnout and secondary trauma literature concerning members of the criminal justice system (child welfare workers, child protective services workers, social workers, correctional officers, police officers, and probation/parole officers) provide a theoretical justification for exploring these concepts among forensic interviewers. Several unanswered questions concerning the effects of organizational factors on the burnout and secondary trauma experiences of forensic interviewers are explored in the current study.

Organizational Factors

The current research also examined the link between organizational factors such as job support, funding constraints, heavy caseloads, and the number of conducted forensic interviews per month on burnout and secondary trauma. Although very little research has examined forensic interviewers overall, some literature finds support for organizational factors affecting other professionals in the criminal justice system. Job support from administrators and coworkers is related to a lower risk of burnout and secondary trauma in child protective services workers (Bride et al., 2007; Hamama, 2012). Job support is also linked to lower levels of burnout among correctional officers (Lambert, Hogan, Barton-Bellessa, & Jiang, 2012; Lambert & Paoline, 2008) and police officers (Thompson, Kirk, & Brown, 2005).

Likewise, funding constraints are shown to increase the risk of secondary trauma among child protective services workers (Tavormina & Clossey, 2017) and burnout among probation/parole officers (Gayman & Bradley, 2013; Slate et al., 2000). Finally, heavy caseloads increase the rates of burnout and secondary trauma among child protective services workers (Bride et al., 2007; Daly 1979; Jayaratne & Chess, 1984), correctional officers (Dignam, et al., 1986; Shamir & Drory, 1982; Triplett et al., 1996), and probation/parole officers **(**Lewis et al., 2013).

Regarding organizational factors, the most consistent predictor in reducing burnout and secondary trauma among various members of the criminal justice system is job support including support from family, friends, colleagues, and supervisors. (Bride et al., 2007; Hamama, 2012; Lambert et al., 2012; Lambert & Paoline, 2008; Thompson et

al., 2005). Also, funding constraints and heavy caseloads are related to an increased risk of both burnout and secondary trauma among criminal justice actors (Bride et al., 2007; Daly 1979; Jayaratne & Chess, 1984; Tavormina & Clossey, 2017). However, the role of these organizational factors in predicting burnout and secondary trauma among forensic interviewers is still unknown in the empirical literature. This gap in the literature partially motivated the current project to examine the relationship between these organizational stressors and both outcome measures burnout and secondary trauma.

Current Study

The current study examined the impact of burnout, secondary trauma, and organizational stressors on a sample of forensic interviewers working at child advocacy centers in the United States. Burnout, a psychological condition caused by a high demanding job with a lack of access to appropriate resources, is a common problem among child protective services workers, correctional officers, police officers, and parole/probation officers. Secondary trauma, caused by continued and prolonged direct contact with survivors of abuse or trauma, is also a problem among social workers, child protective services workers, and child welfare workers that deal with cases of child victimization. Organizational factors such as job support consistently decrease both burnout and secondary trauma, while funding constraints and heavy caseloads increase these outcomes.

Perron and Hiltz (2006) found that burnout, especially disengagement, is a problem among forensic interviewers. Another study conducted by Bonach and Heckert (2012) found that job support decreased secondary trauma among forensic interviewers.

However, the relationship between job support, funding constraints, heavy caseloads, and the number of conducted forensic interviews on both burnout and secondary trauma among forensic interviewers is still unknown. The current novel study examined burnout, secondary trauma, job support, funding constraints, heavy caseloads, and the number of conducted forensic interviews in a multistate sample of forensic interviewers. Unlike previous research the current research utilized regression models to examine the effects of funding constraints and heavy caseloads on both outcome measures, burnout and secondary trauma.

Specifically, the following three research questions were addressed in the current study. Do forensic interviewers experience burnout and secondary trauma associated with their profession? Forensic interviewers in this sample are likely to experience a moderate level of burnout and secondary trauma. Do organizational factors such as job support from family, friends, colleagues, and supervisors mitigate the effects of burnout and secondary trauma among a sample of forensic interviewers? Do heavy caseloads and funding constraints increase the risk of burnout and secondary trauma among forensic interviewers? From these research questions, the following hypotheses were developed.

> Hypothesis 1: Forensic interviewers experience exhaustion and disengagement associated with burnout as a result of the forensic interviewing process. Therefore, it is hypothesized that a higher number of conducted forensic interviews per month, a lower perception of job support, funding constraints, and heavy caseloads will increase burnout.

Hypothesis 2: Forensic interviewers are exposed to traumatic events through the forensic interviewing process. Therefore, it is hypothesized that a higher number of conducted forensic interviews per month, a lower perception of job support, funding constraints, and heavy caseloads will increase the risk of secondary trauma.

Given the number of child advocacy centers in the United States, this research is important for both forensic interviewers and child victims. The adverse consequences of secondary trauma, burnout, and organizational stressors can have detrimental effects on the lives of forensic interviewers. Although very little research examines forensic interviewers, past literature concerning other working professionals such as child welfare workers has shown negative emotional and physical health consequences associated with burnout and secondary trauma (Salloum et al., 2015; Sprang et al., 2007; Tavormina & Clossey, 2017). Also, from a policy perspective understanding the cause of burnout among forensic interviewers can help reduce the high turnover rate in this profession (Bonach & Heckert, 2012). This research also provides practical solutions for the issues associated with burnout and secondary trauma. Finally, the research has implications for the children served at child advocacy centers across the country. Addressing the leading causes of burnout and secondary trauma among forensic interviewers ensures that child victims and their families are receiving high-quality care.

METHODOLOGY SECTION

Research Design/Procedure

The current project utilized an original data collection methodology to survey forensic interviewers working at child advocacy centers across the United States. The research was cross-sectional utilizing a survey via the Qualtrics online platform. This was a convenience sample of forensic interviewers. For this research, a survey methodology was selected for several reasons. Surveys are inexpensive, convenient, and allowed the researcher to access a large number of participants in a single setting. Data collection for this research occurred between July and October of 2018 in three separate stages.

First, the original survey instrument was piloted with multiple forensic interviewers from a single child advocacy center in West Virginia. The survey was reviewed for clarity in the instructions and individual questions. Piloting the survey also helped to ensure validity and reliability in the scales used to measure burnout, secondary trauma, and job support. After piloting the survey questions regarding forensic interviewing protocols and the average age of interviewed children were added to the final survey instrument.

Second, the survey instrument was sent to forensic interviewers through the employment and professional connections of the primary researchers in July of 2018 (see Appendix A for the recruitment email). Those perspective forensic interviewers were asked to complete a survey concerning an assessment of forensic interviewing practices via an email survey link. The recruitment email included information about the purpose of the project and contact information for the primary researchers. The survey was self-

administered, and participants were surveyed individually to ensure anonymity in the research process. Respondents were instructed to answer honestly and told to skip any uncomfortable questions.

Third, in order to increase participation, the researcher also performed an internet search for child advocacy centers in the United States and subsequently sent recruitment emails to those respective forensic interviewers in all 50 states. Recruitment emails were sent to forensic interviewers in 10 different states per week beginning in September and continuing until the beginning of October in 2018. Approximately 143 recruitment emails were sent to staff members working at child advocacy centers per week. This resulted in a response rate of approximately 24.5 percent.[1] The emails were then forwarded by staff members working at child advocacy centers to actual forensic interviewers. The forensic interviewers were not compensated for their participation in this study.

Participants

The final sample contained 157 forensic interviewers working at child advocacy centers across the United States (see Table 1). The average age of a respondent in this sample was 40 years old (SD = 12.21). Approximately 95% of the sample was female. The majority of the respondents were White (87%). Most participants completed at least a bachelor's degree. The majority of respondents spent over 50% of their time conducting forensic interviews. On average each participant had six (SD = 5.20) years of experience as a forensic interviewer and worked at their current child advocacy center for over five

[1] Approximately 10 emails per week were returned undeliverable. The response rate was calculated based on 163 returned surveys and 665 recruitment emails. Although, not every recipient of a recruitment email was a forensic interviewer. Recruitment emails were sent to all staff members working at child advocacy centers in order to increase the sample size of forensic interviewers.

years (SD = 6.00). Finally, descriptive information was also collected from each forensic interviewer about their respective child advocacy center.

