

Portland State University

PDXScholar

---

Criminology and Criminal Justice Senior  
Capstone Project

Criminology and Criminal Justice

---

Spring 2014

# Prevention and Management of Stress in Policing: A Review of the Literature

Portland State University. Criminology and Criminal Justice Senior Capstone

Follow this and additional works at: [https://pdxscholar.library.pdx.edu/ccj\\_capstone](https://pdxscholar.library.pdx.edu/ccj_capstone)



Part of the [Community-Based Research Commons](#), [Criminology Commons](#), and the [Criminology and Criminal Justice Commons](#)

**Let us know how access to this document benefits you.**

---

## Recommended Citation

Portland State University. Criminology and Criminal Justice Senior Capstone, "Prevention and Management of Stress in Policing: A Review of the Literature" (2014). *Criminology and Criminal Justice Senior Capstone Project*. 11.

[https://pdxscholar.library.pdx.edu/ccj\\_capstone/11](https://pdxscholar.library.pdx.edu/ccj_capstone/11)

This Technical Report is brought to you for free and open access. It has been accepted for inclusion in Criminology and Criminal Justice Senior Capstone Project by an authorized administrator of PDXScholar. Please contact us if we can make this document more accessible: [pdxscholar@pdx.edu](mailto:pdxscholar@pdx.edu).

---

# Prevention and Management of Stress in Policing

Spring 2014

A Review of the Literature

## **Portland State University Criminology and Criminal Justice Capstone Project**

UNST 421 Senior Capstone Class: Brad Allen, Elizabeth Alvarado, Jeremy Anderson, Andrea Beck, Eunide Benjamin, Mason Berry, Joanna Bohnsack, Donald Boone, Lyndsay Cardwell, Cynthia Cervantes, Desiree Cimino, Jenna Colbert, Kristin Cook, Dona Davenport, Catherine Del Biaggio, Jeromy Delorme-King, Amber Diana, Ravyn Dunbar, Marc Elliott, Ross Ellis, Kristy English, Hector Equihua, Jeanmarie French, Leia Graf, Rebecca Grillone, Jasmine Haynes, Eduardo Hernandez, Andrea Herrera, Jacob Howitt, Robert Hughes, Tiffinee Hunley, Magda Jimenez, Cory Johnson, Jennifer Keller, Patrick Kennedy, Heather Kikkert, Tatiana Kosheleva, Maggie Kuhle, Brian Kujala, Betty-Jo Larsen, Victoria Lau, Renee Leidorf, Nicole Lenac, Michelle Lintner, Jessica Macomber, Natascha Martin, Siobhan McAlorum, Norma Menera, Tyler Mitchell, Michelle Modglin, Grady Nelson, Amy Nissl, Michael Pace, Dustin Pangelinan, Jacquelyn Patterson, Dashiell Porter, Rachel Ralston, Jennifer Rosenau, Brittany Rowe, Cecilia Salazar, Robert Sangelo, Michael Sargent, Jeff Schlecht, Mary Schneider, Ruby Shaffer, Katie Sichley, Dallis Smith, Trent Smith, Stephanie Speers, Melinda Tabor, Tanya Tkach, Gaerett Umphred, Brianna Unger, Vashek Usov, Stephen VanDover, Amy Vidan, Ryan Voss, Julie Watts, Jennifer Welch, Katherine Woods, Nicole Wooldridge

Supervised by Dr. Debra Lindberg

---

***Table of Contents***

Title Page.....1

Table of Contents.....2

Introduction.....3-4

Definition and Prevalence.....4-6

Characteristics of Those Most Affected.....6-7

Better Practices for Prevention.....7-8

Implications for Policy and Training.....8-10

Conclusion.....10

Bibliography.....11-12

---

## **Introduction**

Working as a police officer can be a rewarding job, but it can also be a stressful one. Policing is one of the few professions where individuals deal with many stressors, which exceed the usual expectations of society. Although there is no way to eliminate stress and the burnout it can cause, there are methods law enforcement agencies can utilize to help officers prevent stress from worsening and to make it more manageable. This literature review contains information to help police agencies train officers about prevention and management of stress in the workplace. It is based on 29 studies from the United States, Australia, South Africa, India and The Netherlands. The review focuses on the definition and prevalence of police officer stress, characteristics of those most affected, better practices for prevention and management, and implications for policy and training.

