2015

Created Equal? Comparing Disturbing Media Outcomes Across Occupations

Christine Nicole Gundermann
Minnesota State University - Mankato

Created Equal? Comparing Disturbing Media Outcomes Across Occupations

Christine N. Gundermann

Thesis Submitted in Partial Fulfillment
of the Requirements for
Masters of Arts
in
Industrial Organizational Psychology

Minnesota State University
Mankato, Minnesota

November, 2015

This thesis has been examine and approved by the following members of the student's committee.

_____

Dr. Lisa Perez, Advisor

_____

Dr. Kristie Campana, Committee Member

_____

Dr. Marilyn Fox, Committee Member

_____

Date

Abstract

The present study was conducted in order to compare outcomes across distinct occupations that are exposed to disturbing media. Using four previously researched samples, I compared results across negative and positive outcomes such as STSD, burnout, social support, and growth. Samples included employees in roles within federal law enforcement and military legal professions. Results indicated that there were some significant differences between occupations on levels of STSD, burnout, and social support. In addition, results showed all samples measuring growth were scoring within the mid-range of scores, indicative of some growth potential. These results also showed that exposure type (Indirect, Combined Exposure) may not be an appropriate classification for roles within disturbing media, as results were not conclusive. Future research should continue to explore disturbing media between varying occupational roles while including measures such as growth.

Table of Contents

The crime of creating and distributing child pornography is not new. The creation and distribution of such disturbing material in a photographic and visual medium has been documented as far back as the 1800's. However, with the recent age of the internet, production, distribution, and accessing of child pornography have never been done through such efficient means (Wortley & Smallbone, 2012). This efficiency creates an endless array of images and other media (i.e. video recordings, live streaming video) in circulation around the world. To highlight this vast problem, some estimates suggest there are between 100,000 and 480,000 dedicated child pornography websites, some receiving up to one million hits in a single month with 200 new images posted each day (Wortley & Smallbone, 2012). One fact that remains constant from the earliest documented cases to the vast number of current cases is the need for professionals to investigate and prosecute individuals involved with child pornography. Regrettably this plethora of media must be examined by law enforcement and legal professionals in the process of prosecutions, investigations, and task forces aimed at combatting child pornography (Krone, 2005; Moise, 2011; Mueller, 2007). Exposure to this disturbing media can occur through various tasks performed in these occupations including, searching through computers, and other storage devices; classifying and identifying materials and victims; as well as preparing a case for prosecution or defending someone accused of such crimes (Wortley & Smallbone, 2012).

Work of this nature is worrisome for researchers and organizations alike as many professionals involved in child pornography investigations will have intensive and prolonged exposure to this disturbing media. There is a great deal of evidence about the risks of direct exposure to traumatic events. However, secondary exposure to trauma, by talking to trauma victims or viewing images of traumatic events can also lead to adverse reactions. These reactions

have been demonstrated in many occupations including helping professions (e.g., counseling, social work, first responders), law enforcement, and legal professionals. For instance, first responders and individuals associated with traumatic disasters are likely to develop emotional, cognitive, and physiological or behavioral stress symptoms, such as fear, anxiety, and intrusive memories (Linderman, Saari, Verkasalo, & Prytz, 1996).

Unfortunately, the impact of exposure to secondary trauma on professionals, specifically those working with disturbing media and child pornography, has yet to be studied in depth in the current literature (Moise, 2011; Mueller, 2007; Wolak, Mitchell, & Finkelhor, 2003). In addition, no known study to date has made comparisons across the various specialized occupations that deal with disturbing media to better understand outcomes and processes of exposure. Not only may some specialties within law enforcement (e.g., special agents) be exposed to disturbing media as part of their work, they may also have direct contact with victims or perpetrators in the course of interviews and crime scene examinations. While other law enforcement professionals (e.g., computer forensic examiners) may have no direct contact with those involved in the crime, and only have indirect exposure to disturbing media as described earlier. Additional and unique types of exposure (i.e., direct contact to victims, crime scenes) could result in different outcomes seen within these individuals. This additional exposure element exists not only within certain law enforcement professionals. Attorneys and judges also face contact with not only disturbing media in the form of reports and evidence (e.g., pictures, videos), but they also must develop relationships with clients (i.e., perpetrators, victims) and witness courtroom testimony. It is currently unknown if these different types, and levels of exposure will result in similar outcomes across these occupations. As such, it is important to further investigate the role of exposure.

Yet, exposure to disturbing images is only one feature of these jobs. In addition to viewing disturbing media, forensic examiners and law enforcement officers investigating these crimes (which can include child pornography) may also face other distinctive hindrances. For law enforcement, these may include being stigmatized by other employees, their work receiving low priority within their organization, the pressure to cover a great number of leads, and difficulty accessing appropriate social support (Holt & Blevins, 2011; Krause, 2009). Legal professionals (e.g., lawyers, judges) may also face unique burdens. Some have noted that the depression and stress experienced by lawyers could be more intense and fundamentally different from other professions (Stress, Burnout, 2004). One practical explanation for this is due to the nature of their job. This may be explained by a sense of learned helplessness within this occupation; many lawyers state there is nothing they can do to help. In addition, their role may have more direct contact with victims or perpetrators than that experienced by forensic examiners, for example. Lawyers may then also have secondary exposure to disturbing media through evidence presentation or reports. As such, it is important to better understand the nuances that exists between these specializations.

There is also a large gap in the understanding of positive growth outcomes (e.g., stress-related growth) of disturbing media and secondary trauma exposure (Folkman, 2008). Gaining a more solid understanding of positive outcomes, and possible differences between occupations may contribute to a better understanding of work-related exposure to disturbing media and child pornography.

Therefore, the purpose of the present study is to investigate the differential outcomes, both positive and negative, of viewing disturbing media across a diverse set of occupations. Although the individual tasks may vary widely among these positions, at the core of their job

responsibilities, these employees may spend a large amount of time exposed to child pornography and other sexually violent material. In addition, some employees may also have direct or more personal contact with victims or perpetrators in the preparation or course of cases, trials, and investigations. Cooper, Clarke, and Rowbottom (1999) suggested that distinct specializations within broad occupational groups may have varied outcomes and reactions to stress. The present study will conduct comparisons across a small set (4) of previously examined samples consisting of employees working with disturbing media, but with different roles in the investigative process (forensic examiners, field agents, law enforcement, and attorneys). As such, examining the effects between these groups will allow a more holistic understanding of disturbing media's role in this line of work. This, in turn, will help to better fit specific interventions for these specializations.

Negative Reactions and Outcomes

Secondary Traumatic Stress Disorder

It is well known that direct exposure to traumatic events can lead to adverse reactions, such as Post Traumatic Stress Disorder (PTSD). The American Psychological Association (APA, 2013) defines the diagnostic criteria of PTSD as exposure to a traumatic event (i.e., death, threat or actual serious injury, sexual violence), and symptoms in each of four clusters: intrusion (i.e., intrusive memories, nightmares), avoidance (i.e., avoidance of trauma related situations or places), negative alterations in cognitions and moods (i.e., negative trauma-related emotions, persistent negative beliefs about the world), and alterations in arousal and reactivity (i.e., hypervigilance, aggressive behavior, sleep disturbance). Although not all traumatic exposure is occupational in nature, many occupations do involve exposure to events that could lead to development of PTSD symptoms. For instance, researchers have demonstrated risks of PTSD

symptoms in veterans of the Vietnam War and other combat operations, 911 telecommunication operators, and urban firefighters/paramedics (Beaton, Murphy, Johnson, Pike, & Corneil, 1998; Holowka, Marx, Kaloupek, & Keane, 2012; Pierce & Lilly, 2012). Interestingly, 911 tele-communicators who are only exposed to occupational trauma through auditory media (Pierce & Lilly, 2012) still report direct occupational-related traumatic distress and PTSD symptoms. Thus, confirming the notion that even indirect or secondary exposure to trauma can have significant negative consequences.

Adverse reactions to traumatic events can and do occur in response to indirect or secondary exposure to traumatic events. One does not need to personally experience or be exposed to the traumatic event itself to demonstrate PTSD-like symptoms, and other harmful reactions. This indirect reaction has been conceptualized as Secondary Traumatic Stress Disorder (STSD; Kleber, Figley, & Gersons, 1995). STSD is defined as the behaviors and emotions resulting from knowledge of a traumatic event, such as hearing about the event or attempting to help the victim (Kleber et al., 1995). Here, PTSD-like symptoms (e.g., intrusion, arousal) occur from secondary sources, such as stories or various forms of media (e.g., video, pictures). Again, like PTSD, these adverse reactions have been seen in many situations and helping professions. Bride (2007) surveyed social workers who were exposed to traumatizing events through their clients (in the areas of mental health, substance abuse, health care and child welfare). Those exposed to traumatized patients reported intrusive work-related thoughts, psychological distress, avoidance of clients, and irritability, among other STSD/PTSD criteria. In addition, over 70% of participants experienced at least one secondary traumatic stress symptom, with 55% meeting at least one STSD/PTSD diagnostic criterion. Later, Choi (2011) expanded Bride's work to exclusively include social workers dealing with family and sexual violence (including child

abuse). Similarly, participants exposed to secondary trauma displayed moderate levels of secondary traumatic stress (STS). Almost 30% of participants were considered to be experiencing at least moderate STS. Symptoms included intrusive thoughts (reported most frequently), avoidance of clients, and irritability. In both Bride's (2007) and Choi's (2011) research, while only a small number of respondents reached clinically significant STSD levels, the research supports the fact that occupational secondary exposure to traumatic events can have a profound psychological and organizational effect on individuals.

However, the relationship between work-related secondary trauma exposure and STS/STSD among helping professions (e.g., social workers) is not unique. While research among those within the legal profession is still in its infancy, several key pieces of research point to a similar relationship. One of the earlier studies compared attorneys who work with traumatized clients and attorneys who work with non-traumatized clients on their levels of vicarious traumatization, which is similar to STS/STSD (Vrklevski & Franklin, 2008). In line with their hypotheses, attorneys who worked with traumatized clients reported higher levels of subjective distress, vicarious traumatization, as well as more depression and negative cognitive changes than attorneys who worked with non-traumatized clients. However, this study included all types of violence and forms of trauma, and had no direct measure of exposure or time spent with clients. A recent longitudinal study explored the effects of attorneys' work with traumatized clients and explored the relationship between PTSD symptoms, functional impairment, depression, and exposure variables (e.g. intensity of contact, number of clients in last 3 months) (Levin, Besser, Albert, Smith, & Neria, 2012). Their findings suggested the relationship between symptom scores at Time 1 (T1) and Time 2 (T2) were significantly and strongly related over time. For example, for attorneys who scored above clinical thresholds for PTSD, their levels of

depression (43%, 40.2%), and levels of functional impairment (74.8%, 73.8%) were not significantly different between T1 and T2. Furthermore, work-related exposure was significantly related with depression and functional impairment at both T1 and T2, as well as with intrusion and hyperarousal at T2. Their findings further suggested that exposure significantly predicted attorneys' PTSD symptoms at T2. While some of their findings were inconsistent over the 10-month period, the study does provide a solid foundation to assume that working with traumatized clients increases levels of negative symptoms, including those related to PTSD/STSD.

Coinciding with Levin et al.'s (2012) call to compare results against other professionals, several recent studies have examined differences among attorneys and other similar occupations on levels of exposure and negative outcomes, such as STSD. One of the first studies to do so examined burnout and STS symptoms among attorneys specializing in domestic violence and family law, mental health providers, and social service workers (Levin & Greisberg, 2003). Prior to their research there had been no studies evaluating these types of outcomes among attorneys who had prolonged contact with traumatized clients. Their results demonstrated the higher caseload that attorneys are faced with, often with more traumatized clients when compared to mental health, and social service professionals. For example, more than half of attorneys reported having over 21 traumatized clients, while more than half of the mental health providers/social workers reported having fewer than 20 traumatized clients. Furthermore, their findings showed that attorneys experienced more symptoms of STS, and consistently scored higher on each subscale of STS, when compared to mental health and social service providers. As such, these attorneys experienced higher levels of avoidance symptoms, intrusive memories of traumatic material, and irritability. Yet, one finding was common among all occupations: higher client case load predicted higher scores for STS symptoms.

Another study compared STS symptoms among attorneys and their administrative staff working with trauma-exposed clients (Levin, Albert, Besser, Smith & Zelenski, 2011). Here, attorneys interacted closely with clients in various locations (courthouse, legal office, etc.) and included offenses ranging from mild violence to sexual offenses (i.e., rape, child sexual abuse). Not only were these attorneys privy to firsthand accounts of offenses directly from clients, they also were indirectly exposed to traumatic material in the review of reports, and photographic and physical evidence. On the other hand, their support staff had less intense and less direct contact with clients, usually during the course of initial client evaluations. However, these staff members were, at times, exposed to details directly from clients and through contact with reports and photographic evidence. Their results showed that compared to their support staff, there were significantly more attorneys who meet criteria for PTSD (11%), STS (34%), depression (39.5%), and functional impairment (74.8%). In addition, the authors concluded that exposure (number of trauma-exposed clients) was significantly and positively correlated with symptomology measures (i.e. PTSD, functional impairment). Furthermore, the researchers found that work-related exposure mediated the direct relationship between group membership and PTSD symptoms, functional impairment, and STS. These results suggest that along with attorneys' longer working hours, their greater direct contact with clients (as opposed to the support staff's more indirect contact) was associated with their increased vulnerability to these negative outcomes.