The sample was fairly representative drawn from 41 different states in nearly every geographic area in the United States. Specifically, concerning the geographic location of the child advocacy centers, most were located in a rural area "small city or town" (46%), urban area "major city with a large population" (29%), suburban area "residential area connected to a large city" (22%), or other (3%). The child advocacy centers also varied based on the organizational structure of the agency. The majority of child advocacy centers were classified as non-profit organizations (90%).

Measures

The original survey instrument includes previously validated and reliable measures of burnout, secondary trauma, and job support (Bonach & Heckert, 2012; Bride et al., 2004; Demerouti, Mostert, & Bakker, 2010; Horwitz, 2006). The survey contains a total of seventy-one questions (see Appendix B for the complete survey). Specifically, the survey contains sixteen questions measuring burnout and seventeen questions measuring secondary trauma. Organizational factors conceptualized as job support, funding constraints, and heavy caseloads were measured with thirteen questions. An additional fourteen items directly measured common forensic interviewing practices such as the benefits of note taking and peer evaluations. The inclusion of these forensic interviewing practices questions was not the primary focus of this thesis. Instead, these questions were an area of subsequent interest and thus will not be mentioned further in this examination.

The final eleven questions measure demographic variables of the forensic interviewers such as age, race, gender, educational level, and years of experience.

Dependent Variables

Burnout

The first dependent variable of interest in the current study is burnout. In the current study, burnout was conceptualized as the psychological condition caused by a job with high demands and a lack of access to resources (Maslach et al., 2001). The most commonly used instrument for measuring burnout is the general Maslach Burnout Inventory, which includes three dimensions of emotional exhaustion, depersonalization, and reduced personal accomplishment. However, the Maslach Burnout Inventory is a global scale and the questions are not as applicable to forensic interviewers. Therefore, burnout in the current study was operationalized with the Oldenburg Burnout Inventory (see Appendix C for the entire scale). This inventory was utilized in a past study examining forensic interviewers (Perron & Hiltz, 2006). Also, prior independent researchers have found that the Oldenburg Burnout Inventory is just as reliable and valid as the original Maslach Burnout Inventory (Demerouti & Bakker, 2008).

The Oldenburg Burnout Inventory is a sixteen-item scale that measures burnout across two main dimensions exhaustion and disengagement, using a four-point Likert scale (Demerouti et al., 2010). Exhaustion is conceptualized as the physical or cognitive strain resulting from prolonged exposure to stress at work (Demerouti et al., 2010). In contrast, the Maslach Burnout Inventory fails to include physical or cognitive strain in the conceptualization of exhaustion. Disengagement in the Oldenburg Burnout Inventory is

conceptualized as distancing oneself from work overall, while depersonalization in the Maslach Burnout Inventory is conceptualized as an emotional distance from clients (Demerouti et al., 2010). The concept of reduced personal accomplishment is not included in the Oldenburg Burnout Inventory, because research has shown this is the weakest correlate of burnout (Demerouti & Bakker, 2008; Demerouti et al., 2010).

Specifically, the Oldenburg Burnout Inventory contains eight items measuring exhaustion, and eight items measuring disengagement. Examples of some questions operationalizing exhaustion are, "There are days when I feel tired before I arrive at work," or "During my work, I often feel emotionally drained." While some examples of questions measuring disengagement include, "It happens more and more often that I talk about my work in a negative way," or "Lately, I tend to think less at work and do my job almost mechanically" (Demerouti et al., 2010). The scale measures burnout using a four-point Likert scale from strongly disagree coded as one through strongly agree coded as four. In the current study this scale is very reliable (overall $\alpha = 0.87$, exhaustion $\alpha = 0.82$, and disengagement $\alpha = 0.72$). Since the scale contains both positively and negatively phrased questions, a total of eight items were reverse coded in order to ensure that a larger score indicates a higher level of burnout. Each subscale was averaged to develop a score for both exhaustion and disengagement. The two subscales were then averaged to create an overall measure of burnout.

Secondary Trauma

The second dependent variable in the current study is secondary trauma. The variable was conceptualized as trauma experienced by those in continued and prolonged

direct contact with survivors of abuse or trauma (Bride et al., 2007). Following past research, the variable was operationalized using the Secondary Traumatic Stress Scale (Bonach & Heckert, 2012; Bride, 2007; Bride et al., 2007; Perron & Hiltz, 2006). See Appendix D for the entire scale. Past scholars have found strong support for the reliability, convergent, and factorial validity of this scale (Bride et al., 2004). The scale contains seventeen questions in which respondents will, "Read each statement then indicate how frequently the statement was true for you in the **past month** by selecting the corresponding number next to the statement from (1) Never, (2) Rarely, (3) Occasionally, (4) Often, (5) Very Often" (Bride et al., 2004). The original scale asked participants to report the presence of symptoms in the past seven days. However, the current study asks about symptoms in the past month, assuming that some forensic interviewers may not conduct interviews every week (Bonach & Heckert, 2012).

The seventeen-item scale measured secondary trauma based on three main symptoms intrusion, avoidance, and arousal (Bride et al., 2004). The overall measure of secondary trauma and each subscale was found to be very reliable in this study (overall $\alpha = 0.91$, intrusion $\alpha = 0.74$, avoidance $\alpha = 0.81$, and arousal $\alpha = 0.82$). Each subscale was coded for a summed total score of intrusion, avoidance, and arousal. Then scores from each subscale were summed together for a total score of secondary trauma. As previously stated, the consequences of secondary trauma are nearly identical to primary trauma. The main symptoms of intrusion, avoidance, and arousal are strongly related to Post-Traumatic Stress Disorder (Bride, 2007). Specifically, the scale contains five questions measuring intrusion, seven questions measuring avoidance, and five questions

measuring arousal. Intrusion is related to negative intrusive thoughts about the client's disclosure. For example, how frequently does either of the following statements occur, "My heart started pounding when I thought about my work with clients," or "I had disturbing dreams about my work with clients." Avoidance is associated with avoidant responses such as, "I had little interest in being around others," or "I avoided people, places, or things that reminded me of my work with clients." Finally, psychological arousal was measured with questions such as, "I had trouble sleeping" or "I expected something bad to happen" (Bride et al., 2004).

Independent Variables

Organizational Factors

In the current study organizational factors are conceptualized as four independent variables: job support, funding constraints, heavy caseloads, and the number of conducted forensic interviews per month. Job support was operationalized with a seven-item scale (Demerouti et al., 2010; Horwitz, 2006). See Appendix E for the entire job support scale. Specifically, the scale measures job support from family, friends, supervisors, and colleagues using questions such as, "I have a positive relationship with my supervisor," and "my colleagues are a valuable support system." The scale measures job support with a four-point Likert scale from strongly disagree coded as one through strongly agree coded as four. The Cronbach's alpha value for this scale was also very high ($\alpha = 0.81$).

However, the job support scale does not include measures of funding constraints, or heavy caseloads. Thus, two additional independent variables funding constraints and heavy caseloads were also included in the survey instrument. The funding constraints

variable was operationalized with the following item on the survey, "Which of the following is a concern at your CAC? Check all that apply." The responses included having sufficient funding for advocacy and investigations, educational outreach programs, community outreach programs, employee salaries, medical exams, and fundraising. The variable was coded so that 0 = 2 or less funding concerns and 1 = 3 or more funding concerns. The third independent variable heavy caseloads were operationalized by examining the self-reported levels of staffing relative to caseloads. For example, participants were asked, "which statement best describes your CAC?" The potential responses to this question included "my CAC has enough staff to handle the caseload," or "my CAC is severely understaffed." Those that reported enough staff to handle the caseload were compared to all responses in this sample. The final independent variable the number of conducted forensic interviews per month was operationalized with an open-ended question on the survey instrument, coded as 1 = 0-5 conducted interviews, 2 = 6-10 conducted interviews, 3 = 11-16 conducted interviews, and 4 = 17-25 conducted interviews.

