

Social Ecology of Police Resilience

Mehdi Ghazinour and Arian Rostami

Introduction

Most of the research in the police field focuses on stress and traumatic events in policing as a predictive factor for developing negative outcomes (e.g., emotional disorder or alcohol abuse) in police officers' work. However, a underdeveloped field in police research focuses on positive and adaptive consequences, such as posttraumatic growth and resilience. Resilience on an individual level can act as a shield for police officers in dealing with the stressful environment of police work, thereby providing more effective police services. Fortunately, the literature on police resilience is increasing within the growing field of police science and researchers are exploring the police working environment, community policing, police training, and other related fields of police work (Andersen, Papazoglou, Arnetz, & Collins, 2015; Janssens, van der Velden, Taris, & van Veldhoven, 2018; Pandey, 2014). However, despite the interest in the construct of resilience within police research, there is still a lack of theoretical and operational models. In this chapter, we start by giving a brief overview of the context of police work and later the definition of police resilience. Thus far, the definition of resilience in policing has been strongly influenced by the disciplines of physiology and psychology. We attempt to go one step further and argue for a systemic model of police resilience, not only including individual physiology and psychology but also the organizational level and community policing.

The Context of Police Work

The first pioneering studies of policing by Banton (1964) and Rubinstein (1973) highlighted that the police officer acts not as a law enforcement officer but as a “peacekeeper,” using

discretion and by being problem-solving oriented. The picture of a police officer being a “philosopher” or “friend and guide” has changed over the years. Today, the main task of police forces is crime prevention and the safety and the security of citizens. Dijk, Hoogewoning, and Punch (2015) state that police organizations not only assume responsibility for crime prevention, but the police is also charged with other duties of a more social nature. Regulating traffic, keeping a watchful eye on unsafe buildings, administering first aid at accident sites, and school attendance duties are just a few examples of their many tasks on a small or large scale. The police are involved in international missions and must collaborate with other international agencies in combating drugs, smuggling, trafficking, and other crimes (Dijk et al., 2015). However, there are other processes involved in police work that are not visible at the first glance like use of power, decision-making, or affect regulation. All of these examples and many other factors play an important role in how police officers manage everyday stress and conflicts.

Nowadays stress represents a common experience in nearly all professions and the variety of sources, intensity, and frequency of stressors vary from job to job. Police work is recognized as being one of the most stressful professions, and the consequences of long-term stress among police officers has been well documented (Hartley, Burchfiel, Fekedulegn, Andrew, & Violanti, 2011; Violanti et al., 2006; Webster, 2013). Police officers’ working conditions usually imply being on duty 24 hours a day. This means that police officers have to act in many different situations, whereas some situations require police officers to encounter potentially traumatic events such as involvement of firearm in crime situation or other type of violent confrontation with citizens.

Police Work and Stressors

Sources of possible stressors in Police work can be categorized as follows: (a) operational/situation-inherent stressors (e.g., interacting with vulnerable, abusive or hostile citizens, encountering danger, threats, or traumatic events) and (b) management/organizational stressors (e.g., bureaucratic policies and procedures, inadequate training, equipment and supervision, lack of organizational support, insufficient pay; Collins & Gibbs, 2003; Patterson, 2001; Violanti, 2014; Violanti et al., 2016). In their study, Violanti and Aron (1995) found that shooting a person in the line of duty, witnessing the loss of a fellow officer, exposure to physical/verbal attacks, and dealing with child abuse and violence were the most highly rated stressors by police officers. In another study by Gershon, Barocas, Canton, Li, and Vlahov (2009), exposure to critical incidents, workplace discrimination, lack of cooperation among co-workers, and job dissatisfaction significantly correlate with perceived work stress.

Both intensity and frequency of stressors are crucial in assessing the stressors and stress consequences of policing. The previously mentioned studies have reported highly rated stressors in police officers, although not their frequency. Violanti et al. (2016) indicated that the most highly rated and frequently occurring stressors in police officers were dealing with family disputes, responding to a felony in progress, lack of fellow officers’ cooperation, making critical on-the-spot decisions, and insufficient manpower. Also, police officers

indicated that exposure to battered or dead children, killing someone in the line of duty, a fellow officer killed in the line of duty, situations requiring the use of force, and physical attacks were perceived as most stressful. It is noteworthy that some of the top-rated stressors such as dealing with crimes related to children, killing someone in the line of duty, and losing a fellow officer had low prevalence, which shows the importance of considering the intensity and prevalence of stressors together. This finding also clarifies why different studies have demonstrated organizational stressors as being the main source of stress reported by police officers.

The organizational challenges and stressful job environment that police officers have to deal with can increase the risk of job burnout and negative consequences on different aspects of life such as psychological well-being (e.g., depression, anxiety, psychosomatic complaints, posttraumatic stress symptoms), physical health (e.g., cardiovascular disease, fatigue, back pain, insomnia, migraine), and behavioral aspects (e.g., aggression, alcohol use, family conflicts, spouse abuse, suicide attempts; Gershon et al., 2009; Kurtz, 2008). Besides other job characteristics such as shift work, long working hours, and absence from family, these negative effects can influence the interpersonal relationships of police officers, especially intimate relationships with their families (Roberts & Levenson, 2001; Taris, Kompier, Geurts, Houtman, & Van Den Heuvel, 2010). Research suggested that critical incidents and work-related stressors can lead officers to adopt dysfunctional behaviors such as avoidance (Pasillas, Follette, & Perumean-Chaney, 2006) and dissociation (Aaron, 2000) and suffer negative outcomes such as alcohol misuse (Swatt, Gibson, & Piquero, 2007), suicidal thoughts, or other psychiatric disorders (Stanley, Hom, & Joiner, 2016). Police officers are reported to have a high rate of alcohol consumption (Ballenger et al., 2011) and binge drinking (Weir, Stewart, & Morris, 2012), and their mortality rate resulting from alcoholic liver diseases is twice that of the general population (McNeill, 1996). Looking at research on police well-being, we can understand why the construct of resilience is psychologically oriented since the literature highlights the vulnerability of police officers.