While there has been limited research on the development of STS/STSD from exposure to disturbing media as part of one's occupation (among law enforcement and legal professionals), links between the two are beginning to emerge. In 2008, Burns and colleagues investigated the emotional impact of internet child exploitation (ICE) investigations on 14 Royal

Canadian Mounted Police. Through the use of the critical incident technique, many reported that the quantity and intensity of exposure to child pornography left them extremely negatively affected. For example, many reported difficulty speaking about their work for fear of traumatizing others, and often reported being overwhelmed. In addition, participants also indicated symptoms similar to STSD such as intrusion (e.g., flashbacks, nightmares), and negative beliefs (i.e., "I am far more paranoid now because I now know what they could do to my child."). However, as the critical incident technique was used, there was not a direct measurement of the level and symptoms of STSD, nor of exposure to child pornography. Although the sample was small and did not directly test any hypotheses, the qualitative results were generally supportive of the link between occupational exposure to disturbing media and child pornography, and the development of symptoms consistent with STSD. The current study hopes to confirm these exposure-STSD relationships among legal professionals and law enforcement working with disturbing media. The current study also hopes to better understand the role job description and tasks (indirect vs. combined contact with clients and traumatizing material) play in this relationship.

Burnout

In addition to STS, work-related exposure to disturbing media has also been linked to other negative work outcomes, including burnout. Burnout has been conceptualized over the years as a prolonged response to chronic job stressors. Symptoms include emotional exhaustion, cynicism, and a loss of professional efficacy (Maslach & Jackson, 1981; Maslach, Schaufeli, & Leiter, 2001). Those suffering from burnout are expected to score high on exhaustion and cynicism, and score low on the efficacy subscale. For example, those experiencing emotional exhaustion could feel their emotional resources are depleted, no longer feeling as if they can give

themselves fully to their work (Maslach & Jackson 1981). Cynicism could manifest itself as a distant attitude towards the job, for example by exhibiting depersonalization of trauma victims or perpetrators (Maslach et al., 2001). Finally, experiencing a loss of professional efficacy would result in the feelings of reduced professional accomplishment, evaluating oneself negatively, and feeling dissatisfied with accomplishments on the job (Maslach & Jackson 1981; Maslach et al., 2001).

Burnout is an especially important outcome as there is a well-documented history of links to important organizational measures such increased turnover intentions (Lee & Ashforth, 1996). These are potentially detrimental for any organization as some estimates indicate U.S. organizations lose up to $300 billion a year from worker absenteeism and employee turnover (Stambor, 2006). Additionally, those suffering from burnout also report decreased job satisfaction, and lower organizational commitment (Lee & Ashforth, 1996; Maslach & Jackson 1981; Maslach et al., 2001).

Symptoms of burnout have been found within helping professionals. Kadambi and Truscott's (2003) investigated 91 therapists working with sex offenders to determine levels of STSD/VT and burnout. Results indicated that not only were many participants (24%) exhibiting moderate to severe reactions to their stressful work, but they also exhibited burnout symptoms. Over half of participants (60.5%) scored at moderate or high levels of emotional exhaustion. In addition, over half of participants (55%) scored at moderate or high levels of the depersonalization subscale. Both of these are key features of burnout. However, despite this, the mean score for personal accomplishment was in the moderate range. In fact, only 2% of participants showed high scores on depersonalization and emotional exhaustion while also scoring low on personal accomplishment.

Additionally, Cieslak and colleagues' (2014) meta-analysis of over 41 studies involving professionals working with trauma survivors found a moderate positive relationship between secondary traumatic stress symptoms (STSD) and burnout. Yet the three components of burnout were not equally related to STSD. Emotional exhaustion related most strongly to STSD (r =.55, r^2=*.30)*, while professional (in)efficacy was least related to STSD (r=.35, r^2=.12). Thus, stress symptoms resulting from indirect traumatic events may occur alongside symptoms of burnout, especially the emotional exhaustion component. On the other hand, while experiencing stronger levels of emotional exhaustion and cynicism, participants may still have some sense of professional efficacy.

Yet, those within helping professions are not the only ones subject to the effects of burnout from work-related stress or trauma exposure. Researchers have also confirmed its existence among legal professionals. Levin and Greisberg (2003) compared symptoms of burnout in family lawyers with burnout in mental health and social service workers. They found higher levels of burnout among lawyers compared to these other helping professionals. In addition, for all participants having an increased client load predicted higher burnout scores. Furthermore, in a follow up study, Levin et al. (2011) compared attorneys with their support staff. They found that attorneys (37.4%) had higher levels of burnout than their support staff (8.3%), which was mediated by longer working hours and greater contact with traumatized clients. More recently, a study investigated the effects of burnout and occupational stress among 180 lawyers (Tsai, Huang, and Chan, 2009). Their results showed that higher levels of stress were related to both high levels of personal and work-related burnout. In fact, results showed that the odds of burnout (e.g., client-related) increased with occupational stress, as well as job

specialty. Many other reviews and essays on the effects of an attorney's work points to serious accounts of burnout in this population (Bateson & Hart, 2007; Morgillo, 2015).

Furthermore, Krause (2009) points to burnout as a possible reaction to the unique stressors experienced by law enforcement workers who often work with disturbing media. However, research directly linking this line of work (i.e., law enforcement working with disturbing media) to qualitative measures of burnout has been slim. This study will seek to expand and discover links between occupations on burnout using previous studies which have directly investigated this topic.

Positive Outcomes

Despite the growing body of evidence that exposure to disturbing media and child pornography is related to negative outcomes, there has been little research investigating the possibility that positive outcomes can occur from this work. In fact, positive emotions and outcomes can, and do occur along with the many negative outcomes during stress (Folkman, 2008). In support of this notion, research among disturbing media occupations has often found that individuals still report positively about their professional accomplishments and contributions to society, even when other negative outcomes are present (Bourke & Craun, 2014). For instance, in their research with law enforcement officers in ICE task forces, high STS scores were not significantly related to a decrease in participants' pride in their work, which was high among that sample.

Another somewhat surprising positive outcome is job satisfaction. Holt and Blevin (2011) examined the relationship between job stress and job satisfaction in a sample of 56 digital forensic analysts. Their job requires investigation of digital evidence of crimes, including child pornography, theft, and computer hacking. Results indicated the majority of individuals (93%)

were at least somewhat satisfied with their job. This occurred despite the fact that 68% reported being under stress and pressure from their job, and over half (51%) reported that aspects of their job could make them upset. This result is encouraging because despite the grave nature of the job, there is the potential for positive outcomes to emerge.

Stress-related Growth

In addition to job satisfaction and feelings of personal accomplishment, it is possible that individuals working in these environments could experience personal growth as a result of their stressful work. One of the first concepts to tap into this notion was Stress-related Growth (SRG). This concept is defined as positive changes following stressful or traumatic life experiences (Park, Encyclopedia of Health and Behavior, 2004). Growth is theorized to occur in various ways including competencies (confidence, coping skills, knowledge), life philosophes (changes in life meaning, life values, goals), relationships with others (deepened bonds, increased social network), and lifestyle changes. This concept has also been referred to interchangeably as post-traumatic growth (Caserta, Lund, Ultz & de Vries, 2010; Park & Fenster, 2004). The present study will use these terms interchangeably to mean instances of growth that may occur after secondary traumatic exposure from disturbing media.

Post-traumatic growth (PTG) is the experience of personal growth after exposure to a traumatic event (Tedeschi & Calhoun, 1996). PTG may involve a positive shift in self-image, interpersonal relationships, spiritual beliefs, and one's philosophy on life. Recent insight into this topic provides support for this notion among those directly exposed to traumatic events. Armstrong, Shakespeare-Finch, and Shochet (2014) investigated post-traumatic growth among 218 firefighters to determine predictive factors of post-traumatic growth and PTSD. Results indicated that experiences of trauma were significant predictors of increases in PTG. The study

further reinforces the notion that post-traumatic growth is a viable outcome from traumatic experiences. However, these studies showcase PTG as a result of direct exposure. Research on PTG in the realm of secondary exposure to trauma is still limited, but explorations into the possibility of secondary or vicarious post-traumatic growth (SPTG or VPTG) have begun.

This concept (stress-related growth and post-traumatic growth) will be further noted in the current study as secondary post-traumatic growth (SPTG) or stress-related growth. SPTG is understood as personal growth, similar in fashion to SRG and PTG, but occurring as a result of indirect exposure to traumatic events or images (Arnold, Calhoun, Tedeschi, & Cann, 2005). Although much of the literature is still exploratory in nature, Arnold et al. (2005) undertook one of the first investigations of secondary post-traumatic growth within helping professions (e.g., psychotherapy). Interviews with 21 psychotherapists showed that all participants reported experiencing positive outcomes similar in fashion to PTG as a result of indirect trauma exposure. Specifically, 90% of participants reported that observing clients' own PTG helped them to discover their own growth and development, and 86% believed their exposure to clients' trauma led to enduring trait-oriented changes within themselves (i.e., compassion, increased sensitivity, empathy). In addition, other positive outcomes included a positive impact on their own spirituality, a deepened appreciation for the human spirit, and positively changing their approach to life (i.e., more emotionally expressive, treating others with greater kindness). While neither exposure nor growth was quantitatively measured, these results provided one of the first studies of PTG resulting from secondary exposure to trauma.

More recently, a 20 study meta-synthesis was conducted to examine the impact of trauma work and secondary post-traumatic growth (Cohen & Collens, 2013). Although the studies included were of a qualitative nature, this provided the platform to more holistically understand

the process of SPTG. Results supported the notion of SPTG, as perceived changes to self were predominantly in the direction of positive growth. For instance, some positive outcomes included increased appreciation of life, gains in wisdom and insight, as well as the development of more positive views on human resilience. However, studies in occupations dealing with sexual trauma documented less growth than studies in other occupations. As such, Cohen and Collens suggested positive outcomes should be investigated more expansively to better understand SPTG. Yet, at the moment, only a handful of known SPTG studies were quantitative in nature.

.Brockhouse, Msetfi, Cohen and Joseph (2011) quantitatively examined variables that may moderate the relationship between exposure and secondary posttraumatic growth in a sample of 118 therapists. In their study, previous direct relationships between exposure and growth had been found, but were inconsistent in their magnitude and significance. They proposed that this relationship may also be moderated rather than directly affected. Results suggested that participants had a moderate level of SPTG in relation to their therapy work, and furthermore that secondary exposure to trauma positively predicted growth. In addition, empathy was a significant moderator between exposure and the "relating to others" subscale of SPTG. For those with low levels of empathy, higher exposure predicted higher levels of SPTG. Interestingly, those with the highest levels of empathy experienced the same high levels of growth regardless of exposure. However, exposure moderation was only related to the "relating to others" subscale, and not all aspects of SPTG.

However, not all quantitative research in this field has yielded similar results. Shoji et al. (2014) investigated the mediating roles that social support and self-efficacy may play in the relationship between STSD and SPTG. Studying health care workers at two separate times, results indicated this relationship was mediated sequentially by secondary trauma self-efficacy

(β=.48) and then, by social support (β=.26). In this case, higher levels of STS (which was significantly and positively related to indirect exposure) predicted lower-levels of self-efficacy, lower levels of self-efficacy predicted lower levels of social support, and finally lower levels of social support predicted lower levels of SPTG. In addition, although indirect exposure was controlled for in the mediation analyses, there was not a significant relationship between indirect exposure and SPTG at both times during the study. These results point to the inconsistency in various relationships in the SPTG literature. Therefore, it is advantageous to seek out more quantitative investigations of growth in occupational settings. The current study will represent the first known quantitative research on growth in response to work with disturbing media, such as child pornography. Furthermore, the current study will attempt to distinguish results between distinct disturbing media occupations.

Mitigating Factors

The literature has illuminated a number of positive and negative outcomes from disturbing media and secondary trauma exposure. However, it is also important to examine any possible factors that may influence these relationships between disturbing media occupations. One positive factor that could influence disturbing media outcomes is job meaningfulness. Britt, Adler, and Bartone (2001) suggest that those who sense more meaning in their work report higher perceived levels of benefits to their work. Furthermore, meaningfulness has been studied in growth literature. Abel and colleagues' (2014) results indicated that meaningfulness of challenges was a positively correlated to, and as such was a predictor of, changes in worldview, one aspect of SPTG. In sum, the ability to make meaning of out one's job or out of the traumatic events experienced, seems to facilitate growth and positive changes in worldview. However, social support has had a long standing run as a key mitigating factor in occupational stress

(Viswesvaran, Sanchez, & Fisher, 1999). In fact, recent literature points to the positive role of social support in mitigating, and coping with, the outcomes of disturbing media and secondary trauma exposure (Bourke & Craun., 2014; Burns, 2008; Killian, 2008).

