Coping with Secondary Traumatic Stress by General Duty Police Officers: Practical Implications La gestion du stress post-traumatique secondaire par les agents de services de police généraux : Enjeux pratiques

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ABSTRACT

This study used the Critical Incident Technique to examine the factors that helped, hindered, or might have helped 10 general duty police officers to cope with secondary traumatic stress. The data were best represented by 14 categories: self-care, family/significant other support, talking with co-workers, emotional engagement, work environment, mental health resources, personality, ability to help the victim, relatability to the victim, scene reminders, continuous exposure/dwelling, exposure to human nature, vulnerability of the victim, and presence of additional stressors. The findings are presented and recommendations are offered for counsellors working with this population and for police agency administrators.

RÉSUMÉ

Pour mener cette étude, les chercheurs ont eu recours à la technique des incidents critiques pour examiner les facteurs qui ont aidé, qui ont nui, ou qui auraient pu aider à 10 agents de services de police généraux dans leur gestion du stress post-traumatique secondaire. On a mis les données dans 14 catégories qui les représentent le mieux : auto-soins, soutien familial et soutien de la personne la plus proche, conversation avec des collègues de travail, engagement émotionnel, milieu de travail, ressources en santé mentale, personnalité, aptitude à aider la victime, capacité d'établir un rapport avec la victime, éléments de rappel de la scène, exposition continue ou tendance à revenir sans cesse sur l'incident, exposition à la nature humaine, vulnérabilité de la victime, et présence d'éléments stressants supplémentaires. On présente les résultats et les recommandations à l'intention de conseillers qui travaillent auprès de cette population, ainsi qu'à l'intention d'administrateurs de corps policiers.

The literature abounds with documentation of the psychological, physiological, behavioural, and spiritual effects of stress on police officers. Research has also been conducted on the sources of police stress and has largely been divided into (a) operational stressors, such as traumatic incidents; and (b) organizational stressors, such as personnel shortages and shiftwork. In this study, we use the Critical Incident Technique to examine factors that help or hinder police officers in coping with secondary traumatic stress. A summary of existing research is offered first.

IMPACT OF STRESS ON POLICE

Multiple studies have found evidence that the stress of police work increases mental health issues such as depression, posttraumatic stress, and anxiety (Carlier, Lambert, & Gersons, 1997; Collins & Long, 2003). One study found that the proportion of police officers with measurable mental illness doubled from 1993 to 2003 (Collins & Gibbs, 2003). The stress from police work has also been found to have a negative impact on police officers' physical health (Gershon, Barocas, Canton, Li, & Vlahov, 2009; Gilmartin, 2002; Van der Kolk, 1996; Violanti et al., 2007). Behavioural effects such as absenteeism, domestic violence, excessive use of force, and substance abuse have also been found in studies of police stress (Cross & Ashley, 2004; Gershon, 2000; Paton, Violanti, Burke, & Gehrke, 2009). The impact of trauma experienced in policing is not confined to the time spent on the job and may even affect the family of the police officer (Dwyer, 2005; Gilmartin, 2002; Violanti et al., 2007). Research also indicates that the impact of critical incident stress from police work may be long-term. In a study conducted by Karlsson and Christianson (2003), officers reported having vivid visual, tactile, and olfactory memories of traumatic events more than 20 years after those events.

SOURCES OF STRESS

Operational stressors of police work can be divided into primary and secondary traumas. A primary trauma involves a threat to the police officer's life, as in the case of an officer-involved shooting. The stress from this type of event has been documented extensively in the research on police stress (Everly & Mitchell, 1995; Gilmartin, 2002; Kirschman, 2000; Paton et al., 2009). Another source of stress for police officers is repeated exposure to the suffering of others. Exposure to secondary trauma may result in secondary traumatic stress (STS). "Secondary traumatic stress (STS) refers to a set of psychological symptoms that mimic post-traumatic stress disorder, but is acquired through exposure to persons suffering from the effects of trauma" (Baird & Kracen, 2006, p. 181). Research on STS has only recently begun and has tended to focus more on therapists, counsellors, and social workers than emergency services personnel such as police officers. Studies have indicated that police officers who repeatedly respond to trauma victims are at risk of developing STS, if not posttraumatic stress disorder (Hafeez, 2003; Marshall, 2003; Salston & Figley, 2003).

In addition to their exposure to operational stressors, police officers also suffer from exposure to the organizational aspects of police work (Brough, 2004; Hart, Wearing, & Headey, 1995; Liberman et al., 2002). Documented examples of organizational aspects of policing that can cause occupational stress include shiftwork, personnel issues, and paperwork. Exposure to routine occupational stress has been found to be a stronger predictor of psychological distress, including posttraumatic stress symptoms, than is the cumulative exposure to critical incidents or danger (Liberman et al., 2002).

A review of the literature on stress and coping produced numerous quantitative studies on the impacts and sources of stress in police work. What seems to be missing is what *is* working for police officers and what would help mitigate the impact of STS in police officers so that it does not have a cumulative effect. This study was undertaken in hopes of illuminating the factors that officers believe have an impact on their ability to cope with their exposure to STS by asking the question: What helps, hinders, or might help general duty police officers to cope with secondary traumatic stress?

The Enhanced Critical Incident Technique (ECIT) (Butterfield, Borgen, Maglio, & Amundson, 2009; Flanagan, 1954) was used to develop a picture of the coping strategies employed by general duty police officers that could not be captured by responses to quantitative surveys. Prior to beginning the research, approval for the recruitment strategy, protocols used, plans to protect participant confidentiality, methodology, and counselling resources for participants, if needed, was received from an institutional Research Ethics Board. No participants required the counselling resource list.

METHODOLOGY

The Critical Incident Technique (CIT) is a qualitative research method that arose from industrial and organizational (I/O) psychology during World War II (Flanagan, 1954). Flanagan developed the CIT to determine what decisions and behaviours flight crews engaged in that allowed them to return safely from bombing missions (Flanagan, 1954). He then used the information to select and classify flight crews. The CIT is exploratory by nature and "is appropriate to use when the researcher is interested in learning more about little-understood events, incidents, factors, or psychological constructs" (Butterfield et al., 2009, p. 268). It is designed to elicit "critical incidents, or factors, that help promote or detract from the effective performance of some activity or the experience of a specific situation or event" (Butterfield et al., 2009, p. 266).

The CIT has evolved since Flanagan's (1954) original description and use of it. First, Woolsey (1986) highlighted its applicability to counselling psychology issues and moved the method from expert observations to retrospective self-report. Second, it is now known as the Enhanced Critical Incident Technique because of the addition of contextual components at the start of the interview, the "wish list items" that give participants the opportunity to highlight what things or factors would have been helpful to them, and the addition of nine credibility checks that are intended to increase the credibility of the results (Butterfield et al., 2009). Readers interested in learning more about the genesis of the CIT and its evolution within counselling psychology are directed to Flanagan (1954), Woolsey (1986), Butterfield, Borgen, Amundson, and Maglio (2005), and Butterfield et al. (2009). For information about the method's reliability and validity, readers are directed to Andersson and Nilsson (1964) and Ronan and Latham (1974). The current study followed the ECIT procedures described by Flanagan (1954) and Butterfield et al. (2009), which are described below.

The Five Steps in a Critical Incident Technique Study

Flanagan (1954) outlined five steps to follow in a CIT study: (a) ascertaining the general aims of the activity being studied; (b) making plans and setting specifications; (c) collecting the data; (d) analyzing the data, which has three parts (determining the frame of reference, formulating the categories, and determining the level of generality or specificity to be used in reporting the data); and (e) interpreting the data and reporting the results.

For the current study, the activity being studied in Step 1 was identified as the naturally occurring coping strategies employed by general duty police officers to deal with STS. It included strategies that were helpful, hindering, or might have been helpful if available ("wish list" items). The second step (i.e., making plans and setting specifications) included the determination and creation of a prescreening questionnaire, the ECIT interview protocol (which included both a contextual component and ECIT questions regarding helping, hindering, and wish list items), and the second interview protocol. It also included selecting persons to perform the credibility checks.

