

Giving Voice to Officers Who Experienced Life-Threatening Situations in the Line of Duty: Lessons Learned About Police Survival

SAGE Open
July-September 2018: 1–13
© The Author(s) 2018
DOI: 10.1177/2158244018800904
journals.sagepub.com/home/sgo
 SAGE

Marian Pitel¹, Konstantinos Papazoglou², and Brooke Tuttle³

Abstract

Given the high-risk nature of police work, officers are often exposed to life-threatening critical incidents in the line of duty. The present study uses qualitative methods to explore the experiences of police officers ($n = 10$) during and after life-threatening incidents as well as the strategies they utilized to cope with these experiences. In particular, the participants, who were all operational police officers during the index incidents, took part in in-depth, semi-structured interviews consisting of open-ended questions. These interviews were recorded, transcribed, verified, and then examined to identify themes, using Denzin's approach for extracting interactional features between narratives. Several common themes between the officers' stories were identified and organized into broader clusters of (a) experiences during life-threatening situations, (b) strategies utilized during life-threatening situations, (c) experiences after life-threatening situations, and (d) strategies utilized after life-threatening situations. Family, clinical, and organizational implications are discussed, with a unifying conclusion that highlights the importance of collaborative efforts to support officers in recovering from life-threatening situations. Finally, future research that (a) encourages studies of qualitative nature exploring the research questions with larger sample sizes and (b) investigates the interaction between family, clinical, and organizational sources of support is recommended.

Keywords

police work, trauma, survival, life-threatening situations, resilience, adaptability

I will tell you about some incidents that I have had, which made me realize that no matter how well-prepared you are, how well-trained you are, you cannot avoid getting in situations that you can't control . . . It will never go away, it will always be a . . . It would be a part of my life, but I've learned to live with it.

Police work is challenging and multifaceted due to competing expectations of officers to be both crime fighters and compassionate public servants (Chopko, 2011; Manzella & Papazoglou, 2014). Officers' mental, emotional, and physical health are tested as they oscillate between varying role demands, resulting from exposure to a wide range of field situations, including routine order maintenance calls to dangerous, critical incident response during active shootings, hostage situations, barricaded subjects, or terrorist attacks (Kingshott, Bailey, & Wolfe, 2004). Notwithstanding officers' ability to cope with trauma of acute life-threatening stress, they also face demands of effectively managing cumulative stress associated with police work (Papazoglou, 2013). Line-of-duty stress accumulates throughout an officer's career and is amplified by the organizational stressors of policing. Law enforcement agency hierarchy and bureaucracy, combined with shift work, long hours, being

away from family, and interpersonal stress, can have deleterious effects on officer health over the course of their career (Fagan, 2015; Gershon, Lin, & Li, 2002; Komarovskaya et al., 2011; Slate, Johnson, & Colbert, 2007; Violanti & Aron, 1993).

When officers are repeatedly exposed to life-threatening stress, they are at greater risk of negative physical and mental health outcomes. These potential negative outcomes include high blood pressure, cardiovascular disease, irregular sleeping patterns, anxiety, depression, and post-traumatic stress disorder (PTSD; Hartley, Burchfiel, Fekedulegn, Andrew, & Violanti, 2011; Lucas, Weidner, & Janisse, 2012; Marmar et al., 2006; Violanti et al., 2009). Furthermore,

¹University of Guelph, Ontario, Canada

²Ontario Ministry of Community Safety and Correctional Services, Ontario, Canada

³Oklahoma State University–Tulsa, USA

Corresponding Author:

Konstantinos Papazoglou, CPsych (Supervised Practice), Clinical&Forensic Psychologist, Ontario Ministry of Community Safety and Correctional Services, 109 McLaughlin Rd. S., Brampton, Ontario, L6Y 2C8, Canada.
Email: kons.papazoglou@mail.utoronto.ca



Marmar et al. (2006) found that greater personal threat during critical incidents is linked to greater likelihood of PTSD symptoms. The experience of great personal threat during a critical incident has been linked to greater risk of peritraumatic dissociation and distress, or reactions during the traumatic experience, as well as hyperarousal symptoms associated with PTSD. An officer's recovery environment following the trauma may also elevate PTSD symptoms. For instance, symptoms may be further elevated in situations where officers have lower social support and higher routine work stress in the period following the trauma (Marmar et al., 2006).

Shared experiences among officers who have been involved in life-threatening incidents include intrusive thoughts, nightmares, hyperarousal, and avoidance following the incident. Conversely, other officers have demonstrated resilience following critical incidents and have reported experiencing more fulfillment in their careers, increased positive feelings, increased meaningful relationships, and the development of a sense of personal strength (Broome, 2014; Chopko & Schwartz, 2013). Officer resilience has been shown to involve a meaning-making process. Meaning-making facilitates officers' resilience as officers make sense of the event, their decision-making process during the event, seek to understand the larger context of the critical incident, and evaluate the event against their personal worldviews (Broome, 2014). Although researchers often highlight the negative experiences that follow trauma exposure, these findings demonstrate that survivors can also—and often do—endure positive experiences.

In line with this perspective, researchers are investigating ways to increase positive experiences during recovery from trauma. For instance, adaptive coping skills related to breathing and positive thinking have been investigated and proven to reduce officers' stress responses during resilience training for SWAT officers on critical incident scenarios (Andersen, Papazoglou, Koskelainen, et al., 2015). Seeking social support and engaging in social interaction with family and colleagues have further contributed to adaptive coping (Evans, Pistrang, & Billings, 2013). Effort toward growing spiritually after traumatic incidents has also been associated with post-traumatic growth (PTG) or positive change that occurs despite experiencing negative symptoms associated with the trauma (Chopko & Schwartz, 2013). While research has demonstrated the breadth of outcomes for officers involved in critical incidents, less is known about the connection between officer coping and adjustment as it relates to health and psychosocial outcomes across various domains of functioning for officers.

Aims

The purpose of this study was to explore officers' experiences during and after life-threatening critical incidents. This study sought to examine strategies utilized by officers during life-threatening incidents, to explore mechanisms leading to

officers' adjustment in the aftermath of trauma, and to explore officers' health experiences, psychosocial experiences, and work experiences following critical incidents.