Social Support

Recently, Killian (2008) conducted a multi-method (qualitative and quantitative) study to investigate compassion fatigue, burnout, and self-care/coping strategies among clinicians working with trauma survivors. The results of 20 clinician interviews suggested that risk factors for developing work-stress and compassion fatigue included the lack of a supportive work environment, lack of a supportive social network, and social isolation. Furthermore, several participants indicated that they received a lot of support from those they work with stating that, "the only people who know what is going on with me are the people that work here with me." Results from the quantitative study revealed that social support (β=.46) was a significant predictor of compassion satisfaction (CS), a construct that can be thought of as the opposite of compassion fatigue. These results showed that the level of social support from friends, family, and community was the most significant predictor of CS. While results did not directly measure social support's role in buffering negative outcomes, they do show that support may be a way to predict resilience and positive outcomes during work-related stress.

Other studies have looked at social support's role among disturbing media occupations, and in particular with law enforcement personnel. Burns and colleagues' (2008) research also examined the coping strategies of 14 ICE investigators. Results of their qualitative study indicated that having supportive supervisors who understood the impact of their work, and peer support was a mitigating factor to the negative impact of viewing disturbing media. In addition, participants also reported that social support from family and friends was another mitigating factor. They reported that having supportive spouses and friends offered them a chance to share

and engage in outside activities. It also allowed them to feel as if they were not alone in the world. In support of other findings, Burns and colleagues also found that having a lack of understanding or support from others, in regards to ICE work, was an additional risk factor to developing negative outcomes. However, due to the qualitative nature of their study no direct relationships can be concluded.

More recently, Bourke and Craun's (2014) conducted a study of over 600 participants within an Internet Crimes Against Children (ICAC) task force. These individuals' jobs often required them to view child pornography, interact with offenders, and interview victims. Previous studies among therapists and counselors had indicated that social and peer support were negatively related to PTSD/Vicarious Traumatization (VT), and burnout symptoms. Discussing cases with colleagues was cited as beneficial (Pearlman, 1999). In agreement with these prior results, Bourke and Craun found that supervisor support was one of the strongest predictors associated with lower STS scores. In fact, their results indicated that despite the fact that more than one-quarter of participants were in the high or severe range for STS, more than half were coping well (e.g., low to mild range for STS). In another study, Powell, Cassematis, Benson, Smallbone, and Wortley (2014) studied 32 ICE investigators' coping strategies through anonymous interviews. Qualitative results indicated that participants relied on various forms of socialization and social support in order to cope with the grave nature of their work. The most frequently reported strategy was described as sharing work-related and personal experiences, exchanging concerns, and socializing with work colleagues. Many participants reported that having social interactions with colleagues to discuss work-related topics was preferred to other support (e.g., family, friends) because their colleagues were best able to empathize. Furthermore, colleagues did not need to be protected from the traumatic nature of work. For instance, one

participant stated, “I talk to other guys on my team who deal with the same stuff and can relate to what I’m talking about.” For these investigators, having strong peer support and interaction was key in coping with the stress and impact from disturbing media exposure.

Research among legal professionals also demonstrates the mitigating effect of social support as a protective factor against various negative outcomes. Vrklevski and Franklin (2008) investigated the difference in coping strategies between attorneys who work with traumatized clients and those who do not. Their results indicated that there was a significant difference in the coping strategies between the two groups. Supporting their hypothesis, a greater number of attorneys who work with traumatized clients reported using professional support or assistance to help cope with work-related distress. In addition, there was a significant difference in the amount of peer support sought by each group. Those working with traumatized clients were more likely to seek peer support (94%) than those who did not work with traumatized clients (88%). A further coping strategy mentioned family support, however levels of this were not significantly different between each group of attorneys. Unfortunately, like previous studies, there were no statistical relationships tested between social support and negative outcomes (i.e., burnout, STS/STSD). Yet, this study, along with others, provides a strong foundation to believe that social support may not only be used differently among groups, but still provides a protective and mitigating effect towards the negative outcomes experienced by those in these occupations.

Linley and Joseph’s (2007) suggested coworker, supervision, and other forms of social support may even predict growth and positive changes. For example, participants who reported receiving formal supervision or support had greater levels of personal growth than those who did not report receiving this support. Additional results showed that social support was a significant predictor (β=.18) of positive changes in outlook among participants. While social support was

not a significant predictor of growth in this study, it does predict some positive changes as a result of trauma work. In support of this notion, Shoji and colleagues' (2014) results, as mentioned previously, pointed to a sequential mediation effect of self-efficacy (β=.48), and perceived social support (β=.26) on post-traumatic growth.. As such higher levels of STS predicted lower-levels of self-efficacy, lower levels of self-efficacy predicted lower levels of social support, and finally lower levels of social support predicted lower levels of growth. This allowed for participants to have growth, despite facing symptoms of STS.

The Present Study

Hypotheses

Recent literature has presented a strong case for the relationship between exposure to disturbing media, as well as secondary exposure to other traumatic events, and the symptoms of secondary traumatic stress disorder (STSD) (Bride, 2007; Burns, 2008; Choi, 2011). However, there is reason to believe that not all types of exposure are created equally. There are some hints to the fact that the nature of the exposure and type of occupation may also play a role in this relationship. Palm, Polusny, and Follette (2004) discussed the role of occupational group (indirect trauma exposure v. combined trauma exposure) in the outcome of STSD likelihood. However, their work did not provide any directional or quantitative data on which to further base research. Still, this provides a starting point to spur further investigation. While seeking to confirm previous results, as well as expand current knowledge on the possible differences between disturbing media occupations, I hypothesize:

> ***Hypothesis 1a:*** *The means of exposure to disturbing media (e.g., overall cases and time since first exposure) and STSD will differ significantly between samples.*
>
> ***Hypothesis 1b:*** *Exposure to disturbing media will be positively correlated to STSD symptoms across all samples.*

Hypothesis 1c: *The means for exposure to disturbing media and STSD will differ significantly by exposure type group (e.g., Indirect Exposure, Combined Exposure).*

Hypothesis 1d: *The relationship between exposure to disturbing media and STSD will differ significantly between exposure type groups.*

Additional literature has linked secondary trauma exposure and burnout together among occupations with secondary trauma or disturbing media exposure (Chamberlain & Miller, 2009; Krause, 2009; Levin, Albert, Besser, Smith, Zelenski, & Rosenkranz, 2011; Levin & Greisberg, 2003). In these cases, greater exposure led to higher levels of overall burnout, with professional efficacy/accomplishment subscales having the smallest relationship. Furthermore, there is again some evidence to suggest the nature of exposure and specificity of the occupation may play a role in burnout outcomes. In Blau, Tatum, and Ward's (2013) research on burnout among psychiatric rehabilitation practitioners, results indicated that reducing personal involvement with clients was vital in lowering responses among the emotional exhaustion and depersonalization subscales of burnout. While this research did not deal directly with secondary trauma exposure or disturbing media, it is feasible to make the assumption that similar patterns could occur within disturbing media occupations due to the differing amounts of personal contact with victims and/or perpetrators. Therefore, I hypothesize:

Hypothesis 2a: *The means for each burnout subscale (emotional exhaustion, cynicism, professional efficacy) will differ significantly between samples.*

Hypothesis 2b: *Exposure will be positively related to emotional exhaustion and cynicism, and negatively related to professional efficacy across samples.*

Hypothesis 2c: *The means of burnout subscales will differ significantly between exposure type groups.*

Hypothesis 2d: *The relationship between exposure to disturbing media and burnout will differ significantly between exposure type groups.*

Aside from the negatives outcomes of disturbing media exposure, it is possible that positive outcomes can occur. Personal growth following stressful and/or traumatic events, both directly and indirectly experienced, has been documented over the last two decades (Cohen & Collens, 2013; Cieslak, 2014, Park, 1996; Tedeschi & Calhoun, 1996). More recently, researchers have begun to link stress-related growth, post-traumatic growth, and secondary post-traumatic growth following secondary traumatic exposure (i.e., psychotherapists, social workers) (Arnold, Calhoun, Tedeschi, & Cann, 2005; Ben-Porat & Itzhaky, 2009). These studies showed that participants did experience growth from their exposure to secondary traumatic events. But, this has yet to be demonstrated among professionals who work with disturbing media. However, these findings provide a strong basis on which to assume outcomes may be similar. Some results suggest that one key factor in determining rates of growth is contact with clients. In fact, personally observing and witnessing client growth has been cited as a catalyst to participants' own growth (Arnold et al., 2005; Cohen & Collens, 2013). Therefore, I hypothesize:

Hypothesis 3a: *Growth means will differ significantly for participants with Indirect Exposure and participants with Combined exposure.*

Hypothesis 3b: *Exposure to disturbing media will be positively correlated to growth.*

Several mitigating factors have been studied in recent years among professions involving disturbing media. However few, if any, have looked across specialized occupations to determine if social support buffers the impact of disturbing media and secondary trauma in the same way. As previously mentioned, social support has had a long standing run as a key mitigating factor in occupational stress (Viswesvaran, Sanchez, & Fisher, 1999). Social support has demonstrated a negative correlation with many adverse outcomes (e.g., burnout, STSD) (Cieslak et al., 2013; Rzeszutek, Partyka, Golab, 2015). However, not all employees within similar occupations may be willing to discuss work or seek social support from others. Two qualitative studies of internet child exploitation (ICE) units suggested that many choose not to discuss work-related issues with family and friends, or that their family and friends did not want to hear about their work (Powell et al., 2014; Stevenson, 2007). In addition, participants felt other coworkers or employees within their field (law enforcement) stigmatized their efforts and that their efforts were not always supported by management (Burns et al., 2008; Stevenson, 2007). Further differences within social support have been found across samples. One study investigating the cross-cultural differences between ICE investigators found that supervisor support was related to lower STSD levels in U.S. employees, but not in U.K. employees (Bourke & Craun, 2014). These results suggest that social support's mitigating qualities may not be equal across a range of disturbing media occupations. Moving forward from these findings, seeking to confirm and expand understanding of social support's role in disturbing media, I hypothesize:

> ***Hypothesis 4a:*** *The mean levels of social support (e.g., supervisor, co-worker, non-work) will differ significantly across samples/exposure type groups.*
>
> ***Hypothesis 4b:*** *Social support will be negatively related to STSD across samples/exposure type groups.*

Hypothesis 4c: *Social support will be negatively related to emotional exhaustion and cynicism, and positively related to professional efficacy across samples/exposure type groups.*

Recent research on secondary post-traumatic growth has suggested that social support may also play an important role in growth. Shoji et al.'s (2014) mediation analysis suggested lower levels of social support predicted lower levels of secondary post-traumatic growth. However, currently there are no known studies which have primarily investigated growth among disturbing media occupations. As such, I predict:

Hypothesis 4d: *Social support will be positively related to growth across samples.*

Method

Participants

A total of 238 individuals across four samples participated in the study. Participants were employees across several occupational groups who were exposed to disturbing media as a part of their work during investigations, trials, and/or examinations. Sample 1 participants included 28 U. S. military law enforcement agency forensic investigators (sworn agents and civilian contractors) with expertise in computer science. Sample 2 participants included 45 U.S. military law enforcement special agents. Sample 3 participants included 138 law enforcement officers from a civilian federal agency. Sample 4 participants included 26 U.S. military JAG officers. These included defense attorneys, prosecuting attorneys, and military judges working in the Air Force or Navy. Full demographic information for Samples 2, 3, & 4 can be found in the Appendix E. However, complete demographic information was not available for Sample 1. As such, only partial information is provided in Appendix E.

Not all participants were included in analyses. Two participants in Sample 4 reported having been exposed to a high number of cases of disturbing media (e.g., 1,300 and 4,300). These values were 2.56 and 8.94 standard deviations above the combined exposure mean of all samples (M=95.91, SD=470.17), respectively. When analyzed as outliers within their own sample, results were comparable. As such, these participants were removed from the study. A final sample of 236 participants was retained for further analyses.

Procedure

The present study is a secondary analysis of four previously collected data sets among various disturbing media occupations. Employees in all samples worked with disturbing media,

and all studies included data relevant to this work. In addition, there was considerable diversity across the samples regarding the nature of their work with disturbing media.

The primary data collection procedure varied by sample. For Sample 1, the researchers mailed copies of the survey to the supervisor which included a cover letter, an informed consent form, and return envelopes. Participants who wished to participate were instructed to sign the informed consent form and complete the survey packet, sealing each in separate envelopes. Those who did not wish to participate were instructed to seal blank informed consent forms and blank survey packets in separate envelopes. All envelopes were returned to a drop box at the workplace to ensure anonymity. For the remaining three samples, researchers followed similar data collection procedures. Participants were invited to take part in the study through an electronic link delivered via email. Email addresses of employees working with disturbing media were provided by the cooperating agency. Participants responded to the survey through a secure online survey system. Participants also completed informed consent forms. Reminder emails were sent to encourage participant completion.

Measures

Demographics. Participants were asked to provide demographic information. The following information was requested: participants' age, sex, marital status, parental status, education level, and position and tenure in current organization.

Exposure to disturbing media. Exposure to disturbing media was assessed differently across the four samples. All participants were asked whether they had been exposed to disturbing media at work. In addition, there was one other consistent item used in Samples 1, 2, and 4. This item assessed how many cases the employee had worked involving child pornography and/or other forms of sexual violence. Additionally, several other items were used as secondary

measures of disturbing media. These included the time since first exposure to disturbing media in participant's current position, and the percent of their work time that they spent engaging with disturbing media. For Sample 3, all exposure items related to how distressed individuals were by their exposure to various types of disturbing media (e.g., video, still photos, audio, etc.).