Police officer stress is heavily influenced by both internal and external factors. Requirements to adhere to standard operating procedures and, in turn, departmental policies and procedures were found to have an impact on officer stress. Officers believe their lack of influence on how police work is accomplished, as well as their lack of influence over departmental policies and procedures are significant sources of stress (Morash, Haarr, & Kwak, 2006, pp.34-36). They are also more likely to think agency personnel policies involving job assignments and discipline are unfair, correlating with burn-out (McCarty & Skogan, 2012, pp.66, 78).

Other indicators include dealing with racial and ethnic biases, diversification of police forces, violence, long hours, fatigue, and an inability to cope with the types of situations they see each day. Female and minority officers have different experiences in the workplace compared to those who are white and male. Community characteristics, support networks, officer status within a department, and workplace problems all influence officer stress (Morash et al., 2006, pp.34-36; Hassell & Brandl, 2009, p.408; National Institute of Justice, 2012, p.1).

Several researchers found stress positively correlated to violence, both on the job and at home. Anderson and Lo (2010), found job-related stress can lead to a loss of control at home and potentially to intimate partner violence (p.1180). Kop and Euwema (2001) stated officer burnout was related to positive attitudes toward the use of force, self-reported use of force, and independently observed use of force (p.631). Manzoni and Eisner (2006), however, found no relationship between work-related stress, job satisfaction, organizational commitment, and burnout and excessive use of force by officers (p.613).

Coping ability was also related to officer stress. Aaron (2000) states stress does not influence psychological adjustment, but does influence dissociation, which influences psychological adjustment, and concludes it is not the stressors themselves, but how the officer copes with stress which determines psychological adjustment (p.438). Pienaar, Rothman and Van de Vijver (2007) contend coping strategies, occupational stress, and personality traits are positively related to suicidal ideation, They state those at risk for suicidal ideation have lower levels of coping skills, turn less frequently to religion, and are less emotionally stable (p.254). Postmortem reviews of traumatic events like 9/11 may result in significantly higher levels of traumatic stress, which is especially true when first responders are asked to evaluate the trauma and/or testify about events at a later time (Regehr, Hill, Goldberg, & Hughes, 2003, pp.611-618). Scott (2004) notes small town police officers cite administrative changes, their treatment

---

within the department, media criticism, and the dangerousness of the job, itself, lead to stress (p.237, 255). Precursors left unaddressed, may resultant in “full-blown” stress and negatively impacted effectiveness, public safety, and community and workplace relationships (Garcia, Nesbary, & Gu, 2004, pp.34-47).

## ***Definition and Prevalence***

Definitions of stress for law enforcement officers include both external and internal causes. External causes are dangers, threats, and declining respect from the public while on patrol. Internal stressors are described as negative attitudes toward upper management, such as feeling lack of support from administration, demanding work, lack of clarified job descriptions, as well as insufficient acknowledgement for a job well-done. It has been determined a well-defined job description, positive supervisor support, beneficial working relationships and positive perception of change leads to a happier work environment (Terpstra & Schaap, 2013, p.67; Allisey, Noblet, Lamontagne, & Houdmont, 2013, pp.6-14).

Scott, Evans and Verma (2009) also found the contributing aspects of home environment, criminal contacts, and foot patrols made up the majority of stressors, with greater levels more prevalent in officers with less education (p. 225). Another study which took into account eight primary variables (age, gender, race, education, shift, tenure, hours of client contact, and security level) found no significant differences in satisfactions among race, shift, or security levels. They did, however, find gender and length of employment to show differing levels of correctional officer burnout (Morgan, Van Haveren, & Pearson, 2002, p.151). Males showed much more depersonalization than women. Results also indicated older and more educated officers are more likely to experience increased feelings of personal accomplishment (pp.151-153).

In a study of 1,104 officers, a five-page questionnaire was used to assess officer stressors, negative health outcomes, current stress levels, level of support, and use of violence by police officers. The study assessed demographic characteristics, the nature of interpersonal relationships, work related events, psychological and physiological responses to stress, level of burnout, and perceptions related to gender dynamics. The greatest emotional stressor identified was being the subject of an internal investigation. The student also found that Black and white women had slightly elevated rates of stress, whereas Black males had reduced levels of stress compared to white men (Kurtz, 2008, pp.223-236).