Method

Participants

The participants ($n = 10$) in the current study were all operational police officers during the index incidents; at the time of the interviews, all participants were either retired or on active duty. All participants identified as Caucasian. Nine participants were male and one participant was female. On average, they served as operational police officers for 23 years (range: 10-38 years), with ranks varying from patrol officer to unit commander. Three study participants were from North America (United States and Canada), and seven participants were from Europe. Despite the geographical heterogeneity of the sample group, the authors contend that the present study makes a crucial contribution in our understanding of how life-threatening experiences affect officers' quality of life and ability to do their jobs. This last perspective is enhanced by the fact that the current body of knowledge in this area of research is limited. The officers who were interviewed for the present study reported experiencing the following life-threatening situations: being shot and severely wounded in the line of duty ($n = 3$ officers), engaging in a shooting situation but avoiding injury ($n = 2$ officers), being involved in a shooting incident in which they fatally shot the suspect ($n = 2$ officers), halting a mass-shooting incident in a public place ($n = 1$ officer), and being held hostage by armed guerrillas while serving as part of a peace-keeping mission ($n = 2$ officers).¹

Procedures

Facing the challenge to recruit participants. Even though exposure to critical incidents is inherent in police work, recruiting police officers who have experienced a life-threatening situation to participate in a research study is a challenging process. For instance, some officers may be reluctant to be interviewed because they fear that it may trigger PTSD-related symptoms, whereas others may simply not want to share their experiences with anyone. In addition, the authors of the present study faced challenges in identifying and recruiting officers who had experienced life-threatening critical incidents; consequently, law-enforcement-related professional networks (e.g., Blue Circle, Badge of Life Canada, European Police College Medical and Psychology Network) were utilized to distribute invitations to participate in this study. Nevertheless, the recruitment process was greatly aided by the fact that the second author is a former uniformed police officer who presently conducts research in collaboration with police organizations across the United States, Canada, and

Europe. This author's prior police experience aided in fostering a sense of trust between himself and the respondents. Building trust and rapport was particularly important for this study as many respondents were reluctant to be interviewed by an "outsider" due to concerns that someone without police experience would be unable to comprehend the situations being described or would distort the veracity of their experiences in the line of duty and, in turn, would be unable to "give voice" to their experiences.

The study participants were recruited using purposive snowball sampling, which is a type of nonprobability sampling that is utilized when researchers aim to study a certain issue and, hence, identify participants who are able and willing to provide primary data in the form of personal experiences and knowledge (Browne, 2005; Tongco, 2007). As mentioned above, the officers—especially those who had been exposed to life-threatening situations—were often reluctant to share personal information. Therefore, law enforcement professional networks (e.g., Blue Circle, Badge of Life Canada, European Police College Medical and Psychology Network) and intermediaries (e.g., police psychologists, police supervisors, police trainers) played a vital role in establishing the second author's "insider" status and promoting his credibility and trustworthiness as an ally who could "give voice" to what was going to be shared during the interview session.

Conducting interviews. Participation in the present study was voluntary,² and those who participated had to be operational police officers at the time of the index incident, which was supposed to refer to a life-threatening situation. That is, officers who were interviewed had either been severely injured or their lives had been placed in imminent jeopardy during the life-threatening situation (index incident) discussed during the interview session.

The second author conducted the interviews in person. At the beginning of the session, the participants were informed about the aims of the interview and the purpose of the study. Written consent was then obtained for their participation. In most cases, the participants were informed that their agency's clinical psychologist or psychiatrist was aware of the interview and would be available to provide psychological support should the participant wish to talk to them after the interview session. In other cases, participants preferred to inform their own clinician about their participation in the interview session; these participants largely opted to consult with an external mental health professional because they had been working with these clinicians since experiencing their traumatic incident. In addition, all participants were informed that they would be assigned pseudonyms and that any personal and professional identifying information would be concealed to ensure their anonymity.

The interview sessions were conducted at a location preferred by each participant (e.g., family house, police department office, conference room), and each session lasted an average of 2 hr (range: 1.5–3.5 hr). All participants were informed at the beginning of the interview session that they were welcome to interrupt and take a break if they deemed that as necessary for their active participation in the interview session. They were also informed that they could cease participation at any time, should they desire. The interview rooms were equipped with a conference-type rectangular table and chairs, and all rooms had windows and were well-lit. Furthermore, the interviewer ensured that the interview room was quiet with minimal external sounds and that the room temperature was on average 75°F or 24°C. These conditions were selected to minimize distractions or potential restlessness caused by external, environmental factors.

The interviews were in-depth and semi-structured, consisting of open-ended questions that encouraged natural, spontaneous, and flexible conversations; this format was intended to make the participants feel more comfortable in sharing their experiences. In cases where the discussion began to deviate from the main topic of the interview, the interviewer actively redirected the conversation back to the intended interview topics. Nonetheless, participants were aware that they could skip a question or avoid answering a question if they did not feel comfortable doing so. Allowing participants to refrain from answering certain questions allowed the interviewer to minimize the possibility of emotional harm and to make participants feel comfortable in sharing as much information as they were willing to.

Each interview was voice-recorded and transcribed by volunteer research assistants who had been recruited by the second author. In addition, content of the transcribed interviews was verified for accuracy by another volunteer research assistant under the supervision of the second author. Following Denzin's (1989) methodology for approaching the phenomena in a contextual manner, the researchers conducted multiple, thorough line-by-line readings and textual analyses of the interview transcripts before coding them. The identified codes were subsequently combined to help the researchers identify the recurring themes, which would be used to answer the present study's research questions (Glaser & Strauss, 2009). To maintain a diversity of perspectives and voices during the analysis of the interview transcripts, the second author consciously recruited a culturally and experientially diverse team of assistants. Specifically, the analysis team consisted of both males and females, and at least one team member was from a racial, ethnic, and/or sexual minority group. To ensure reliability, the coding and development of the themes for each interview transcript were constructed using the work of at least three members from the analysis team. In every case, the findings were validated only after intercoder agreement had been reached by all team members.

Results

Very dangerous incidents? Yeah, more. I have experienced enough . . . I don't need more. I don't need more.

Four main themes emerged from the data: (a) experiences during life-threatening situations, (b) strategies utilized during life-threatening situations, (c) experiences after life-threatening situations, and (d) strategies utilized after life-threatening situations. The following sections highlight each of these themes and their content using quotations from the present study's interviews.

Experiences During Life-Threatening Situations

Three subthemes emerged under the broader theme of experiences during life-threatening situations.

The first cluster of subthemes can be categorized as cognition-related reactions. Many participants reported thinking about death or severe injury during the traumatic event. For instance, one participant stated, "I pictured it all in my head: Dinner table, Thanksgiving, Christmas time . . . me not there. The family's there; dogs are running around and I wasn't there. I pictured my girlfriend walking my dogs without me." Furthermore, participants reported "black spots"—memory lapses or lapses in consciousness—during the traumatic experience. Participants also reported time distortion as a phenomenon that occurred during the traumatic incident. A participant stated, "Some periods of time in there felt an instant and some periods of time in there felt like they were half an hour to an hour long." Finally, the experience of detachment or disassociation was common among participants. One participant's experience encapsulates this phenomenon when he or she stated,

There was almost no connection with my body. My body, I think, was—The best way I could describe it was, like, I was looking through, like, a camera, like a video. It was like my body was just acting autonomously.

Many of the participants reported physiological reactions during the event; these physiological reactions may explain, at least in part, the emergence of the cognitive reactions listed above. On this topic, one participant stated,

You know, heart starts pumpin', adrenaline starts pumpin', 'cause we know we're going into a—Now, it's a . . . it's not a typical drug sale like we're used to going after. It's someone with a gun, which is . . . raises the stakes a little bit."