Secondary traumatic stress. The Secondary Traumatic Stress Scale (STSS) was used to measure symptoms of secondary traumatic stress among all four samples (Bride, Robinson, Yegidis, & Figley, 2004). Containing a total of 17 items, the STSS is further divided into three subscales. These consist of Avoidance (seven items), Arousal (five items), and Intrusion (five items), mirroring the symptoms of PTSD. Participants rated each items on a five-point scale ranging from 1 (*Never*) to 5 (*Very Often*). Example items included, "I wanted to avoid working on some cases," "I expected something bad to happen," and "I had disturbing dreams about my work." Reliability analyses for all measures are provided later in the paper.

Burnout. The Maslach Burnout Inventory-General Survey (MBI-GS) was used to measure burnout among all samples (Maslach et al., 1996). The MBI-GS consists of 16 items on three burnout subscales of Exhaustion (five items), Cynicism (five items), and Professional Efficacy (six items). Items were rated on a seven-point scale from 0 (*Never*) to 6 (*Everyday*) Example items included, "I have become less interested in my work since I started this job," and "I doubt the significance of my work."

Stress-related Growth. Although no studies specifically measured growth, some samples included items that assessed the idea of personal growth as a result of one's work with disturbing media. For Samples 1 and 3, selected items from the original 50 item Stress-related Growth Scale (SRGS; Park 1996) were used to measure growth. The seven items selected included, "I've learned to find more meaning in life," "I've learned that I want to have some

impact on the world," "I've learned that it is OK to ask others for help," "I've grown spiritually," "I've learned to work through problems and not just give up," "I've learned how to reach out and help others," and "I've grown closer to my religion/faith." Items were rated on four-point-scale from 1 (*Not at All*) to 4 (*Very Much*).

Social support. Social support was assessed in three samples, although the specific measures of social support used varied. Measures of social support included assessments of the levels of social support provided by family, friends, and coworkers or supervisors. Nine items in Sample 1 were used to measure supervisor, co-worker, and non-work (e.g., family and friends) support. These items were adapted from the scale developed by Caplan, Cobb, French, Harrison, & Pinneau (1975). Example items included, "How much does your immediate supervisor go out of his/her way to do things to make your work life easier for you?", "How easy is it to talk with your spouse/significant other, friends, and relatives?", and "How much can other people at work be relied on when things get tough at work?". Items within Sample 1 were each rated on a four-point scale ranging from 1 (*Not at* All) to 4 (*Very* Much). Items within Sample 2 did not address social support. For Sample 3, social support was measured using an adapted version of the scale developed by Caplan, et al. (1975) that was used in Sample 1, with only very slight wording variations. The nine items in this scale measured supervisor support, co-worker support, and non-work (e.g., friends and family) support, addressing both emotional and instrumental support. Example items for Sample 3 included, "How easy is it to talk to your immediate supervisor?", "How comfortable do you feel talking with your spouse/significant other, friends, and relatives about your work?", and "How comfortable do you feel talking with other people at work about your job?". Items in Sample 3 were rated on the same scale as in Sample 1. Only co-worker support was assessed in Sample 4. Co-worker support was assessed using two measures, one

measuring emotional social support, and one measuring instrumental social support. To address instrumental support, four items from O'Driscoll's (2000) social support measure were used. Example items included, "My colleagues provide practical assistance at work," and, "My colleagues provide helpful information or advice about my work." To address emotional support from coworkers, five items developed by Huong (2014) specifically for that study were used. Example items included, "My coworkers help me cope with the work that I do here." and, "My coworkers provide me with the strength that I need to get through a difficult day." All nine social support items in Sample 4 were rated on a five-point scale ranging from 1 (*Strongly Disagree*) to 5 (*Strongly Agree*).

Results

Preliminary Analyses

Samples were combined for several analyses to better determine the role that exposure and specific occupation play in the exposure-outcome relationship. By examining each samples' occupational tasks, two exposure-related groups were developed by the researchers: Indirect Exposure and Combined Exposure. The Indirect Exposure group consisted of Sample 1 and Sample 2. This group's exposure to disturbing media was determined to be of an indirect nature only. In other words, participants had no direct contact with victims or perpetrators. The Combined Exposure groups consisted of Sample 3 and Sample 4. Their exposure to disturbing media consisted of both indirect exposure, as with the indirect group, but also consisted of direct exposure to disturbing media through victims, perpetrators, and/or crime scene visits.

Scale reliabilities were assessed by calculating Cronbach's alpha for each scale, within each sample. When possible, samples were combined and reliability was assessed across the total sample, the composite indirect exposure group (Sample 1 & 2), and the composite combined

exposure group (Sample 3 & 4). These values are found in Table 1. Item statistics were also evaluated to determine final item content for each scale. Two items from the SRGS measure ("I've learned that it is OK to ask others for help.", and "I learned that I want to have some impact on the world.") were removed due to low item-total correlations in Sample 1 and/or Sample 3. Before removing Item 3, Sample 1 had an overall reliability of .649 and an item-total correlation for Item 3 of .221. Sample 3, while having an acceptable reliability (.809), also had a low item-total correlation for Item 3 (.192). However, once removed, the overall alpha for Sample 1 was still below acceptable levels (.659). Removing Item 2 increased the reliability for Sample 1 to .70, while also increasing Sample 3 to an alpha of .82. All other scales had acceptable reliabilities and item statistics according to original authors.

Table 1

Reliability Statistics for All Outcome Variables

	Sample 1	Sample 2	Sample 3	Sample 4	Total	Indirect Exposure	Combined Exposure
STSS	.97	.92	.91	.95	.94	.96	.92
EXH	.92	.91	.94	.96	.94	.93	.95
CYN	.86	.77	.81	.90	.83	.81	.83
PE	.69	.82	.82	.88	.82	.77	.84
SRGS	.70	---	.82	---	.80	.70	.82

S_SUP	.91	---	.83	---	.84	.91	.83
S_CW	.82	---	.79	---	.79	.82	.79
S_NW	.78	---	.74	---	.74	.78	.74
S_TO	.89	---	.86	---	.86	.89	.86
CWS_I	---	---	---	.91	---	---	---
CWS_E	---	---	---	.87	---	---	---
CWS_IE	---	---	---	.92	---	---	---

STSS=Secondary Traumatic Stress Scale, EXH=Maslach Burnout Inventory Emotional Exhaustion, CYN=Maslach Burnout Inventory Cynicism, PE=Maslach Burnout Inventory Professional Efficacy, SRGS=Stress-related Growth, S_SUP=Supervisor Social Support (Sample 1 &3), S_CW=Coworker Social Support (Sample 1&3), S_NW=Non-work Social Support (Sample 1 & 3), S_TO=Total Social Support (Sample 1&3), CWS_I=Instrumental Coworker Support (Sample 4), CWS_E=Emotional Social Support (Sample 4), CWS_IE=Coworker Social Support Total (Sample 4).

Descriptive Statistics

Descriptive statistics (means, standard deviations, and ranges) were computed for each sample, when all samples where combined, and for each exposure type group. Results are reported in Tables 2 through 8. Correlations between all outcome variables were assessed for

each sample and are presented in Table 9 through12. Correlations between outcome variables were also assessed for each exposure type group and are presented in Tables 13 and 14.

Mean STSS scores exceeding 49 indicated high levels of STS, while scores above 38 are equivalent to moderate levels of STS (Bride, 2007). Composite STSS scores across all four samples was 33.79 (N=229). Since this was below these cutoffs, the majority of participants are within the mild range of STS. However, it should be noted that 16.6% of all participants (N=41) reported at least moderate STS symptoms, while 10.5% (N=24) reported high level of STSD symptoms. Examining scores within each sample, Sample 1 displayed the most severe STS reaction among all four samples, with a mean STSS score of 36.72 (*n*=27). In addition, 29% of participants in Sample 1 scored within the moderate to high range level of STSD symptoms. Sample 2 had the lowest STS level of all four samples with a mean score of 24.57 (*n*=42*)*, which is considered low level of STS. This sample also had the lowest level of STSD symptoms within moderate to high range levels (*n*=3). Samples 3 & 4 also had STSS mean scores within the mild range, 35.55 (*n*=132) and 36.15 (*n*=26), respectively. However, these two samples had the high proportion of participants scoring within the moderate to high range level of STSD symptoms, 33% and 34%, respectively. Examining exposure groups, Indirect Exposure had a mean STS score of 29.32 (*n*=69) which is within the mild-low range. However, it should be noted that this group included the highest and lowest sample means. The Combined Exposure group had a STS mean score of 35.65 (*n*=158).

Mean scores for all burnout subscales are presented in Tables 2 through 8. Mean scores among all samples for emotional exhaustion (10.94) fell within the average range as classified by Maslach et al. (1996). Among each sample, Sample 1 (17.93, *n*=27) and Sample 4 (16.69, *n*=26) had the highest mean levels of emotional exhaustion, which both fell into the high burnout range.

Sample 2 and 3 had the lowest mean levels of emotional exhaustion. According to Maslach et al. mean levels for Sample 2 (10.21, *n*=43) fell into the average burnout range. However, mean scores for Sample 3 (8.71, *n*=138) were within the low burnout range. Interestingly, mean scores for burnout among Indirect Exposure (*n*=70) and Combined Exposure (*n*=164) groups differed in positon within the burnout range. Mean emotional exhaustion scores for the Indirect Exposure group (13.19) fell within average burnout levels, whereas mean scores for the Combined Exposure group (9.98) fell within the low burnout range. Mean scores among all samples for level of cynicism (8.53, *N*=232) fell within the average burnout range as classified by Maslach et al. (1996). For mean cynicism scores among each sample, Sample 1 (11.30, *n*=27) fell within the high burnout range, Sample 2 (8.56, *n*=43) fell within the average burnout range, Sample 3 (7.53, *n*=137) also fell within the average burnout range, while Sample 4 (10.96, *n*=25) approached the high burnout range. Mean scores among the two exposure groups both fell within average burnout ranges for cynicism: Indirect Exposure (9.61, *n*=70), Combined Exposure (8.05, *n*=162). Mean scores for level of professional efficacy among all participants (29.91) approached the high range for this subscale. Results were similar for Sample 1 (27.78, *n*=27), Sample 2 (28.68, *n*=44), and Sample 4 (28.62, *n*=26) with mean scores all approaching the high level range. Mean professional efficacy scores for Sample 3 (30.99, *n*=135) fell within the high range. Mean professional efficacy scores for exposure type groups varied between average and high range. Indirect Exposure (28.36, *n*=70) group had a mean score within the average range, while the Combined Exposure (30.61, *n*=161) group had a mean score within the high range. It should be noted that high mean scores for professional efficacy indicate low burnout presence, while low mean scores indicate higher presence of burnout. This is opposite to the emotional exhaustion and cynicism subscales where high mean scores indicate high burnout presence. As

such, the results of the descriptive statistics show that while individual scores and ranges varied, in general, participants had mild to moderate levels of burnout while also having high levels of professional efficacy. Although mean scores for growth cannot be compared to scale norms, as only select items were used in this study, one can compare mean scores with the minimum and maximum values possible for the given items. After item removal, the total possible range for growth was 5-20, with higher scores indicating higher levels of growth. Given this range, the mean score among all participants (Sample 1 & 3) was above the mid-score level (M=12.80, *n*=162) and approaching the top 65% of possible scores. Mean scores for individual samples were similar with Sample 1 mean score at 12.31 (*n*=26) and Sample 3 mean score at 12.89 (*n*=126). These scores suggest that participants were experience significant levels of growth.

Table 2.

Descriptive Statistics for All Study Variable-Sample 1

Scale	Mean (Total)	SD	Range	Possible Range	N
STSS	36.72	18.22	17-80	17-85	27
EXP	54.31	61.88	8-300	No restriction	26
FEXP	4.37	1.31	1-6	1-6	27
EXH	17.93	7.79	4-30	0-30	27
CYN	11.30	7.86	0-26	0-30	27
PE	27.78	4.90	11-36	0-36	27

S_SUP	8.26	3.03	3-12	3-12	27
S_CW	8.56	2.26	4-12	3-12	27
S_NW	7.93	2.66	3-12	3-12	27
S_TO	24.74	6.76	10-33	9-36	27
SRGS	12.31	3.36	6-18	5-20	26

STSS=Secondary Traumatic Stress Scale, EXP=Exposure to Disturbing Media (Total Cases) FEXP=Exposure to Disturbing Media (First Exposure), EXH=Maslach Burnout Inventory Emotional Exhaustion, CYN=Maslach Burnout Inventory Cynicism, PE=Maslach Burnout Inventory Professional Efficacy, S_SUP=Supervisor Social Support, S_CW=Co-worker Social Support (Sample 1&3), S_NW=Non-work Social Support, S_TO=Total Social Support (Sample 1&3), SRGS=Stress-related Growth

Table 3.

Descriptive Statistics for All Study Variable-Sample 2

Scale	Mean (Total)	SD	Range	Possible Range	N
STSS	24.57	8.59	17-55	17-85	42
EXP	26.42	51.63	3-300	No restriction	36
FEXP	4.62	1.33	2-6	1-6	39

EXH	10.21	7.17	0-25	0-30	43
CYN	8.56	5.76	0-22	0-30	43
PE	28.68	6.26	9-36	0-36	44

Table 4.