The longevity of most law enforcement careers, the stress levels from exposure to danger, and traumatic situations can have detrimental effects on law enforcement officers (Chapin, Brannen, Singer, & Walker, 2008, p.340). Hassell and Brandl (2009) concluded the longer officers have been in service, the higher the stress levels they have (p.421). Another study found law enforcement officers also suffer significant medical, physical, and mental problems the longer they stay within their workplace environments (Keinan & Malach-Pines, 2007, pp.390-392). In addition, law enforcement officers who work long hours and different shifts on a regular basis suffer from lack of sleep, among many other mental and medical issues, which negatively manifest as stressors (NIJ, 2012, pp.1-4).

---

It is also noted that law enforcement personnel experience “extreme stimulus,” sometimes referred to as “acute stress,” in the course of their work situations. It is this extreme stimulus which is believed to manifest itself in significant adverse changes in the physiological, psychological and behavioral responses of law enforcement personnel (i.e., officers think and act differently), than non-law enforcement individuals. Acute stress is defined as “unpleasant verbal input, pain or injury, making wrong decisions, shooting inaccuracies, making errors when making arrests, uncertain or dangerous situations, and reprimands from a supervisor” (Anshel, 2000, p.378). The stresses arising from the law enforcement careers are manifested as various physical and psychological ailments, including but not limited to premature death and disability (Brandl & Smith, 2012, p.121).

### ***Characteristics of Those Most Affected***

Many of the studies addressed characteristics of those persons affected by stress in policing. Kurtz (2008), found job requirements, making violent arrests, police internal investigations, interactions with the public, and officer gender were directly related to officer burnout. Officers without administrative or family support and less education were strongest candidates for burnout. There were gender differences in stress, as well. Males were experienced more depersonalization, while females experienced more burnout (pp.223-224).

Officers whose subgroups (age, race and sexual orientation) are most represented in police departments experience less workplace stress than those with less representation. Female minorities reported more stress than white males or females (Hassell & Brandl, 2009, pp.423-424). Morash et al. (2006) found the second strongest predictor of stress was perceived lack of influence on how police work is accomplished or in the development of policies and procedures. A surprising finding was that violent crime rate was unrelated to stress levels (pp.36-37).

The rank of an officer in a law enforcement agency was also linked to experiences with stressors. Patrol officers were most adversely affected by the potential of a fellow officer becoming injured or dying. Public criticism of performance was the primary stressor for detectives, while sergeants and lieutenants were most affected by perceptions that officers were incompetent (Garcia et al., 2004, p.39). Pienaar et al. (2007) found less conscientious officers to have a lower degree of emotional stability and to have fewer coping skills, using avoidance strategies, instead. These strategies refer to the perceptual, cognitive, and behavioral responses used to manage stress. Officers who are less religious were also more prone to suicidal ideation. Pienaar’s findings indicate differences in job demands experienced by high and low suicide ideation groups might be attributable to personality traits and coping strategies, such as extraversion, agreeableness, conscientiousness, and seeking emotional support (pp.249-255).

Efforts have been made to explore the theory of police officer stress corresponding with greater risk of increased use of force by officers. Manzoni and Eisner (2006) found burnout and job stress did not cause increased use of force by officers. They found those who experienced more work related stress tended to perform more conflict-prone police activities. Officers less able to handle the stress reported lower job satisfaction and greater emotional exhaustion. Job profiles remain the only predictor of police use of force (pp.631-636).

---

Police officers' families, non-sworn personnel, and dispatchers were also vulnerable to stress. An NIJ study found shift work and overtime placed stress on family bonding and disrupted family life. The results also showed non-sworn personnel were frequently stressed from the handling of critical incidents and being perceived as second-class employees (2012, pp.14-15, 23). Anderson and Lo (2010) looked at intimate partner violence among police officers. They found a correlation between higher rates of stressful events, authoritarian spillovers, and negative emotions with officers who engaged in intimate partner violence (p.1181).

When looking at the similarities between civilians working in law enforcement and sworn officers, McCarty and Skogan (2012, p.77) and Scott (2004, p.255) found the burnout process is universal, with nearly the same factors affecting civilians as those affecting sworn officers. Agency size was also important. Agencies serving populations of less than 250,000 had higher levels of burnout than agencies serving populations 250,000 or greater (p.77).

### ***Better Practices for Prevention***

Suggestions for better practices to decrease officer stress include exercise programs, stress reduction programs, anonymous surveys to determine levels of stress, efforts to increase job meaningfulness, and clear promotional criteria for advancements. One study found ten-hour shifts most favorable for officers because they experienced less fatigue, more quality sleep at home, and increased overall work satisfaction. Those with eight-hour shifts reported less sleep in twenty-four hour periods, as well as logging more overtime than other shifts. Those with twelve-hour shifts were less likely to perform self-initiated tasks (NIJ, 2012, p.7).