Control Variables

The current research also controlled for several demographic variables such as race, age, educational level, state of residency, years of experience, and years worked at the current child advocacy center. The race variable was operationalized as a closed-ended question coded as a dummy variable where 0 = white, and 1 = Black, American Indian or Alaska Native, Asian, or other. The age of the forensic interviewer was asked in an open-ended format and coded as a continuous variable. The variable age was

normally distributed in this sample. The interviewer's educational level was operationalized with a closed-ended question and coded as a dummy variable where 0 = graduate degree and 1=some college, associate degree, or bachelor's degree. The forensic interviewer's state of residence was also utilized as a control variable and operationalized with an open-ended item on the survey instrument. The state of residency variable was clustered for data analysis. Clustering this variable allowed the researcher to adjust the standard error for forensic interviewers living in the same state. The researcher also individually controlled for both professional experience working as a forensic interviewer, and the years worked at the current child advocacy center. Both of these variables were operationalized with open-ended responses in which the respondents could answer in months or years. For data analysis, both variables were log-transformed to approximate a normal distribution.

Analytic Strategy

The original dataset contained a sample of 163 forensic interviewers working at child advocacy centers in the United States. In order to ensure validity in the results, those interviewers (n = 6) that reported spending zero percent of their time conducting forensic interviews were excluded from the sample. Therefore, the final sample size was 157 forensic interviewers. Data analysis for this study was completed in three different stages.

First, bivariate correlations were examined between each independent variable (job support, funding constraints, heavy caseloads, the number of conducted forensic interviews per month) and the two dependent variables in this sample burnout and

secondary trauma. After an association was established between the independent and dependent variables more sophisticated techniques were conducted.

Second, Ordinary Least Squares (OLS) regression models were utilized in order to predict burnout. Specifically, OLS regression models were selected because burnout was coded as a continuous scale. The use of regression models is also an improvement on previous literature in this area which solely utilized correlation coefficients in order to analyze the data (Bonach & Heckert, 2012; Perron & Hiltz, 2006). Also, given the convenience sampling methodology used for this study regression models were the most appropriate form of statistical analysis. In order to predict burnout, a multistage approach was utilized resulting in a set of five separate regression models. At each stage of analysis, an independent variable was added into the regression model, until the final model included all independent variables plus the control variables. In model 1, job support the first independent variable was used to predict burnout. Job support was included in the first regression model because this variable was predicted to have the strongest effect on burnout. For model 2, job support and funding constraints were used to predict burnout. The funding constraints variable was previously ignored by empirical research examining forensic interviewers (Perron & Hiltz, 2006); however, it was a significant predictor of burnout among other members of the criminal justice system (Slate et al., 2000; Gayman & Bradley, 2013). For model 3 job support, funding constraints, and heavy caseloads were used to predict burnout. The effect of heavy caseloads was not addressed in another study examining burnout among forensic interviewers (Perron & Hiltz, 2006), but is still hypothesized to be an important predictor.

In model 4, job support, funding constraints, heavy caseloads, and the number of conducted forensic interviews per month were all included as independent variables examining the outcome measure burnout. The number of conducted forensic interviews was not a significant predictor of burnout among forensic interviewers in previous research, and thus is the fourth independent variable (Perron & Hiltz, 2006). Finally, model 5 predicted the dependent variable using all four independent variables plus the inclusion of several control variables (age, race, educational level, state of residency, years of experience, and years worked at the current child advocacy center). Third, a parallel analysis was used to examine the second dependent variable, secondary trauma.

RESULTS

The results indicate moderate levels of burnout (M = 2.09, SD = 0.39) and secondary trauma (M = 27, SD = 15.8) in the sample. However, the overall secondary trauma score is lower than previously reported by Perron and Hiltz (2006) in a study examining 66 forensic interviewers (M = 34.2, SD = 10.6). Both burnout and secondary trauma variables were normally distributed in this sample. See Table 2 for the complete list of means, standard deviations, and alpha reliability estimates for each scale. Also, the secondary traumatic stress scale is utilized to evaluate the participant for post-traumatic stress disorder (PTSD), which is caused by repeated and prolonged exposure to traumatic events (Bride, 2007). Secondary trauma was measured across three subscales intrusion, avoidance and arousal using a four-point Likert scale: never (1), rarely (2), occasionally (3), often (4). In order to meet the diagnostic criteria for PTSD, the participant must answer "occasionally or often" to one intrusion item, three avoidance items, and two

arousal items. In the current sample, approximately (18%) of respondents (n = 28) met the diagnostic criteria for PTSD. Another, roughly (11%) of interviewers (n = 18) met five out of the six required diagnostic criteria for PTSD.

The average participant conducted between two and three forensic interviews each day, between six and ten interviews per week, and more than twenty interviews on average every month (see Table 3 for a complete summary of the independent variables). The sample overall reported a high level of job support (M = 3.53, SD = 0.39). Job support was measured using a four-point Likert scale where a higher value indicated more support from family, friends, colleagues, and supervisors. The vast majority of respondents (84%) reported at least one major funding constraint, and more than one-third (36%) reported three or more funding constraints. Finally, less than half (48%) of the sample reported having enough staff to handle the caseload at their child advocacy center.

Bivariate Correlations

First, bivariate correlations were conducted to examine the relationship between each of the independent variables and burnout in this sample (see Table 4 for the complete correlation matrix). Although the number of conducted forensic interviews per month was not significantly correlated to burnout, the three other independent variables were strongly correlated with the outcome measure. Job support was significantly negatively correlated with burnout ($p < 0.01$). Self-reported funding constraints were significantly positively correlated with burnout ($p < 0.01$). The heavy caseloads variable was significantly negatively correlated to burnout ($p < 0.05$).

Second, bivariate correlations were also conducted to examine the relationship between each independent variable and secondary trauma. The number of conducted forensic interviews per month was again not significantly correlated with secondary trauma. Job support is also significantly negatively correlated with secondary trauma ($p < 0.01$). Funding constraints were positively correlated with secondary trauma ($p < 0.01$). Finally, heavy caseloads were not correlated with secondary trauma. The relationship between the independent variables and each outcome variable was further explored using bivariate and multivariate regression models.

Burnout Regression Models

Table 5 presents the results of several regression models predicting burnout. In model 1, the bivariate regression model using job support as the predictor was significant ($R^2 = 0.13$, $F(1,127) = 19.05$, $p < 0.001$). Job support, in this model, was a highly significant predictor of burnout ($\beta = -0.36$, $p < 0.001$). The next model also included the second independent variable, funding constraints. In model 2, both predictor variables explained about 23% of the variance in burnout ($R^2 = 0.23$, $F(2,126) = 18.44$, $p < 0.0001$). In this model, both job support and funding constraints were significant predictors at the $p < 0.01$ level. The next model introduced heavy caseloads as the third independent variable. Model 3 was overall significant and increased the amount of variance explained by the model ($R^2 = 0.25$, $F(3,125) = 14.13$, $p < 0.0001$). Both job support and funding constraints remained highly significant predictor variables at the $p < 0.01$ level. The heavy caseloads variable was significant at the $p < 0.05$ level. Model 4 examined all four independent variables including the number of conducted forensic

interviews per month. The model is overall significant although the inclusion of the fourth independent variable does not increase the amount of variance explained by the dependent variable ($R^2 = 0.25$, $F(4,123) = 10.54$, $p < 0.0001$). Unsurprisingly, the number of conducted forensic interviews was not significant in this model. However, both job support and funding constraints remained highly significant at the $p < 0.01$ level. This suggesting that both variables are important predictors of burnout despite the inclusion of multiple independent variables. The effect of heavy caseloads in this model decreased but remained significant ($\beta = -0.16$, $p < 0.06$).