Police Resilience: Toward a Multisystemic Definition

Summarizing the physio-psychological definition of resilience, two definitions of the construct are frequently used. Psychological resilience has been defined as the ability of an individual to rebound or recover from adversity (Leipold & Greve, 2009) or as the ability to maintain psychological and physical health despite exposure to a traumatic event. The definition of resilience in police work suggests enhancing the experience of well-being among individuals who face significant and chronic exposure to adversity and stressful events through, for example, physical training and self-awareness (Bonanno, 2004; de Terte, Stephens, & Hudleston, 2014). Resilience also includes the capacity of agencies and officers to “draw upon their own individual, collective, and institutional resources and competencies to cope with, adapt to, and develop from the demands, challenges, and changes encountered during and after a critical incident, mass emergency, or disaster” (Paton et al., 2008, p. 96). Paton and

his colleagues are influenced by Antonovsky's definition of resilience. Based on Antonovsky's definition, they developed the stress shield police resilience model. The model assumes that the resilience of a person or group reflects the extent to which they can call upon their psychological and physical resources and competencies in ways that allow them to reduce challenging events in a coherent, manageable, and meaningful manner. The model suggests that a police officer's capacity to render challenging experiences meaningful, coherent, and manageable reflects the interaction of person, team, and organizational factors. This model is one step further toward a systems theory of police resilience, moving from an individual perspective to a multisystemic holistic lens. Ungar, Ghazinour and Richter (2013), drawing upon the work of Bronfenbrenner (1979) and Ungar (2008, 2011), developed a social-ecological interpretation of resilience that shifts focus from the invulnerable individual to the social-ecological factors that facilitate the development of well-being under stress.

Research examining the impact of societal, community, and other support systems on well-being has consistently shown that environments count more than individual biology or temperament with regards to psychosocial outcomes, especially when risk exposure is high (Ungar, 2018). The role of the environment in individual well-being is highly relevant to police officers and their profession, and we take this as our point of departure in proposing a systemic model of resilience in policing. An ecological approach to police resilience helps to conceptualize the police officers' social and physical ecologies, from individual support to workplace support, as well as the role of society's perceptions of the police—a system of factors that all account for successful development under adversity (Armeli, Eisenberger, Fasolo, & Lynch, 1998; Bartone, 2006; Goerling, 2012; Kamphuis & Delahaij, 2014; Paton et al., 2008).

The Social-Ecology of Resilience in Police Work

Ungar (2016) states that resilience of one system might be at the expense of the resilience of another system. Thus, applying a systemic resilience perspective in police work indicates how police officers influence their working environment and are influenced by simultaneous processes within the police organization and from the political level. In the following section, we focus on the three main levels of ecological police resilience presented in Figure 10.1.

Individual-Level Psychological and Physiological Factors

Studies reveal that constant and intense stress has physiological effects on the brain that cause psychophysiological, cognitive, and behavioral disorders (Pole, 2007; Yehuda, 2002). With regards to policing, resilience constitutes both *psychological* and *physiological* flexibility in the face of adversity (i.e., a conscious awareness of the best course of action and the best moment to take action), self-awareness, and control over one's physiological stress responses to threat and recovery from exposure beyond one's own control (Andersen, Gustafsberg, et al., 2015; Andersen, Papazoglou, Koskelainen, et al., 2015; Arnetz, Arble, Backman, Lynch, & Lublin, 2013; Arnetz, Nevedal, Lumley, Backman, & Lublin, 2009; Masten, 2014; McCraty & Atkinson, 2012). Importantly, police resilience includes the recognition of one's

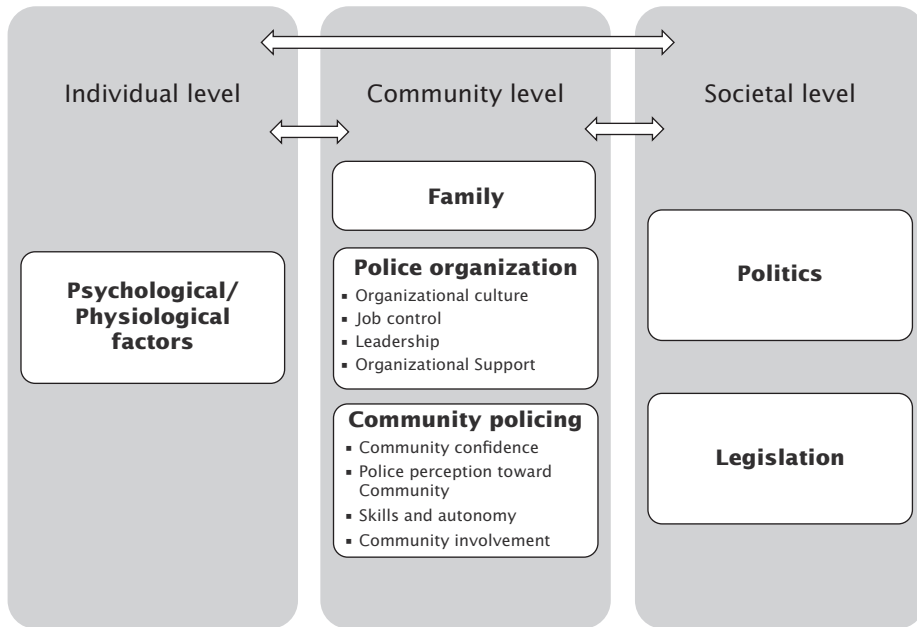


FIGURE 10.1 Main levels of ecological police resilience.

limitations—both physical and mental; the reality-based awareness of one’s strengths and weaknesses and the knowledge of when to ask for support and assistance and when to soldier on alone (Andersen, Papazoglou, Arnetz, et al., 2015).

However, because police officers are constantly asked to deal with increasingly complex and threatening incidents, it is appropriate to expand the scope of this definition to include the development of a police officer’s capacity to deal with future events. Consequently, the definition adopted here embodies the notion of “adaptive capacity” (Klein, Nicholls, & Thomalla, 2003). According to this definition, some activities—including imagery exposure to potential stressors, practicing adaptive responses when facing stressful events, and the frequent practice of both exposure and skills—can prevent stressful psychological outcomes and increase resilience to trauma and improve behavioral performance (Arnetz et al., 2013).

