



Gender Stress: Differences in Critical Life Events among Law Enforcement Officers

Jacquelyn H. Bradway¹
North Central University, USA

Abstract

This mixed-method research surveyed 271 officers in Florida to examine if a difference exists in critical life events (sources of stress) experienced by law enforcement officers. Descriptive statistics, t-test, chi-square, ANOVA and Cronbach's Alpha were used to analyze the data. The data did not reveal any significant statistical differences between sources of stress for male and female officers. The findings did however reflect significant statistical differences in the coping strategies and self-reporting of physical illnesses between male and female officers.

Key Words: Stress, Gender, coping strategies, Law enforcement officers.

Introduction

Police work is a highly stressful occupation, and police officers are frequently exposed to stressors that are unique to their jobs. Their role of protecting the public, for instance, makes it possible to anticipate both positive and negative responses to stress (Renck, Weisaeth & Skarbo, 2002). The effects of the stress have been empirically linked to the physiological and psychological illness of officers and to the decreased quality and quantity of police service. Moreover, the law enforcement culture plays a "direct role in the causation of traumatic stress reactions, and organization factors are particularly relevant when dealing with duty related psychological trauma" (Renck et al., p. 7).

Over the years, policing has been characterized as appropriate only for males and inconsistent with socially acceptable female activities (Lonsway et al., 2002). With the increasing number of women joining the profession, issues regarding the impact of the job, its stressors, and the effect of a male dominated subculture on women have come to the fore. Historically, research into police stress is most often descriptive or anecdotal. To adequately understand, predict, and control stress among the law enforcement officers, particularly among female officers, more empirical study is necessary.

To this end, this mixed-method research surveyed 271 officers in Florida to examine if a difference exists in critical life events (sources of stress) experienced by law enforcement officers. The instrument used was a modified version of Sewell's Law Enforcement Critical

¹ Mentor, Homeland Security Program, North Central University, USA. Email: jbradway@tampabay.rr.com

Life Events Scale (LECLES) survey. The LECLES is a 144-item instrument that examines police stress based on individual events (Sewell, 1983).

The sample for this study was drawn from a population of 734 municipal, county, and state law enforcement officers in the Tampa Bay, Florida, area each of whom had a minimum of 5 years of active law enforcement experience. Officers were administered a Likert-type attitudinal scale to rate their perceived stress on a scale of 0 to 5, or none to very high.

Agency Profile

Respondents were drawn from five agencies within the Tampa Bay each of which was accredited by either the Commission on Accreditation Law Enforcement Agencies at the national level or the Florida Commission Law Enforcement Accreditation (or both). On The successful accomplishment, the accreditation process ensures that these agencies comply with a set of law enforcement standards meeting all the professionally recognized criteria.

Site 1: Florida Highway Patrol

The Florida Highway Patrol is Florida's largest traffic law agency. In March 2002, the Florida Highway Patrol had over 1,770 troopers (sworn law enforcement officers) and 500 non sworn staff. At the time of study, Troop F of Florida Highway Patrol, located in the Tampa Bay area, was commanded by a female major in charge of charged with managing the operations in the nine counties comprising the troop's geographic district. Troop F is posed of 96 male and 16 female troopers. Twelve of the females met the minimum 5-year requirement (FHP, personal e-mail, November 14, 2005).

Site 2: Lakeland Police Department

The city of Lakeland covers approximately 70.5 square miles with a population of over 90,000 permanent residents. In November 2005, the LPD authorized to have 234 law enforcement officers, although, at that time, it had only 221 officer positions filled: 193 males and 28 females (LPD, personal e-mail, January 3, 2006). There were 54 sworn supervisory personnel. The LPD command leadership included one chief of police and three assistant police chiefs (one of whom was a female). The total number of females that had a minimum of 5 years of active law enforcement experience was not available.

Site 3: Sarasota County Sheriff's Office

Sarasota County covers approximately 620 square miles, with a population of over 360,000 permanent residents, approximately 81,000 seasonal residents, and over 1.1 million tourists and visitors per year. Sarasota County Sheriff's Office has 280 male deputies and 44 female deputies.

Site 4: Tampa Police Department

Tampa is the largest city in Hillsborough County and it is the third most populous city in Florida. The city is 116.1 square miles with a population of over 333,000 permanent residents. As of November 29, 2005, there were approximately 980 sworn officers, of which 110 females had a minimum of 5 years of active law enforcement experience. Two of the three assistant chiefs of police are females.

Site 5: Hillsborough County Sheriff's Office

Hillsborough County covers over 1,000 square miles, approximately 900 square miles of which comprise unincorporated Hillsborough County. The county has a population of over 1.1 million permanent residents, of whom 759,000 are in the unincorporated Hillsborough County area. Seasonal residents range from approximately 20,000 in midsummer to 60,000 in the winter months. The county has approximately 17 million tourists and visitors per year.

Hillsborough County Sheriff's Office is the 10th largest suburban law enforcement agency, by personnel, in the nation. The agency has 103 male and 14 female supervisors and 767 male and 159 female deputies, of which 155 of the females have 5 or more years of active law enforcement experience.