Finally, model 5 used the four independent variables plus the inclusion of several control variables (age, race, educational level, state of residency, years of experience, and years worked at the current child advocacy center) in order to predict burnout. The full model is overall significant and explains the most variance in the dependent variable of any model ($R^2 = 0.32$, $F(9,38) = 6.37$, $p < 0.0001$). This suggests the final model is a better fit for the data compared to the previous regression models. Job support, despite the inclusion of control variables, remained highly significant ($\beta = -0.32$, $p < 0.01$). A one unit increase in the job support scale, which measures support from family, friends, colleagues, and supervisors, results in a -0.32 unit decrease in overall burnout holding all else constant. The effect of increasing job support is the equivalent of almost an entire standard deviation reduction in burnout. Although slightly decreased the funding constraints variable also remained significant ($\beta = 0.25$, $p < 0.05$). Those interviewers that self-reported three of more serious funding constraints (such as insufficient funding for advocacy and investigations, educational outreach programs, community outreach

programs, employee salaries, medical exams, or fundraising) experienced a 0.25 unit increase in burnout compared to those interviewers that reported two or less funding constraints. The effect of heavy caseloads not only remained significant but increased with the inclusion of the control variables ($\beta = -0.19$, $p < 0.03$). Participants with enough staff to handle the caseload experienced a -0.19 unit decrease in burnout compared to the other forensic interviewers in the sample that reported less than ideal staffing conditions. According to this model, those interviewers with heavy caseloads will experience increased burnout compared to those interviewers with enough staff to handle the caseload. The fourth independent variable, the number of conducted forensic interviews per month was again not significant in the final regression model. However, a few control variables were significant in this model.

Race was a significant predictor in this model, where *White* was the reference category; forensic interviewers that identify as *Black, American Indian, Alaska Native,* or *Asian* have increased levels of burnout compared to those interviewers that identify as *White.* The forensic interviewer's age is also highly significant in this model ($\beta = -0.24$, $p < 0.05$). As age increases overall burnout decreases among interviewers in this sample. Specifically, for every one-year increase in age burnout is reduced by -0.24 in this model. Also, years of experience working at the current child advocacy center (a log-transformed variable) also significantly predicted burnout. An increase in the months working at the child advocacy center predicts an increase in overall burnout.

Finally, given the results of this final regression model, the data is mostly supportive of hypothesis 1 which predicted burnout utilizing four independent variables:

job support, funding constraints, heavy caseloads, and the number of conducted forensic interviews per month. In this final model, the only non-significant predictor of burnout was the number of conducted forensic interviews. Job support, funding constraints, heavy caseloads were also significant predictors of burnout holding all other variables constant.

Secondary Trauma Regression Models

Table 6 presents the results of several regression models predicting secondary trauma in this sample. Model 1 was overall significant using job support as the single predictor variable ($R^2 = 0.06$, $F(1,127) = 8.57$, $p < 0.005$). Job support was highly significant at the $p < 0.01$ level in this model. The next model includes funding constraints as the second independent variable. Model 2 is overall significant and increases the amount of variance explained ($R^2 = 0.12$, $F(2,126) = 8.31$, $p < 0.005$). The effect of job support is decreased in this model but remains significant at the $p < 0.05$ level, with the inclusion of the second independent variable. Funding constraints is also highly significant in this model ($\beta = 0.23$ $p < 0.01$). Next, the heavy caseloads variable is introduced into the model. Model 3 is also overall significant with three independent variables ($R^2 = 0.15$, $F(3,125) = 7.54$, $p < 0.0005$). The job support variable increased in this model ($\beta = -0.25$, $p < 0.01$), while the effect of funding constraints decreased ($\beta = 0.16$, $p < 0.10$). Heavy caseloads are also significant at the $p < 0.05$ level. The subsequent model includes the fourth variable the number of conducted forensic interviews per month. Model 4 is overall significant with the inclusion of the fourth independent variable ($R^2 = 0.17$, $F(4,123) = 6.74$, $p < 0.0005$). Although the amount of variance explained only increases slightly with the inclusion of the new variable. In this model job

support remains significant at the $p < 0.01$ level, and funding constraints at the $p < 0.05$ level. Both heavy caseloads and the number of conducted forensic interviews are also significant at the $p < 0.10$ level.

The full model (model 5) included all four independent variables plus several control variables (race, age, educational level, state of residency, years of experience, and years worked at the current child advocacy center). This final model is overall significant and provides the best fit for the data with all variables explaining about 22% of the variance in the dependent variable ($R^2 = 0.22$, $F(9,38) = 5.06$, $p < 0.0005$). Job support is the only independent variable that remains significant in this model holding all other variables constant ($\beta = -0.26$, $p < 0.01$). An increase in job support from family, friends, colleagues, and supervisors decreases the secondary trauma experience of forensic interviewers in this sample. Specifically, a one unit increase in job support results in a -0.26 unit decrease in secondary trauma, controlling for other variables in the model. Funding constraints, heavy caseloads, and the number of conducted forensic interviews per month are not significant in this final model. Also, a few control variables are significant in the full model.

Race was also significant in this model, where *White* was the reference category; forensic interviewers that identify as *Black, American Indian or Alaska Native,* or *Asian* experience increased levels of secondary trauma compared to those interviewers that identify as *White.* The interviewer's age was also a significant predictor of secondary trauma ($\beta = -0.22$, $p < 0.05$). As the participant's age increases their experience of secondary trauma decreases. For every one-year increase in age secondary trauma will

decrease by -0.22 units. This result suggests that older individuals may have better coping skills compared to their younger counterparts.

Finally, given the results of this final regression model, the data is only slightly supportive of hypothesis 2 which predicted secondary trauma utilizing four independent variables: job support, funding constraints, heavy caseloads, and the number of conducted forensic interviews per month. In this final model, the only significant predictor of secondary trauma was job support from family, friends, colleagues, and supervisors. Funding constraints, heavy caseloads, and the number of conducted forensic interviews per month were not significant predictors of secondary trauma holding all else constant.

DISCUSSION

The goal of this study was to examine burnout and secondary trauma among a sample of forensic interviewers working at child advocacy centers in the United States. Specifically, the following research questions inspired the current project. Do forensic interviewers experience burnout and secondary trauma associated with their profession? Do organizational factors such as job support from family, friends, colleagues, and supervisors mitigate the effects of burnout and secondary trauma among a sample of forensic interviewers? Do heavy caseloads and funding constraints increase the risk of burnout and secondary trauma among forensic interviewers? The researcher hypothesized that a higher number of conducted forensic interviews, a lower perception of job support, funding constraints, and heavy caseloads will increase the risk of both burnout and secondary trauma in forensic interviewers.

The current project is only the third empirical study to examine burnout and secondary trauma among this population of forensic interviewers. Also, unlike previous literature, the present study specifically examined the impact of multiple independent variables such as the effect of job support, funding constraints, and heavy caseloads. This project also utilized regression models in order to analyze the data, in contrast to previous literature which relied solely on correlation coefficients to conduct data analysis (Bonach & Heckert, 2012; Perron & Hiltz, 2006). Although largely ignored by previous literature this is an important area of research.

This research has direct implications for the forensic interviewers working at the nearly 1,000 child advocacy centers in the United States and for the over 311,000 children served at these centers annually (History-National Child Advocacy Center, 2018; National Children's Alliance, 2014). It is important to establish that burnout and secondary trauma are problems within this population, as the adverse consequences of these constructs have detrimental effects on the lives of forensic interviewers. Also, understanding predictive factors of both burnout and secondary trauma such as job support, funding constraints, and heavy caseloads help to reduce these experiences within forensic interviewers. Finally, addressing the leading causes of burnout and secondary trauma among forensic interviewers ensures that child victims and their families are receiving high-quality care**.** Several important findings resulted from this research.