The third step, data collection, was accomplished through in-person semistructured interviews using the interview guide described above. The fourth step, analyzing the data, was conducted in accordance with the steps set forth by Flanagan (1954) and Butterfield et al. (2009). Determining the frame of reference was the first part of analyzing the data. The literature review conducted prior to undertaking the current study informed this work. Based upon this frame of reference, the researchers collected data primarily in hopes of informing police agency policy in support of the well-being of officers, and secondarily to inform counselling interventions that assist officers in managing workplace STS. The second part of data analysis was to create categories based upon grouping of similar incidents. This consisted of organizing raw data, identifying critical incident and wish list items, and creating the categories. The third part of data analysis consisted of determining the level of detail that would be needed to report the data (Butterfield et al., 2009). The researchers chose to report the data in terms of the number of helping, hindering, and wish list items and participation rates for each category, and provided support for each of the categories by offering representative quotes, which is consistent with the manner in which previous ECIT studies have reported their findings.

The fifth and final step involved conducting credibility checks and writing the final report to detail the story the data told. Data extracts were included in the final report to elucidate the story told by participants. The credibility checks conducted during this fifth step include (a) audio-recording of interviews, (b) interview fidelity, (c) independent extraction of critical incidents, (d) exhaustiveness, (e) participation rates, (f) placing incidents into categories by an independent judge, (g) cross-checking by participants, (h) expert opinions, and (i) theoretical agreement. These credibility checks are described in more detail in Appendix A.

The data in an ECIT study are the factors or critical incidents that helped or facilitated in the situation being studied (helping incidents), the factors or inci-

dents that detracted from or made it more difficult to deal with the situation being studied (hindering incidents), and items that participants believed would have helped during the situation but were not actually available (wish list items). The N of an ECIT study is the number of critical incidents collected, not the number of participants (Flanagan, 1954).

The interviews began with the collection of contextual data to provide a better understanding of the participants' general work experiences and perceived current state of coping. These questions asked participants about their overall experience as police officers, the number of exposures to secondary trauma that had impacted them, and how well they felt they had been coping with those exposures. The definition of "impact" of trauma was left to the police officer to decide. An example of an event that might be considered traumatic, a next of kin notification, was offered and delineated from an organizational stressor, such as feeling pressure to leave a call due to other calls waiting. In the interview preamble, STS was defined to participants as "exposure to those who have been traumatized or who are suffering in different ways."

The CIT questions comprised the next portion of the interview and consisted of inquiring about critical incidents or factors that helped, hindered, or would have helped them handle a time when they were exposed to another person's trauma. Probes were asked to ensure clarity and understanding, to find out the importance of the factor to their ability to deal with the exposure to someone else's trauma, and to obtain an example. Gathering these additional details is consistent with the ECIT method and provides the criteria for determining whether an incident is counted and included in the final data analysis (Butterfield et al., 2009; Flanagan, 1954). The interview concluded with the collection of demographic data in order to describe the sample.

Interviews were conducted at six police agencies in the Lower Mainland of British Columbia and lasted from 52 to 78 minutes, averaging 64 minutes. Interviews were transcribed to facilitate analysis of the data for themes and categories. Tentative categories were created as described by Flanagan (1954) and Butterfield et al. (2009). Further details about how the categories are created in an ECIT study are offered by Butterfield et al. (2009). Categories, data, and assumptions were then subjected to the rigours of the ECIT credibility checks (Butterfield et al., 2009; Flanagan, 1954). The established standards for all the credibility checks were met.

Participants

A purposive and snowball sample was obtained through dissemination of a research introductory letter as an attachment in an e-mail directed to the interviewing researcher's professional contacts in police agencies. Professional contacts directed the research introductory letter to their contacts within their respective police agencies. Interested persons were instructed to contact the interviewing researcher if they had questions or wanted to participate. The phone number and e-mail address of the interviewing researcher were provided to facilitate contact. The interviewing researcher did not personally know any of the responding in-

terested persons, preventing any problems with dual relationships. Responding persons were screened using a prescreen questionnaire that ensured participants met the inclusion criteria. Inclusion criteria included (a) a minimum of one year of experience as a police officer; (b) currently assigned to general duty assignment (patrol), or having been assigned to general duty assignment within the last 6 months; (c) being of the rank of constable; and (d) able to read, write, and speak English fluently. Participants were not offered remuneration, and were presumably motivated to participate based upon their own personal interests in the research topic. To protect the confidentiality of participants, their identifying information was removed and replaced with a participant number prior to reporting the results.

The sample consisted of 7 male and 3 female general duty police officers. Participants' ages ranged from 22 to 36 years old (M = 28). Years of experience ranged from 20 to 60 months (M = 36 months). All participants had been assigned to general duty for the entirety of their police careers. Four participants identified as married, 3 as single, 1 as common-law, and 2 as engaged. Eight participants identified as having bachelor's degrees and 2 had master's degrees.

RESULTS

In this section we first report on the contextual data, then on the CIT data. Within the CIT data, the number of critical incidents collected is broken down into helping and hindering critical incidents and wish list items. Then the categories derived from the critical incidents and wish list items are described, and participation rates and frequencies reported, as well as the category's operational definition and representative quotations to illustrate the category.

Contextual Data

To get a general idea of their experience as police officers, participants were asked what it was like being a police officer. Contextual data reflected an overall positive tone. Eight participants explicitly stated that being a police officer was a positive experience. Participants reported between 1 and 10 exposures to traumatic situations as having had an impact on them (M = 3.45). Participants determined what having an impact on them meant and cited various types of events, including next of kin death notifications and motor vehicle accidents. Seven participants identified as doing "pretty well" while 3 identified as doing "very well" with respect to coping with those exposures.

CIT Data

The first interview yielded a total of 155 critical incidents and wish list items. There were 74 helpful critical incidents, 62 hindering critical incidents, and 19 wish list items. The second interview did not yield any additional critical incidents but did yield one additional wish list item. Following Flanagan (1954), the ECIT results are reported in the form of categories with self-descriptive titles and operational definitions. Operational definitions were assigned to each category based

upon participant responses and are reported next, accompanied by the participation rates and frequencies as suggested by Butterfield et al. (2009). Participation rates were calculated by dividing the number of participants citing incidents in a category by the total number of participants. Table 1 depicts the 14 categories into which the 156 critical incidents and wish list items were placed. There were no incidents that did not fit into a category.

SELF-CARE

Self-care played an important helping role in coping for 8 of the 10 participants interviewed (80% participation rate, 17 incidents). There were no hindering or wish list items cited by participants that fit into this category. Purposeful activity to promote physical and emotional health constituted self-care for the purpose of this study. This category contained activities such as exercise, prayer, meditation, sleep, and taking time-outs. Some of the self-care strategies were reported to enhance the participants' focus on themselves while others were reported to be more like a form of distraction. One participant stated:

I think a lot of things that prevent stress happen beforehand as opposed to after, so things like fitness, things like relationships, lifestyle, [and] personality ... I think it gives me outlets. It gives me ways to either physically burn off stress or emotions. (Participant #4)

FAMILY/SIGNIFICANT OTHER SUPPORT

Support from family, friends, and significant others was also cited by 8 of the 10 participants as a helpful factor (80% participation rate, 13 incidents). The lack of support was deemed as hindering by 6 participants (60% participation rate, 6 incidents). There was one wish list item from 1 participant (10% participation rate, 1 incident). Family or significant other support was defined in this study as the participant's ability to rely on family members, such as parents and siblings, and significant others to help meet his or her emotional, psychological, and spiritual needs. For this study, lack of support meant the absence or unavailability of family members and significant others or a lack of understanding from family members and significant others. Significant others included love partners and friends. For some participants, friends referred to non-police friendships, and for others it included police friendships outside of work. Forms of support and means of meeting the officers' emotional, psychological, and spiritual needs varied. One participant who identified family support as helpful to coping reported:

I think they're [family is] very important in the fact that having those healthy relationships it definitely does help to cope—having people to talk to and, you know, having people around you that do love and care about you. You know, it's something worth going home to at the end of the day. (Participant #4)

Another participant spoke of the hindering effect of the lack of familial/significant other support, stating, "If I was to go home, say, and tell my girlfriend or tell my