Kop and Euwema found officers who most often exercise use of force were those experiencing significant emotional exhaustion and depersonalization. They suggest better management applications, such as implementation of policies to develop norms of reasonable use of force and providing feedback for behavior might help alleviate the problem (2001, pp.648-649). It is also important to have a specific protocol in place for officer-involved domestic violence. By adopting an International Association of Chiefs of Police (IACP) Model Policy, an organization might be able properly to respond to intense crisis situations with set protocols (Lonsway, 2006, pp.418-420).

Morash et al. found organizational psychologists employed to monitor negative workplace conditions can reduce employee stress. Taking action to decrease bias and allow officers more influence over work activities has the potential to be beneficial by allowing officers to perceive fair treatment and control over their work (2006, p.36). The Employee Assistance Program (EAP) is essential to the law enforcement field in dealing with daily operations and challenges facing police agency personnel. Peer-led critical stress debriefings help reduce stresses of those affected by critical incidents, by allowing all participants to express their feelings in controlled environments and offering understanding of the situations (Newbold, Lohr, & Gist, 2008, p.1344). Zhao et al. (2002) found that police officers could handle their jobs efficiently when given effective support and counseling.

Aaron's (2000) research revealed police officers who disassociate or use avoidance to cope with negative on-the-job experiences experienced increased stress and poor psychological skills. Officers confronting challenging tasks and negative thoughts or feelings can expect healthier

---

outcomes when dealing with these obstacles. Structured debriefings after critical incidents can help with policies, attitudes, and behaviors. Proactive screenings for dissociative behaviors conducted by law enforcement administrators could identify and lessen risks of negative outcomes (pp.446-447).

Styles of policing play roles in amounts of stress encountered by officers. Individuals with service-oriented approaches to policing encounter fewer stressors (e.g., they experience more respect for their authority from the public), than do officers with strict crime-fighting styles (Terpstra & Schaap, 2013, p.69). Education is also an important factor in managing stress. Morgan et al. (2002) found officers with higher levels of education perceive higher levels of personal accomplishments. Morgan suggests based on the findings, incentives should be put in place for officers to continue their education (p.157).

The U.S. Department of Justice Office of Justice Programs (DOJ) (1996) found many criminal justice planners believed in establishing formal advisory boards or diverse steering committees, to be helpful in moderate to large law enforcement agencies (p.29). Formal boards are especially important in selecting stress management programs and referral sources for police officers. With adequate planning, criminal justice agencies will be able to train officers to deal with the job stressors and provide better services to them (pp.141-144).

## ***Implications for Policies and Training***

There are several helpful programs to be considered when designing policies and procedures to alleviate police officer stresses. Counseling and employee assistance programs (EAP) can help those who have been affected by stress (McCarty & Skogan, 2012, p.80). Hiring individuals based on their backgrounds, coping abilities, and education levels could reduce future stressors. The Department of Justice suggests including both officers and their families in decisions pertaining to policies, procedures, or trainings about stress (DOJ, 1996, p.32).

Race and gender must be considered when establishing policies and training. Dowler (2005) learned African American officers believed their peers viewed their on-the-job performance more critically and that diversity training helps to alleviate these perceptions (p.487). According to Kurtz (2008), male officers believe they must maintain masculine personas while working. This may cause female officers to feel as though their male counterparts do not want them on the job (p.235). Again, diversity training can prove beneficial in helping not only racial divides, but gender relationships, as well.

Research by both Scott (2004, pp.256-7) and Hassell and Brandl (2009) suggest if officers have good working relationships with administrative management, stress would be reduced and that when officers and administration have holistic relationships, stress levels are decreased. Efforts should be made to blend traditional “top-down” approaches with less traditional methods, which increase participation among officers. Police managers should create clear policy statements, provide proper supervision, hold well-controlled investigations, and apply sanctions justly in order to continue to reduce workplace stress.

---

Police leaders can reduce the administrative and bureaucratic stressors on officers by implementing systematic changes such as a shifting to community oriented policing or better negotiating with bargaining units in order to change working conditions (Chapin et al., 2008, p.340). Law enforcement shift work and work assignments also contribute to police officer stress. One consideration is the redesigning of patrol districts to ensure an even workload, which would ultimately lead to lowered stress levels (Hickman, Fricas, Strom, & Pope, 2011, p.245).