Burnout Findings

Overall burnout, operationalized as exhaustion and disengagement, was a common experience of forensic interviewers working at child advocacy centers in this

sample. Interviewers often reported exhaustion, conceptualized as a feeling of emptiness and physical exhaustion associated with their profession (Demerouti et al., 2010). This finding was also supported in another study examining forensic interviewers which found comparable levels of burnout and exhaustion (Perron & Hiltz, 2006). The feeling of physical exhaustion has detrimental effects for the interviewer and their respective child advocacy center. Burnout among forensic interviewers also contributes to the high rate of turnover in this profession (Bonach & Heckert, 2012). In addition to the main findings regarding burnout in this sample, multiple independent variables also impact this outcome.

The most important predictor of burnout in this sample was job support. Consistently as job support increased burnout decreased. This finding is consistent with previous scholarship which found that job support often mitigates burnout among forensic interviewers (Bonach & Heckert, 2012). Specifically, post-hoc analysis revealed that internal job support, particularly from colleagues and supervisors, most significantly reduced burnout. One possible explanation for this result is that supervisors and colleagues are more likely to understand the demanding nature of this profession. Along with job support from colleagues and supervisors, funding constraints also significantly influenced burnout.

In general, funding constraints were commonly reported among forensic interviewers in this sample. The vast majority (84%) of interviewers reported at least one major funding constraint, and more than one-third (36%) reported three or more funding constraints. The most frequently reported financial concerns involved insufficient funding

for community outreach programs, employee salaries, and mental health exams. Also, consequently those interviewers that reported numerous funding constraints experienced higher rates of burnout. This lack of resources hinders the ability of forensic interviewers to carry out the responsibilities of their occupation leading to increased burnout, and this finding is consistent among other actors in the criminal justice system (Gayman & Bradley, 2013; Slate et al., 2000). Unsurprisingly, heavy caseloads were also common among participants in this sample.

In particular less than half of the sample reported having enough staff to handle the caseload. The other participants in the sample reported being slightly, moderately or severely understaffed relative to their caseloads. As expected, heavy caseloads also consistently predict burnout among forensic interviewers. Heavy caseloads often contribute to the feelings of physical exhaustion and disengagement in forensic interviewers increasing the risk of burnout and job turnover. This finding is consistent in that heavy caseloads increase burnout among child protective services workers (Jayaratne & Chess, 1984), correctional officers (Shamir & Drory, 1982; Triplett et al., 1996), and probation/parole officers **(**Lewis et al., 2013).

The only independent variable that did not significantly predict burnout was the number of conducted forensic interviews. This is not surprising given that previous researchers examining this population also found that the number of conducted interviews per month was not an important predictor of burnout (Perron & Hiltz, 2006). Post-Hoc analysis also showed that the number of conducted forensic interviews per day and week did not significantly predict burnout. The number of conducted forensic

interviews is perhaps less important than self-reported caseloads, which in this study were measured relative to staffing. Several control variables in the current study also predicted burnout.

In the final burnout regression model, the forensic interviewers' race, age, and years worked at the current child advocacy center were significant. Interviewers that identified as non-white experienced burnout more frequently than *White* interviewers. Although, it is difficult to generalize this finding given the smaller number of respondents that identify as a minority race. Older forensic interviewers were less likely to report the symptoms associated with burnout. This finding is possibly related to the development of better coping strategies over time. Prior research also finds that age is inversely related to burnout (Perron & Hiltz, 2006). As the years worked at the current child advocacy center increased reported levels of burnout also increased. This surprising result contradicts numerous scholars that find experience often decreases burnout (Morgan et al., 2002; Shannon & Saleebey, 1980; Sprang et al., 2007). Interestingly only the years worked at the current child advocacy center was a significant predictor of burnout, the total years of experience as a forensic interviewer was not significant. The result may be explained by differences in experience at the agency level, regardless of total working experience as a forensic interviewer. Given these results, hypothesis 1 predicting burnout was largely supported in that job support, funding constraints, and heavy caseloads were significant predictors.

Secondary Trauma Findings

Unfortunately, forensic interviewers also reported moderate experiences of secondary trauma operationalized as intrusion, avoidance, and arousal. This finding is supported by previous researchers that found secondary trauma was a problem in another sample of forensic interviewers (Perron & Hiltz, 2006). The experience of secondary trauma among forensic interviewers is suggestive of a larger problem. In the current sample, approximately (18%) of forensic interviewers met the diagnostic criteria for PTSD, and another (11%) were one item away from meeting these criteria. Another study conducted by Bride (2007) which surveyed social workers directly exposed to the traumatic victimization of children at work also found that (15.2%) of this sample met the diagnostic criteria for PTSD. The prevalence of secondary trauma and potentially PTSD is evidence of the genuinely traumatizing work conducted by forensic interviewers. Importantly, secondary trauma and post-traumatic stress disorder often result in poor mental and physical health outcomes for those affected, which decreases the quality of life for forensic interviewers and their ability to provide needed care and support for victimized children.

The only variable that significantly predicted secondary trauma in this sample was job support, especially from colleagues and supervisors. Job support continually predicted a reduced risk of secondary trauma. This finding illustrates the need for forensic interviewers to receive support not only from supervisors but colleagues that are uniquely positioned to empathize with the upsetting nature of this work. Bonach and Heckert (2012) also found that job support from supervisors and colleagues buffered the

effects of secondary trauma. The importance of internal job support also suggests a need for continued supervision and the opportunity to debrief without breaking confidentiality with fellow forensic interviewers.

Funding constraints were not significantly related to secondary trauma in this sample. This is contrary to previous research finding that funding constraints increase the risk of secondary trauma among child protective services workers (Tavormina & Clossey, 2017). Also, unsupported by previous scholarship heavy caseloads did not predict secondary trauma in this sample (Bride et al., 2007). This is potentially due to the importance of job support rather than funding constraints and heavy caseloads in predicting the ultimate experience of secondary trauma. Job support, particularly from those supervisors and colleagues that understand the nature of this work, perhaps is a better mitigating factor for the psychological symptoms of secondary trauma mainly intrusion, avoidance, and arousal. Conversely, funding constraints and heavy caseloads along with job support have a more significant effect on the exhaustion and disengagement elements of burnout. The number of conducted forensic interviews was also not significantly related to secondary trauma. Post-hoc analysis revealed that forensic interviews conducted per day and week were also not related to this outcome. This is not surprising given that previous researchers examining this population also found that the number of conducted interviews was not an important predictor of secondary trauma (Perron & Hiltz, 2006). Conceivably, in terms of predicting secondary trauma perhaps the nature of the alleged abuse is more important than the number of conducted forensic interviews.

In the full secondary trauma regression model, the only significant control variables were the interviewers' race and age. Again, participants that identified as *Black*, *American Indian Alaska Native,* or *Asian* experience secondary trauma more frequently than *White* interviewers. However, it is once more difficult to generalize this result given the small number of identified racial minorities in this sample. Also, in agreement with previous scholars-- age was inversely related to secondary trauma (Bonach & Heckert, 2012). One explanation is that older forensic interviewers have developed better coping skills over time in order to combat secondary trauma. Alternatively, younger forensic interviewers may be qualitatively different in terms of ability to handle the secondary trauma associated with this profession compared to older forensic interviewers that remain in the field. Given this data, hypothesis 2 was only slightly supported as job support was the only significant independent variable. Funding constraints, heavy caseloads, and the number of conducted forensic interviews per month were not significant predictors of secondary trauma. Although, this research found several important findings this project did have a few methodological limitations.