Table 1 Critical Incident Categories

	Helpi)	Helping Incidents $(n = 74)$	lents	Hind	ering Inc $(n = 62)$	Hindering Incidents $(n = 62)$	Wis	Wish List Items $(n = 20)$	(rems
Categories	Participants $N = 10$	%	# of incidents	Participants $N = 10$	%	# of incidents	Participants $N = 10$	%	# of incidents
Self-care	∞	80	17	0	0	0	0	0	0
Family/significant other support	∞	80	13	9	09	9	1	10	1
Talking with co-workers	∞	80	13	0	0	0	0	0	0
Emotional engagement	9	09	10	ю	30	⟨ <	1	10	1
Work environment	ς.	90		9	09	15	∞	80	14
Mental health resources	4	40	4	0	0	0	3	30	8
Personality	ю	30	4	0	0	0	0	0	0
Ability to help the victim	С	30	ϵ	Е	30	5		10	1
Relatability to the victim	2	20	2	4	40	5	0	0	0
Scene reminders	1	10	1	Е	30	ϵ	0	0	0
Continuous exposure/dwelling	0	0	0	5	90	10	0	0	0
Exposure to human nature	0	0	0	5	90	5	0	0	0
Vulnerability of the victim	0	0	0	4	40	4	0	0	0
Presence of additional stressors	0	0	0	80	30	4	0	0	0

parents, it would be a horrible thing for them. So they don't really seem to get that part" (Participant #2).

TALKING WITH CO-WORKERS

Talking with co-workers was tied with family/significant other support as the second most prevalent factor that helped participants cope with STS (80% participation rate, 13 incidents). For this study, *talking with co-workers* included informal conversations with one or more fellow officers after an incident. Timing of conversations included both immediately following the conclusion of the incident and those that occurred later in the same shift or days or even weeks after the incident. They were not in the course of a structured operational or psychological debriefing. One participant stated:

I find there's a little bit of difference with ... this might sound a little bad, but talking to someone who either gets it or doesn't ... there are some people, say from work, that I'll talk to where they have been in the same situations so they do understand, and I know there are times when they're in situations like that. (Participant #6)

Another participant commented, "I think just having another person who can say 'Yeah, you know what, that bothered me too,' so you just feel like you're not the only one" (Participant #9). Being able to speak with co-workers offered these participants a sense of being understood and seemed to normalize their reactions.

EMOTIONAL ENGAGEMENT

Six participants identified not being emotionally engaged as helpful in coping with STS (60% participation rate, 10 incidents). Being emotionally engaged in a call was cited as hindering for 3 participants (30% participation rate, 5 incidents). No wish list items were cited that fit into this category. For this study, emotional engagement meant learning or paying attention to personal details about the victim that might create a personal connection or feelings of empathy or sympathy. A lack of emotional engagement can be best understood as directing one's focus to the tasks of the job to the exclusion of learning or paying attention to personal details about the victim. Knowledge of these details might create a personal connection or feelings of empathy or sympathy. Personal details included learning additional information about a deceased person that was not necessary for the completion of one's tasks while on the call. It also included the use of humour to lighten the seriousness of the incident. In discussing what hindered their coping, some participants expressed a tendency to abstain from getting to know victims. For one participant, having the visual image of accident victims seemed to make them more human, adding to the difficulty in coping with STS. That officer stated, "the NOK [next of kin notification] where I did see the bodies, was much harder than the NOK where I don't. Like I don't know how to explain it other than it's more than just a name" (Participant #6).

WORK ENVIRONMENT

Beyond the factor of talking with co-workers, participants cited their work environment as impacting their ability to cope with STS. Five participants identified a supportive work environment as promoting their ability to cope (50% participation rate, 7 incidents). Six participants identified factors of the work environment as a hindrance for their coping (60% participation rate, 15 incidents). Eight participants identified wish list items that fit into the work environment category (80% participation rate, 14 incidents). For this study, work environment was defined as characteristics of the work setting that impacted the psychological well-being of the police officer. It included the work atmosphere and the provision of services that impacted the participant's psychological well-being such as formal debriefings, members of the Critical Incident Stress Management Team (CISM), specialized training on mental health, and educational materials pertaining to the topic. It also included the ease of access to employee assistance programs and information.

Participants drew distinctions between supportive co-workers and a broader organizational environment. Descriptions of camaraderie occurred in the context of an organization whose policies and practices may or may not have been conducive to employee mental health. One participant spoke of the work environment in terms of supervisory support (Participant #4). Work environment was less about the proximal interpersonal interactions captured in the Talking with Co-workers category and more about the overall tone, policies, and provision of services that promoted employee mental health. One participant's comment illustrates this point: "I felt like I was in an environment where I could sit up and say I'm not coping.... It would be listened to and taken seriously" (Participant #8).

Three participants identified having a formal debriefing as being helpful for their coping. A *formal debriefing* for the purposes of this study was a structured intervention performed by members of the Critical Incident Stress Management Team and/or designated mental health professionals that offered a forum for discussing one's emotional reaction to a critical incident. A critical incident in this context refers to a traumatic event one encounters at work. It should be distinguished from a critical incident in the ECIT research context that constitutes "factors that promote or detract from the effective performance of some activity or the experience of a specific situation or event" (Butterfield et al., 2009, p. 266). One participant reported, "I spoke to members on our critical incident team and they were very helpful, and they just said, 'You know you're going to think about it for a couple of weeks and that's fine, that's natural, and continue to process that'" (Participant #4).

The work environment was also cited as a hindering factor, for a variety of reasons. The stigma of seeking help was an impediment for some police officers. Participants related that information was not readily available to them without going through a supervisor. One participant expressed concern about speaking with the designated mental health contact persons at the department, stating "At the

end of the day I do not trust them, because for every single person that it is, they're always supervisors" (Participant #3). Inadequate training for stress management was also cited as hindering their ability to cope with STS. Some of the training was optional, conveying the message to one participant that the information was not regarded as important.

MENTAL HEALTH RESOURCES

Four participants identified that mental health resources helped them to cope with STS (40% participation rate, 4 incidents). Three participants cited having mental health resources would have helped with coping if it had been available (30% participation rate, 3 incidents). There were no hindering critical incidents cited that fit into this category. *Mental health resources* for the participants in this study meant the provision and utilization of psychological services and materials that promote psychological well-being. It included accessing professional psychotherapeutic services or materials pertaining to psychological well-being. It included the knowledge and/or utilization of these services and sources of information. One participant relayed how accessing mental health resources was a helping factor, saying "I went to see a counsellor and that made a huge difference, just normalizing and just sitting there talking to somebody actually that's totally not involved in your life" (Participant #8).

PERSONALITY

Three participants reported their personality naturally helped them to cope with STS (30% participation rate, 4 incidents). There were no hindering critical incidents or wish list items cited that fit into this category. For this study, *personality* was operationalized as characteristics or qualities of mind and behaviour. A representative quote illustrates one participant's stance on how personality helped that participant to cope:

I think it becomes a matter of personality ... [to] not take myself too seriously. Being able to be told that I'm wrong or I did something wrong. Being able to accept criticism and not get all riled up or defensive; I think it is not being afraid to make mistakes that are made in good faith. (Participant #4)

ABILITY TO HELP THE VICTIM

Three participants indicated that the ability to help the victim promoted their ability to cope with the STS of that call (30% participation rate, 3 incidents). The inability to help victims hindered coping for three participants (30% participation rate, 5 incidents). One wish list item related to the ability to help the victim was also cited (10% participation rate, 1 incident). In this study, *ability to help the victim* referred to the belief that one can make a difference or change the circumstances of the victim or victims. The inability to help victims was operationalized as facing a situation where one feels helpless to make a difference or change the circumstances of the victim or victims. Participants related that this feeling may

have been because the victim was deceased when the police officers arrived, or it may have been that the situation required a long-term solution (Participants #2 and 10). Some participants reported feeling they were unable to help the victim, even referring to it as "helplessness" (Participants #2, 5, and 10). One officer reported that shifting how one interpreted the ability to help the victim helps oneself to cope better, stating:

As long as there is a society, there's going to be crime, if there's going to be crime, guess what? Somebody has to control that, but I suppose not to look at the light at the end of the tunnel as, you know, as an end, but perhaps you now look more at the light at the end of the tunnel for that particular file. You know, what's the end? Well the end is either making an arrest, putting a report in for a conviction, any number of those things, because ... for the longest time I was looking at long term ... how can we feel like we're actually bettering society? It doesn't seem that way, but you know what? Just trying to make a difference in one person's life however you can. (Participant #10)