He told us that, during the chase, this physiological response continued: "I was tense . . . I know I was sweatin'. And I know it was instant, 'cause we weren't physically—You know, I ran ten feet to the door, that was the only real physical thing I did.

Beyond cognitive and physiological reactions, participants also reported having reactions that were unique to the role and training of a police officer. For instance, one participant stated, "Now at the time of the shooting, I reacted the way I was trained. So, training is very important, I truly believe that we need to train police officers for muscle memory."

It appears, then, that the experiences of the participants during life-threatening situations can be separated into categories of cognition-related (e.g., thinking about death or injury, lapses in memory or consciousness, detachment or dissociation) and physiology-related reactions as well as manifestations of police role and training. For supplementary quotations, see Table 1.

Strategies Utilized During Life-Threatening Situations

Three subthemes emerged under the broader theme of strategies that helped during the traumatic event.

The first subtheme pertaining to this topic is religiosity. Many participants reported feeling comfort in or obtaining a surge of strength from their faith or relationship with God. For instance, one participant stated, "I asked God to be with me . . . God is the reason I didn't get shot. The gunman shot at me several times, but missed. I know that is because God protected me."

In contrast, other participants found confidence not from their faith or religion but within themselves. When asked what kinds of thoughts helped them survive the incident, one participant stated, "I'm not going to die. I'm going to kill this guy, he's not going to kill me . . . I'm not gonna die, he's going to die."

Finally, some officers reported that regaining control over their physiology helped them cope with the incident. For instance, a participant stated, "Sometimes you need not to react in order to survive . . . Overall, one needs to be able to remain calm."

The sources of support during the traumatic incident varied in type. One source of support was external (i.e., religiosity), whereas the others were internal (i.e., self-confidence, physiological control). However, one commonality emerged: Regardless of source, these aspects helped the participants to successfully deal with the traumatic incident. For supplementary quotations, see Table 2.

Experiences After Life-Threatening Situations

Five subthemes emerged under the broader theme of experiences after traumatic event.

A cluster of subthemes can be categorized as psychological symptoms. Many participants reported experiencing sleep-related problems following the event. For instance, one participant stated,

Table 1. Supplementary Quotations From Study Participants Pertaining to Experiences During Life-Threatening Situations.

Theme	Quotation
Experiences during life-threatening situations	
Cognition-related reactions	You are going to die and the first thing that you think of is your own people. I'm sittin' here, thinkin' to myself, "I'm gonna get shot."
Physiology-related reactions	I was tense . . . I know I was sweatin'. And I know it was instant, 'cause we weren't physically—You know, I ran ten feet to the door, that was the only real physical thing I did. I walked out, everything was almost muted at that point. I don't know if my ears were ringing a little bit, but it was almost that sensation like, you know, you hear a loud sound like a gunshot without earplugs in. The next hour was very disconnected from reality. Sometimes I couldn't hear what people were saying . . . I was [having] tunnel vision.
Manifestation of police role and training	Apparently, and I found this out later, that I yelled "gun" right before I shot . . .

Table 2. Supplementary Quotations From Study Participants Pertaining to Strategies Utilized During Life-Threatening Situations.

Strategies utilized during life-threatening situations	
Religiosity	Somebody might call it randomness, a religious person might say that God helped me . . . it is the way you view things . . . we literally survived and it was a matter of millimeters . . . even doctors were surprised they could not believe how we survived . . .
Self-confidence	[With multiple exposure to threatening situations] You get professionally better; more efficient, more self-confident.
Physiological control	I was somehow losing my consciousness and I was trying to stay awake . . . because I was afraid that if became unconscious . . . I would die . . . I was trying again to get strength and focus on something that would keep me awake . . .

It felt like I would fall asleep in exhaustion for about five minutes. Then, I would wake up in a panic and I would pace back and forth for hours until my legs were exhausted again physically and then I would fall back asleep and wake up five minutes later and it would start all over again and it was like that all the time.

Many also reported difficulty initiating or maintaining attention. One participant stated,

I could not hear them and not because I was losing my hearing, but because I could not focus. I was somewhere else in my mind. This lasted for several weeks. I had no idea what was happening to me.

Unexplainable negative affect was experienced by some participants, as captured by this quotation from one participant: "I was crying all the time . . . and for no reason my world started to pshhhhh . . . everything, I was crying for nothing." Similarly, participants reported being more irritable ("But what was getting worse was my, um, my tension . . . I'd be edgy for nothing . . . I would get mad about things I don't care about . . . I found a lot of things, like irritability . . .") and hypervigilant ("For my whole career on the street after that, every time I turned a corner, I was ready for a bank robbery. I knew where every bank was, where every gas station was,

where every pharmacy was in my area—so every time I turned a corner, I was ready for that split-second decision that had to be made"). Others reported having new beliefs about themselves and the situation such as immense responsibility over the outcome of the traumatic incident and doubts about their career.

Subthemes related to participants' recollection of the event were also discovered. Many participants reported gaps or distortions in memories when they attempted to recall the traumatic event. One participant, for example, stated, "Nobody knows what happened . . . except us who were there . . . even us we have gaps in our memories . . ." In contrast, other participants reported being able to recall memories fully but with a hazy, "dream" or "movie"-like quality.

A third cluster of subthemes is related more to the lack of helpful support participants received from different sources. Many participants reported either not receiving support or disliking the support they did receive from their organization. One quotation from a participant captures this finding:

You're an active cop, they love you. Until something goes wrong . . . You feel like you're being punished. Again, it's one of those things where you're treated like a . . . like a number. You're treated like a pariah . . . You know, it's like . . . I'm literally just a file on a desk.

Support received from sources outside of the law enforcement organization was met with similar criticism by officers. One participant expressed discontent about a priest's dismissive reaction, whereas another participant expressed discontent about a physician's seeming lack of knowledge about post-traumatic processes.

Some participants also reported that the life-threatening situation had negative effects on their family relationships. To put this matter into perspective, one participant stated, "... You see families fall apart because it's easier to be angry with someone you love than with someone you don't love." Beyond family issues, another negative experience shared unanimously by the participants is persisting holistic after-effects. One participant referred to recovery from trauma as "a long, long, long journey . . . and I am still travelling and . . . I am still travelling . . . today."

Despite the negative experiences that many participants endured following the traumatic incident, many reported that it was necessary to "pretend" to be healthy. This need for a façade of wellness is encapsulated by this quotation from one participant: "There was pressure for me to appear to be healthy at work . . . Extremely angry some minutes, crying the next minute . . . yet putting on a façade of, 'I am fine, I can do the job at work'."

Overall, participants reported a range of experiences following exposure to a traumatic incident. These experiences range from internal problems (e.g., psychological symptoms) to problems involving other people (e.g., family issues). For supplementary quotations, see Table 3.