Limitations

Although larger than a previous study examining burnout and secondary trauma (Bonach & Heckert, 2012), this research did result in a small sample size of 157 forensic interviewers. However, this study used a national data collection methodology resulting in a representative sample of interviewers from 41 different states. Also, it is impossible to know if the sample is fundamentally different from those forensic interviewers that chose not to participate in this study in terms of their experiences of burnout and

secondary trauma. However, the researcher attempted to correct some of this potential bias through the use of regression models, a statistical analysis technique not utilized in the two previous studies examining these constructs among forensic interviewers (Bonach & Heckert, 2012; Perron & Hiltz, 2006). Also, those who did not respond to the survey might have the highest levels of burnout and secondary trauma. The current study also found that a minority of participants met the diagnostic criteria for post-traumatic stress disorder. Although, this is an important finding that should not be easily discredited; it is worth noting that forensic interviewers drawn to this field may have personal connections to traumatized children and thus may exhibit PTSD symptoms for additional reasons.

The use of cross-sectional survey data does present some limitations when attempting to conclude the temporal ordering of forensic interviews and the subsequent burnout and secondary trauma (Bonach & Heckert, 2012; Perron & Hiltz, 2006). Also, the use of a survey methodology did not allow for expansion on certain questions (Nardi, 2018). Although the researcher attempted to overcome this limitation by including several open-ended questions in the survey that would allow for further elaboration. The use of a convenience sample also limits the generalizability of the findings to the larger population of forensic interviewers. However, data collection for this project resulted in a multistate sample of forensic interviewers, which increased the external validity of the findings.

Policy Implications

The current study provides evidence that forensic interviewers often experience burnout and secondary trauma. As such accrediting bodies for child advocacy centers should be aware of the potential dangers associated with burnout and secondary trauma. These accrediting bodies should mandate continued education and training for forensic interviewers through policies such as peer evaluations, national conferences, workshops, and ongoing supervision (Bonach & Heckert, 2012). Also, ongoing mental health services must be available for forensic interviewers in order to combat the adverse effects of secondary trauma.

Internal job support was also a significant mitigating factor of both burnout and secondary trauma. At the agency level policies should be implemented in order to increase job support between supervisors and colleagues. Supervisors should focus on providing adequate supervision and educating forensic interviewers about the risk of burnout and secondary trauma. Also, mandatory weekly or monthly staff meetings with supervisors and colleagues would provide the forensic interviewer with the opportunity to debrief in a safe environment without breaking any confidentiality rules. This cost-effective policy would also help build support between staff members and reduce the risk of burnout and secondary trauma. Also, older forensic interviewers often experience less burnout and secondary trauma compared to their younger counterparts. Another cost-effective strategy of reducing these detrimental outcomes is a mentorship program between older and younger forensic interviewers.

Funding constraints and heavy caseloads were also frequently reported by interviewers in this sample, and these factors significantly predict burnout. Agencies should use this study and similar research to advocate for private grants, as well as state and federal funding. Additional funding for employee salaries, community outreach programs, and mental health services will be advantageous for the agency and the individual forensic interviewer. Also, increasing funding in these areas of concern most frequently identified by forensic interviewers will help to reduce burnout.

Future Research

The current project represents only the third empirical study to examine burnout and secondary trauma within this population; future scholars should replicate this research using additional samples of forensic interviewers in order to validate these results. This area of study will also benefit from diversity in research methodologies. An interview methodology would allow the researcher to gain more in-depth responses from forensic interviewers regarding their experiences of burnout and secondary trauma. These qualitative interviews with forensic interviewers would also result in policy recommendations from forensic interviewers working in the field. Also, utilizing a longitudinal methodology will eliminate the temporal ordering limitation of the current study. The content of the forensic interview such as an allegation of sexual abuse, physical abuse, or mental abuse may also impact the subsequent experiences of burnout and secondary trauma. Another consideration for future researchers is examining forensic interviewers that have already left the field.

The dataset for this project also includes several variables not addressed in the current research. Specifically, fourteen questions directly measured common forensic interviewing practices such as note taking, peer evaluations, and forensic interviewing protocols. Currently, there is not a consensus in the field regarding the benefits of note taking during forensic interviews. An assessment of those forensic interviewing practices is a future area of expansion within this dataset. Also, the dataset contains several qualitative variables which ask the interviewer about the best and worst parts of their jobs. Analysis of this feedback from forensic interviewers is an additional area of expansion.

Conclusion

The results overall indicate that burnout and secondary trauma are problematic within this sample. Increased job support, especially from supervisors and colleagues, reduces the risk of burnout and secondary trauma. Also, funding constraints and heavy caseloads are issues for agencies that often result in increased levels of burnout for interviewers. As a result, potential policy implications include providing continued education, training, and mental health services for forensic interviewers. Future scholars should continue exploring issues relating to burnout, and secondary trauma among this understudied and underappreciated population. Continued research in this area improves the lives of forensic interviewers and thus helps them continue to provide life-saving services to the most vulnerable members of society, abused and neglected children.

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Table 1.
Forensic Interviewer and Child Advocacy Center Descriptive Statistics (n = 157)

	Mean or Percentage	SD	Range
Age of Interviewer	40	12.21	23-76
Years of experience	6	5.20	0-28
Years at current CAC	5	6.00	0-29
Female	95%		
Race			
White	87%		
Black or African American	2%		
Asian	2%		
American Indian or Alaska Native	1%		
Other	8%		
Education			
Graduate Degree	57%		
Bachelor's Degree	38%		
Associate Degree	2%		
Some College	3%		
Age of children most frequently interviewed			
2-5	47%		
6-8	69%		
9-11	71%		
12-14	62%		
15-18	41%		
Position			
Forensic Interviewer	59%		
Program Coordinator	12%		
Family/Child Advocate	10%		
Executive Director	9%		
Mental Health Professional	9%		
Law Enforcement	1%		
Medical Professional	0%		
Location			
Rural	46%		
Urban	29%		
Suburban	22%		
Other	3%		
Organization			
Non-Profit	90%		
Prosecution	4%		
Hospital	2%		
Law Enforcement	1%		
Other	3%		

Table 2.
Mean, Standard Deviations, and Alpha Reliability Estimates for Scales

Scale	N	Mean	SD	Range	α
Burnout	129	2.09	0.39	1.25-3.31	0.87
Exhaustion	129	2.19	0.45	1.25-3.88	0.82
Disengagement	129	2	0.39	1.25-3.25	0.72
Secondary Trauma	157	27	15.8	0-71	0.91
Intrusion	157	7.15	4.29	0-21	0.74
Avoidance	157	11.67	7.08	0-29	0.81
Arousal	157	8.17	5.10	0-21	0.82
Job Support	129	3.53	0.39	2.71-4	0.81

Note. Differences in sample size are due to missing values

Table 3.
Summary Statistics for Independent Variables

	N	Percentage or Mean	SD and Range
Number of Forensic Interviews (per day)	148		
0-1	45	30%	
2-3	82	55%	
4-7	21	14%	
Number of Forensic Interviews (per week)	144		
0-5	79	55%	
6-10	40	27%	
11-16	22	15%	
17-25	3	2%	
Number of Forensic Interviews (per month)	143		
1-10	30	20%	
11-19	33	23%	
20-30	50	35%	
31-39	15	11%	
40+	15	11%	
Job Support Scale	129	3.53	0.39, 2.71-4
Funding Constraints			
Employee Salaries	76	48%	
Community Outreach Programs	63	40%	
Mental Health Exams	59	38%	
Educational Outreach Programs	59	38%	
Advocacy and Investigations	54	34%	
Medical Exams	26	17%	
Heavy Caseloads (relative to staffing)			
Enough Staff	76	48%	
Slightly Understaffed	46	29%	
Moderately Understaffed	19	12%	
Severely Understaffed	6	4%	

Note. Differences is sample sizes due to missing variables; Number of forensic interviews per day and week are not reported in further analysis