Studies found co-workers and supervisors can have great impacts in reducing stress. Law enforcement agencies which pair police partners who have similar personalities reduce job dissatisfaction and increase job performance (Dowler, 2005, p.487). Supervisors trained to support their subordinates also have significant impact on job satisfaction (Brough & Williams, 2007, p.566). Officers who believed they were rewarded for seeking help or helping fellow co-workers felt supported and that they had overcome the stigma surrounding asking for help (Chapin et al., 2008, p.345).

Selecting employees based on emotional stability and personality characteristics was also found to reduce the amount of excessive force associated with workplace stress and depersonalization (Kop & Euwema, 2001, p.648). Hiring applicants with high scores on conscientiousness, emotional stability, coping skills, and religious affiliations could prevent future suicides (Pienaar et al., 2007, p.256). Hiring officers who have college educations and are properly instructed and evaluated in the academy can assist in reducing officer stress. Police academies can ensure recruits receive the necessary tools to face the demands of police work (Gershon, Barocas, Li, & Vlahov, 2009, p.286). College educated personnel might also help develop more proactive policies (Scott et al., 2009, pp.230-231).

Stress reduction programs and training are helpful in police organizations. Training in racial, ethnic, and cultural awareness reduces the amount of stress felt by minorities (Dowler, 2005, p.486). Creating training programs designed to address job satisfaction, promotional opportunities and benefits, family issues, supervisor evaluations and physical fitness would provide officers tools in managing stress (Keinan & Malach-Pines, 2007, p.395).

## **Conclusion**

As a result of the research review, we have found several key factors determining the prevalence of stress among police. Stress is more prevalent in female officers and lower among male officers, particularly those who are African American. Several studies identified characteristics of those most affected by stress in police work. These include a lack of social and familial support, less education, the fact of being a female officer or a female minority, being less conscientious and less religious were among those traits.

We also learned researchers made several suggestions for improvement of policing agency practices to help alleviate the burden of stress. Among the suggestions were implementation of improved stress reduction programs, removal of the stigma of asking for help, providing counseling, developing a specific protocol for officer-involved domestic violence, which includes same-gender couples, more education on police-related issues, stress debriefing, and increasing officers' influence over their work situations.

---

Suggestions for policy changes and training programs, designed to combat stress associated with police work include increased access to employee assistance programs (with services for officers' families), including officers and their families in policy changes affecting them, and offering training about stress, as well as racial, ethnic, and cultural awareness.

Overall, the research reviewed on the subject of stress in policing revealed many critical elements associated with the topic. Attention to the problem of stress in policing is crucial for a better understanding of how properly to handle its far-reaching effects.

---

## Bibliography

- Aaron, J.D.K. (2000). Stress and coping in police officers. *Police Quarterly*, 3(4), 438-450. DOI: 10.1177/109861110000300405
- Allisey, A.F., Noblet, A.J., Lamontagne, A.D., & Houdmont, J. (2013). Testing a model of officer intentions to quit: The mediating effects of job stress and job satisfaction. *Criminal Justice and Behavior*, XX(X), 1-21. DOI: 10.1177/0093854813509987
- Anderson, A.S., & Lo, C.C. (2010). Intimate partner violence within law enforcement families. *Journal of Interpersonal Violence*, 26(6), 1176-1193. DOI: 10.1177/0886260510368156
- Anshel, M. H. (2000). A conceptual model and implications for coping with stressful events in police work. *Criminal Justice and Behavior*, 27(3), 375-400. DOI: 10.1177/0093854800027003006
- Brandl, S. G., & Smith, B. W. (2012). An empirical examination of retired police officers' length of retirement and age at death: A research note. *Police Quarterly*, 16(1), 113-123. DOI: 10.1177/0093854800027003006
- Brough, P., & Williams, J. (2007). Managing occupational stress in a high-risk industry: Measuring the job demands of correctional officers. *Criminal Justice and Behavior*, 34(4), 555-567. DOI: 10.1177/0093854806294147
- Chapin, M., Brannen, S.J., Singer, M.I. & Walker, M. (2008). Training police leadership to recognize and address operational stress. *Police Quarterly*, 11(3), 338-352. DOI: 10.1177/1098611107307736
- Dowler, K. (2005). Job satisfaction, burnout, and perception of unfair treatment: The relationship between race and police work. *Police Quarterly*, 8(4), 476-489. DOI: 10.1177/1098611104269787
- Garcia, L., Nesbary, D.K., & Gu, J. (2004). Perceptual variations of stressors among police officers during an era of decreasing crime. *Journal of Contemporary Criminal Justice*, 20(1), 33-50. DOI: 10.1177/1043986203262300
- Gershon, R.R.M., Barocas, B., 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
- Hassell, K.D., & Brandl, S.G. (2009). An examination of the workplace experiences of police patrol officers: The role of race, sex, and sexual orientation. *Police Quarterly* 12(4), 408-430. DOI: 10.1177/1098611109348473
- Hickman, M.J., Fricas, J., Strom, K.J., & Pope, M. W. (2011). Mapping police stress. *Police Quarterly*, 14(3), 227-250. DOI: 10.1177/10986111111413991
- Keinan, G., & Malach-Pines, A. (2007). Stress and burnout among personnel: Outcomes, and intervention strategies. *Criminal and Behavior*, 34(3), 380-398. DOI 10.1177/0093854806290007