Strategies Utilized After Life-Threatening Situations

Two subthemes emerged under the broader theme of strategies that helped after the traumatic event.

A set of subthemes relate to self-initiated coping strategies. Many participants reported seeking positive experiences to overcome the trauma experiences. Specifically, one participant stated the importance of "having laughs in their lives . . . avoid being miserable in life and focus on having a good quality of life." Others reported engaging in self-empowerment. The significance of self-empowerment is captured by this one quotation:

Whether you like it or not you have to overcome this . . . to overcome the whole situation by the effort that you make to support your family, your siblings, when they come to visit you (in the hospital) they should not see you lying in bed . . . and you should show them that you can stand on your own feet.

Similarly, others attempted to reframe the situation positively to help with coping. For instance, one participant shared the following experience:

. . . It was on about the sixth year [after the incident], and I remember stopping at the red light and it was a beautiful, sunny day; people walked around with shorts and t-shirts. And I could hear music in the background and I thought, "When did the sun started shining?" And I realized at that point that . . . the only damage that was happening to me was that I was staying angry. I was causing the problem to myself now. I was my own worst enemy.

Other self-initiated coping strategies endorsed by participants include physical activity, cooking, mindfulness, and writing.

Another set of subthemes pertains to coping strategies that involve other people. Many participants found it helpful to receive support from others who have gone through similar negative experiences. One participant stated,

So, we called ourselves the "heroes and zeroes." You were a "hero" because you got shot and everybody felt sorry for you or you were a "zero" 'cause you shot somebody and you were investigated for a criminal offense . . . But what we realized is that whether you were a "hero" or a "zero" when we talked to each other, we felt the same.

Some received help from more formal supports. For instance, a participant stated,

What was important for me was that [the clinician] said to me, "It's quite normal. What you have. . . the experiences that you have had . . . the way you react—nothing unnatural in that. It's quite normal to react in the way that you did." Just to hear him tell me, that the way you react is normal.

Others found support from family members also helpful. For example, one participant shared a conversation they had with their therapist about family support that showcases this point powerfully:

He [the therapist] said, "Do you love your wife?" I said, "Very much so." He said, "Are you happy with your family life?" I said, "Very much so." He [the therapist] said, "I'm gonna give you some exercises. One of the exercises is that every time you feel overwhelmed, I want to sit down with your wife on the couch and wrap your arms around her and say, 'I need you'. Just be quiet and just let her help you" . . . So, we just hugged each other and that became my medicine. Constant hugging. Constant hugging.

Although all participants endured negative experiences after the incident, there is no shortage of positive support or experiences also endured by the participants. Highlighted in this section was a plethora of coping strategies, ranging from self-empowerment to peer support, that participants endorsed as helpful in their recovery from trauma. For supplementary quotations, see Table 4.

Table 3. Supplementary Quotations From Study Participants Pertaining to Experiences After Life-Threatening Situations.

Experiences after life-threatening situations	
Psychological symptoms	<p>I was totally abandoned . . . It's very real . . . I've got post-traumatic stress disorder. And it's not pleasant . . . I'm just now, six years later from the shooting, starting to emerge from the cave I've been hiding in.</p> <p>I got in my jeep and started driving . . . and this guy's driving, like, right behind me flashing his high-beams and I was just enraged, I felt in a very threatened. Like, "I'm mad because I feel like you're gonna hurt me" . . . And it was just . . . typical city driver.</p> <p>You can't think about happy thoughts anymore after . . . You feel great hate feelings towards the perpetrator . . . You get aggravated more easily.</p> <p>It's easier to become upset.</p> <p>I was not participating in anything . . . I was lying down, I couldn't eat, I couldn't sleep, I couldn't . . . and I could lie on the couch, looking in the air for hours . . . my wife said "Hey, what about the lawn . . . ?" "Maybe tomorrow, maybe tomorrow . . ." But this [trauma] wouldn't go away. I felt that when the children was doing something wrong, I was very (snaps fingers) quickly to be angry.</p> <p>I was really sick from not sleeping and I found it difficult to sleep. I woke up, fell asleep, woke up so many times during the night . . . I hated the look of my bed; that became kind of my enemy.</p> <p>I would close my eyes but I couldn't sleep . . . forever, it took forever.</p> <p>If I have some problems . . . it is always reflected in my quality of sleep. Sometimes I wake up at like 4am thinking . . .</p>
Distortions or gaps in memory of event	<p>So, I got all this happening at one and there's this big tree in my way between me and the bad guy and the tree is in my way . . . I went back a week later [after the incident] to look at that tree. That thing wasn't even an inch in diameter and I thought this huge tree was in the way.</p> <p>I mean, if you go into the tape . . . the time frames are all weird. I've had a hard time figuring out dates and months; it might all be jumbled and confusing.</p>
Lack of support from organization and other sources	<p>I realized that you stand by yourself . . . You are no longer part of . . . no matter how tight you are, you stand by yourself . . . The police family—you know, we're all brothers and sisters—is only as strong as they are healthy. Once one of them is sick, not so much anymore, because nobody wants to sink with the sick guy.</p> <p>Many times, [the managers] didn't understand our situation . . . they would say: "we need to move on" . . . and you see their ignorance.</p> <p>My incident was not reported as a work-related incident . . .</p> <p>Nobody wants to give you a straight answer . . . Why won't you tell me?"</p> <p>The police department brings you in and sits you in front of, you know, a psychologist and tells you that anything you tell them is not confidential. And you're so afraid, between the courtside, you know the actual legal side . . . and the department side.</p> <p>I was offered absolutely nothing by way of psychological assistance. I wasn't even asked if I needed such help . . .</p> <p>The way they treat you is punitive . . . I didn't rob a bank, I didn't choose to drink and drive, I didn't choose to beat my wife or my girlfriend.</p> <p>You know, the criminal trial is done, but there is a department trial . . . they look at your duty status . . . where they're gonna reassign you.</p> <p>They make you feel like a bastard child, like, "You can't hang out with this guy, he's bad news." You find out who your real friends are . . . All of a sudden, you get jammed up, and they don't call you. Then, there's the guys that do and sometimes you're surprised about who that is.</p>
Family problems	<p>I came home one day and my wife said, "What would you like for supper?" . . . And I blew up and I said. "Why are you asking me what to make? Why do I always have to make decisions?" . . . It was moment when the decision-making process should not have been asked of me and I yelled at her, "Last time I made a decision, I killed somebody." And I felt so bad . . .</p> <p>You can't tell everything to family because, you know, they don't understand everything . . . It's really hard to try to explain [to] them. Even though a few of them are health care professionals, the situations are pretty different. To get others to understand, it's really difficult.</p>
Façade of health and wellness	<p>I was thinking if don't . . . If I tell them about it, will they look at me in another way? Will they say, "Oh he's a pussy."</p> <p>I was recalling this incident in parts and many times . . . in general though it is a painful experience, an experience that takes time to get out of the mind and . . . whether you want to or not, you cannot avoid that . . . it's very hard . . . you were almost dead . . . and there is no worse feeling than that . . . you re-experience that, and the other people are asking you "are you ok?" and you are telling them "yes I am fine . . . I'll be fine in a bit" something like that.</p> <p>. . . I was crying and I was thinking about [the incident] . . . and I didn't tell them that I was crying—but they thought it was tears of joy.</p>

Table 4. Supplementary Quotations From Study Participants Pertaining to Strategies Utilized After Life-Threatening Situations.