Table 4.
Correlations Matrix for Independent and Dependent Variables

	1	2	3	4	5	6
1.Number of Forensic Interviews (per month)	-					
2. Job Support	0.04	-				
3. Funding Constraints	0.02	-0.16*	-			
4. Heavy Caseloads	-0.17**	-0.11	-0.25***	-		
5. Burnout	0.07	-0.36***	0.36***	-0.22**	-	
6. Secondary Trauma	0.06	-0.25***	0.21***	0.02	0.77***	-

p≤0.01***, p≤0.05**, p≤0.10*

Table 5.
Multi-level OLS Regression Models Predicting Burnout

	Model 1		Model 2		Model 3		Model 4		Model 5	
	b	SE	b	SE	b	SE	b	SE	b	SE
Job Support	-0.36***	0.08	-0.31***	0.08	-0.34***	0.08	-0.34***	0.08	-0.32***	0.08
Funding Constraints			0.31***	0.06	0.25***	0.07	0.26***	0.07	0.25**	0.07
Heavy Caseloads					-0.17**	0.06	-0.16*	0.07	-0.19**	0.05
Number of Conducted Forensic Interviews (per month)							0.04	0.03	-0.001	0.02
Non-White									-0.15*	0.10
Age									-0.24**	0.003
Educational Level									0.04	0.07
Professional Years of Experience									-0.02	0.02
Years worked at Current CAC									0.19*	0.03

Note. Statistics are standardized coefficients (b), and standard errors (SE)
State of Residency was clustered for data analysis
$p \leq 0.01$***, $p \leq 0.05$**, $p \leq 0.10$*

Table 6.
Multi-level OLS Regression Models Predicting Secondary Trauma

	Model 1		Model 2		Model 3		Model 4		Model 5	
	b	SE	b	SE	b	SE	b	SE	b	SE
Job Support	-0.25***	2.33	-0.21**	2.30	-0.25***	2.29	-0.26***	2.26	-0.26***	2.28
Funding Constraints			0.23***	1.84	0.16*	1.93	0.18**	1.92	0.18	2.81
Heavy Caseloads					-0.20**	1.86	-0.16*	1.87	-0.16	2.00
Number of Conducted Forensic Interviews (per month)							0.14*	0.73	0.11	2.00
Non-White									-0.16*	2.53
Age									-0.22**	0.07
Educational Level									-0.54	2.09
Professional Years of Experience									-0.07	0.51
Years worked at Current CAC									0.08	0.71

Note. Statistics are standardized coefficients (b), and standard errors (SE)
State of Residency was clustered for data analysis
p≤0.01***, p≤0.05**, p≤0.10*

APPENDIX A

RECRUITMENT EMAIL TO FORENSIC INTERVIEWERS

Hello___,

My name is Destinee Starcher, and I am a graduate student under the direction of Professor Stacia Stolzenberg in the School of Criminology and Criminal Justice at Arizona State University. I am conducting a research study to learn more about forensic interviewing practices from those actually working in child advocacy centers. The research will be used to improve the lives of forensic interviewers and subsequently the children and families they serve.

I am recruiting individuals to take a survey which will take approximately 20 minutes to complete. Your participation in this study is voluntary. The online survey can be found at this link: https://asu.co1.qualtrics.com/jfe/form/SV_6Yk0AiXbG0zlmfP

If you have any questions concerning the research study, please email me at dstarche@asu.edu

Thank you so much for your participation,

Destinee Starcher
B.A. Criminology, West Virginia University
M.S. Student, Criminology & Criminal Justice
School of Criminology & Criminal Justice
Arizona State University
Former Family Advocate

APPENDIX B

ASSESSMENT OF FORENSIC INTERVIEWING PRACTICES SURVEY

Thank you for agreeing to complete this survey. The purpose of this research project is to understand the common forensic interviewing practices associated with those working at child advocacy centers (CACs) across the United States. This research will be used to further understand and improve the lives of forensic interviewers and subsequently the child victims they serve. The research project will be conducted by Destinee Starcher a graduate student at Arizona State University and former family advocate from a child advocacy center in West Virginia, under the direction of Professor Stacia Stolzenberg.

Participation in the study is completely **voluntary**, and you may choose to stop at any moment. Although participation in the study is entirely voluntary all feedback will be used to further benefit child advocacy centers, forensic interviewers and those they serve. All responses will be kept entirely anonymous. The information will not be shared with your supervisors or any other forensic interviewers working at child advocacy centers. The survey will take approximately twenty minutes to complete.

Thank you so much for your participation. If you have any questions about the survey, please contact Destinee Starcher at dstarche@asu.edu or Professor Stacia Stolzenberg at Stacia.Stolzenberg@asu.edu.

If you have any questions about your rights as a subject/participant in this research, or if you feel you have been placed at risk, you can contact the Chair of the Human Subjects Institutional Review Board, through the ASU Office of Research Integrity and Assurance, at (480) 965-6788

- ☐ You must be at least 18 years old to participate in this study. Check this box if you wish to participate in the study.

We will begin by asking some questions about your child advocacy center (CAC), and everyday experiences as a forensic interviewer. Please type or select your response to the following questions.

1. Approximately how many forensic interviews do you conduct in an average day? ___

2. Approximately how many forensic interviews do you conduct in an average week? ___

3. Approximately how many forensic interviews do you conduct in an average month? ___

4. Approximately what percentage of your job is spent conducting forensic interviews? ___

5. Which statement best describes your CAC?
    - My CAC has enough staff to handle the caseload
    - My CAC is slightly understaffed
    - My CAC is moderately understaffed
    - My CAC is severely understaffed

6. Which of the following is a concern at your CAC? Check all that apply.
    - Having sufficient resources for advocacy and investigations
    - Having sufficient resources for educational outreach programs
    - Having sufficient resources for community outreach programs
    - Having sufficient resources for employee salaries
    - Funding for medical exams
    - Funding for mental health services

7. How often do you participate in peer review with other forensic interviewers?
    - Never
    - Weekly
    - Every two weeks
    - Monthly
    - Bi-Annually
    - Annually

8. Do you find the peer review process to be beneficial?
    - Yes
    - No

9. How is the peer review process beneficial?
   _____

10. We are interested in knowing more about what occurs during the peer review process. How would you describe what occurs during the peer review process? Please provide as much detail as possible such as the length of time, how those reviews are selected, and who provides feedback.
    _____

11. Do you take notes during forensic interviews?
    - Yes
    - No

12. If yes, what information is included in the notes you take during the forensic interview? _____

13. If no, why do you not take notes during forensic interviews?
    _____

14. Which forensic interviewing protocol is most often used at your CAC? Check all that apply.
    - ChildFirst forensic interviewing protocol
    - Radar forensic interviewing protocol
    - APSAC forensic interviewing protocol
    - Lyon's ten-step forensic interviewing protocol
    - National Institute of Child Health and Human Development (NICHD) forensic interviewing protocol
    - National Children's Advocacy Center (NCAC) forensic interviewing protocol

15. Which age group best describes the children that you most frequently interview? Check all that apply.
    - 2-5 years old
    - 6-8 years old
    - 9-11 years old
    - 12-14 years old
    - 15-18 years old

16. Which of the following areas best describes the location of your CAC?
    - Urban (major city with a large population)
    - Rural (small city or town)
    - Suburban (residential area connected to a large city)
    - Other

17. Which of the following best describes your CAC?
    - Private Organization
    - Non-Profit Organization
    - Hospital based Organization
    - Law Enforcement based Organization
    - Prosecution based Organization
    - Other

Below you will find a list of responses that you may agree or disagree with. Please, indicate your level of agreement by selecting one of the following responses.