The Family

Job stress and demands at home have direct and indirect effects on the well-being and performance of police officers (Peeters, Montgomery, Bakker, & Schaufeli, 2005). Family-based conflicts have a significant relationship to burnout in police officers. Also, police work pressure and burnout increase the level of conflict within the family and reduces police officers’ interest in family issues, spent time with the family, and marital satisfaction (Jackson & Maslach, 1982; Roberts & Levenson, 2001). A longitudinal study of 257 Australian police officers at two points, 12 months apart, delineated the relationship between work demands, emotional exhaustion, and work–family conflicts. The demands of police work and emotional exhaustion can cause work–family conflicts; also job demands can lead to emotional exhaustion as mediated by work–family conflicts (Hall, Dollard, Tuckey, Winefield,

& Thompson, 2010). Factors such as shift work that disrupts sleeping patterns and causes absence from the family, as well as stressful and critical events in the line of duty, can increase the level of domestic violence, alcoholism, suicide attempts, and family overprotection in police officers (Burke, 2017). In their study, Culbertson, Huffman, Mills, and Imhof (2017) categorized the consequences of work–family conflict into work outcomes (e.g., lower level of job satisfaction and higher turnover intentions), nonwork outcomes (e.g., reduced family well-being, increased domestic violence), and stress outcomes (higher psychological distress, physical problems, and burnout). As indicated by Griffin and Sun (2018) in a web-based survey of 621 American police officers, work–family conflicts and resilience mediate stress and burnout of police officers. On the other hand, the family is a prominent part of an individual’s social support network and an effective buffer by diminishing stress in stressful jobs. This helps to reduce the psychological consequences of job strain (Cullen, Lemming, Link, & Wozniak, 1985; Evans, Pistrang, & Billings, 2013). As social support is associated with higher resilience, improvement in family relationships is therefore a main part of resilience training programs for the police that build resilience in police officers and their families and enhances their well-being, family satisfaction, and job performance.

Community Level

According to our proposed model, the mesosystem of police work comprises of two components whereby each relates to individual resilience and, in another direction, are also influenced by macro level factors. These two components are organizational factors and community policing. We start by giving a brief description of police organization and then about police community resilience.

Several studies have determined that organizational stressors are a more significant source of stress than operational stressors and critical incidents in police work (Biggam, Power, Macdonald, Carcary, & Moodie, 1997; Falconer, Alexander, & Klein, 2013; Kop, Euwema, & Schaufeli, 1999; Shane, 2010). The interaction between workplace environment and well-being of police officers influences the function of both sides and has consequences for effective policing. Thus, building resilience in police officers and the policing organization is crucial for surviving and thriving amid growing changes and disturbances in police work.

The concept of a healthy organization was introduced by Lim and Murphy (2010) as “one whose culture, climate and practices create an environment that promotes employee health and safety as well as organizational effectiveness” (p. 64). Lowe (2010) described positive cultures, inclusive leadership, vibrant workplaces, and inspired employees as the four fundamental building blocks of a healthy organization.

Thus, we categorize the main effective elements in interactions between organization and police officers as follows. *Organizational culture* is defined as the shared values and norms within the police force, such as traditions of the organization, moral norms of the staff, positive or negative experiences, relationships between individuals in the organization, work atmosphere, relationship between leaders and officers, and other invisible elements that shape the culture (Elekes, 2014). Organizational culture affects the level of trust through interpersonal and organizational relationships and consequently increases the effectiveness of personal and organizational interactions and teamwork, which is associated

with empowerment of the police officers (Dirks, 1999; Siegrist & Cvetkovich, 2000). Working in a trusting and fostering environment increases organizational effectiveness, has positive impacts on job satisfaction, commitment (Laschinger, Finegan, Shamian, & Casier, 2000; Laschinger, Finegan, & Shamian, 2002) and the physical and mental health of the organizational members (Tănase, Manea, Chraif, Anței, & Coblaș, 2012).

According to the job demands-resources model (Bakker & Demerouti, 2007; Demerouti, Bakker, Nachreiner, & Schaufeli, 2001), job resources such as equality, social support of colleagues, job security and participation in decision-making are job characteristics that are functional in achieving work goals, reducing job demands, improving personal development, well-being and life satisfaction (Bakker & Demerouti, 2007; Demerouti et al., 2001; Salmela-Aro, & Upadyaya, 2018).

Job security and participation in decision-making are two of the most important aspects of work-related resources (Bakker, Demerouti, & Verbeke, 2004; Crawford, LePine, & Rich, 2010), under the broad conceptual framework of “job control” (Schieman & Reid, 2009). Job control has been defined as an individual’s potential control over the pace and content of work tasks (Karasek & Theorell, 1990). In line with Karasek and Theorell (1990), disparity between perceived job demands and job control can lead to emotional stress and illness. A low level of job control, particularly in combination with high job demands (demanding job), negatively impacts the mental health of employees (Bentley, Kavanagh, Krnjacki, & LaMontagne, 2015; Dalgard et al., 2009). Police officers have broad discretionary powers to achieve the goals and accomplish the tasks that the police are supposed to perform (Lipsky, 2010). Stress and poor mental health influence the judgment and decision-making of police officers by affecting their cognitive functions and capacities (Gutshall, Hampton, Sebetan, Stein, & Broxtermann, 2017; Starcke & Brand, 2012), which can lead to maladaptive behaviors or police misconduct.

Police management plays a key role in empowering the work environment by translating organizational culture into daily values and procedures. Management based on supportive and officer-centered leadership practices creates an empowering environment (Liden, Wayne, & Sparrowe, 2000; Quinn, & Spreitzer, 1997). In highly demanding professions where individuals have to deal with extreme work-related stressors and hazards, leaders play a pivotal role in the way in which stressful experiences are perceived and interpreted by team members (Bartone, 2006). Based on the model of psychological resilience for the Netherlands Armed Forces, Kamphuis and Delahaj (2014) indicate that organizational leadership and information provision by the organization are the most important factors before and during operations that affect the resilience of armed forces officers. Schafer (2010) studied the characteristics of effective leadership among 1,042 police supervisors attending the Federal Bureau of Investigations National Academy in Virginia. According to their findings, honesty and integrity, communication skills, leadership by example, delegation and empowerment, promoting innovation and growth, taking appropriate action, establishing and maintaining trust and fairness, and organizational justice were reported as being the main characteristics of effective leadership. The organizational stressors that need to be considered by police managers include authoritarian management, lack of administrative support, inept and apathetic supervision, inappropriate work schedules, excessive paperwork, insufficient wages and resources, and race and gender

issues (Kyle & Schafer, 2017). The application of an appropriate stress management approach to identify stressors in the work environment and reduce them to create a healthy organizational environment are necessary for effective leadership (Ayres & Flanagan, 1990; Kyle & Schafer, 2017) that contributes to a more resilient police workforce.

Organizational support is a crucial resource that influences the performance, effectiveness, and socioemotional needs of officers (Adebayo, 2005; Armeli et al., 1998; Currie & Dollery, 2006). Perceived organizational support is the degree to which employees believe their organization values their contribution and cares about their well-being and needs (Eisenberger, Huntington, Hutchison, & Sowa, 1986). Organizational support can reduce the general level of stress and psychological and psychosomatic reactions to stressors through the availability of tangible and emotional support when facing pressure at work. With this regard, organizational support is very useful in reducing severe consequences of stressors at work (George, Reed, Ballard, Colin, & Fielding, 1993; Rhoades & Eisenberger, 2002). In a quantitative study in the Indian state of Haryana on job demands and resources among 827 police officers, Frank, Lambert, and Qureshi (2017) concluded that organizational support represent a main job resource for mitigating work stress.