RELATABILITY TO THE VICTIM

Two participants identified their ability to relate to the victim as helpful (20% participation rate, 2 incidents) while 4 participants cited this factor as hindering their coping with STS (40% participation rate, 5 incidents). No wish list items were cited that fit into this category. *Relatability to the victim* was the participant's identification of shared traits or circumstances with the victim or victim's family that promoted empathic feelings. One participant's ability to relate to the victim family's situation promoted this officer's coping, as evidenced by this quote:

I think it actually helps my coping because I know that I can't fix what I've just come in and told people or what I've just had to deal with it. I know that it doesn't matter how brilliant I was at delivering whatever news it was or dealing with them, it's not going to change. (Participant #8)

SCENE REMINDERS

One participant identified not being at the scene as a helping factor (10% participation rate, 1 incident). Three of the 10 participants identified scene reminders as hindering their ability to cope with STS (30% participation rate, 3 incidents). There were no wish list items cited that fit into this category. *Scene reminders* were operationalized in the study to include visual, tactile, olfactory, and auditory cues that initiated the memory of a traumatic incident. One participant spoke of how scene reminders hindered this officer's coping, stating:

[There is a] stench as you drive there and then it was kind of mixed with like smoke and like probably burning people, so there's this smell that and when I drive it, if I'd smell the smell again, then it would like remind of it again. (Participant #9)

CONTINUOUS EXPOSURE/DWELLING

For 5 participants, being continuously exposed to a stressful incident hindered their ability to cope with STS (50% participation rate, 10 incidents). There were no helping incidents or wish list items cited that fit into this category. For the purpose of this study, *continuous exposure/dwelling* was defined as the inability to escape or remove oneself physically or emotionally from an incident. It also included continuously thinking about an incident. One participant shared a story of having to remain on a death scene for several hours and believed this continuous exposure hindered the ability to cope, as it left the officer little respite physically or mentally. This participant stated:

I think it's probably just the fact that it was such an abnormal situation of having to, like I say, get that little mental snapshot so many times, is probably why it was difficult to cope with. Just because it's like you're out here, you're by yourself, you're tired, and time is just dragging by. You can't do anything, you can't leave ... it's going to be a long night. (Participant #2)

EXPOSURE TO HUMAN NATURE

Exposure to human nature was identified by half of the participants as a hindering factor (50% participation rate, 5 incidents). There were no helping factors or wish list items cited that fit into this category. This category can be described as seeing the manner in which people treat themselves and/or others. When asked about what hindered the ability to cope, one participant spoke of an incident where an infant had been sexually abused, stating:

I mean you often hear that line, you know, "I've seen it all." I didn't see that one coming. It's just, wow, I can't believe there are people who actually do that, so it ... it's hard to process something that you don't understand. (Participant #1)

VULNERABILITY OF THE VICTIM

Four participants cited the vulnerability of the victim as hindering their ability to cope with STS (40% participation rate, 4 incidents). There were no helpful incidents or wish list items for this category. *Victim vulnerability* was defined as those characteristics of the person that made them more innocent and/or reliant on others for protection. One participant relayed a story of an impaired driver hitting a "good" family, stating:

It's kind of back to the innocence thing, I guess. Like they were just ... they were good people. Like they didn't ... they didn't have criminal records, like they didn't have any prime history, like they were completely off the map because they were just this like quiet family ... when you had the two extremes. People with, like, lengthy records and then the people that are just hardworking, good people, it's senseless. (Participant #9)

PRESENCE OF ADDITIONAL STRESSORS

Three participants identified the presence of additional stressors as hindering their ability to cope with STS (30% participation rate, 4 incidents). There were no helping factors or wish list items that fit into this category. For this study, presence of additional stressors signified the presence of stressful situations outside of work that compounded the amount of stress experienced. It included personal problems such as financial distress, relationship problems, and scrutiny from the department, the public, and the media. One participant identified multiple sources of scrutiny as a hindrance to coping, and stated:

I think another thing that can be annoying or can make it difficult is like arm-chair quarterbacking, is when you start hearing other people in other sections or other units saying, "Oh well this is how I would have done it" or "This is how we did it back in the day" or … that whole idea of people who weren't there kind of offering their two cents. I'm just like, you know what, who are you? Like even in the media too, like the public … that can all be difficult. (Participant #3)

DISCUSSION

The study illuminated several factors that helped, hindered, or might have helped police officers in coping with STS. Overall, the findings were consistent with existing literature pertaining to coping strategies for STS. One of the most commonly cited helping categories, Self-Care, has been documented as a protective factor throughout the stress and coping literature (e.g., Gilmartin, 2002; Kirschman, 2000; Palm, Polusny, & Follette, 2004). The most commonly cited hindering category, Work Environment, has also been well-documented (e.g., Burke & Paton, 2006; Liberman et al., 2002; Paton et al., 2009).

Two surprising results arose from the current study. First, the prevalence of the expressed desire for access to mental health resources such as counselling and education (80% participation rate) was a surprise based upon a documented reluctance to seek mental health services among police officers (e.g., Graf, 1986; Miller, 1995). Second, none of the participants relayed using any of the maladaptive behavioural coping mechanisms such as consuming alcohol or using excessive force. This was unexpected, given the extensive documentation of these maladaptive coping mechanisms in the police stress literature (Cross & Ashley, 2004; Gershon, 2000). The researchers cannot determine what these unexpected results mean, as this was not the primary purpose of the study. This is therefore an area that warrants further study.

Many of the participants spoke of their expectations regarding who was an "innocent victim" and who was not. There appeared to be a set of unwritten, unspoken rules of justice that, when broken, hindered the participants' ability to cope. Some participants seemed to hold beliefs consistent with Lerner's (1970) just world theory, which states that we live in a world where people get what they

deserve. It lends order to events that might otherwise be difficult to comprehend. It can lead to victim-blaming to create a sense of personal safety. It fosters the belief that one will not fall victim to tragic events unless he or she does something that contributes to this fate. When there was a violation of this order, it seemed to hinder participants' coping. This was particularly evident in the Vulnerability of the Victim, Relatability to the Victim, and Exposure to Human Nature categories. One participant spoke of a logical order where it is more traumatic when some victims do not deserve their fate while others do. Another participant also reported that the ability to relate to the victim hindered that participant's ability to cope, stating that it changes things "when [the victim is] someone you know or I also think if it's someone you can identify with or ... you see some similarities" (Participant #6). Another participant cited relatability to the victim as a hindrance to coping, stating:

I'd say, as far as coping, I would say it would make it worse maybe, because you sort of relate to it being like ... this could be me, and then sometimes your mind wanders and you're like "Oh God, what if that happens to my family?" (Participant #9)

The police officers' inability to help the victim may create an existential dilemma referred to as confronting unfixable suffering, which has been used to refer to loneliness, angst, thrownness, and ambiguity (Plomp, 1997). It can be a state of being or an affective reaction to circumstances one faces. Participants expressed experiences consistent with three of the four concepts: loneliness, angst, and ambiguity. Two participants reported feelings of isolation. Angst refers to the feelings of helplessness, and some participants in the current study related feelings of helplessness to change the circumstances for the victim. Feelings of ambiguity were also expressed by some participants, as they experienced stress with role changes and uncertainty. As previously mentioned, one participant (#10) shared an experience of shifting perspective to redefine the conceptualization of helping people from long-term (changing society) to short-term (connecting with one small child, or helping the victim by getting a conviction). This new perspective on the officer's ability to help victims promoted coping, changing the inability to help the victim from a hindering incident to a helping incident.

The results of this study are also consistent with the findings of Maddi and Kobasa (1991), who contend that when people have a control disposition, they feel as though they can have influence over the varied contingencies in life; consequently they do not feel helpless. The person perceives a sense of control in his or her circumstances. It does not imply that one believes that he or she has the ability to have complete control over outcomes and events but rather has the sense that one has the ability to influence outcomes by exercising skills, choices, and knowledge. One participant (#2) relayed that the inability to use skills and knowledge to change circumstances was a source of distress and hindered the ability to cope. The ability to interpret situations as challenges instead of threats requires a certain level of flexibility (Maddi & Kobasa, 1991). This personal at-

tribute was identified by one participant (#4) as a factor that helped the officer to cope. Commitment indicates involvement, activeness, and approaching the problem rather than avoiding it. This appears to be related to the task-orientation that several participants spoke of (Participants #1, 2, 3, 4, 6, and 10). Participants mentioned task-orientation during the critical incident to avoid experiencing emotional engagement, but they also used distraction activities outside of work to avoid experiencing the residual secondary stress from work.