Descriptive Statistics for All Study Variable-Sample 3

Scale	Mean (Total)	SD	Range	Possible Range	N
STSS	35.55	9.98	17-62	17-85	132
EXH	8.71	7.25	0-30	0-30	138
CYN	7.53	6.30	0-30	0-30	137
PE	30.99	5.34	7-36	0-36	135
S_SUP	8.59	2.79	3-12	3-12	138
S_CW	9.08	2.25	3-12	3-12	136
S_NW	9.68	2.21	4-12	3-12	136
S_TO	27.33	5.93	12-36	9-36	134

SRGS	12.89	3.61	5-20	5-20	136

Table 5.

Descriptive Statistics for All Study Variable-Sample 4

Scale	Mean (Total)	SD	Range	Possible Range	N
STSS	36.15	14.79	20-76	17-85	26
EXP	25.73	23.89	2-100	No restriction	26
FEXP	4.96	1.37	2-6	1-6	26
EXH	16.69	8.55	3-30	0-30	26
CYN	10.96	8.38	1-29	0-30	25
PE	28.62	6.29	16-36	0-36	26
CWS_I	16.04	2.82	8-20	4-20	26
CWS_E	14.5	3.18	8-19	4-20	26
CWS_IE	30.54	5.61	16-39	8-40	26

Table 6

Descriptive Statistics for All Study Variables-Total Sample

Scale	Mean (Total)	SD	Range	Possible Range	N
STSS	33.76	12.34	17-80	17-85	229
EXP	34.45	50.04	2-300	No restriction	88
FEXP	4.64	1.33	1-6	1-6	92
EXH	10.94	8.20	0-30	0-30	234
CYN	8.53	6.76	0-30	0-30	232
PE	29.91	5.70	7-36	0-36	232
S_SUP	8.54	2.82	3-12	3-12	165
S_CW	8.99	2.25	3-12	3-12	163
S_NW	9.39	2.38	3-12	3-12	163
S_TO	26.89	6.13	10-36	9-36	161
SRGS	12.80	3.56	5-20	5-20	162

Table 7

Descriptive Statistics for All Study Variable-Indirect Exposure Only

Scale	Mean (Total)	SD	Range	Possible Range	N
STSS	29.32	14.39	17-80	17-85	69
EXP	38.11	57.37	3-300	No restriction	62
FEXP	4.52	1.32	1-6	1-6	66
EXH	13.19	8.27	0-30	0-30	70
CYN	9.61	6.73	0-26	0-30	70
PE	28.34	5.76	9-36	0-36	71
S_SUP	8.26	3.03	3-12	3-12	27
S_CW	8.56	2.26	4-12	3-12	27
S_NW	7.93	2.66	3-12	3-12	27
S_TO	24.74	6.76	10-33	9-36	27
SRGS	12.31	3.36	6-18	5-20	26

Table 8

Descriptive Statistics for All Study Variable-Combined Exposure

Scale	Mean (Total)	SD	Range	Possible Range	N
STSS	35.65	10.86	17-76	17-85	158
EXP	25.73	23.89	2-100	No restriction	26
FEXP	4.96	1.37	2-6	1-6	26
EXH	9.98	8.00	0-30	0-30	164
CYN	8.05	6.75	0-30	0-30	162
PE	30.61	5.56	7-36	0-36	161
S_SUP	8.59	2.79	3-12	3-12	138
S_CW	9.08	2.25	3-12	3-12	136
S_NW	9.98	2.21	4-12	3-12	136
S_TO	27.33	5.93	12-36	9-36	134
SRGS	12.89	3.61	5-20	5-20	136

*CWS_I, CWS_E, CWS_IE are not included

Table 9

Correlation Matrix for All Outcome Variables-Sample 1

	1	2	3	4	5	6	7	8
1. STSS								
2. EXH	.74**							
3. CYN	.79**	.57**						
4. PE	-.51**	-.40*	-.45**					
5.S_SUP	-.46*	-.53**	-.41*	.58**				
6. S_CW	-.66**	-.59**	-.49**	.51**	.67**			
7. S_NW	-.46*	-.34*	-.32	.34*	.54**	.53**		
8. S_TO	-.61**	-.57**	-.47**	.56**	.89**	.85**	.81**	
9. SRGS	-.29	-.21	-.23	.16	.29	.29	.22	.31

*p<.05, **p<.01 (two-tailed)

Table 10

Correlation Matrix for All Outcome Variables-Sample 2

	1	2	3
1. STSS			

2. EXH	.35*		
3. CYN	.27	.51**	
4. PE	-.23	-.22	-.37*

*p<.05, **p<.01 (two-tailed)

Table 11

Correlation Matrix for All Outcome Variables-Sample 3

	1	2	3	4	5	6	7	8
1. STSS								
2. EXH	.69**							
3. CYN	.59**	.65**						
4. PE	-.47**	-.48**	-.58**					
5.S_SUP	-.35**	-.43**	-.48**	.42**				
6. S_CW	-.50**	-.41**	-.49**	.48**	.61**			
7. S_NW	-.40**	-.29**	-.38**	.49**	.44**	.45**		
8. S_TO	-.50	-.46**	-.55**	.56**	.87**	.83**	.74**	

9. SRGS	-.17**	-.25**	-.37**	.43**	.29**	.33**	.39**	.41**

*p<.05, **p<.01 (two-tailed)

Table 12

Correlation Matrix for All Outcome Variables-Sample 4

	1	2	3	4	5	6
1. STSS						
2. EXH	.61**					
3. CYN	.54**	.65**				
4. PE	-.13	-.45*	-.69**			
5. CWS_I	-.45*	-.41*	-.52**	.31		
6. CWS_E	-.39*	-.42*	-.43*	.20	.75**	
7.CWS_IE	-.45*	-.44*	-.51*	.27	.93**	.94**

*p<.05, **p<.01 (two-tailed)

Table 13

Correlation Matrix for All Outcome Variables-Indirect Exposure Only

	1	2	3	4	5	6	7	8

1. STSS								
2. EXH	.64**							
3. CYN	.62**	.55**						
4. PE	-.34**	-.28*	-.39**					
5.S_SUP	-.46*	-.53**	-.41*	.58**				
6. S_CW	-.66**	-.59**	-.49**	.51**	67**			
7. S_NW	-.46*	-.34	-.32	.34	.54**	.53**		
8. S_TO	-.61**	-.57**	-.47**	.56**	.89**	.85**	.81**	
9. SRGS	-.29	-.21	-.23	.16	.29	.29	.22	.31

*p<.05, **p<.01 (two-tailed)

Table 14

Correlation Matrix for All Outcome Variables-Combined Exposure

	1	2	3	4	5	6	7	8
1. STSS								
2. EXH	.63**							

3. CYN	.57**	.66**						
4. PE	-.38**	-.49**	-.61**					
5.S_SUP	-.35**	-.43**	-.48**	.42**				
6. S_CW	-.50**	-.41**	-.49**	.48**	.61**			
7. S_NW	-.40**	-.29**	-.38**	.49**	.44**	.45**		
8. S_TO	-.50**	-.46**	-.55**	.56**	.87**	.83**	.75**	
9. SRGS	-.17*	-.25**	-.37**	.43**	.29**	.33**	.39**	.41**

*p<.05, **p<.01 (two-tailed)

Test of Hypotheses

Hypothesis 1a predicted that the means of exposure to disturbing media and STSD would differ significantly between the four samples. A one-way ANOVA was conducted to test the differences between samples on STSD symptoms. The Games-Howell post hoc test was used because the Levene's test was significant and group sizes were unequal. Results indicated a significant difference across samples on STSD symptoms, *Brown-Forsythe* $F(3,70.7)=7.40$, $p<.001$. Post-hoc comparisons indicated that Sample 2 (M=24.57, SD=8.59) had significantly lower STSD levels than Sample 1 (M=36.72, SD=18.22), Sample 3 (M=35.55, SD=9.98), and Sample 4 (M=36.15, SD=14.79). Samples 1, 3, and 4 did not differ significantly from each other on STSD levels.

One-way ANOVAs were conducted to test the differences between samples on exposure to disturbing media. Results indicated a marginally significant difference between samples on overall case exposure to disturbing media, $F(2,85)=3.04$, $p=.053$. A Fischer's LSD post-hoc test indicated that Sample 1 ($M=54.31$, $SD=61.88$) had significantly higher overall exposure than Sample 2 ($M=26.42$, $SD=51.63$) and Sample 4 ($M=25.73$, $SD=23.89$). Concerning time since first exposure, results of the one-way ANOVA indicated there were no significant differences between samples, $F(2,89)=1.13$, p=ns. As such, Hypothesis 1a is supported.

Hypothesis 1b predicted that exposure to disturbing media would be positively correlated to STSD across all samples. One-tailed correlation analyses were conducted for each sample. With regards to Sample 1, results indicated that total case exposure was not significantly related to STSD ($r = .12$, p = ns). However, time since first exposure was positively correlated to STSD ($r = .38$, $p < .05$). For Sample 2, results indicated that neither exposure measure was significantly related to STSD ($r = .20$ and .26, respectively, ps = ns). Exposure was not measured for Sample 3. Finally, results for Sample 4 showed there were no significant relationships between exposure measures and STSD ($r = -.04$ and -.23, respectively, ps = ns). Hypothesis 1b was not supported.

Hypothesis 1c predicted that means for exposure to disturbing media and STSD would differ significantly by exposure type group (Indirect only and combined exposure). This was tested with an independent samples t-test. Hypothesis 1c was partially supported. Results indicated that the exposure type groups differed significantly ($t(225)=-3.64$, $p < .001$, with Indirect Exposure participants having a lower mean STSD level ($M=29.32$, $SD=14.39$) than Combined Exposure participants ($M=35.65$, $SD=10.86$). However, previous analyses suggest that Sample 2 may be primarily driving this effect as Sample 1 and Sample 2 differed significantly in STSD levels, with Sample 2 having the lowest levels of STSD among all four samples. In further

support of this notion, mean STSD levels between Samples 1, 3, and 4 did not differ significantly from each other. Concerning exposure to disturbing media, results indicated that there were no significant difference between exposure type group and total case exposure ($t(86)=1.06$, p=ns), as well as time since first exposure ($t(90)=-1.45$, p=ns).

Hypothesis 1d predicted that the correlations between exposure to disturbing media and STSD would differ significantly between exposure type groups. One-tailed correlation analyses were performed to determine the relationship between exposure variables and STSD in each group. Results for the Indirect Exposure only group indicated there was a significant positive relationship between total case exposure and STSD (r=.22, p<.05, N=59), as well as between time since first exposure and STSD (r=.26, p<.05, N=63). Results for the Combined Exposure group, which only included Sample 4 (N=26), indicated there was no significant relationship between exposure measures and STSD (EXP: r= -.04, p=ns; FEXP: r=-.23, p=ns). A Fisher r-to-z transformation was performed to calculate statistical difference between the two exposure groups (Preacher, 2002). With regards to total case exposure, results indicated that the correlations were not significantly different from each other (p=ns). Results concerning time since first exposure found that the correlations were significantly different from each other (p<.05). Hypothesis 1d was partially supported.

Hypothesis 2a predicted that means on each of the burnout subscales would differ significantly between the four samples. Results of a one-way ANOVA indicated that there were significant differences between samples on levels of emotional exhaustion, $F(3,230)=17.32$, p<.001. A Fischer's LSD post-hoc analysis indicated that Sample 1 had significantly higher levels of emotional exhaustion than Sample 2 and Sample 3. Furthermore, Sample 4 had significantly higher levels of emotional exhaustion than Sample 2 and 3. Results of a one-way

ANOVA indicated that were significant differences between samples in regards to cynicism levels, *Brown-Forsythe* $F(3,86.6)=3.07$, $p<.05$. The Games-Howell post hoc test was used because the Levene's test was significant and group sizes were unequal. However, the Games-Howell post-hoc analysis indicated that there were no significant differences between samples on levels of cynicism. Results of a one-way ANOVA indicated that were significant differences between samples on levels of professional efficacy, $F(3,228) = 4.17$, $p<.05$. A Fischer's LSD post-hoc analysis indicated that Sample 3 had significantly higher levels of professional efficacy than Sample 1, 2, and 4. Hypothesis 2a was partially supported.

Hypothesis 2b predicted that exposure would be negatively correlated with emotional exhaustion and cynicism, but positively correlated with professional efficacy across the four samples. Hypothesis 2b was not supported. One-tailed correlation analyses were conducted for each subscale within each sample. Results indicated that there was not a significant positive relationship between emotional exhaustion and either measure of exposure in any of the samples. With regards to cynicism, results indicated that there was a significant negative relationship between total case exposure and cynicism in Sample 4 only, which was opposite to the predicted direction. However, there was a significant positive relationship between time since first exposure and cynicism in Sample 1 only. There were not significant relationships between cynicism and exposure in Sample 2. Finally, results indicated that there was a significant positive relationship between total case exposure and professional efficacy in Sample 4 only, which was also opposite to the predicted direction. There were not significant relationships between time since first exposure and professional efficacy in any of the samples. Results for each sample are found in Tables 15 through 17.