Strategies utilized after life-threatening situations	
Self-initiated coping strategies	<p>Because I think if . . . if I would have let the experience take control, I don't know where I would have ended. I took control and I am still here.</p> <p>I hung on to a tree one time and I thought to myself, this tree has been here maybe a 100 years and it's looking very well in spite of what anybody else thinks. So, why can I not live in this world, despite anybody thinking so my tree became my favorite buddy, I'd hug the tree and I'd say, "you . . . you are showing me how I should live . . ."</p> <p>Writing is my therapy . . .</p> <p>The main point is healthy. That you . . . keep yourself healthy. I train a lot.</p> <p>It should be . . . walking, and, walking every day, for example, going swimming, and wandering in forests and something like that.</p> <p>I like to cook . . . I have a beautiful garden designed to be peaceful and stress free . . .</p> <p>I just sit down and breathe and . . . be present. I'm thinking about that I'm sitting down, and I'm breathing, and I'm thinking that now I'm here. It's, um, how can I call it? I transform my mind this moment. Now we are here . . . I'm not in the situation anymore.</p> <p>It's very easy. I can do [that] in just a couple minutes . . . I just sit down and breathe and . . . be present. I'm thinking about that I'm sitting down, and I'm breathing, and I'm thinking that now I'm here. It's, um, how can I call it? I transform my mind this moment. Now we are here . . . I'm not in the situation anymore.</p> <p>Then [my physiology] automatically goes down.</p>
Other-involved coping strategies	<p>People who worked on the street, really, they were able to understand our situation . . . the first day in the hospital a person came . . . who was at the same precinct, but he was working on a different shift, we didn't know him in person and . . . he was hugging us and . . . you were looking at him and he was crying . . . we didn't know them, but because they had gone through similar situations they were able to understand . . .</p> <p>[Colleagues'] congratulations and their encouragement . . . and they made you feel good.</p> <p>We were together giving advice and recommendations to each other . . . we went through that together.</p>

Discussion

I've seen a lot of death by gunshots and . . . [The bullet] shreds your face or your chest or your arms or your legs. And that is shocking to see . . . But when we see it all the time, it's not shocking anymore. But . . . the psychologist is not going to know, they're not going to have a clue. No matter how descriptive you are, they're not going to get it . . . You would traumatize the therapist if they watched [videos of real death] but it's almost like you have to see the most graphic, violent deaths in order to understand what the cop or the soldier had to do . . . otherwise, they're not going to have a clue.

Although not uncommon in police work, traumatic experiences akin to the ones faced by the participants in this study can be deemed rare, especially when considered within the parameters of what the average person experiences in their lifetime. It is, therefore, important to uncover the commonalities between the participants' experiences of trauma to learn from these events as well as understand the processes of dealing with and recovering from these special occurrences.

The first set of paragraphs in the results section demonstrated that officers experience a multitude of reactions when confronted with a traumatic situation, including cognition-related and physiology-related reactions as well as manifestations of police role and training. This variety of reactions, however, fails to make clear which aspects of their

experiences were helpful to officers during these experiences. Therefore, the authors explored what strategies participants utilized during life-threatening situations that supported them in overcoming these traumatic situations. Similar to officer reactions during life-threatening events, the strategies that they utilized ranged in type, with some internally sourced (e.g., physiological control and self-confidence) and others externally sourced (e.g., religiosity).

Next, the authors explored the experiences of officers in various life domains (e.g., personal, family, and work) after the index traumatic incident was resolved. These experiences included psychological symptoms, gaps or distortions in memory, lack of helpful support, family issues, and a desire to "pretend" to be healthy. Nonetheless, the experiences of the participants following traumatic incidents were not entirely negative. They also reported engaging in coping strategies following the incident as an activity that helped them accrue experiences that were positive. Some of these experiences can be clustered around engagement in self-initiated coping strategies (i.e., self-empowerment, positive reframing, physical activity, cooking, mindfulness, writing, and seeking more positive experiences) and other experiences can be clustered around other-involved coping strategies (i.e., peer support, formal support, and family support). These various coping strategies were deemed helpful by the participants in countering the negative experiences they had following the life-threatening events.

Family Implications

Major themes from data analyses carry implications for officer adaptation across multiple levels of functioning to include the individual, family, and organizational level. Family relationships may be vulnerable to officers' psychological experiences following critical incidents. The psychological symptoms experienced by participants in this study such as sleep disturbances, difficulty maintaining attention, irritability, negative affect, and hypervigilance can have contagious effects on family relationship functioning. Experiences reported by officers in this study mirror predictors of negative relationship functioning from prior research. Reactivity to family interactions, disengagement, and an increase in negative emotionality have been shown to interfere with healthy family communication, family emotional climate, and relationship satisfaction (Neff & Karney, 2009; Roberts, Leonard, Butler, Levenson, & Kanter, 2013; Story & Bradbury, 2003). It is important for law enforcement families and mental health professionals to be aware of the influence that psychological experiences shared by officers faced with life-threatening stress can have on the family system.

Vulnerability of the family system notwithstanding, this study revealed the promotive nature of family relationships on officers' adaptation following life-threatening stress. Receiving support from family members was helpful for officers in this study during their recovery process. Physical touch emerged as evidence for the supportive role of family relationships in officers' adaptation. The exercise of hugging their spouse provided affirmation and comfort for one participant. Simple—but vital—behaviors of family members, such as hugging or embracing their officer, can be instrumental in an officers' adaptation process.

Families should be empowered by the finding that family support can facilitate the adaptation process. Furthermore, mental health professionals who work with law enforcement officers are encouraged to integrate the family into treatment planning. For example, self-initiated coping strategies used by officers in this study lend themselves to incorporation into family activities. Cooking and physical activity were noted by study participants as examples of self-initiated coping strategies. Incorporating officers' coping strategies into family activities could serve the dual purpose of officer coping and family relationship maintenance during the sensitive time period following a life-threatening incident.

Future research should explore family-level adjustment in the aftermath of critical incident response for police officers. A deeper understanding of the lived experiences of family members of law enforcement officers who have been involved in life-threatening incidents would provide insight into the interplay between individual and family-level factors associated with the adaptation process. Identifying common experiences and strategies employed by law enforcement families following critical incidents could allow for more targeted prevention, intervention, and treatment for officers and their loved ones.