Community Policing

Community policing is a philosophy for reducing conflict and crime in communities by promoting trust, respect, and collaboration between the police and the members of a community (Nicholl, 2000). In community policing, the combination of police expertise and community knowledge and resources has been applied to define, prioritize, and address crime problems (Weisburd & McElroy, 1998). By collaborating with the community, the police focus on the main concerns of the community and underlying causes of problems to find a solution and act proactively. Studies show the important benefits of community policing for communities and the police (Roh & Oliver, 2005; Xu, Fielder, & Flaming, 2005). Police–community relations and public confidence have been improved through the implementation of community policing (Cordner, 2000; Kuo & Shih, 2018; Skogan, 2006). Several studies indicated that officers who are involved in community policing have a more positive perception of the community and residents. The positive view can be explained by day-to-day collaboration with individuals from the general public rather than dealing with problematic individuals, as well as the community’s trust and positive perception of the police (Skolnick & Bayley, 1988; Trojanowicz & Bucqueroux, 1998). Thus, complete and consistent implementation of community policing was associated with higher job satisfaction in police officers (Brody, DeMarco, & Lovrich, 2002; Kuo & Shih, 2018). Community policing encourages police officers to apply their skills and experiences creatively and perceive their role as more valuable (Pelfrey, 2004; Skolnick & Bayley, 1988). Although there is a lack of evidence regarding the impact of community policing on police officers’ well-being, a higher level of job satisfaction, collaborative relationship with the community, perceived support from the community, and a positive community attitude toward the role of police and legitimacy can influence different aspects of police officers’ health and promote their well-being (Basinska & Dåderman, 2019; Deschênes, Desjardins, & Dussault, 2018; Kohan & O’Connor, 2002). Community involvement and active participation in community-oriented policing empowers the police and

the community to recognize and respond to concerns and to develop a resilient community (Pandey, 2014).

Community-oriented policing also helps to promote community cohesion. Community cohesion has been defined as the extent to which community members bond with shared common interests and goals, a sense of belonging and collective identity, collective knowledge, understanding, and trust. In a cohesive community, people from diverse backgrounds and circumstances are valued and respected, people from different backgrounds have the same life opportunities, and community members share a sense of belonging and have strong relationships with each other (Local Government Association, 2002). Community cohesion leads to mobilization and prepares community members to collaborate in interventions against common problems such as conflicts and tensions between different groups, crime, or environmental issues. Various studies show that higher levels of community cohesion are associated with a lower risk of individual violent victimization and crime rates (Hirschfeld & Bowers, 1997; Lee, 2000; Olutola & Bello, 2016). In addition, a number of studies demonstrated the significant link between the community cohesion and resilience (Ludin, Rohaizat, & Arbon, 2019; Patel & Gleason, 2018). Community resilience refers to the capacity of a community to survive, respond to, and recover from adverse events and community cohesion plays a key role in this process.

Law and Police Resilience

The police are key actors in the security sector and the only actor with the legitimacy to use power in the public context. Legislation and constant control mechanisms from legislative and regulatory sections are necessary to supervise the police (Council of Europe, 2002; United Nations Office on Drugs and Crime, 2011). Thus, we believe that beyond individual, team, and organizational factors, there is a need to add societal factors such as laws and regulations to the police resilience model.

At the macrosystem level, the government establishes the missions, general priorities, regulations and police budget and has control over police actions (Reiner, 2010). Political and social changes and/or establishing new legislation on a governmental level from judicial, administrative, and legislative authorities affect police actions on both organizational and individual levels. A few studies on police stress have considered broader aspects of job stress and described societal and political changes as being important sources of stress in police officers, which influence them through altering organizational policies and rules (Kara, Sunger, & Kapti, 2015; Saunders, Kotzias, & Ramchand, 2019).

Indeed, police forces have the legal authority to intervene directly in citizens' lives and defend or attack citizens' freedom or even their lives. Maintaining public order and security, ensuring public protection, providing assistance, preventing crime, solving crimes, monitoring public order and safety, conducting reconnaissance, and carrying out criminal investigations are other types of police work in which legitimacy and the use of power and discretion take place (Hansson, Ghazinour, & Wimelius, 2015). According to Lipsky's (2010) framework, street-level bureaucrats are "public service workers who directly interact with citizens in the course of their jobs, and who have substantial discretion in their execution of

their work” (p. 3). He argued that discretion involves a balance between implementing societal rules and legislation and being sensible and flexible to the needs of citizens and the general public. Operationalizing discretion means that the police make independent priorities and interpretations, disregard rules, and invent praxises (Hansson et al., 2015). Finding a balance between police professionalism and serving the state and serving the public is crucial to appropriate policing (United Nations Office on Drugs and Crime, 2011). Keeping this balance might place extra pressure on police organization and police officers, especially if there is a contradiction between the organizational policy and individuals’ principles.

Conclusion

Our point of departure is that three main systems interact with each other to maintain equilibrium in the face of adversity as overall terms of resilience in the police force: (a) each system influences the other, and there is a reciprocal relationship between them; (b) each of the systems comprises a certain level of resilience; and (c) each system comprises a number of visible and invisible processes that create a synergy effect in the other systems.

Research showed that police work is one of the most stressful professions in the world and officers often suffer from a variety of physiological, psychological, and behavioral symptoms (Manzella & Papazoglou, 2014; McCraty & Atkinson, 2012). For this reason, the need to develop a resilience-building program is crucial for this professional group. McCraty and Atkinson (2012) conducted a resilience training study on police officers and determined effectiveness of the program by assessing well-being, stress coping skills, work performance, family relationships, and physiological changes (heart rate and blood pressure) following severe stressors in police officers. Their results indicated that a resilience-building training can improve officers’ reactions to stressors from different sources. Applying practical stress and emotion self-regulation skills by police officers can decrease negative physiological and psychological consequences of stress and positively influence both personal and occupational aspects of their lives. However, enhancing the capacity of individual resources through a resilience program without accessing working environment resources and policies that protect police officers reduces the ability to negotiate for resources to be provided in culturally meaningful ways. Therefore, a multisystemic social-ecological theory should be applied to resilience programs to increase police officers’ resilience by empowering police officers, their families, and police organization, as well as considering police-related policies and laws.

Key Messages

- There is a great emphasis on psychological and physiological resilience in the police profession. There is a great need for a transformation from an individual perspective toward a multisystem approach.
- Multisystem resilience in police work requires balancing the demands of different systems on police officers and their organizations.