Table 15

Correlation Matrix for Burnout and Exposure Variables-Sample 1

	EXH	CYN	PE	EXP	FEXP
EXP	-.06	.10	.03		
FEXP	.04	.41*	.06	.48**	

*p<.05, **p<.01 (one-tailed)

Table 16

Correlation Matrix for Burnout and Exposure Variables-Sample 2

	EXH	CYN	PE	EXP	FEXP
EXP	.09	-.19	.05		
FEXP	.05	.04	-.04	.33*	

*p<.05, **p<.01 (one-tailed)

Table 17

Correlation Matrix for Burnout and Exposure Variables-Sample 4

	EXH	CYN	PE	EXP	FEXP
EXP	-.31	-.34*	.34*		
FEXP	-.19	-.03	.03	.26	

*p<.05, **p<.01 (one-tailed)

Hypothesis 2c predicted that burnout means for each subscale would differ significantly between exposure type groups. Conducting an independent t-test, results indicated that there was a significant difference in emotional exhaustion ($t(232) = 2.78$, $p<.05$, with the Indirect Exposure group (M=13.19, SD=8.27, N=70) having significantly higher levels of exhaustion than the Combined Exposure group (M=9.98, SD=8.00, N=164). There were no significant differences between the Indirect Exposure only group (M=9.61, SD=6.73), and the Combined Exposure group (M=8.06, SD=6.75) on levels of cynicism, $t(230)=1.62$, p=ns. There were also significant differences in professional efficacy between groups ($t(230)=-.28$, $p<.05$), with the Indirect only Exposure group (M=28.34, SD=5.76) having significantly lower levels of professional efficacy than the Combined Exposure group (M=30.61, SD=5.56). However, as the ANOVA analysis conducted demonstrates significant differences between the groups within each exposure group on the three burnout subscales, individual samples may be driving the results seen. As such, hypothesis 2c was partially supported.

Hypothesis 2d predicted that the correlations between exposure to disturbing media and burnout subscales would differ significantly between exposure type groups. One-tailed correlation analyses were performed to determine the relationship between exposure (e.g., total case exposure, time since first exposure) and burnout (e.g. emotional exhaustion, cynicism, professional efficacy) for each exposure type group. Results for the Indirect Exposure group indicated that were no significant correlations between exposure and burnout. Results are presented in Table 18. Results of the correlation analysis for the Combined Exposure groups indicated a significant negative relationship between total case exposure and cynicism, and a significant positive relationship between total case exposure and professional efficacy. There were not significant relationships between time since first exposure and burnout. Results are

presented in Table 19. A Fisher r-to-z transformation was performed to calculate statistical difference between the two exposure groups (Preacher, 2002). With regards to total case exposure, results indicated that none of the correlations (emotional exhaustion, p=.05; cynicism, p=.13; and professional efficacy, p=.14) were significantly different from each other. Results concerning time since first exposure also indicated that there were no significant differences in correlations between the groups on emotional exhaustion (p=.44), cynicism (p=.37), and professional efficacy (p=.92). As such, hypothesis 3d was not supported.

Table 18

Correlation Matrix for Exposure Variables and Burnout for Indirect Exposure

	EXH	CYN	PE
EXP	.16	.02	-.005
FEXP	-.001	.19	.002

*p<.05, *p<.01 (one-tailed)

Table 19

Correlation Matrix for Exposure Variables and Burnout for Combined Exposure

	EXH	CYN	PE
EXP	-.31	-.34*	.34*
FEXP	-.19	-.03	.03

*p<.05, *p<.01 (one-tailed)

Hypothesis 3a predicted that levels of growth would be significantly different between both exposure groups. Hypothesis 3a was not supported. Results of an independent t-test indicated that there were no significant differences between SRGS means between the two groups, $t(160)=-77$, p=ns. Means and standard deviations are presented in Table 20.

Table 20

Means and Standard Deviations of SRGS

	M	SD
Indirect Exposure (N=26)	12.31	3.36
Combined Exposure (N=136)	12.89	3.61

Hypothesis 3b predicted that exposure to disturbing media would be positively correlated to growth. Hypothesis 3b was not supported. Results of a one-tailed correlation analysis indicated that there was not a significant relationship (r=-.08, p=ns) between total case exposure and SRGS in Sample 1 (Indirect Exposure). No other sample measured both growth and exposure. Results indicated there was a significant negative relationship between time since first exposure and SRGS. However the relationship was opposite to the predicted direction (r=-.38, p<.05).

Hypothesis 4a predicted that mean levels of social support would differ significantly across samples. Sample 1 (Indirect Exposure) and Sample 3 (Combined Exposure) were included in all social support analyses. Results of independent t-tests indicated that there were no

significant differences between samples on levels of supervisor support ($t(163)=-.56$, p=ns) and co-worker support ($t(161) = -1.11$, p=ns). See Tables 2 and 4. With regards to non-work support, the independent t-test indicated that there was a significant difference between the groups ($t(161) = -3.65$, $p<.001$), with Sample 3 receiving significantly higher levels of non-work social support than Sample 1. As such, hypothesis 4a is partially supported.

Hypothesis 4b predicted that social support would be negatively related to STSD across samples. A one-tailed correlation analysis was conducted on each sample. Results of Sample 1 (Indirect Exposure) and Sample 3 (Combined Exposure) indicated that all types of social support were significantly and negatively related to STSD. See Tables 9 and 11. Therefore, hypothesis 4b is supported.

Hypothesis 4c predicted that social support measures would be negatively related to emotional exhaustion and cynicism. Furthermore, it predicted that social support would be positively related to professional efficacy. One-tailed correlation analyses were conducted on each social support subscale (supervisor, co-worker, non-work) within each of the two samples. Sample 1 results indicated that supervisor support, co-worker support, and non-work support were all significantly and negatively related to emotional exhaustion. In addition, supervisor support and co-worker support were also found to be negatively related to levels of cynicism. Finally, all three subscales of social support were found to be positively related to professional efficacy. See Table 9. Sample 3 results indicated that all subscales of social support were negatively and significantly related to emotional exhaustion and cynicism. In addition, results indicated that supervisor, co-worker, and non-work social support were positively related to professional efficacy. See Table 11. Hypothesis 4c was supported.

Hypothesis 4d predicted that social support would be positively correlated to growth across samples. Results of a one-tailed correlation analysis indicated that within Sample 1 social support (supervisor, co-worker, non-work) was not significantly correlated to growth. However, results with Sample 3 indicated that all facets of social support were significantly and positively related to growth. As such, Hypothesis 4e was partially supported. See Tables 9 and 11.

Discussion

Many occupations across diverse industries (e.g., law enforcement, legal professions) are exposed to disturbing media during the course of their work. This exposure has been associated with several negatives outcomes, including STSD and burnout. Recently however, traumatic exposure and work-related stress have also been linked to (secondary) post-traumatic growth. While research has explored many of these outcomes individually among specific occupations, no research to date has sought to understand any differences that may occur between these occupations exposed to disturbing media. The purpose of this study is to not only further investigate the negative and positive outcomes of disturbing media exposure, but also to make comparisons of outcomes for occupational groups with different types of exposure to disturbing media. Specifically, I compared groups with only Indirect Exposure (e.g., computer files) to disturbing media to groups with Combined (indirect and direct exposure) Exposure (e.g., dealing with victims and/or perpetrators) to disturbing media.

Summary of Findings

Results of the study showed that there were significant differences between samples with regards to STSD levels. Participants in Sample 2, (an indirect exposure group) experienced low STS symptoms, while participants in all the other samples were within the mild to moderate range. Additionally, I found that number of overall cases differed between Sample 1 and

Samples 2 and 3. Yet, I found no differences between participant samples when exposure was measured as time since first exposure. While I was able to find some significant exposure differences between samples, and while results did indicate that many participants were experiencing STSD symptoms, I was unable to find significant correlations between exposure measures and STSD in all but one sample (Sample 1 for time since first exposure). This is interesting given that samples did not differ on this measure of exposure, yet did vary on STSD levels and the relationship between exposure and STSD. Similarly, in Samples 2 and 4 there were no correlations between exposure and STSD but the groups differed in levels of STSD. These outcomes point to an additional factor, aside from mere exposure levels that could be affecting negative outcomes such as STSD.

Another negative outcome explored in the disturbing media literature is burnout. I found that there were significant differences between samples on levels of emotional exhaustion, cynicism, and professional efficacy. Specifically, two samples (Samples 1 and 4) had levels of emotional exhaustion and cynicism that would generally be classified within the high range, while the other two (Samples 2 and 3) had emotional exhaustion and cynicism levels within a low to mild range. One interesting result to consider is that these two groupings (high range and low-mild range) differed from our determined exposure types groups. If exposure type (Indirect v. Combined) were an overarching theme for any differences found between samples, we would expect for these results to mirror our groupings. However, this is not what happened, and once again may indicate that exposure and exposure type may not best explain outcomes within these occupations.

On a more positive note, while there were significant differences between samples on levels of professional efficacy, all samples were within the high range on professional efficacy

despite also having relatively higher scores on the emotional exhaustion and cynicism subscales. High levels of professional efficacy are indicative of low burnout. As such, no matter what the specific job tasks were or the type of exposure participants experienced, they all had positive reactions to their work, and may have felt that their work was meaningful and making an impact on the world. Nevertheless, there were no consistent relationships between exposure measures and burnout subscales. Of three significant correlations, only one was in the hypothesized direction (exposure and cynicism in Sample 1). Interestingly, Sample 1 had the highest exposure levels, but the exposure was exclusively of an indirect nature. However, it is unclear whether the higher number of cases or the indirect nature of the exposure might have contributed to this finding. Overall, the lack of consistent correlations between exposure and outcomes across all samples suggests that exposure and specifically, exposure type, may not be the main catalyst behind these outcomes.

I anticipated that exposure type might help to explain differences between samples. With regards to STSD I did find significant differences between exposure groups with the Indirect Exposure group experiencing less STSD than the Combined Exposure group. However, one consideration regarding this result is that Samples 1 and 2 differed significantly from each other on STSD levels, despite the fact that they both have only indirect exposure. I found similar results among exposure type groups in regards to professional efficacy. There were no differences between exposure groups on the cynicism subscale; however, the indirect group experienced significantly higher levels of emotional exhaustion while also having lower levels of professional efficacy, indicative of burnout. Once again, especially in regards to emotional exhaustion, the samples within each exposure group did differ significantly from each other. To substantiate the notion that some samples were driving results within the exposure type groups,

specifically the two indirect samples (Samples 1 and 2), I ran the same analyses after splitting the indirect group. Although exploratory, the results do suggest that Samples 1 and 2 are distinct from each other in regards to STSD and burnout. Although they both have similar types of exposure, they are not comparable. As such, these results should be regarded with caution. It seems likely that grouping by exposure type (e.g., indirect only versus combined exposure) may not provide the best explanation for the differences observed across samples. It may be that exposure alone, in any form, is enough to increase outcomes, although a lack of consistent correlations between exposure and negative outcomes casts doubt on this.

I also explored potential mitigating factors (i.e., social support) and positive outcomes (i.e., growth) that may result from work with disturbing media. Although social support has been studied previously, disturbing media research has yet to address the issue of post-traumatic growth. Participants in both samples where growth was assessed (Sample 1 and 3) experienced moderate growth in relation to possible maximum scores. Although there are no established norms for SRG levels, instances of similar growth after traumatic exposure are documented in other occupations (Abel et al., 2014; Armstrong et al, 2014; Arnold et al., 2005; Brockhouse et al., 2011; & Cohen & Collens, 2013). Interestingly, levels of growth did not differ significantly between the two samples, despite having different types of exposure. Yet, another blow to the hypothesis of exposure type differences. However, the fact that individuals experienced moderate levels of growth is encouraging given the high levels of STSD in these two samples. These individuals may be able to find some positive factors within their work lives. Yet, I found no significant relationship between any exposure measure and growth. Although previous qualitative findings indicate that being exposed to client trauma and growth can be a catalyst to participants' own growth, another unknown factor may be contributing to this outcome (Arnold

et al., 2005). It could be the case that participants in previous research were able to witness client growth following trauma (e.g., in a therapeutic setting), while in law enforcement occupations witness trauma, but not necessarily growth in their clients. However, I did find that levels of growth were significantly and negatively related to STSD and burnout (e.g., emotional exhaustion, cynicism) in Sample 3.

While not specifically explored, growth could act as a protective factor against the negative outcomes experienced in some disturbing media occupations. However, similar results were not found in Sample 1. This could indicate that, again, additional factors (aside from disturbing media exposure and type of exposure) could be affecting growth and negative outcomes, and furthermore may determine growth's ability to buffer negative outcomes. It could be that, due to the two samples vastly different tasks and exposure types, growth occurs differently in each, and as such, may be related to negative outcomes in different ways. Previous results indicating observing client trauma and growth was necessary, included primarily psychotherapists who had more personal, long-term relationships with clients than the current study's participants. Moving forward, growth, and specifically secondary post-traumatic growth (SPTG) should be explored in future studies on disturbing media to better understand its occurrence, its relation to negative outcomes and its potential to act as a buffer.