Clinical Implications

The present study's findings indicated that officers experience a myriad of challenges in the line of duty. Depending on the circumstances, officers are mandated to protect civilians, their colleagues, and themselves if there is an immediate threat to their lives. The participants interviewed for this study reported experiencing complex forms of trauma in the line of duty, and they described the various effects on their health and well-being that occurred as a result. The results indicated that the participants experienced PTSD symptoms, depressive symptoms, sleep-related issues, and even substance-abuse-related issues following exposure to a traumatic incident. Furthermore, most participants reported experiencing problematic cognitive processes relative to index traumatic experiences. The current trauma literature (e.g., Difede et al., 2007; Foa, Hembree, & Rothbaum, 2007) contains a large number of studies that explore various approaches to treating cognitive-behavioral trauma in first responders and active and veteran military personnel who have been diagnosed with PTSD. The present study found that some participants reported a lack of emotional regulation (e.g., anger, irritability) after experiencing the index traumatic event. Interestingly, many participants also emphasized their physical reactions to the index traumatic incident, both during and after it. To this end, mental health professionals (e.g., psychologists, psychiatrists, social workers, counselors) who work with police officers may need to consider a holistic approach to treating trauma that focuses on both the body and the mind. When they are on duty, officers are often focused on body survival. Therefore, as has been previously suggested (Flannery, 2015), a multimodal clinical treatment approach that focuses on physical sensation as well as emotional and cognitive processes relevant to trauma experience should be considered. Mindfulness-based cognitive therapy (MBCT) is an example of a treatment approach that would be able to address the physical, cognitive, and emotional symptoms experienced by officers (Segal, Williams, & Teasdale, 2002; Williams, Russell, & Russell, 2008). Although initially developed for treating recurrent major depression, a pilot study with combat veterans successfully applied MCBT toward treating trauma exposure in an occupation that is similar to policing (King et al., 2013).

Moreover, the authors recommend that the rehabilitation process should continue on an ongoing basis after treatment has been completed. To this end, clinicians may supervise officers who have completed trauma treatment to ensure that their transition back into active duty is both gradual and successful. Furthermore, the authors strongly recommend that officers attend systematic post-treatment meetings and assessments with clinicians before returning to the line of duty. During these meetings, any outstanding trauma-related symptoms or organizational-related challenges may be addressed.

The authors suggest that the role of the clinician should not be solely focused on treatment. Mental health

professionals can also play an important role in developing and administering preventative interventions aimed at preparing officers for psychological survival in the streets (Andersen, Papazoglou, Arnetz, & Collins, 2015; Andersen, Papazoglou, Koskelainen, et al., 2015; Manzella & Papazoglou, 2014). Clinicians who work with police organizations can develop trauma-awareness programs and seminars aimed at increasing officers' awareness of the potentially toxic psychological effects that exposure to trauma can have on their mental and physical health and well-being. These programs can also help officers realize that physical or psychological responses to traumatic incidents are a normal reaction to an unusual situation. Increasing awareness on this topic will greatly aid in reducing the stigma surrounding trauma and trauma-related symptoms that often permeates police culture and will ideally increase support between officers. This would be a significant outcome as some of our study participants reported being ostracized by their own colleagues as a result of their trauma-related symptoms or experiences.

Most study participants referred to the crucial roles played by hope, religiosity/spirituality, and police training in helping them survive critical moments and life-threatening situations. The authors suggest that future research should explore the role of the aforementioned factors in officers' psychological survival during critical moments. Research in this area will improve our understanding and knowledge of how catalytic psychological factors contribute to officers' survival during critical moments. The knowledge obtained from this research could be useful in developing future police tactical training programs and officer preparedness training programs for responding to critical incidents.

Organizational Implications

As discussed in the previous sections, the study findings lend themselves to significant practical implications in clinical and family domains. Beyond these domains, there are also organizational implications. Many of the clinical and family recommendations discussed can be extended into the work context and applied at the organizational level. Recommendations for family members and family activities to be integrated into trauma recovery plans for the officers can be supported by police organizations. For instance, police organizations can give their members access to intervention programs that utilize family-based treatment strategies. FOCUS, a family resilience program recently developed by a team of researchers from University of California, Los Angeles (UCLA) and Harvard Medical Schools, is gaining traction for its focus on helping military families with parental exposure to acute or cumulative trauma (Saltzman, 2016; Saltzman et al., 2011). Through narrative sharing and in-depth discussions, families who participate in FOCUS build perspective-taking skills and mutual understanding, reduce cognitive distortions, and bridge estrangement between

family members. Although no formal trauma interventions for police families is known to the authors, police organizations can facilitate officer recovery by borrowing insights from programs, like FOCUS, that help families of workers in industries similar to policing. In line with this perspective, police organizations may find it beneficial to ensure that agency-wide trauma interventions offered by internal or external health and wellness professionals cover family perspective-taking skills, shared cognitions, and interpersonal dynamics, among other elements.

In addition to delivering family interventions in the workplace, police organizations may consider developing or implementing interventions that address the mental well-being of officers. In the past, trauma-awareness initiatives in police contexts have been well received by officers (e.g., Manzella & Papazoglou, 2014). Similarly, the Israeli army has applied trauma awareness initiatives in a military context by developing exemplary "mental health gyms" (Cobb, 2013). Mental health professionals attend training exercises conducted in these spaces, and they incorporate psychological techniques for helping the soldiers avoid trauma and build resilience. In addition, this approach has the added benefit of destigmatizing clinicians' role in the military context (Cobb, 2013). Police organizations would do well to follow the Israeli army example and establish their own "mental gyms" wherein law enforcement personnel can receive training that can fortify their health and well-being against the effects of trauma. Clinicians who participate in such programs will have the opportunity to increase their familiarity with police culture as well as to open channels of communication with police officers to stress the importance of considering their psychological needs. One prominent issue identified by some participants in the present study was that mental health professionals did not seem to comprehend their experiences because they lacked awareness of the unique nature of police work. Alternatively, other participants were skeptical about visiting a mental health professional (even though they were encouraged to do so by organizations and police clinicians) because they were afraid that they would not be able to provide adequate support. The authors contend that such issues can be resolved through psychological trauma awareness events and the establishment of "mental health gyms."

Finally, the authors recommend fostering a positive organizational culture in police organizations. Organizational culture refers to basic assumptions about how to think and feel about work situations that employees invent, discover, or develop through experiences within the organization (Alvesson & Sveningsson, 2015; Schein, 1984). As a few participants noted, the organizations they were affiliated with at the time of the traumatic incidents had cultures that were marked with assigning blame to officers for outcomes, particularly negative, of life-threatening situations. Such blame-oriented cultures may be associated with negative implications for work safety and communication, as found in

research studies involving samples of workers in high-risk occupations (Casey & Krauss, 2013; Cigularov, Chen, & Rosecrance, 2010). As a result, researchers often encourage the development and promotion of positive organizational culture surrounding work-related critical incidents (e.g., Frese & Keith, 2015). In this context, a positive organizational culture would be one wherein officers openly communicate with supervisors and peers about life-threatening incidents, and positive beliefs about the occurrence of errors (e.g., that errors are inevitable and insights can be learned from them) are encouraged within the organization. Consistent with this perspective, it has been found that officers who perceive more support from the organization are more willing to utilize stress intervention services than those who perceive less support from the organization (Tucker, 2015). The authors, therefore, suggest that police organizations may benefit from adopting or continuing to foster a more positive, supportive culture around trauma exposure and service use in policing.