- A multisystemic resilience perspective should be applied to the development of resilience-promoting programs for police officers.

References

- Aaron, J. D. (2000). Stress and coping in police officers. *Police Quarterly*, 3(4), 438–450.
- Adebayo, D. O. (2005). Ethical attitudes and prosocial behavior in the Nigerian police: Moderator effects of perceived organizational support public recognition. *Policing: An International Journal of Police Strategies & Management*, 28(4), 684–705. doi:10.1108/13639510510628767
- Andersen, J. P., Gustafsborg, H., Papazoglou, K., Nyman, M., Koskelainen, M., & Pitel, M. (2015, August). *A potentially lifesaving psychophysiological intervention for special forces officers*. Poster presented at the annual conference of the American Psychosomatic Society, Savannah, GA.
- Andersen, J. P., Papazoglou, K., Arnetz, B. B., & Collins, P. (2015). Mental preparedness as a pathway to police resilience and optimal functioning in the line of duty. *International Journal of Emergency Mental Health and Human Resilience*, 17(3), 624–627.
- Andersen, J. P., Papazoglou, K., Koskelainen, M., Nyman, M., Gustafsborg, H., & Arnetz, B. B. (2015). Applying resilience. Promotion training among special forces police officers. *Journal of Police Emergency Response*, 5(2), 1–8. doi:10.1177/2158244015590446
- Armeli, S., Eisenberger, R., Fasolo, P., & Lynch, P. (1998). Perceived organizational support and police performance: The moderating influence of socioemotional needs. *Journal of Applied Psychology*, 83(2), 288–297. doi:10.1037//0021-9010.83.2.288
- Arnetz, B. B., Nevedal, D. C., Lumley, M. A., Backman, L., & Lublin, A. (2009). Trauma resilience training for police: Psychophysiological and performance effects. *Journal of Police and Criminal Psychology*, 24(1), 1–9. doi:10.1007/s11896-008-9030-y
- Arnetz, B. B., Arble, E., Backman, L., Lynch, A., & Lublin, A. (2013). Assessment of a prevention program for work-related stress among urban police officers. *International Archives of Occupational and Environmental Health*, 86(1), 79–88. doi:10.1007/s00420-012-0748-6
- Ayres, R., & Flanagan, G. (1990). *Preventing law enforcement stress: The organization's role*. Washington, DC: Bureau of Justice Assistance, U.S. Department of Justice.
- Bakker, A. B., & Demerouti, E. (2007). The job demands-resources model: State of the art. *Journal of Managerial Psychology*, 22(3), 309–328. doi:10.1108/02683940710733115
- Bakker, A. B., Demerouti, E., & Verbeke, W. (2004). Using the job demands-resources model to predict burnout and performance. *Human Resource Management*, 43(1), 83–104. doi:10.1002/hrm.20004
- Ballenger, J. F., Best, S. R., Metzler, T. J., Wasserman, D. A., Mohr, D. C., Liberman, A., . . . Marmar, C. R. (2011). Patterns and predictors of alcohol use in male and female urban police officers. *The American Journal on Addictions*, 20, 21–29. doi:10.1111/j.1521-0391.2010.00092.x
- Banton, M. (1964). *The policeman in community*. London, UK: Tavistock.
- Bartone, P. T. (2006). Resilience under military operational stress: Can leaders influence hardiness? *Military Psychology*, 18(Suppl.), 131–148. doi:10.1207/s15327876mp1803s_10
- Basinska, B. A., & Däderman, A. M. (2019). Work values of police officers and their relationship with job burnout and work engagement. *Frontiers in Psychology*, 10, 442. doi:10.3389/fpsyg.2019.00442
- Bentley, R. J., Kavanagh, A., Krnjacki, L., & LaMontagne, A. D. (2015). A longitudinal analysis of changes in job control and mental health. *American Journal of Epidemiology*, 182(4), 328–334. doi:10.1093/aje/kwv046
- Biggam, F. H., Power, K. G., Macdonald, R. R., Carcary, W. B., & Moodie, E. (1997). Self-perceived occupational stress and distress in a Scottish police force. *Work & Stress*, 11(2), 118–133. doi:10.1080/02678379708256829
- Bonanno, G. A. (2004). Loss, trauma, and human resilience: Have we underestimated the human capacity to thrive after extremely aversive events? *American Psychologist*, 59(1), 20–28. doi:10.1037/0003-066X.59.1.20

- Brody, D. C., DeMarco, C., & Lovrich, N. P. (2002). Community policing and job satisfaction: Suggestive evidence of positive workforce effects from a multijurisdictional comparison in Washington State. *Police Quarterly*, 5(2), 181–205. doi:10.1177/109861102129198093
- Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Cambridge, MA: Harvard University Press.
- Burke, R. J. (2017). Stress in policing: An overview. In R. J. Burke (Ed.), *Stress in policing* (pp. 3–27). New York, NY: Routledge.
- 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(4), 256–264. doi:10.1093/ocmed/kqg061
- Cordner, G. (2000). Community policing: Elements and effects. In G. Alpert & A. Piquero (Eds.), *Community policing: Contemporary readings* (pp. 401–418). Chicago, IL: Waveland Press.
- Council of Europe. (2002). *The European code of police ethics*. Strasbourg, France: Council of Europe Publishing.
- Crawford, E. R., LePine, J. A., & Rich, B. L. (2010). Linking job demands and resources to employee engagement and burnout: A theoretical extension and meta-analytic test. *Journal of Applied Psychology*, 95(5), 834–848. doi:10.1037/a0019364
- Culbertson, S. S., Huffman, A. H., Mills, M. J., & Imhof, C. B. (2017). Balancing the badge: Work-family challenges within policing and recommended supports and interventions. In R. J. Burke (Ed.), *Stress in policing* (pp. 66–94). New York, NY: Routledge.
- Cullen, F. T., Lemming, T., Link, B. G., & Wozniak, J. F. (1985). The impact of social supports on police stress. *Criminology*, 23(3), 503–522.
- Currie P., & Dollery B. (2006). Organizational commitment and perceived organizational support in the NSW police. *Policing: An International Journal of Police Strategies & Management*, 29(4), 741–756. doi:10.1108/13639510610711637
- Dalgard, O. S., Sorensen, T., Sandanger, I., Nygård, J. F., Svensson, E., & Reas, D. L. (2009). Job demands, job control, and mental health in an 11-year follow-up study: Normal and reversed relationships. *Work & Stress*, 23(3), 284–296. doi:10.1080/02678370903250953
- Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands-resources model of burnout. *Journal of Applied Psychology*, 86(3), 499–512. doi:10.1037/0021-9010.86.3.499
- Deschênes, A. A., Desjardins, C., & Dussault, M. (2018). Psychosocial factors linked to the occupational psychological health of police officers: Preliminary study. *Cogent Psychology*, 5(1), 1426271. doi:10.1080/23311908.2018.1426271
- de Terte, I., Stephens, C., & Huddleston, L. (2014). The development of a three part model of psychological resilience. *Stress and Health*, 30(5), 416–424. doi:10.1002/smi.2625
- Dijk, A., Hoogewoning, F., & Punch, M. (2015). *What matters in policing? Change, values and leadership in turbulent times*. Chicago, IL: Bristol University Press.
- Dirks, K. T. (1999). The effects of interpersonal trust on work group performance. *Journal of Applied Psychology*, 84, 445–455.
- Eisenberger, R., Huntington, R., Hutchison, S., & Sowa, D. (1986). Perceived organizational support. *Journal of Applied Psychology*, 71, 500–507. doi:10.1037/0021-9010.71.3.500
- Elekes, E. (2014). An examination of the organizational culture at the policing. *APSTRACT: Applied Studies in Agribusiness and Commerce*, 8, 43–50. doi:10.22004/ag.econ.187527
- Evans, R., Pistrang, N., & Billings, J. (2013). Police officers' experiences of supportive and unsupportive social interactions following traumatic incidents. *European Journal of Psychotraumatology*, 4(1), 19696. doi:10.3402/ejpt.v4i0.19696
- Falconer, M., Alexander, D. A., & Klein, S. (2013). *Resilience and wellbeing in a Scottish police force*. Scottish Institute for Policing Research, SIPR Report-November 2013.
- Frank, J., Lambert, E. G., & Qureshi, H. (2017). Examining police officer work stress using the job demands-resources model. *Journal of Contemporary Criminal Justice*, 33(4), 348–367.
- George, J. M., Reed, T. F., Ballard, K. A., Colin, J., & Fielding, J. (1993). Contact with AIDS patients as a source of work-related distress: Effects of organizational and social support. *Academy of Management Journal*, 36(1), 157–171. doi:10.5465/256516