The Exposure to Human Nature category seemed to reflect psychological adjustments to the way people interpret their world. This adjustment has been discussed in the coping literature using a variety of names including Park and Folkman's (1997) concept of order and global meaning, Lerner's (1970, 1980) just-world theory, and Janoff-Bulman's (1989) assumptive world theory. There is an initial tendency to believe that this is a just, fair world that is predictable, understandable, and controllable. The cumulative exposure to the dark side of human nature may erode these beliefs. Participants spoke of the innocence of some victims and the culpability of others as factors that impacted their ability to cope with their exposure to STS (Participants #1, 4, 5, 6, and 9). It is possible that being exposed to the suffering of "innocent" victims challenged the participants' beliefs in a just world, making them more vulnerable to suffering.

One of the frequently cited helping factors in this study was the use of self-care. Self-care has been suggested for those in other helping professions, such as therapists, social workers, and nurses (Figley, 1995; Pearlman & Saakvitne, 1995). Palm et al. (2004) suggest spending time in activities that give a sense of purpose. They also suggest maintaining balance by attending to roles outside of work. Salston and Figley (2003) echo this sentiment and add that people who work with traumatized persons should also maintain balance among their physical self, emotional self, and spiritual self. This recommendation is consistent with the identity accumulation theory proposed by Thoits (1983).

It was not surprising that 60% of the participants identified the lack of support from family/significant others as a hindering factor for their coping, given that 80% identified the support of family/significant others as a helpful factor for their coping. For some of the participants (#2, 3, 9, and 10), their family/ significant others were not able to provide adequate support because they did not fully understand the job. This may be due to the stressor-support specificity principle, based upon Cohen and Willis' (1985) buffering hypothesis, which states that the source of optimal support may be matched to the source of the stress. For instance, workplace stress may best be countered by social support from those in the workplace while familial support may be better suited for stressors outside of the workplace. Another participant (#10) did not wish to talk to family/significant others about traumatic experiences and expose them to the trauma. This shielding may be warranted, as research indicates that the transmission of traumatic stress from the police officer to the partner and/or family members interferes with their ability to provide support to the officer (Dwyer, 2005).

Regardless whether or not the police officer shares the traumatic experience with the family, the traumatization of the police officer has been found to be a family stressor affecting other members of the family (Dwyer, 2005; Ruzek, 2006). Dwyer (2005) found that 28.2% of police wives met the criteria for STS. Higher levels of distress experienced by police officer husbands related to higher distress levels in their spouses. The literature on prevention of STS also recommends the extension of training initiatives to the family of police officers (Anshel, 2000; Gilmartin, 2002; Kirschman, 2000; Sewell, 1993). Implications for counselling are discussed next.

Counselling Implications

There are numerous implications for counselling stemming from this study. Implications are presented categorically as cognitive, behavioural, and emotional interventions followed by recommendations for delivery of counselling services.

COGNITIVE INTERVENTIONS

Participants identified feelings of "helplessness" when they were unable to help some victims (Participants #2, 5, and 10). To address this sense of helplessness, it may be helpful for counsellors to explore with the officer how he or she qualifies "helping" the victim. Unrealistic expectations that reflect cognitive distortions and/or perfectionistic standards would need to be tempered with more realistic appraisals. This could be achieved by examining the evidence for and against the cognitive distortion. Psychoeducation about hindsight bias and perfectionism may also be helpful. A discussion of a healthy sense of responsibility and an awareness of factors outside of the officer's control may offset his or her inability to change the victim's circumstances. Maddi and Kobasa (1991) discussed the concept of hardiness as comprising commitment, control, and challenge. Therapeutic interventions aimed at enhancing hardiness by fostering commitment, tempering one's sense of control, and interpreting events as challenges instead of threats may also be helpful for officers hindered by their inability to help victims.

Counselling may be helpful in addressing the cumulative impact of exposure to the dark side of human nature and the vulnerability of victims. A good starting point might be inquiring about maladaptive, negative schemas about the self, others, and the world. If the officer's perspective has been skewed toward negative appraisals based upon his or her cumulative exposure to the dark side of human nature, collecting evidence for adaptive, alternative schemas may assist the police officer in having a more balanced view of human nature. Asking the officer to look for evidence outside of his or her current negative schema will likely change the way he or she perceives the environment.

Techniques to offset the impact of continuous exposure may also be taught by the therapist. Task-orientation (Endler & Parker, 1994) and/or some form of relaxation technique might prove helpful for an officer forced to remain at a distressing call. Research has indicated that individuals who become distressed become self-preoccupied, which impairs their performance and heightens their

already high level of anxiety (Meichenbaum, 2007; Sarason, 1975). Stress management training that included instruction in adaptive cognitive responses and progressive relaxation has demonstrated a reduction in anxiety levels and improved performance (Sarason, Johnson, Berberich, & Siegel, 1979).

It might also be helpful to help officers strike a healthy balance between detachment and engagement to mitigate the impact of STS, consistent with Figley's (1995) approach to avoiding compassion fatigue. Relatability to the victim, a concept possibly related to emotional engagement, might also need to be addressed. The literature on countertransference among therapists discusses overidentification and distancing from the trauma victim (Dutton & Rubinstein, 1995; Pearlman & Saakvitne, 1995). There do not appear to be strategies designed to address this same dilemma with police officers. It is possible that the treatment for therapists' countertransference issues could be adapted to suit the needs of police officers who may be troubled by tendencies to over-identify with or distance from victims. Counselling implications can be drawn from the recommendations arising out of the countertransference literature, which includes fostering self-insight, differentiation of self from others, self-integration, conceptual ability, empathy, and anxiety management (Hayes, 2004).

BEHAVIOURAL INTERVENTIONS

Self-care was a strong helping factor for participants in this study, with an 80% participation rate. Counselling treatment plans encouraging self-care might mitigate the impact of STS for officers. According to Thoits' (1983) identity accumulation theory, counselling interventions promoting a life outside of work, participation in hobbies, and extracurricular activities might also counter the accumulation of posttraumatic stress. These strategies would be consistent with the advice directed at officers by Gilmartin (2002), who contends that officers are well-advised to be active outside of work to combat the "biological rollercoaster" that occurs when officers leave work and return home.

EMOTIONAL INTERVENTIONS

Addressing the emotional wear and tear from the job would complement cognitive therapeutic interventions. This might be accomplished by cultivating positive emotions to promote resiliency (Frederickson, 2001). Positive emotions may be generated by positive reappraisal, problem-focused coping, and assigning positive meanings to ordinary events (Folkman & Moskowitz, 2000).

COUNSELLING SERVICE DELIVERY

Related to the counselling interventions are the ways in which counselling services are delivered. Several implications arise from this study, which are discussed next.

A systemic approach. Results of this study highlighted the importance of support from family and significant others. It is possible that family and significant others are protective factors that could be incorporated in the therapeutic plan. A systems

approach to counselling may assist the officer to manage his or her exposure to STS with the support of his or her loved ones. A treatment approach that includes affected members of the family seems warranted.

Accessibility. According to participant responses, mental health resources, such as access to counselling and educational material, should be a consideration for counsellors in practice. Accessibility to counselling might include factors such as being available after normal business hours and advertising after-hour services. In an effort to promote accessibility of services, one may provide outreach care at the places where police officers congregate (Ruzek, 2006). This strategy, coupled with the use of motivational interviewing (Miller & Rollnick, 2013), may increase the likelihood that officers will take advantage of available mental health services (Ruzek, 2006). Motivational interviewing is recommended because it is a method of communication that is consciously directive, yet still focuses on enhancing officers' intrinsic motivation for change by exploring and resolving their ambivalence (Miller & Rollnick, 2013). It is not externally applied pressure, which would likely be rejected by an officer who was already hesitant about seeking help.