With regards to social support, I found no significant differences between samples (1 and 3) in their levels of supervisor support or co-worker support. However interestingly, I found differences in levels of non-work support between the two samples. Sample 3, where participants may have direct contact with victims or perpetrators, had higher levels of non-work support than Sample 1. One possible explanation may be due to the nature and possible outside stigma associated with these different occupations. For instance, participants in Sample 1 work

primarily with digital computer forensic evidence (i.e., pornographic images, videos, etc. involving children) which may be seen as less acceptable than federal law enforcement work tasks (i.e., interviews, crime scene investigation), as in Sample 3. They may also be viewed as having a more direct role in catching predators and getting them off the streets than an individual sitting behind a computer screen. Additionally, participants in Sample 1, due to the nature of the disturbing media they encounter, may be less willing to discuss or seek support from family and friends. Yet, what is promising in both of these samples is that both are receiving similar levels of social support in their work environment (e.g., supervisors, co-workers). These avenues of support know the nature of the participants' work and possible disturbances, and can truly understand what others are going through.

Having these types of social support, especially supervisor and co-worker, has been found to be an important buffer in negating the effects of many work related stressors including traumatic stressors (Bourke & Craun., 2014; Burns et al., 2008; Killian, 2008). My results have mirrored these previous studies. Within both samples that assessed social support, all types of social support were negatively related to STSD, with co-worker support providing the strongest effect. Additionally, I found that, aside from the relationship between non-work support and cynicism in Sample 1, all types of social support were significantly and negatively related to the emotional exhaustion and cynicism subscales of burnout and positively related to the professional efficacy subscale of burnout. These relationships are all promising findings for people engaged in this work, regardless of differences in levels of social support, type of work tasks or exposure. Social support may be equally helpful across a diverse set of occupations who work with disturbing media. As such, it is important for those within these occupations to foster

an environment where support is provided and openly received. Supervisors and co-workers should be encouraged to engage and support their fellow investigators.

To better understand social support's role in positive outcomes, I studied its effects on growth. Within Sample 1, social support was not significantly related to growth. However, within Sample 3, all types of social support were significantly and positively related to growth. This result has been found in similar literature studying growth among individuals exposed to various forms of secondary trauma (Linley & Joseph, 2007; Shoji et al., 2014). This is promising as social support may act as one means toward developing growth in these occupations. Studying the predictors of growth was beyond the scope of this study, but should be explored more in future research on this topic. However, it is unclear why there is a lack of consistent results in regards to social support's relationship to growth. Both samples had similar levels of growth, and similar levels of supervisor and co-worker support. It could be that distinct aspects of their work life and occupational tasks, such as greater outside support and recognition, account for the differences found. As such, there may be stronger and more reliable variables that attribute for growth in this population. Further research should be conducted to determine better correlates in regards to growth/SPTG.

Several possible explanations could help in understanding the difference in levels of STSD and burnout among the various samples. During the study, it became clear that exposure type distinctions may not the best classification to begin exploring the differences between samples. One possible explanation that could help to account for the differences we found is exposure intensity and the frequency of occurrence. Unfortunately, these factors were not explicitly measured in these samples. However, we do know that each of these samples had varying levels for each of these factors. For example, Sample 1 had very intense exposure that

occurred on a constant basis. Examining disturbing media was the entirety of their workload. Alternatively, Sample 3 had only periodic exposure to disturbing media, and that exposure may have been less intense. It could be that the intensity of the exposure plays a larger role in outcomes than exposure in general. Previous research, and the qualitative data associated with the current samples, show that some forms of disturbing media (e.g., video, sound) may be more intense and harder to cope with than others. Future studies should seek to make finer distinctions in measuring exposure. Another possible explanation to the differences we see may not be related to exposure or disturbing media at all. This notion is supported by the fact that we did not see consistent relationships between exposure and measured outcomes.

When looking at other workplace occurrences it is important to note that not all samples had the same working environment. Aside from differing tasks, Sample 3 included participants who were civilian federal law enforcement while the other samples were military personnel. It could be that workplace culture or organizational stressors differed significantly between the samples. Expanding on this notion, another possible explanation for these results may be that instead of disturbing media related stressors, more generalized work stressors were the main and underlying causes for the levels of burnout and STSD we found. In support of this, Brough (2004) suggests that even in occupations where traumatic stressors (e.g., firefighters, paramedics) are present, as in the current study, traditional organizational stressors may account for a vast amount of the variance in outcomes. Even more interesting, organizational stressors predicted job satisfaction more than traumatic stressors (Brough, 2004). Unfortunately, the samples in the current study did not specifically measure more generalized work stressors. However, it has been noted that law enforcement and other similar occupations may have distinct stressors, and these could in fact be accounting for the observed outcomes. In order to better

understand the role different work stressors play between these occupations, future studies should begin to measure more generalized work-stressors.

Limitations

There are several limitations of this study related to the secondary nature of the data analysis. First, I used archival data where individual measures and items varied slightly from sample to sample. In fact, only the measures of burnout and STSD were completely identical across all four samples. Therefore, hypotheses relating to social support, disturbing media exposure, and growth were only examined within a subset of samples. It would be preferable to have identical measures across samples to examine differences between the occupations more accurately. Unfortunately, secondary data analysis does not allow one to control these factors. A second limitation of this study was the varying sample sizes between the four samples. Two samples examined contained only 26 and 28 participants. Samples of this size severely limited the power of the analyses needed to obtain significant relationships between variables. This is particularly concerning when comparing such small samples with larger samples (i.e., Sample 3). Future comparison between disturbing media occupations with larger and relatively equal sample sizes is needed in order to instill greater confidence in any of the differences found between samples. A third limitation was that one sample had much lower exposure levels than was expected, and was significantly lower than exposure levels in the other three samples. This became apparent when looking at outcome differences between exposure type groups. In this case, it might have been that the lower scoring sample (Sample 2) was driving the differences we found. This is problematic as it appears that exposure groups are significantly different, when in fact, only one sample may be driving this result.

An additional limitation of this study was that all data was collected through self-report

measures. As such, there is acknowledgement that the information collected may contain various inaccuracies and relationships may be contaminated by common method bias. Additionally, the original research samples did not account for any confounding variables that could have affected results (i.e., other participant characteristics), nor were any control groups within similar occupations who are not exposed to disturbing media used to isolate exposure effects. Future research should try to incorporate designs using non-exposed control groups. This would allow research to eliminate some alternative explanations of findings related to occupation-specific factors or other personal characteristics. Finally, the designs of the original research were cross-sectional in nature. Having longitudinal data would allow relationships to be studied over time, allowing for an understanding of how employees may adapt to (or fail to adapt to) the demands of this unique stressor and how this process may vary across organizations or occupations.

Future Directions

Although this study was one of the first of its kind within this specific topic, there is still much to explore and understand about the relationship between occupational exposure to disturbing media, and various positive and negative outcomes. Due to the limitations and nature of this study, different facets of exposure could not be determined (e.g., intensity). However, these could still play a role in the outcomes studied. Future research could examine more closely the intricacies of exposure, such as the intensity and/or the frequency (i.e., daily/constant, weekly) of exposure to determine its role in the exposure-outcome relationship. The current study only examined overall case exposure as the main measure of exposure. We were unable to determine intensity or frequency measures. It is possible that these factors may play a larger role in determining outcomes than simply overall case exposure. By examining relationships in this way, we could better understand how to protect employees viewing this material to reduce any

negative outcomes (i.e., daily viewing limits). Furthermore, future research could also examine more closely disturbing media itself. Different occupational groups may be exposed to different types of disturbing media (e.g., videos, photos, interviews). While this study did attempt to better understand these differences (e.g., indirect exposure versus indirect/direct exposure), this was still at a fairly general level.

Another area of research that deserves more attention in the disturbing media literature is secondary post-traumatic growth. As this was a preliminary study on this subject, with several limitations, additional research is needed to explore this outcome and also to explore predictors of growth. In the current study, social support was found to be positively related to growth in one sample. Further replication, perhaps examining various types of support (instrumental versus emotional) would provide individuals in these occupations the ability to better understand how to foster positive outcomes. Additionally, recent research around SPTG has yielded one promising predictor, secondary trauma self-efficacy (STSE; Cieslak et al, 2013). Over the years, general self-efficacy has found to be a powerful buffer for many stressor-strain relationships, including STSD and burnout in occupations exposed to traumatic events/clients (Lusczcynska, Benight, & Cieslak, 2009; Prati, Pietrantoni, & Cicognani, 2010). Relevant to this study, researchers have uncovered that self-efficacy for one's ability to deal with the outcomes of indirect trauma exposure (i.e., STSE) has led to not only decreased negative outcomes but also increased levels of SPTG (Cieslak et al., 2013). Knowing this, training and education on how to better deal with outcomes of disturbing media, thereby increasing employees' STSE, could be a fruitful avenue in combating outcomes seen within these lines of work. Research on this topic across several disturbing media occupations is needed.

Conclusion

The current study undertook one of the first studies to explore occupational differences among those exposed to disturbing media in law enforcement and legal professions. While I found that exposure type only could not fully explain the differences found, the study did provide substantial insight on a broad range of reactions and mitigating factors across diverse occupations. There is much more to the exposure-outcome relationship than simply overall case exposure. In fact, not all occupations had similar reactions to exposure to disturbing media. Yet, across all occupations, social support can act as a powerful means to cope with the stressful nature of their job. Additionally, positive outcomes are possible across these occupations. Despite their levels of STSD and burnout, individuals had a sense of increased professional efficacy, and furthermore were experiencing instances of personal growth. However, further research is needed to better understand outcome drivers and the differences found between these occupations. Then, we can better adapt interventions among different occupational groups.

References

Abel, L., Walker, C., Samios, C., & Morozow, L. (2014). Vicarious posttraumatic growth: Predictors of growth and relationships with adjustment. Traumatology: An International Journal, 9-18.

American Psychological Association. (2013).

Armstrong, D., Shakespeare-Finch, J., & Shochet, I. (2014). Predicting post-traumatic growth and post-traumatic stress in firefighters. Australian Journal of Psychology, 38-46.

Arnold, D., Calhoun, L.G., Tedeschi, R., & Cann, A. (2005). Vicarious posttraumatic growth in psychotherapy. Journal of Humanistic Psychology, 239-263.

Bateson, D.M., & Hart, T. (2007). Combating attorney burnout. Bench & Bar of Minnesota, 22-25.

Beaton, R., Murphy, S., Johnson, C., Pike, K. and Corneil, W. (1998). Exposure to duty-related incident stressors in urban firefighters and paramedics. Journal of Traumatic Stress, 821-828.

Ben-Porat, A., & Itzhaky, H. (2009). Implications of treating family violence for the therapist: Secondary traumatization, vicarious traumatization, and growth. Journal of Family Violence, 507-515.

Blau, G., Tatum, D.S., & Ward Goldberg, C. (2013). Exploring correlates of burnout dimensions in a sample of psychiatric rehabilitation practitioners: A cross-sectional study. Psychiatric Rehabilitation Journal, 166-172.

Bourke, M.L., & Craun, S.W. (2014). Secondary traumatic stress among internet crimes against children task force personnel: Impact, risk factors, and coping strategies. Sex Abuse, 586-609.

Bride, B. E. (2007). Prevalence of secondary traumatic stress among social workers. Social Work, 63-70.

Bride B., Robinson M., Yegidis B., & Figley, C.R. (2004). Development and validation of the secondary traumatic stress scale. Res Soc Work Pract 14:27-35

Britt, T. W., Adler, A. B., & Bartone, P. T. (2001). Deriving benefits from stressful events: The role of engagement in meaningful work and hardiness. Journal of Occupational Health Psychology, 53-63.

Brockhouse, R., Msefti, R. M., Cohen, K., & Joseph, S. (2011). Vicarious exposure to trauma and growth in therapists: The moderating effects of sense of coherence, organizational support, and empathy. Journal of Traumatic Stress, 735-74.

Brough, P. (2004). Comparing the influence of traumatic and organizational stressors on the psychological health of police, fire, and ambulance officers. International Journal of Stress Management, 227-244.

Burns, C. M., Morley, J., Bradshaw, R., & Domene, J. (2008). The emotional impact on and coping strategies employed by police teams investigating internet child exploitation. Traumatology, 20-31.

Caplan, R.D., Cobb, S., French, J.R.P., Van Horrison, R., & Pinneau, S.R. Job demands and worker health. Ann Arbor, MI: Institute for Social Research, 1975.

Caserta, M., Lund, D., Utz, R., & de Vries, B. (2009). Stress-related growth among the recently bereaved. Aging & Mental Health, 463-476.

Chamberlain, J., & Miller, M.K. (2009). Evidence of secondary traumatic stress, safety concerns, and burnout among a homogeneous group of judges in a single jurisdiction. Journal of the American Academy of Psychiatry and the Law Online, 214-224.

Choi, G.-Y. (2011). Secondary traumatic stress of service providers who practice with survivors of family or sexual violence: A national survey of social workers. Smith College Studies in Social Work, 101-119.

Cieslak, R., Shoji, K., Douglas, A., Melville, E., Luszczynska, A., & Benight, C. C. (2014). Meta-analysis of the relationship between job burnout and secondary traumatic stress among workers with indirect exposure to trauma. Psychological Services, 75-86.

Cieslak, R., Shoji, K., Luszczynska, A., Taylor, S., Rogala, A., & Benight, C. C. (2013). Secondary trauma self-efficacy: Concept in its measurement. Psychological Assessment, 917-928.

Cohen, C., & Collens, P. (2013). The impact of trauma work on trauma workers: A metasynthesis on vicarious trauma and vicarious posttraumatic growth. Psychological Trauma: Theory, Research, Practice, and Policy, 570-580.