- Gershon, R. R., Barocas, B., Canton, A. N., 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
- Goerling, R. J. (2012). Police officer resilience and community building. *ASBBS Proceedings*, 19(1), 394–397.
- Griffin, J. D., & Sun, I. Y. (2018). Do work-family conflict and resiliency mediate police stress and burnout: A study of state police officers. *American Journal of Criminal Justice*, 43(2), 354–370. doi:10.1007/s12103-017-9401-y
- Gutshall, C. L., Hampton, D. P., Jr., Sebetan, I. M., Stein, P. C., & Broxtermann, T. J. (2017). The effects of occupational stress on cognitive performance in police officers. *Police Practice and Research*, 18(5), 463–477. doi:10.1080/15614263.2017.1288120
- Hall, G. B., Dollard, M. F., Tuckey, M. R., Winefield, A. H., & Thompson, B. M. (2010). Job demands, work-family conflict, and emotional exhaustion in police officers: A longitudinal test of competing theories. *Journal of Occupational and Organizational Psychology*, 83(1), 237–250. doi:10.1348/096317908X401723
- Hansson, J., Ghazinour, M., & Wimelius, M. E. (2015). Police officers' use of discretion in forced repatriations of unaccompanied, asylum-seeking refugee children—Balancing efficiency and dignity. *International Journal of Social Work and Human Services Practice*, 3(3), 101–108. doi:10.13189/ijrh.2015.030301
- Hartley, T. A., Burchfiel, C. M., Fekedulegn, D., Andrew, M. E., & Violanti, J. M. (2011). Health disparities in police officers: Comparisons to the US general population. *International Journal of Emergency Mental Health*, 13(4), 211.
- Hirschfield, A., & Bowers, K. J. (1997). The effect of social cohesion on levels of recorded crime in disadvantaged areas. *Urban Studies*, 34(8), 1275–1295. doi:10.1080/0042098975637
- Jackson, S. E., & Maslach, C. (1982). After-effects of job-related stress: Families as victims. *Journal of Organizational Behavior*, 3(1), 63–77. doi:10.1002/job.4030030106
- Janssens, K. M., van der Velden, P. G., Taris, R., & van Veldhoven, M. J. (2018). Resilience among police officers: A critical systematic review of used concepts, measures, and predictive values of resilience. *Journal of Police and Criminal Psychology*, 1–17. doi:10.1007/s11896-018-9298-5
- Kamphuis, W., & Delahaij, R. (2014, January). *The relevance of resources for resilience at different organizational levels within the military deployment cycle*. Paper presented at the 5th Symposium on Resilience Engineering: Managing Trade-Offs, Soesterberg, Netherlands.
- Kara, H. B., Sunger, E., & Kapti, A. (2015). Police stress factors among law enforcement agencies: A comparison study of US and Turkish police. *European Scientific Journal*, 11(4), 82–94.
- Karasek, R., & Theorell, T. (1990). *Healthy work: Stress, productivity, and the reconstruction of working life*. New York, NY: Basic Books.
- Klein, R. J., Nicholls, R. J., & Thomalla, F. (2003). Resilience to natural hazards: How useful is this concept? *Global Environmental Change Part B: Environmental Hazards*, 5(1), 35–45. doi:10.1016/j.hazards.2004.02.001
- Kohan, A., & O'Connor, B. P. (2002). Police officer job satisfaction in relation to mood, wellbeing, and alcohol consumption. *The Journal of Psychology*, 136(3), 307–318. doi:10.1080/00223980209604158
- Kop, N., Euwema, M., & Schaufeli, W. (1999). Burnout, job stress and violent behaviour among Dutch police officers. *Work & Stress*, 13(4), 326–340. doi:10.1080/02678379950019789
- Kuo, S. Y., & Shih, Y. C. (2018). An evaluation of a community-oriented policing program in Taiwan. *International Journal of Offender Therapy and Comparative Criminology*, 62(7), 2016–2044. doi:10.1177/0306624X17703719
- Kurtz, D. L. (2008). Controlled burn: The gendering of stress and burnout in modern policing. *Feminist Criminology*, 3(3), 216–238. doi:10.1177/1557085108321672
- Kyle, M. J., & Schafer, J. A. (2017). Effective leadership in policing. In R. J. Burke (Ed.), *Stress in policing* (pp. 295–308). New York, NY: Routledge.
- Laschinger, H. K. S., Finegan, J., & Shamian, J. (2002). The impact of workplace empowerment, organizational trust on staff nurses' work satisfaction and organizational commitment. In *Advances in health care management* (pp. 59–85). Bingley, UK: Emerald Group. doi:10.1016/S1474-8231(02)03006-9
- Laschinger, H. K. S., Finegan, J., Shamian, J., & Casier, S. (2000). Organizational trust and empowerment in restructured healthcare settings: Effects on staff nurse commitment. *Journal of Nursing Administration*, 30(9), 413–425.