To meet the participants' stated need for counselling resources, it may also be helpful to place links to informative articles or fact sheets on the counsellor's website regarding symptoms of STS and strategies for managing them. The Internet has been used as a source of information for those troubled by traumatic stress and has been demonstrated to be an effective means of treatment (Lange, van den Ven, Schrieken, & Emmelkamp, 2001).

Proactive interventions. Two participants (#6 and 7) cited specific psychoeducational material on stress, police work, and coping as helpful. Research supports the participants' identification of psychoeducational material as being helpful in countering the effects of being exposed to secondary trauma. Bell, Kulkarni, and Dalton (2003) state, "Trauma-specific education also diminishes the potential of vicarious trauma. Information can help individuals to name their experience and provide a framework for understanding and responding to it" (p. 467).

Another possible intervention—stress inoculation training (SIT)—can be offered by counsellors. SIT provides education on reactions to traumatic events to normalize officers' experience and promote accurate expectations (Meichenbaum, 1977). An important goal of SIT that would likely be helpful in a counselling setting is delineating between problem-focused and emotional focused coping efforts.

Familiarity with policing. Counsellors might want to become versed in books that prepare officers and their families for police-specific expectations, as well as become educated on the culture of policing and its influence on help-seeking behaviour and commitment to therapy. Sewell (1993) suggests mental health practitioners should not only understand the work of police officers, they should also be familiar with the department and be familiar within the department to avoid being regarded as "outsiders" or "uninvited guests." Additionally, Sewell suggests mental health practitioners should be sufficiently trained and experienced in both the philosophy and technical procedures of trauma debriefing. Critical incident stress debriefings (CISD) have been criticized, purporting that they actually

do harm (Bisson & Deahl, 1994). Everly and Mitchell (1995) have responded to the criticism, noting that the criticism of CISD has largely surrounded its application in an indiscriminate manner or as a stand-alone intervention. Everly and Mitchell contend that CISD is not a stand-alone intervention but rather is a component of the critical incident stress management context of continued support services.

Making recommendations regarding helpful books, support groups, seminars, and other resources to officers could educate and empower them to manage stress levels and enhance coping mechanisms. The participants who had read books about what to expect in police work reported that it not only helped them with their expectations, but it also helped their family members to support them. This ties in to the family/significant other support category, enhancing the benefit of sharing materials with officers and their families. Bibliotherapy has been found to contribute to learned resourcefulness in the client (Whisman, 1993). According to Rosenbaum and Jaffe (1983), learned resourcefulness allows the client to feel that he or she has more control and leads to perception of the environment as less demanding.

Another method of alleviating tension is through the use of humour. Participants in the current study reported using dark humour to cope with exposure to STS. Extending this natural coping mechanism to the counselling setting may be helpful for working with officers. Miller (1995) suggests that the use of humour in counselling can bring a sense of balance to horrific circumstances. Miller contends that incorporating humour in therapeutic work also allows officers to vent their anger, frustration, and resentment. Incorporating humour in therapeutic work could be achieved by making light of dark situations with jokes. Of course, the therapist should exercise caution with this technique, refraining from using it until rapport has been established and he or she has noted that the client uses dark humour as a coping mechanism.

Another recommendation in the literature regarding therapy with officers is to provide them active, concrete, problem-solving approaches to address presenting issues (Miller, 1995; Wester & Lyubelsky, 2005). A solution-focused approach that explores officers' prior successes in managing problems may be fitting due to their self-identification as problem solvers. Recognizing and enhancing existing strengths may be complemented by fortifying the officer's skill repertoire with additional concrete problem-solving strategies.

Police Agency Implications

There are numerous police agency policy implications arising from this study. A key finding was the desire for access to support services and stress management training. Police agencies may wish to consider providing educational initiatives during both initial academy training and ongoing training. Extending training initiatives and support services to police families is also suggested. Police agencies may also benefit from examining their Critical Incident Stress Management programs to ensure they reflect the spirit of continuous care. Lastly, ways to ensure

ease of access to information about mental health resources for all officers should be implemented to facilitate their access and ability to seek help.

Limitations of the Study

The results of this study should be considered in light of some of its limitations. One limitation is that participants were recruited in a small geographic area. Results may only reflect characteristics of the officers interviewed in the Greater Vancouver area and may not apply to officers in other areas. Participants' years of service ranged from 1 to 5 years; therefore, their responses may differ from those of officers with several more years of service. It is unclear if newer police officers are more open to participating in a research study and discussing their experiences, if their participation is a product of the inclusion criteria requiring that they be of the constable rank, or some other unidentified factors. None of the participants had children and some of the participants stated that they believed having children would likely change their responses, particularly with respect to the hindering aspect of the vulnerability of some of the victims. Finally, this was a qualitative research study so its results cannot be generalized. However, this study was designed to be exploratory and to offer initial suggestions for ways to support this population and for areas needing future research.

The study also possesses several strengths. By using the ECIT (Butterfield et al., 2009; Flanagan, 1954), the researchers explored in-depth the experience of coping from the patrol officer's perspective. ECIT helped illuminate, in a way that a survey could not, the manner in which officers successfully managed their STS. Equally as important, it allowed them to tell their story, in their own words, of what had hindered them from coping. It also allowed participants a moment to reflect and share what else might help them if it were available. The information gathered in this study could form the base for further research and policy implications. Finally, the ECIT is a well-developed qualitative research method with an established track record and sufficiently articulated procedures that the study can be replicated. The ECIT procedures were followed, the nine credibility checks were conducted as outlined by Butterfield et al. (2009), and the established standards for the credibility checks were met or exceeded, all of which indicated the results are credible for this sample of patrol officers.

Implications for Future Research

The surprise finding of the desire for access to mental health resources, such as counselling and education, merits further inquiry. The availability of information to access counselling and educational resources should also be examined to determine if, in fact, it results in increased usage of mental health resources such as counselling. Numerous questions arise from the study: How might a police agency provide a more supportive work environment? How might support from family and significant others be promoted by the police agency? How might support be promoted by the individual police officer? How can police agencies facilitate access to information about mental health resources? The correlation between relatability

to the victim, emotional engagement, and scene reminders also merits further investigation. The unexpected finding that none of the participants reported using drugs or alcohol as a coping mechanism should also be explored in future research.

Conclusions

The cumulative exposure to STS can have grave consequences for the psychological, physiological, behavioural, and spiritual well-being of police officers and their families. The participants of the current study indicated they were doing either "pretty well" or "very well" with their exposure to STS. They provided a robust list of protective strategies they employed to counter the cumulative impact of STS. This is encouraging, as it indicates that police officers are not doomed to a fate of chronic stress problems, but rather, they may exercise some control over their circumstances to promote their well-being. Some of the participants even stated that participating in the current study provided insight into what was working for them.

Hopefully, the results of this study will prove beneficial both to counsellors working with police officers and to police agencies, to better serve the needs of police officers. The results of the current study, particularly the wish list items, contribute to the existing body of literature that prescribes ways to mitigate these consequences. These prescriptions will not likely secure changes overnight, but will require vigilance, patience, and dedication.