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
I always find new and interesting aspects in my work. (18)	○	○	○	○
After work, I tend to need more time than in the past in order to relax and feel better. (19)	○	○	○	○
There are days when I feel tired before I arrive at work. (20)	○	○	○	○
It happens more and more often that I talk about my work in a negative way. (21)	○	○	○	○
I can tolerate the pressure of my work very well. (22)	○	○	○	○
Lately, I tend to think less at work and do my job almost mechanically. (23)	○	○	○	○

I find my work to be a positive challenge. (24)	○	○	○	○
During my work, I often feel emotionally drained. (25)	○	○	○	○
Over time, one can become disconnected from this type of work. (26)	○	○	○	○
After working, I have enough energy for my leisure activities. (27)	○	○	○	○
Sometimes I feel sickened by my work tasks. (28)	○	○	○	○
After my work, I usually feel worn out and weary. (29)	○	○	○	○
This is the only type of work that I can imagine myself doing. (30)	○	○	○	○
Usually, I can manage the amount of my work well. (31)	○	○	○	○
I feel more and more engaged in my work. (32)	○	○	○	○
When I work, I usually feel energized. (33)	○	○	○	○

For each statement below, select the number (1-4) as they apply to you.
(1) Strongly Disagree, (2) Disagree, (3) Agree, (4) Strongly Agree

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
I have a positive relationship with my colleagues. (34)	○	○	○	○
I have a positive relationship with my supervisor. (35)	○	○	○	○
I can make a difference in the lives of children. (36)	○	○	○	○
I can contribute to improving my agency. (37)	○	○	○	○
My colleagues are a valuable support system. (38)	○	○	○	○
My family is a valuable support system. (39)	○	○	○	○
My friends are a valuable support system. (40)	○	○	○	○
The multidisciplinary team works well together. (41)	○	○	○	○

The following is a list of statements made by persons who have been impacted by their work with traumatized clients. For each statement then indicate how frequently the statement was true for you in the past month by selecting the corresponding number next to the statement. (1) Never, (2) Rarely, (3) Occasionally, (4) Often, (5) Very Often

	Never (1)	Rarely (2)	Occasionally (3)	Often (4)	Very Often (5)
I felt emotionally numb. (42)	○	○	○	○	○
My heart started pounding when I thought about my work with clients. (43)	○	○	○	○	○
It seemed as if I was reliving the trauma(s) experienced by my client(s). (44)	○	○	○	○	○
I had trouble sleeping. (45)	○	○	○	○	○
I felt discouraged about the future. (46)	○	○	○	○	○
Reminders of my work with clients upset me. (47)	○	○	○	○	○
I had little interest in being around others. (48)	○	○	○	○	○

I felt jumpy. (49)	○	○	○	○	○
I was less active than usual. (50)	○	○	○	○	○
I thought about work with clients when I didn't intend to. (51)	○	○	○	○	○
I had trouble concentrating. (52)	○	○	○	○	○
I avoided people, places, or things that reminded me of my work with clients. (53)	○	○	○	○	○
I had disturbing dreams about my work with clients (54)	○	○	○	○	○
I wanted to avoid working with some clients. (55)	○	○	○	○	○
I was easily annoyed (56)	○	○	○	○	○
I expected something bad to happen. (57)	○	○	○	○	○
I noticed gaps in my memory about client sessions. (58)	○	○	○	○	○

Finally, please type or select your response to the following questions.

59. What is your sex?
    - Male
    - Female

60. What is your race?
    a. White
    - African American
    - American Indian or Alaska Native
    - Asian
    - Other

61. Are you Latino or Hispanic?
    - Yes
    - No

62. What is your highest level of education completed?
    - High School Diploma or GED
    - Some College
    - Associate Degree
    - Bachelor's Degree
    - Graduate Degree

63. What is your age? _____

64. What is your state of residency? _____

65. How many months or years have you worked as a forensic interviewer? _____

66. How many months or years have you been employed at your CAC? _____

67. What is your current position at the CAC? Check all that apply.
    - Family/Child Advocate
    - Executive Director
    - Forensic Interviewer
    - Program Coordinator
    - Mental Health Professional
    - Medical Professional
    - Law Enforcement

68. Overall, how satisfied are you with your current job at the CAC?
    - Very dissatisfied
    - Dissatisfied
    - Satisfied
    - Very Satisfied
69. What is the best part about your job?

    _____

70. What is the worst part about your job?

    _____

71. Is there anything else you would like to share with the researchers?

    _____

Thank you for completing this survey!

APPENDIX C

OLDENBURG BURNOUT INVENTORY

Instructions: Below you will find a list of responses that you may agree or disagree with.

Please, indicate your level of agreement by selecting one of the following responses**.**

1.) I always find new and interesting aspect of my work [R]

2.) There are days when I feel tired before work

3.) It happens more and more often that I talk about my work in a negative way

4.) After work, I tend to need more time than in the past in order to relax and feel better.

5.) I can tolerate the pressure of my work well [R]

6.) Lately, I tend to think less at work and do my job automatically

7.) I find my work to be a positive challenge [R]

8.) During work, I often feel emotionally drained

9.) Over time, one can become disconnected from this type of work

10.) After work, I have enough time for my leisure activities (R]

11.) Sometimes I feel sickened by my work tasks

12.) After my work, I usually feel worn out and weary

13.) This is the only type of work I can imagine myself doing [R]

14.) Usually, I can manage the amount of my work well [R]

15.) I feel more and more engaged in my work [R]

16.) When I work, I usually feel energized [R]

Demerouti, E., Mostert, K., & Bakker, A. B. (2010). Burnout and work engagement: A thorough investigation of the independency of both constructs. *Journal of Occupational Health Psychology, 15*(3), 209-222. doi:http://dx.doi.org.ezproxy1.lib.asu.edu/10.1037/a0019408

APPENDIX D

SECONDARY TRAUMATIC STRESS SCALE

The following is a list of statements made by persons who have been impacted by their work with traumatized clients. Read each statement then indicate how frequently the statement was true for you in the past **seven (7) days** by circling the corresponding number next to the statement. NOTE: *"Client" is used to indicate persons with whom you have been engaged in a helping relationship. You may substitute another noun that better represents your work such as consumer, patient, recipient, etc.*
(1) Never, (2) Rarely, (3) Occasionally, (4) Often, (5) Very Often

1.) I felt emotionally numb.

2.) My heart started pounding when I thought about my work with clients.

3.) It seemed as if I was reliving the trauma(s) experienced by my client(s).

4.) I had trouble sleeping.

5.) I felt discouraged about the future.

6.) Reminders of my work with clients upset me.

7.) I had little interest in being around others.

8.) I felt jumpy.

9.) I was less active than usual.

10.) I thought about my work with clients when I didn't intend to.

11.) I had trouble concentrating.

12.) I avoided people, places, or things that reminded me of my work with clients.

13.) I had disturbing dreams about my work with clients

14.) I wanted to avoid working with some clients.

15.) I was easily annoyed.

16.) I expected something bad to happen.

17.) I noticed gaps in my memory about client sessions.

Bride, B. (2007). Prevalence of secondary traumatic stress among social workers. *Social Work,* 52, 63-70. https://doi.org/10.1093/sw/52.1.63

APPENDIX E

JOB SUPPORT SCALE

For each statement below, select the number (1-4) as they apply to you. (1) Strongly Disagree, (2) Disagree, (3) Agree, (4) Strongly Agree

1.) I have a positive relationship with my colleagues.

2.) I have a positive relationship with my supervisor

3.) I can make a difference in the lives of children.

4.) I can contribute to improving my agency.

5.) My colleagues are a valuable support system.

6.) My family is a valuable support system.

7.) My friends are a valuable support system.

Bride, B. E., Robinson, M. M., Yegidis, B., & Figley, C. (2004). Development and validation of the secondary traumatic stress scale. *Research on Social Work Practice,* 14, 27–35. https://doi.org/10.1177%2F1049731503254106

Horwitz, M. J. (2006). Work-related trauma effect in child protection social workers. *Journal of Social Service Research,* 32, 1–18. https://doi.org/10.1300/J079v32n03_01