Cooper, C.L., Clarke, S., & Rowbottom, A.M. (1999). Occupational stress, job satisfaction and well-being in anesthetists. Stress Medicine¸115-126.

Folkman, S. (2008). The case for positive emotions in the stress process. Anxiety, Stress & Coping: An International Journal, 3-14.

Holowka, Darren W., Marx, Brian P., Kaloupek, Danny G., & Terence M. (2012). PTSD symptoms among male Vietnam veterans: Prevalence and associations with diagnostic status. Psychological Trauma: Theory, Research, Practice, and Policy, 285-292.

Holt, T. J., & Blevins, K. R. (2011). Examining job stress and satisfaction among digital forensic examiners. Journal of Contemporary Criminal Justice, 230-250.

Kadambi, M.A., & Truscott, D. (2003). Vicarious traumatization and burnout among therapists working with sex offenders. Traumatology, 216-230.

Killian, K.D. (2008). Helping till it hurts: A multi-method study of burnout, compassion fatigue and resilience in clinicians working with trauma survivors. Traumatology, 31- 44.

Kleber, R. J., Figley, C. R., & Gersons, B. P. (1995). Beyond trauma: Cultural and societal dynamics. Springer.

Krause, M. (2009). Identifying and managing stress in child pornography and child exploitation investigators. Journal of Police Crime Psychology, 22-29.

Krone, T. (2005). International police operations against online child pornography. Trends & Issues in Crime and Criminal Justice, 1-6.

Lee, R.T., & Ashforth, B.E. (1996). A meta-analytic examination of the correlates of the three dimensions of job burnout. The Journal of Applied Psychology, 123-133.

Levin, A., Albert, L., Besser, A., Smith, D., Zelenski, A., & Rosenkranz, S. (2011). Secondary traumatic stress in attorneys and their administrative support staff working with trauma-exposed clients. The Journal of Nervous and Mental Disease, 946-955.

Levin, A., Besser, A., Albert, L., Smith, D., & Neria, Y. (2012). The effect of attorney's work with trauma-exposed clients on PTSD symptoms, depression, and functional impairments: A cross-lagged longitudinal study. Law and Human Behavior, 538-547.

Levin, A., & Greisberg S., (2003). Vicarious trauma in attorneys. Pace Law Review.

Linderman, M., Saari, S., Verkasalo, M., & Prytz, H. (1996). Traumatic stress and its risk factors among peripheral victims of the m/s Estonia disaster. European Psychologist, 255-270.

Linley, P.A., & Joseph, S. (2007). Therapy work and therapists' positive and negative well-being. Journal of Social and Clinical Psychology, 385-403.

Luszczynska, A., Benight, C.C., & Cieslak, R. (2009). Self-efficacy and health related outcomes of collective trauma: A systematic review. European Psychology, 51-62.

Maslach, C., & Jackson, S. E. (1981). The measurement of experienced burnout. Journal of Occupational Behavior, 99-113.

Maslach, C., Jackson, S.E., & Leiter, M.P. (1996). Maslach burnout inventory manual (3rd ed.). Palo Alto, CA: Consulting Psychologists Press.

Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. Annual Review of Psychology, 397-422.

Moise, A.C. (2011). Characteristics of the computer crimes investigation from the child pornography category. Forensic Science, 708-712.

Morgillo, L. (2015). Do not make their trauma your trauma: Coping with burnout as a family law attorney. Family Court Review.

Mueller, R. S. (2007). Child Pornography and the Internet. Vital speeches of the day, 45-47.

O'Driscoll, M. P. (2000). Work and family Transactions. In P. Koopman-Boyden, A Dharmalingam, B. Grant, V. Hendy, S. Hillcoat-Nalletamby, D. Mitchell, M.

O'Driscoll, and S. Thompson. Transactions in the Mid-life Family (pp92-112).

University of Waikato, Hamilton: Population Association of New Zealand.

Palm, K.M., Polusny, M.A., & Follette, V.M. (2004). Vicarious traumatization: Potential hazards and interventions for disaster and trauma workers. Prehospital and Disaster Medicine, 73-78.

Park. (2004) Encyclopedia of Health and Behavior.

Park, C.L., Cohen, L.H., & Murch, R.L. (1996). Assessment and prediction of stress-related growth. Journal of Personality, 71-105.

Park, C.L, & Fenster, J.R. (2004). Stress-related growth: Predictors of occurrence and correlates with psychological adjustment. Journal of Social and Clinical Psychology, 195-215.

Pearlman, L. A. (1999). Self-care for trauma therapists: Ameliorating vicarious traumatization. In B. H. Stamm (Ed.), Secondary traumatic stress: Self-care issues for clinicians, researchers and educators (2nd ed., pp. 51-64). Lutherville, MD: Sidran Press

Pierce, H., & Lilly MM. (2012). Duty-related trauma exposure in 911 telecommunicators: Considering the risk for posttraumatic stress. Journal of Traumatic Stress, 211-215.

Powell, M.B., Cassematis, P., Benson, M.S., Smallbone, S., & Wotley, R. (2014). Police officers' perceptions of the challenges involved in Internet Child Exploitation investigation. Policing: An International Journal of Police Strategies & Management, 543-557.

Prati, G., Prietrantoni, L., & Cicognani, E. (2010). Self-efficacy moderates the relationship between stress appraisal and quality of life among rescue workers. Anxiety, Stress, & Coping, 463-470.

Preacher, K. J. (2002, May). Calculation for the test of the difference between two independent correlation coefficients [Computer software]. Available from http://quantpsy.org.

Rzeszutek, M., Partyka, M., & Golab, A. (2015). Temperament traits, social support, and secondary traumatic stress disorder symptoms in a sample of trauma therapists. Professional Psychology: Research and Practice, 213-220.

Shoji, K., Bock, J., Cieslak, R., Zukowska, K., Luszcynska, A., Benight.C. (2014). Cultivating secondary traumatic growth among healthcare workers: The role of social support and self-efficacy. Journal of Clinical Psychology, 831-846.

Stambor, Z. (2006). Employees: A company's best asset. Monitor on Psychology, 28-30.

Stevenson, J. (2007). Welfare considerations for supervisors managing child sexual abuse on-line units. (Unpublished master's thesis) Middlesex University, London, England.

Tai, Feng-Jen, Huang, Wei-Lun, & Chan, Chang-Chaun (2009). Occupational stress and burnout of lawyers. Journal of Occupational Health.

Tedeschi, R.G, & Calhoun, L.G. (1996). The posttraumatic growth inventory: Measuring the positive legacy of trauma. Journal of Traumatic Stress, 455-471.

Viswesvaran, C., Sanchex, J., & Fisher, J. (1999). The role of social support in the process of work stress: A meta-analysis. Journal of Vocational Behavior, 314-334.

Vrklevski, L.P., & Franklin, J. (2008). Vicarious trauma: The impact on solicitors of exposure to traumatic material. Traumatology, 106-118.

Wolak, J., Mitchell, K., & Finkelhor, D. (2003). Internet sex crimes against minors: The response of law enforcement. National Center for Missing & Exploited Children.

Wortley, R., & Smallbone, S. (2012). Internet child pornography: Causes, investigation, and prevention. Santa Barbara: ABC-CLIO, LLC.

Appendix A

Secondary Traumatic Stress

1. I feel emotionally numb.
2. My heart started pounding when I think about my work.
3. It seems as if I relive the trauma(s) experienced by the victims in the media I view at work.
4. I have trouble sleeping.
5. I feel discouraged about the future.
6. Reminders of my work upset me.
7. I have little interest in being around others.
8. I feel jumpy.
9. I am less active than usual.
10. I think about my work when I don't intend to.
11. I have trouble concentrating.
12. I avoid people, places, or things that remind me of my work with disturbing media.
13. I have disturbing dreams about my work.
14. I want to avoid working on some cases.
15. I am easily annoyed.
16. I expect something bad to happen.
17. I notice gaps in my memory about cases.

Appendix B

Burnout

1. I feel emotionally drained from my work.
2. I feel used up at the end of the workday.
3. I feel tired when I get up in the morning and have to face another day on the job.
4. Working all day is really a strain for me.
5. I can effectively solve the problems that arise in my work.
6. I feel burned out form my work.
7. I feel I am making an effective contribution to what this organization does.
8. I have become less interested in my work since I started this job.
9. I have become less enthusiastic about my work.
10. In my opinion, I am good at my job.
11. I feel exhilarated when I accomplish something at work.
12. I have accomplished many worthwhile things in this job.
13. I just want to do my job and not be bothered.
14. I have become more cynical about whether my work contributes to anything.
15. I doubt the significance of my work.
16. At work, I feel confident that I am effective at getting things done.

Appendix C

Stress-related Growth

1. I've learned to find more meaning in life.
2. I've learned that I want to have some impact on the world.
3. I've learned that it is OK to ask others for help.
4. I've grown spiritually.
5. I have learned to work through problems and not just give up.
6. I've learned how to reach out and help others.
7. I've grown closer to my religion/faith/God.

Appendix D

Social Support

Supervisor

1. How easy is it to talk to your immediate supervisor?
2. How much can you rely on the supervisory chain of command (immediate supervisor) when things get tough at work?
3. How much do your supervisors go out of their way to support you in doing your job?/ How much does your immediate supervisor go out of his/her way to do things that make your work life easier for you?

Non-work

1. How much do your spouse/significant other, friends, and relatives go out of their way to support you in doing your job?
2. How comfortable do you feel talking with your spouse/significant other, friends, and relatives about your work?
3. How much can your spouse/significant other, friends and relatives be relied on when things get tough at work?

Co-worker

1. How comfortable do you feel talking with other people at work about your job?
2. How much can your co-workers be relied on when things get tough at work?
3. How easy is it to talk with other people at work?

Appendix E

Demographic Characteristics of Sample 1

	N	%
Employment Status		
Active Duty	4	14.3
Civilian Contractors	24	85.7
Gender		
Male	21	75
Female	7	25
Marital Status (incomplete)		
Married	21	75

Demographic Characteristics of Sample 2

	N	%
Employment Status		
Active Duty	33	73.3
Civilian Federal Officer	12	26.7
Time at Agency		
Less than 1 year	2	4.4
1-2 years	8	17.8
2-5 years	14	31.1
More than 5 years	1	46.7
Gender		
Male	37	82.2
Female	8	17.8
Age		
21-30	12	26.7
31-40	26	57.8
41-50	5	11.1
51-60	1	2.2

Older than 60	1	2.2
Marital Status		
Single	7	15.6
Married	34	75.6
Divorced/Separated	4	8.9
Widowed	0	0
Education Level		
High School Diploma	4	8.9
Associates Degree	9	20
Bachelor's Degree	20	44.4
Master's Degree or Higher	12	26.7
Children Under 18		
Yes	28	62.2
No	17	37.8

Demographic Characteristics of Sample 3

	N	%
Area of Assignment		
Full-Time SCI	23	16.8
Full-Time District SCI	19	13.9
Part-Time District SCI	61	44.5
Assigned Elsewhere (non-SCI)	34	24.8
SCI Total	43	31.4
Non-SCI Total	94	68.6
Years in Law Enforcement	Mean: 17.3	-
SCI	Mean: 16.4	-
Non-SCI	Mean: 17.9	-

Years in Current Agency	Mean: 14.3	-
SCI	Mean: 13.5	-
Non-SCI	Mean: 14.8	-
Gender		
Male	125	90.6
Female	13	9.4
Ethnicity		
African American	5	3.6
Asian	0	0.0
White/Caucasian	119	86.2
Hispanic	9	6.5
Native American	1	0.7
Other	4	2.9
Education Level		
High School Diploma	18	13.0
Some College	4	2.9
Associates Degree	10	7.2
Technical Training/Certificate	5	3.6
Bachelors Degree	93	67.4
Masters Degree or Higher	8	5.8
Marital Status		
Married	109	85.8
Separated	1	0.8
Divorced	8	6.3
Single	6	4.7
Widowed	1	0.8
Other	2	1.6

Parental Status		
Children (at least 1 child)	115	83.3
No Children	23	16.7

Demographic Characteristics of Sample 4

	N	%
Military Branch		
Air Force	14	51.9
Navy	12	44.4
Did Not Report Military Branch	1	3.7
Employment Status		
Defense Attorney	11	40.7
Prosecuting Attorney	14	51.9
Judge	1	3.7
Other	1	3.7
Age		
18-20	0	0
21-30	2	7.4
31-40	16	59.3
41-50	6	22.2
51-60	1	3.7
Older than 60	0	0
Did Not Report Age	2	7.4

Gender		
Male	18	66.7
Female	8	29.6
Did Not Report Gender	1	3.7
Marital Status		
Single	4	14.8
Married	21	77.8
Separated/Divorced	1	3.7
Widowed	0	0
Other	0	0
Did Not Report Martial Status	1	3.7
Time in JAG Corps		
Less than 1 year	1	3.7
1-2 years	1	3.7
2-5 years	7	25.9
More than 5 years	17	62.9
Did Not Report Time in JAG Corps	1	3.7
Children Under 18		
Yes	14	51.9
No	12	44.4
Did Not Report Parental Status	1	3.7
Education Level		

High School	0	0
Associates Degree	0	0
Bachelor's Degree	0	0
Master's Degree or Higher	26	96.3
Did Not Report Education	1	3.7