Conclusion, Limitations, and Future Directions

I had no idea how heavy the uniform was until I finally took it off for the very last time due to retirement, knowing I would never have to put it on again . . . When I slept, I think I almost slept for about three months when retired . . .

The present study explores the lived experiences of police officers encountering life-threatening situations. The decision was made to use qualitative methodology to capture the rich and vivid details of officers' unique experiences during and after a life-threatening situation in the line of duty. In addition, qualitative methodology was chosen to ensure that the stories of the participating officers were kept as close to their raw form as possible, preserving the narratives of the officers. Several common themes between the officers' stories were identified and organized into broader classes of (a) experiences during life-threatening situations, (b) strategies utilized during life-threatening situations, (c) experiences after life-threatening situations, and (d) strategies utilized after life-threatening situations. Categorizing themes in this manner allowed the authors to present the details of officers' stories in a chronological and linear fashion, mirroring the journey that the officers underwent and allowing readers to momentarily place themselves in the shoes of the officers.

Several implications were discussed, under the classes of family, clinical, and organizational. Common among these implications is an understanding that treatment for police officers with these experiences could benefit from a collaborative approach, whether it is collaborating between family members and officers, mental health professionals and officers, and mental health professionals and senior police management. Furthermore, the findings and implications of this present study highlighted the possible advantage of a multi-pronged solution to helping officers recover from traumatic

incidents. The authors posit that effectiveness of treatment is potentially increased when there is a combination of family, clinical, and organizational support. However, the interaction between these three sources was not explicitly measured in the present study. Future work can further explore whether interaction effects pertaining to these support sources exist. In addition, the authors recognize that the sample of the present study is too small to generalize the findings to the larger population of officers who encounter similar situations. Future studies of qualitative nature with larger sample sizes are strongly encouraged to allow for better generalizability of findings and for stronger confidence in the present study's recommendations. Nonetheless, due to the rare occurrence of life-threatening situations within the parameters of the average human life, the present study serves as beneficial in aiding our understanding about the processes involved in traumatic experiences and recovery therefrom:

Having to violently end a person's life, though I am a police officer and had no choice, is a very unnatural thing to do. Killing someone has forever changed my life. Yes, I know I did what I had to do and would be able to do it again if needed, but when you're not a murderer and are a person with a soul, it is definitely a most unpleasant experience.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

Notes

1. One of the two officers was forced by the armed guerrillas to walk into a minefield.
2. Participants were offered US\$50 to cover their commuting or their vehicle gasoline and parking expenses on their way to and from the interview location.

References

- Alvesson, M., & Sveningsson, S. (2015). *Changing organizational culture: Cultural change work in progress*. New York, NY: Routledge.
- Andersen, J. P., Papazoglou, K., Arnetz, B. B., & Collins, P. I. (2015). Mental preparedness as a pathway to police resilience and optimal functioning in the line of duty. *International Journal of Emergency Mental Health*, 17, 624-627.
- Andersen, J. P., Papazoglou, K., Koskelainen, M., Nyman, M., Gustafsberg, H., & Arnetz, B. B. (2015). Applying resilience promotion training among special forces police officers. *SAGE Open*, 5(2), 1-8. doi:10.1177/2158244015590446
- Broome, R. (2014). A phenomenological psychological study of the police officer's lived experience of the use of deadly force. *Journal of Humanistic Psychology*, 54, 158-181. doi:10.1177/0022167813480850