References

- Andersson, B., & Nilsson, S. (1964). Studies in the reliability and validity of the critical incident technique. *Journal of Applied Psychology, 48*(6), 398–403. Retrieved from http://psycnet.apa.org/doi/10.1037/h0042025
- Anshel, M. H. (2000). A conceptual model and implications for coping with stressful events in police work. *Criminal Justice and Behavior*, 27(3), 375–400. doi:10.1177/0093854800027003006
- Baird, K., & Kracen, A. C. (2006). Vicarious traumatisation and secondary traumatic stress: A research synthesis. *Counselling Psychology Quarterly*, 19(2), 181–188. doi:10.1080/09515070600811899
- Bell, H., Kulkarni, S., & Dalton, L. (2003). Organizational prevention of vicarious trauma. Families in Society, 84(4), 463–470. Retrieved from https://www.socialworktodayce.com/articles/100716/ PrevVicariousTrauma.pdf
- Bisson, J. I., & Deahl, M. P. (1994). Psychological debriefing and prevention of post-traumatic stress: More research is needed. *British Journal of Psychiatry*, 165, 717–720. doi:10.1192/bjp.165.6.717
- 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*, 11(3), 227–244. doi:10.1037/1072-5245.11.3.227
- Burke, K. J., & Paton, D. (2006). Predicting police officer job satisfaction: Traditional versus contemporary models of trauma in occupational experience. *Traumatology, 12*, 189–197. doi:10.1177/1534765606294989
- Butterfield, L. D., Borgen, W. A., Amundson, N. E., & Maglio, A. T. (2005). Fifty years of the critical incident technique: 1954–2004 and beyond. *Qualitative Research*, 5(4), 475–497. doi:10.1177/1468794105056924
- Butterfield, L. D., Borgen, W. A., Maglio, A. T., & Amundson, N. E. (2009). Using the critical incident technique in counselling psychology research. *Canadian Journal of Counselling*, 43(4), 265–282. (Accession #46778659)

- Carlier, I. V., Lambert, R. D., & Gersons, B. P. R. (1997). Risk factors for posttraumatic stress symptomology in police officers: A prospective analysis. *Journal of Nervous and Mental Disease*, 185, 498–506. doi:10.1097/00005053-199708000-00004
- Cohen, S., & Willis, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin*, 98, 310–357. doi:10.1037/0033-2909.98.2.310
- Collins, P. A., & Gibbs, A. C. C. (2003). Stress in police officers: A study of the origins prevalence, and severity of stress-related symptoms within a county police force. *Occupational Medicine*, 53, 256–264. doi:10.1093/occmed/kqg061
- Collins, S., & Long, A. (2003). Working the psychological effects of trauma: Consequences for mental health workers—a literature review. *Journal of Psychiatric and Mental Health Nursing*, 10, 417–424. doi:10.1046/j.1365-2850.2003.00620.x
- Cross, C. L., & Ashley, L. (2004). Police trauma and addiction: Coping with the dangers on the job. FBI Law Enforcement Bulletin, 73(10), 24–32.
- Dutton, M. R., & Rubinstein, F. L. (1995). Working with people with PTSD: Research implications. In C. R. Figley (Ed.), *Compassion fatigue: Coping with secondary traumatic stress disorder in those who treat the traumatized* (pp. 82–100). New York, NY: Brunner/Mazel.
- Dwyer, L. A. (2005). An investigation of secondary trauma in police wives. (Unpublished doctoral dissertation). Hofstra University, Hempstead, NY. Retrieved from ProQuest Dissertations and Theses database (UMI 3177108).
- Endler, N. S., & Parker, J. D. A. (1994). Assessment of multidimensional coping: Task, emotion, and avoidance strategies. *Psychological Assessment*, 6, 50–60. doi:10.1037/1040-3590.6.1.50
- Everly, G. S., Jr., & Mitchell, J. T. (1995). Prevention of work-related posttraumatic stress: The critical incident stress debriefing process. In L. R. Murphy, J. J. Hurrell Jr., S. L. Sauter, & G. P. Keita (Eds.), *Job stress interventions* (pp. 173–183). Washington, DC: American Psychological Association.
- Figley, C. R. (Ed.). (1995). Compassion fatigue: Coping with secondary traumatic stress disorder in those who treat the traumatized. Levittown, PA: Brunner/Mazel.
- Flanagan, J. C. (1954). The critical incident technique. *Psychological Bulletin*, 51(4), 327–358. Retrieved from http://www.analytictech.com/mb870/Readings/flanagan.pdf
- Folkman, S., & Moskowitz, J. T. (2000). Coping: Pitfalls and promise. *Annual Review of Psychology*, 55, 745–774. doi:10.1146/annurev.psych.55.090902.141456
- Frederickson, B. L. (2001). The role of positive emotions in positive psychology. The broaden-and-build theory of positive emotions. *American Psychologist*, 56(3), 218–226. doi:10.1037/0003-066X.56.3.218
- Gershon, R. (2000). *National Institute of Justice final report "Project Shields"* (Document No. 185892). Retrieved from www.ncjrs.gov/pdffiles1/nij/grants/185892.pdf
- Gershon, R. R. M., Barocas, B., Canton, A., Li, X., & Vlahov, D. (2009). Mental, physical, and behavioral outcomes associated with perceived work stress in police officers. *Criminal Justice and Behavior*, 36(3), 275–289. doi:10.1177/0093854808330015
- Gilmartin, K. M. (2002). Emotional survival for law enforcement: A guide for officers and their families. Tucson, AZ: E-S Press.
- Graf, F. A. (1986). The relationship between social support and occupational stress among police officers. *Journal of Police Science and Administration*, 14(3), 178–186. Retrieved from http://psycnet.apa.org/psycinfo/1987-36270-001
- Hafeez, S. (2003). The relationship of violence-related trauma and length of trauma exposure to post-traumatic stress disorder in emergency medical services personnel (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses database. (UMI No. 3072174).
- Hart, P. M., Wearing, A. J., & Headey, B. (1995). Police stress and well-being: Integrating personality, coping and daily work experiences. *Journal of Occupational and Organizational Psychology*, 68, 133–156. doi:10.1111/j.2044-8325.1995.tb00578.x
- Hayes, J. A. (2004). Therapist, know thyself: Recent research on countertransference. Psychotherapy Bulletin, 39, 6–12. Retrieved from http://www.divisionofpsychotherapy.org/wp-content/uploads/2009/10/2004-Bulletin-394.pdf

- Janoff-Bulman, R. (1989). Assumptive worlds and the stress of traumatic events: Applications of the schema construct. *Social Cognitions*, 7(2), 113–136. doi:10.1521/soco.1989.7.2.113
- Karlsson, I., & Christianson, S. (2003). The phenomenology of traumatic experiences in police work. *Policing*, 26(3), 419–438. doi:10.1108/13639510310489476
- Kirschman, E. (2000). I love a cop: What police families need to know. New York, NY: Guilford Press.
- Lange, A., van den Ven, J. P., Schrieken, B., & Emmelkamp, P. M. G. (2001). Treatment of post-traumatic stress disorder through the Internet: A controlled trial. *Journal of Behavior Therapy and Experimental Psychiatry*, 32, 73–90. doi:IOJ037/0022-006X.71.5.901
- Lerner, M. J. (1970). The desire for justice and reactions to victims: Social psychological studies of some antecedents and consequences. In J. Macaulay & L. Berkowitz (Eds.), *Altruism and helping behaviors* (pp. 205–229). New York, NY: Academic Press.
- Lerner, M. J. (1980). The belief in a just world: A fundamental delusion. New York, NY: Plenum.
- Liberman, A. M., Best, S. R., Metzler, T. J., Fagan, J. A., Weiss, D. S., & Marmar, C. R. (2002). Routine occupational stress and psychological distress in police. *Policing*, 25(2), 421–439. doi:10.1108/13639510210429446
- Maddi, S. R., & Kobasa, S. C. (1991). The development of hardiness. In A. Monat & R. S. Lazarus (Eds.), *Stress and coping: An anthology* (3rd ed., pp. 245–257). New York, NY: Columbia University Press.
- Marshall, E. K. (2003). Occupational stress and trauma in law enforcement: A preliminary study in cumulative career traumatic stress (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses database (UMI No. 3098255).
- Meichenbaum, D. (1977). Cognitive-behavior modification: An integrative approach. New York, NY: Plenum.
- Meichenbaum, D. (2007). Stress inoculation training: A preventative and treatment approach. In P. M. Lehrer, R. L. Woolfolk, & W. S. Sime (Eds.), *Principles and practice of stress management* (3rd ed., pp. 497–518). New York, NY: Guilford Press.
- Miller, L. (1995). Tough guys: Psychotherapeutic strategies with law enforcement and emergency services personnel. *Psychotherapy*, 32(4), 592–600. doi:10.1037/0033-3204.32.4.592
- Miller, W. R., & Rollnick, S. (2013). *Motivational interviewing: Helping people change* (3rd ed.). New York, NY: Guilford Press.
- 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*, 19(1), 73–78. Retrieved from http://www.impact.arq.org/doc/kennisbank/1000011453-1.pdf
- Park, C. L., & Folkman, S. (1997). Meaning in the context of stress and coping. *Review of General Psychology, 1*(2), 115–144. doi:10.1037/1089-2680.1.2.115
- Paton, D., Violanti, J. M., Burke, K., & Gehrke, A. (2009). *Traumatic stress in police officers. A career-length assessment from recruitment to retirement.* Springfield, IL: Charles C. Thomas.
- Pearlman, L. A., & Saakvitne, K. W. (1995). Treating therapists with vicarious traumatization and secondary traumatic stress disorders. In C. R. Figley (Ed.), *Compassion fatigue: Coping with secondary traumatic stress disorder* (pp. 150–177). Levittown, PA: Brunner/Mazel.
- Plomp, L. M. (1997). Confronting unfixable suffering: The lived experience of police officers. Unpublished master's thesis, University of British Columbia, Vancouver, Canada.
- Ronan, W. W., & Latham, G. P. (1974). The reliability and validity of the critical incident technique: A closer look. *Studies in Personnel Psychology, 6*(1), 53–64. Retrieved from http://psycnet.apa.org/psycinfo/1975-02063-001
- Rosenbaum, M., & Jaffe, Y. (1983). Learned helplessness: The role of individual differences in learned resourcefulness. *British Journal of Social Psychology, 22*, 215–225. doi:10.1111/j.2044-8309.1983. tb00586.x
- Ruzek, J. I. (2006). Bringing cognitive-behavioral psychology to bear on early intervention with trauma survivors: Accident, assault, war, disaster, mass violence, and terrorism. In V. M. Follette & J. I. Ruzek (Eds.), *Cognitive-behavioral therapies for trauma* (2nd ed., pp. 433–462). New York, NY: Guilford Press.