- Lee, M. R. (2000). Community cohesion and violent predatory victimization: A theoretical extension and cross-national test of opportunity theory. *Social Forces*, 79(2), 683–706. doi:10.1093/sf/79.2.683
- Leipold, B., & Greve, W. (2009). Resilience: A conceptual bridge between coping and development. *European Psychologist*, 14(1), 40–50. doi:10.1027/1016-9040.14.1.40
- Liden, R. C., Wayne, S. J., & Sparrowe, R. T. (2000). An examination of the mediating role of psychological empowerment on the relations between the job, interpersonal relationships, and work outcomes. *Journal of Applied Psychology*, 85(3), 407–416. doi:10.1037/0021-9010.85.3.407
- Lim, S. Y., & Murphy, L. R. (1999). The relationship of organizational factors to employee health and overall effectiveness. *American Journal of Industrial Medicine*, 36(Suppl. 1), 64–65. doi:10.1002/(SICI)1097-0274(199909)36:1+<64::AID-AJIM23>3.0.CO;2-1
- Lipsky, M. (2010). *Street-level bureaucracy: Dilemmas of the individual in public services*. New York, NY: Russell Sage Foundation.
- Local Government Association. (2002). *Guidance on community cohesion*. Retrieved from <http://www.tedcandle.co.uk/publications/006%20Guidance%20on%20Community%20Cohesion%20LGA%202002.pdf>
- Lowe, G. (2010). *Healthy organizations: How vibrant workplaces inspire employees to achieve sustainable success*. Toronto, ON: University of Toronto Press.
- Ludin, S., Rohaizat, M., & Arbon, P. (2019). The association between social cohesion and community disaster resilience. *Health & Social Care in the Community*, 27(3), 621–631. doi:10.1111/hsc.12674
- Manzella, C., & Papazoglou, K. (2014). Training police trainees about ways to manage trauma and loss. *International Journal of Mental Health Promotion*, 16(2), 103–116. doi:10.1080/14623730.2014.903609
- Masten, A. S. (2014). Global perspectives on resilience in children and youth. *Child Development*, 85(1), 6–20. doi:10.1111/cdev.12205
- McCarty, R., & Atkinson, M. (2012). Resilience training program reduces physiological and psychological stress in police officers. *Global Advances in Health and Medicine*, 1(5), 44–66. doi:10.7453/gahmj.2012.1.5.013
- McNeill, M. (1996). *Alcohol and the police workplace: Factors associated with excessive intake* (Report Series No. 119.1). Retrieved from <http://www.anzpaa.org.au/ArticleDocuments/239/ACPR-RS-119.1.pdf.aspx>
- Nicholl, C. G. (2000). *Community policing, community justice and restorative justice: Exploring the links for the delivery of a balanced approach to public safety*. Washington, DC: University of Michigan Library.
- Olutola, A. A., & Bello, P. O. (2016). Exploring the association between community cohesion and crime in the republic of South Africa. *International Journal of Social Sciences and Humanity Studies*, 8(1), 133–151.
- Pandey, V. (2014). Community policing for conflict resolution and community resilience. *International Journal of Social Work and Human Services Practice*, 2(6), 228–233. doi:10.13189/ijrh.2014.020604
- Pasillas, R. M., Follette, V. M., & Perumean-Chaney, S. E. (2006). Occupational stress and psychological functioning in law enforcement officers. *Journal of Police and Criminal Psychology*, 21(1), 41–53. doi:10.1007/BF02849501
- Patel, R. B., & Gleason, K. M. (2018). The association between social cohesion and community resilience in two urban slums of Port au Prince, Haiti. *International Journal of Disaster Risk Reduction*, 27, 161–167. doi:10.1016/j.ijdrr.2017.10.003
- Paton, D., Violanti, J. M., Johnston, P., Burke, K. J., Clarke, J., & Keenan, D. (2008). Stress shield: A model of police resiliency. *International Journal of Emergency Mental Health*, 10(2), 95–108.
- Patterson, G. T. (2001). Reconceptualizing traumatic incidents experienced by law enforcement personnel. *Australasian Journal of Disaster and Trauma Studies*, 5(2).
- Peeters, M. C., Montgomery, A. J., Bakker, A. B., & Schaufeli, W. B. (2005). Balancing work and home: How job and home demands are related to burnout. *International Journal of Stress Management*, 12(1), 43–61. doi:10.1037/1072-5245.12.1.43
- Pelfrey, W. V., Jr. (2004). The inchoate nature of community policing: Differences between community policing and traditional police officers. *Justice Quarterly*, 21(3), 579–601. doi:10.1080/07418820400095911
- Pole, N. (2007). The psychophysiology of posttraumatic stress disorder: A meta-analysis. *Psychological Bulletin*, 133(5), 725–746. doi:10.1037/0033-2909.133.5.725
- Quinn, R. E., & Spreitzer, G. M. (1997). The road to empowerment: Seven questions every leader should consider. *Organizational Dynamics*, 26(2), 37–49. doi:10.1016/S0090-2616(97)90004-8