- Browne, K. (2005). Snowball sampling: Using social networks to research non-heterosexual women. *International Journal of Social Research Methodology*, 8, 47-60. doi:10.1080/1364557032000081663
- Casey, T. W., & Krauss, A. D. (2013). The role of effective error management practices in increasing miners' safety performance. *Safety Science*, 60, 131-141. doi:10.1016/j.ssci.2013.07.001
- Chopko, B. A. (2011). Walk in balance: Training crisis intervention team police officers as compassionate warriors. *Journal of Creativity in Mental Health*, 6, 315-328. doi:10.1080/15401383.2011.630304
- Chopko, B. A., & Schwartz, R. C. (2013). The relation between mindfulness and posttraumatic stress symptoms among police officers. *Journal of Loss and Trauma*, 18, 1-9. doi:10.1080/15325024.2012.674442
- Cigularov, K. P., Chen, P. Y., & Rosecrance, J. (2010). The effects of error management climate and safety communication on safety: A multi-level study. *Accident Analysis & Prevention*, 42, 1498-1506. doi:10.1016/j.aap.2010.01.003
- Cobb, C. (2013, November). How the Israeli military is attacking PTSD. Ottawa Citizen. Retrieved from: <http://www.ottawacitizen.com/health/Israeli+military+attacking+PTSD/9138736/story.html>
- Denzin, R. K. (1989). *Interpretive biography*. Newbury Park, CA: Sage.
- Difede, J., Malta, L. S., Best, S., Henn-Haase, C., Metzler, T., Bryant, R., & Marmar, C. (2007). A randomized controlled clinical treatment trial for world trade center attack-related PTSD in disaster workers. *The Journal of Nervous and Mental Disease*, 195, 861-865. doi:10.1097/NMD.0b013e3181568612
- Evans, R., Pistrang, N., & Billings, J. (2013). Police officers' experiences of supportive and unsupportive social interactions following traumatic incidents. *European Journal of Psychotraumatology*, 4, 19696. doi:10.3402/ejpt.v4i0.19696
- Fagan, N. (2015). *Tactical police officers, romantic attachment and job-related stress: A mixed-methods study* (Order No. 10153820). Available from ProQuest Dissertations and Theses Global. (UMI No. 1818797865). Retrieved from https://uknowledge.uky.edu/cgi/viewcontent.cgi?referer=https://scholar.google.ca/scholar?hl=en&as_sdt=0%2C-5&q=Tactical+police+officers%2C+romantic+attachment+and+job-related+stress%3A+A+mixed-methods+study&btnG=&httpsredir=1&article=1031&context=sociology_etds
- Flannery, R. B. J. (2015). Treating psychological trauma in first responders: A multi-modal paradigm. *Psychiatric Quarterly*, 86, 261-267. doi:10.1007/s11126-014-9329-z
- Foa, E. B., Hembree, E. A., & Rothbaum, B. O. (2007). *Prolonged exposure therapy for PTSD: Emotional processing of traumatic experiences*. New York, NY: Oxford University Press.
- Frese, M., & Keith, N. (2015). Action errors, error management, and learning in organizations. *Annual Review of Psychology*, 66, 661-687. doi:10.1146/annurev-psych-010814-015205
- Gershon, R., Lin, S., & Li, X. (2002). Work stress in aging police officers. *Journal of Occupational and Environmental Medicine*, 44, 160-167. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/11851217>
- Glaser, B. G., & Strauss, A. L. (2009). *The discovery of grounded theory: Strategies for qualitative research*. Piscataway, NJ: Transaction Publishers.
- Hartley, T. A., Burchfiel, C. M., Fekedulegn, D., Andrew, M. E., & Violanti, J. M. (2011). Health disparities in police officers: Comparisons to the U.S. general populations. *International Journal of Emergency Mental Health*, 13, 211-220. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4734372/>
- King, A. P., Erickson, T. M., Giardino, N. D., Favorite, T., Rauch, S. A. M., Robinson, E., . . . Liberzon, I. (2013). A pilot study of group Mindfulness-Based Cognitive Therapy (MBCT) for combat veterans with Posttraumatic Stress Disorder (PTSD). *Depression and Anxiety*, 30, 638-645. doi:10.1002/da.22104
- Kingshott, B. F., Bailey, K., & Wolfe, S. E. (2004). Police culture, ethics and entitlement theory. *Criminal Justice Studies*, 17, 187-202. doi:10.1080/0888431042000235020
- Komarovskaya, I., Maguen, S., McCaslin, S., Metzler, T., Madan, A., Brown, A., . . . Marmar, C. (2011). The impact of killing and injuring others on mental health symptoms among police officers. *Journal of Psychiatric Research*, 45, 1332-1336. doi:10.1016/j.jpsychires.2011.05.004
- Lucas, T., Weidner, N., & Janisse, J. (2012). Where does work stress come from? A generalizability analysis of stress in police officers. *Psychology & Health*, 27, 1426-1447. doi:10.1080/0870446.2012.687738
- Manzella, C., & Papazoglou, K. (2014). Training police trainees about ways to manage trauma and loss. *International Journal of Mental Health Promotion*, 16, 103-116. doi:10.1080/14623730.2014.903609
- Marmar, C. R., McCaslin, S. E., Metzler, T. J., Best, S., Weiss, D. S., Fagan, J. A., . . . Neylan, T. (2006). Predictors of post-traumatic stress in police and other first responders. *Annals of the New York Academy of Sciences*, 1071, 1-18. doi:10.1196/annals.1364.001
- Neff, L., & Karney, B. (2009). Stress and reactivity to daily relationship experiences: How stress hinders adaptive processes in marriage. *Journal of Personality and Social Psychology*, 97, 435-450.
- Papazoglou, K. (2013). Conceptualizing police complex spiral trauma and its applications in the police field. *Traumatology*, 19, 196-209. doi:10.1177/1534765612466151
- Roberts, N., Leonard, R., Butler, E., Levenson, R., & Kanter, J. (2013). Job stress and dyadic synchrony in police marriages: A preliminary investigation. *Family Process*, 52, 271-283. doi:10.1111/j.1545-5300.2012.01415.x
- Saltzman, W. R. (2016). The FOCUS family resilience program: An innovative family intervention for trauma and loss. *Family Process*, 55, 647-659. doi:10.1111/famp.12250
- Saltzman, W. R., Lester, P., Beardslee, W. R., Layne, C. M., Woodward, K., & Nash, W. P. (2011). Mechanisms of risk and resilience in military families: Theoretical and empirical basis of a family-focused resilience enhancement program. *Clinical Child and Family Psychology Review*, 14(3), 213-230.
- Schein, E. H. (1984). Coming to a new awareness of organizational culture. *Sloan Management Review*, 25(2), 3-16. Retrieved from http://www.sietmanagement.fr/wp-content/uploads/2016/04/culture_schein-1.pdf
- Segal, Z. V., Williams, J. M. G., & Teasdale, J. D. (2002). *Mindfulness-based cognitive therapy for depression: A new approach to preventing relapse*. New York, NY: Guilford Press.

- Slate, R., Johnson, W., & Colbert, S. (2007). Police stress: A structural model. *Journal of Police and Criminal Psychology*, 22, 102-112. doi:10.1007/s11896-007-9012-5
- Story, L., & Bradbury, T. (2003). Understanding marriage and stress: Essential questions and challenges. *Clinical Psychology Review*, 23, 1139-1162. doi:10.1016/j.cpr.2003.10.002
- Tongco, M. D. C. (2007). Purposive sampling as a tool for informant selection. *Ethnobotany Research and Applications*, 5, 147-158. Retrieved from <http://hdl.handle.net/10125/227>
- Tucker, J. M. (2015). Police officer willingness to use stress intervention services: The role of Perceived Organizational Support (POS), confidentiality and stigma. *International Journal of Emergency Mental Health and Human Resilience*, 17, 304-314. Retrieved from http://digitalcommons.wcupa.edu/crimjust_facpub/4
- Violanti, J. M., & Aron, F. (1993). Sources of police stressors, job attitudes, and psychological distress. *Psychological Reports*, 72, 899-904. Retrieved from <http://journals.sagepub.com/doi/abs/10.2466/pr0.1993.72.3.899>
- Violanti, J. M., Burchfiel, C. M., Hartley, T. A., Mnatsakanova, A., Fekedulegn, D., Andrew, M. E., . . . Vila, B. J. (2009). Atypical work hours and metabolic syndrome among police officers. *Archives of Environmental & Occupational Health*, 64, 194-201. doi:10.1080/19338240903241259
- Williams, J. M. G., Russell, I., & Russell, D. (2008). Mindfulness-based cognitive therapy: Further issues in current evidence and future research. *Journal of Consulting and Clinical Psychology*, 76, 524-529. doi:10.1037/0022-006X.76.3.524

Author Biographies

Marian Pitel is a recent graduate in master of Arts and current PhD student in Industrial-Organizational Psychology at the University of Guelph. Her current research focuses on errors at work and how they are managed. Marian is a consultant at Organization and Management Solutions where she works in tandem with other consultants to evaluate and improve the selection process of various public and private sector organizations.

Konstantinos Papazoglou has recently completed his doctoral degree (PhD) in psychology (clinical - forensic area) as vanier scholar at the University of Toronto. He is a former police major of the Hellenic Police Force and European Police College and holds a master's degree in applied psychology from New York University (NYU) as Onassis Scholar. His research focuses on stress, trauma prevention, and resilience promotion among police officers. In terms of clinical work, Konstantinos currently works as a clinical and forensic psychologist (supervised practice) with the Ontario Ministry of Community Safety and Correctional Services, Ontario Correctional Institute where he conducts assessments and treatment to criminal justice offenders.

Brooke Tuttle serves as the project coordinator for the Center for Family Resilience at Oklahoma State University where she leads community-based research. She received her MS in Criminal Justice from the University of Central Missouri and is a current PhD student in Human Development and Family Science at Oklahoma State University. Her research interests include risk and resilience for justice involved youth, police officers, and law enforcement families.