- Salston, M. D., & Figley, C. R. (2003). Secondary traumatic stress effects of working with survivors of criminal victimization. *Journal of Traumatic Stress*, 16(2), 167–174. doi:10.1023/A:1022899207206
- Sarason, I. G. (1975). Anxiety and self-preoccupation. In I. G. Sarason & C. D. Spielberger (Eds.), Stress and anxiety (Vol. 2, pp. 27–44). New York, NY: Halsted Press.
- Sarason, I. G., Johnson, J. H., Berberich, J. P., & Siegel, J. M. (1979). Helping police officers to cope with stress: A cognitive-behavioral approach. *American Journal of Community Psychology*, 7(6), 593–603. doi:10.1007/BF00891964
- Sewell, J. D. (1993). Traumatic stress of multiple murder investigations. *Journal of Traumatic Stress*, 6(1), 103–118. doi:10.1007/BF02093365
- Thoits, P. A. (1983). Multiple identities and psychological well-being: A reformulation and test of the social isolation hypothesis. *American Sociological Review, 48,* 174–187. doi:10.2307/2095103
- Van der Kolk, B. A. (1996). The body keeps the score. In B. A. Van der Kolk, A. C. McFarlane, & L. Weisaeth (Eds.), *Traumatic stress: The effects of overwhelming experience on mind, body, and society* (pp. 214–241). New York, NY: Guilford Press.
- Violanti, J. M., Andrew, M. E., Burchfiel, C. M., Hartley, T. A., Charles, L. E., & Miller, D. B. (2007). Post-traumatic stress symptoms and cortisol patterns among police officers. *Policing: An International Journal of Police Strategies and Management*, 30(2), 189–202. doi:10.1108/13639510710753207
- Wester, S. R., & Lyubelsky, J. (2005). Supporting the thin blue line: Gender-sensitive therapy with male police officers. *Professional Psychology: Research and Practice*, 36(1), 51–58. doi:10.1177/1098611109348473
- Whisman, M. A. (1993). Mediators and moderators of change in cognitive therapy of depression. *Psychological Bulletin*, 114(2), 248–265. doi:10.1037/0033-2909.114.2.248
- Woolsey, L. (1986). The critical incident technique: An innovative method of research. Canadian Journal of Counselling, 20(4), 242–254. Retrieved from http://cjc.synergiesprairies.ca/cjc/index.php/rcc/article/view/1419

Appendix A

Credibility Checks for the Enhanced Critical Incident Technique

The descriptions below of the credibility checks for the CIT/ECIT research method are based on material the reader can find in Butterfield et al. (2005); Butterfield et al. (2009); Flanagan (1954); and Woolsey (1986). They are listed in the order the checks would typically be conducted.

- 1. Audio-recording interviews. This has to do with the descriptive validity of the data, and specifically with the accuracy of the account of what participants have said. If the account is not accurate, then it is posited that the data analysis and subsequent results are not accurate. The accuracy of the account is established in a CIT study by audio- or video-recording the interviews, having them transcribed verbatim, and working off the transcripts for the data analysis.
- 2. Interview fidelity. This credibility check is related to how well the researcher adheres to the interview guide and to the principles of CIT interviewing. This is established by having an expert in the CIT research method listen to the first interview and a previously agreed-upon sample of subsequent taped interviews to ensure the interviewer is consistently following the interview guide, asking probing questions for clarification without prompting, and eliciting appropriate support information

- (importance and examples) for the critical incidents and wish list items mentioned by participants. This step is intended to increase consistency in a CIT study where new researchers or multiple research assistants may be conducting the interviews.
- 3. Independent extraction of critical incidents. This credibility check involves someone other than the researcher examining 25% of the transcripts and independently identifying the critical incidents and wish list items. These are then compared to the critical incidents and wish list items extracted by the researcher. The higher the match rate, the greater the credibility is of the claim that the incident was important to the aim of the activity being studied.
- 4. Exhaustiveness. Flanagan (1954) defined exhaustiveness (or redundancy) as the point at which no new categories need to be created to fit the critical incidents and wish list items. It is considered a sign that the domain of the activity being studied has been adequately covered.
- 5. Participation rates. Participation rates are calculated for each category once all critical incidents and wish list items have been placed into it. The established standard for a category to be deemed viable is a 25% participation rate or greater. Participation rates are calculated by dividing the number of participants who cite items in a category by the total number of participants in the study, then multiplying that number by 100 to report it as a percentage.
- 6. Placing incidents into categories by an independent judge. This check is intended to test the robustness of the category scheme and the operational definitions. It entails giving a person other than the researcher 25% of the helping, 25% of the hindering, and 25% of the wish list items along with the categories and their operational definitions. This independent judge places the incidents and wish list items into the categories. The placement is compared with the researcher's placement. The higher the concordance rate, the greater the viability of the category scheme is thought to be. A match rate of 80% or greater has been established as the standard to meet.
- 7. Cross-checking by participants. This occurs after the data from the first interview have been analyzed and the critical incidents and wish list items placed into the categories. The purpose of this is to ensure participants' experiences have been represented accurately by the researcher, and consists of several steps. First, the participant is asked to review the critical incidents and wish list items extracted from the interview by the researcher to ensure they are correct. Next, the participant is asked to review the categories into which the critical incidents and wish list items have been placed to determine whether the categories make sense. Finally, the participant is asked to comment on the category titles and definitions to ensure the categories accurately represent their experiences. If a participant is unsure about whether an item is a critical incident or wish list item, additional context from the interview may be offered to

- the individual to help them make a determination. If the participant ultimately decides that an item listed is not a critical incident or wish list item, it is not included in the final data analysis report. Lastly, this discussion with participants allows the researcher to follow up on any items from the original interview that appear to be critical incidents or wish list items for which supporting information was not obtained.
- 8. Expert opinions. Two experts are asked to review the categories that have been created to comment on whether they think they are useful, whether they are surprised by any of the categories, and whether there is anything missing based on their experience. The rationale for this is that their agreement with the categories enhances the credibility of the results.
- Theoretical agreement. This credibility check has two parts. The first is 9. making explicit the assumptions underlying the study, which are stated during the planning and proposal stage of the research project. These assumptions are then scrutinized in light of the available scholarly research to see if they are supported. The second part of theoretical agreement is comparing the categories that have been created from the data against the scholarly literature to see if they are supported. Support for the categories increases the trustworthiness of the findings. However, it is important to note that if a category found in a CIT study is not supported by the literature, it does not necessarily mean the category is not sound. Given the exploratory nature of the CIT, it could mean the researcher has uncovered something new relative to the domain being studied and it therefore may warrant future research. In such situations, the role of the researcher is to examine the categories and make reasoned decisions about what the theoretical agreement (or lack of it) means.

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