- Reiner, R. (2010). *The politics of the police* (4th ed.). Oxford, UK: Oxford University Press.
- Rhoades, L., & Eisenberger, R. (2002). Perceived organizational support: A review of the literature. *Journal of Applied Psychology, 87*(4), 698–714. doi:10.1037//0021-9010.87.4.698
- Roberts, N. A., & Levenson, R. W. (2001). The remains of the workday: Impact of job stress and exhaustion on marital interaction in police couples. *Journal of Marriage and Family, 63*, 1052–1067. doi:10.1111/j.1741-3737.2001.01052.x
- Roh, S., & Oliver, W.M. (2005). Effects of community policing upon fear of crime: Understanding the causal linkage. *Policing: An International Journal of Police Strategies & Management, 28*(4), 670–683. doi:10.1108/13639510510628758
- Rubinstein, J. (1973). *City police*. New York, NY: Farrar, Strauss & Giroux.
- Salmela-Aro, K., & Upadaya, K. (2018). Role of demands-resources in work engagement and burnout in different career stages. *Journal of Vocational Behavior, 108*, 190–200. doi:10.1016/j.jvb.2018.08.002
- Saunders, J., Kotzias, V., & Ramchand, R. (2019). Contemporary police stress: The impact of the evolving socio-political context. *Criminology, Criminal Justice, Law & Society, 20*(1), 35–52.
- Schafer, J. A. (2010). Effective leaders and leadership in policing: Traits, assessment, development, and expansion. *Policing: An International Journal of Police Strategies & Management, 33*(4), 644–663. doi:10.1108/13639511011085060
- Schieman, S., & Reid, S. (2009). Job authority and health: Unraveling the competing suppression and explanatory influences. *Social Science & Medicine, 69*(11), 1616–1624. doi:10.1016/j.socscimed.2009.08.038
- Shane, J. M. (2010). Organizational stressors and police performance. *Journal of Criminal Justice, 38*(4), 807–818. doi:10.1016/j.jcrimjus.2010.05.008
- Siegrist, M., & Cvetkovich, G. (2000). Perception of hazards: The role of social trust and knowledge. *Risk Analysis, 20*, 713–719. doi:10.1111/0272-4332.205064
- Skogan, W. G. (2006). *Police and community in Chicago: A tale of three cities*. New York, NY: Oxford University Press.
- Skolnick, J. H., & Bayley, D. H. (1988). *Community policing: Issues and practices around the world*. Washington, DC: U.S. Department of Justice, National Institute of Justice, Office of Communication and Research Utilization.
- Stanley, I. H., Hom, M. A., & Joiner, T. E. (2016). A systematic review of suicidal thoughts and behaviors among police officers, firefighters, EMTs, and paramedics. *Clinical Psychology Review, 44*, 25–44. doi:10.1016/j.cpr.2015.12.002
- Starcke, K., & Brand, M. (2012). Decision making under stress: A selective review. *Neuroscience & Biobehavioral Reviews, 36*(4), 1228–1248. doi:10.1016/j.neubiorev.2012.02.003
- Swatt, M. L., Gibson, C. L., & Piquero, N. L. (2007). Exploring the utility of general strain theory in explaining problematic alcohol consumption by police officers. *Journal of Criminal Justice, 35*(6), 596–611. doi:10.1016/j.jcrimjus.2007.09.005
- Tănase, S., Manea, C., Chraif, M., Anței, M., & Coblaș, V. (2012). Assertiveness and organizational trust as predictors of mental and physical health in a Romanian oil company. *Procedia—Social and Behavioral Sciences, 33*, 1047–1051. doi:10.1016/j.sbspro.2012.01.282
- Taris, T. W., Kompier, M. A., Geurts, S. A., Houtman, I. L., & Van Den Heuvel, F. F. (2010). Professional efficacy, exhaustion, and work characteristics among police officers: A longitudinal test of the learning-related predictions of the demand–control model. *Journal of Occupational and Organizational Psychology, 83*(2), 455–474. doi:10.1348/096317909X424583
- Trojanowicz, R. C., & Bucqueroux, B. (1998). *Community policing: How to get started*. Cincinnati, OH: Anderson.
- Ungar, M. (2008). Resilience across cultures. *The British Journal of Social Work, 38*(2), 218–235. doi:10.1093/bjsw/bcl343
- Ungar, M. (2016). Which counts more: Differential impact of the environment or differential susceptibility of the individual? *The British Journal of Social Work, 47*(5), 1279–1289. doi:10.1093/bjsw/bcw109
- Ungar, M. (2018). The differential impact of social services on young people's resilience. *Child Abuse & Neglect, 78*, 4–12. doi:10.1016/j.chiabu.2017.09.024
- Ungar, M. (2011). The social ecology of resilience. Addressing contextual and cultural ambiguity of a nascent construct. *American Journal of Orthopsychiatry, 81*, 1–17. doi:10.1111/j.1939-0025.2010.01067.x

- Ungar, M., Ghazinour, M., & Richter, J. (2013). Annual research review: What is resilience within the social ecology of human development? *Journal of Child Psychology and Psychiatry*, *54*(4), 348–366. doi:10.1111/jcpp.12025
- United Nations Office on Drugs and Crime. (2011). *Handbook on police accountability, oversight and integrity*. Retrieved from https://www.unodc.org/pdf/criminal_justice/Handbook_on_police_Accountability_Oversight_and_Integrity.pdf
- Violanti, J. M., & Aron, F. (1995). Police stressors: Variations in perception among police personnel. *Journal of Criminal Justice*, *23*(3), 287–294. doi:10.1016/0047-2352(95)00012-F
- Violanti, J. M., Burchfiel, C. M., Miller, D. B., Andrew, M. E., Dorn, J., Wactawski-Wende, J., . . . Sharp, D. S. (2006). The Buffalo Cardio-Metabolic Occupational Police Stress (BCOPS) Study: Methods and participant characteristics. *Annals of Epidemiology*, *16*(2), 148–156. doi:10.1016/j.annepidem.2005.07.054
- Violanti, J. M., Fekedulegn, D., Hartley, T. A., Charles, L. E., Andrew, M. E., Ma, C. C., & Burchfiel, C. M. (2016). Highly rated and most frequent stressors among police officers: Gender differences. *American Journal of Criminal Justice*, *41*(4), 645–662. doi:10.1007/s12103-016-9342-x
- Violanti, J. M. (2014). Police suicide: A detrimental outcome of psychological work exposures. In J. M. Violanti (Ed.), *Dying for the job: Police work exposure and health* (pp. 115–123). Springfield, IL: Charles C Thomas.
- Webster, J. H. (2013). Police officer perceptions of occupational stress: The state of the art. *Policing: An International Journal of Police Strategies & Management*, *36*(3), 636–652. doi:10.1108/PIJPSM-03-2013-0021
- Weir, H., Stewart, D. M., & Morris, R. G. (2012). Problematic alcohol consumption by police officers and other protective service employees: A comparative analysis. *Journal of Criminal Justice*, *40*(1), 72–82. doi:10.1016/j.jcrimjus.2011.11.007
- Weisburd, D., & McElroy, J. (1998). Enacting the CPO role: Finding from the New York City pilot program in community policing. In J. R. Greene & S. D. Mastrofski (Eds.), *Community policing: Rhetoric or reality* (pp. 89–101). New York, NY: Praeger.
- Xu, Y., Fielder, M. L., & Flaming, K. H. (2005). Discovering the impact of community policing: The broken windows thesis, collective efficacy, and citizens' judgement. *Journal of Research in Crime and Delinquency*, *42*(2), 147–186. doi:10.1177/0022427804266544
- Yehuda, R. (2002). Current status of cortisol findings in post-traumatic stress disorder. *Psychiatric Clinics of North America*, *25*(2), 341–368. doi:10.1016/s0193-953x(02)00002-3