- 
- Kop, N., & Euwema, M.C. (2001). Occupational stress and the use of force by Dutch police officers. *Criminal Justice and Behavior*, 28(5), 631-652. DOI: 10.1177/009385480102800505
- 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
- Lonsway, K.A. (2006). Policies on police officer domestic violence: Prevalence and specific provisions within large police agencies. *Police Quarterly*, 9(4), 397-422. DOI: 10.1177/1098611104268884
- Manzoni, P., & Eisner, M. (2006). Violence between the police and the public: Influences of work-related stress, job satisfaction, burnout, and situational factors. *Criminal Justice and Behavior*, 33(5), 613-645. DOI: 10.1177/0093854806288039
- McCarty, W.P., & Skogan, W.G. (2012). Job-related burnout among civilian and sworn police personnel. *Police Quarterly*, 16(1), 66-84. DOI: 10.1177/1098611112457357
- Morash, M., Haarr, R., & Kwak, D. (2006). Multilevel influences on police stress. *Journal of Contemporary Criminal Justice*, 22(1), 26-43. DOI: 10.1177/1043986205285055
- Morgan, R.D., Van Haveren, R.A., & Pearson, C.A. (2002). Correctional officer burnout: Further analysis. *Criminal Justice and Behavior*, 29(2), 144-160.
- National Institute of Justice. (2012). Officer work hours, stress, and fatigue. Retrieved from <http://www.nij.gov/topics/law-enforcement/officer-safety/stress-fatigue/pages/welcome.aspx>
- Newbold, K.M., Lohr, J.M., & Gist, R. (2008). Apprehended without warrant: Issues of evidentiary warrant for critical incident services and related trauma interventions in a federal law enforcement agency. *Criminal Justice and Behavior*, 35(10), 1337-1353. DOI: 10.1177/0093854808321655
- Pienaar, J., Rothmann, S., & Van de Vijver, F.J.R. (2007). Occupational stress, personality traits, coping strategies, and suicide ideation in the South African Police Service. *Criminal Justice and Behavior*, 34(2), 246-258. DOI: 10.1177/0093854806288708
- Regehr, D., Hill, J., Goldberg, G., & Hughes, J. (2003). Postmortem inquiries and trauma responses in paramedics and firefighters. *Journal of Interpersonal Violence*, 18(6), 607-622. DOI: 10.1177/0886260503251131
- Scott, J., Evans, D., & Verma, A. (2009). Does higher education affect perceptions among police personnel? A response from India. *Journal of Contemporary Criminal Justice*, 25(2), 214-236. DOI: 10.1177/1043986209333592
- Scott, Y.M. (2004). Stress among rural and small-town patrol officers: A survey of Pennsylvania municipal agencies. *Police Quarterly*, 7(23), 237-261. DOI: 10.1177/1098611103258958
- Terpstra, J., & Schaap, D. (2013). Police culture, stress conditions, and working styles. *European Journal of Criminology*, 10(1), 59-73. DOI: 10.1177/1477370812456343

---

U.S. Department of Justice Office of Justice Programs. (1996). Developing a law enforcement stress program for officers and their families. NCJ163175. Retrieved from <https://www.ncjrs.gov/pdffiles/163175.pdf>

Zhao, J., He, N., & Lovrich, N. (2002). Predicting five dimensions of police officer stress: Looking more deeply into organizational settings for sources of police stress. *Police Quarterly*, 5(1), 43-62.  
DOI: 10.1177/109861110200500103