Demographic Profile

Of the 271 respondents to the survey, 148 (55%) were male and 123 (45%) were female. The sample in this study was more heavily female oriented than the gender composition of other law enforcement agencies with 100 or more sworn law enforcement officers, but it provided a better comparison of stressors based on gender. The summary data for 2000 for state and local law enforcement agencies with 100 or more officers indicate that female officers comprise 12% of county police, 14% of municipal police, 14% of sheriff agencies and 6% of primary state law enforcement (Reaves & Hickman, 2004). All of the agencies in this research had 100 or more officers. He, Zhao and Archbold (2002) posited that similar demographic findings of the female respondents might contribute to a similar professional perspective on stressful events.

The average age of all officers was 42.99 years. The average age of the female law enforcement officers was approximately two and a half years younger than male law enforcement officers, 41.57 years and 44.15 years, respectively. With an alpha level of .05, age, $X^2(32, N = 271) = 111.08, p < .05$, was statistically significant based on gender.

Of the female respondents in this study, 83.7% (103) were White; 8.9% (11) Black; 6.5% (8) Hispanic; and .8% (1) Native American. The male cohort was 78.2% (212) White; 7.7% (21) Black; 12.2% (33) Hispanic; .4% (1) Native American; 1.1% (3) Asian/Pacific Islander; and .4% (1) Other.

Collectively, 18% of the respondents were single, 62% of the respondents were married, and 16% were divorced. Over 25 percent of the females indicated they were single compared to 10% of the males, and 50% of the females and 72% of the males indicated they were married. In the separated, divorced, and widowed categories, the females were 2%, 20% and .8%, respectively, and the males were 3%, 14%, and 1%. Seven female law enforcement and two male law enforcement officers responded that their current married status was single; however, the respondents checked the item divorced on the experience since being a law enforcement officers section of the survey.

Female respondents were divorced an average of 1.43 times ($SD = .770$), and male respondents an average of 1.46 ($SD = .701$) times. Research has indicated that the divorce rate in law enforcement is higher than in the general population (Snipes, 2000). Collins and Gibbs (2003) found that twice as high a percentage of female officers, than their male counterparts, were divorced or separated. Based on the results of this study, female officers had a higher rate of being separated or divorced than male officers; however, it was not twice as high (21% and 17% respectively).

Collectively, respondents averaged 17.79 years of law enforcement experience ($SD = 6.90$). The average years of law enforcement experience for males was 19.10 years ($SD = 7.12$) as compared to the 16.20 years of law enforcement for females ($SD = 7.06$). The majority of the male respondents ($n = 43$) and female respondents ($n = 32$) indicated having been employed with their department at an average range of 16–20 years.

In US, civil service policies govern the appointment of police and detectives in most States, large municipalities, and special police agencies, as well as in many smaller jurisdictions. Eligibility for appointment is based on the applicants' performance in competitive written examinations and previous education and experience. In larger departments, where the majority of law enforcement jobs are found, applicants usually must have, at the least completed high school education, and some departments also require a year or two of college coursework (Reaves & Hickman, 2004). Law enforcement officers that participated in this study averaged 14.90 years of education ($SD = 1.65$). The overall mean educational level for males was 14.86 years ($SD = 1.67$) and, for females, 14.95 years ($SD = 1.63$).

Approximately the same percentages of male and female law enforcement officers had at least 16 years of education, the equivalent of a college degree: 53% and 55%, respectively. The majority of the respondents had at least 16 years of education and the results showed a similar demographic for both male and female law enforcement officers, 53% and 55% respectively.

Results

Agency Programs

Researchers have concluded that support from supervisors and coworkers and the availability of stress management programs might allow officers to better deal with stressors on the job. In this survey, the number of yes responses to the question, "Does your agency have an organized or formal stress management program?", and the types of stress programs available to the respondents are presented in Table 1. Over 80% of the respondents indicated that their agencies had some type of ongoing stress management program. The availability of an Employee Assistance Program (77%) had the most responses, followed by in service training (61 %).

Illnesses Experienced Since Becoming Officer

Police work is recognized as a high-stress occupation with a significant relationship to physical and psychological illness (Renck et al., 2002). The occupation involves shift work, physical danger, and personal and organizational conflicts. To evaluate how the sample reacted to stress, the survey included a self-report section of mental and physical health complaints that targeted symptoms with a correlation to high stress levels and job-related stressors for law enforcement officers.

Table 1

Types of Stress Programs Available within the Agency

Characteristic	N	%
Supervisory/management	1	39
Spouse training	5	1.
Physical fitness program	5	21
Dietary/nutrition training	1	4.
Psychological counseling	1	46
Peer Counseling	1	49
Critical Incident Stress	1	72
Annual Physical Examination	2	9.
Other Stress Programs	1	4.

The survey identified 20 stress-related illnesses or stressful events (see Table 2). Respondents were asked to check all the symptoms, illnesses, and events they had experienced since becoming a law enforcement officer. Collectively, the most-reported illnesses and events were high blood pressure, divorce, high cholesterol, migraines, chronic back problems, chronic or severe digestive or gastrointestinal disturbances, chronic sleep difficulties, increased anxiety, and depression. Over 33% of the males reported experiencing high blood pressure, compared to 6% of the females, and 16% of the males reported chronic back problems, compared to 32% of the females.

Critical Life Events

The modified version of the survey used in this study utilized 124 critical life events outlined in Sewell's Law Enforcement Critical Life Events Scale (LECLES) survey. The survey instructed participants to respond to each item by selecting one of the following options for assessing stress levels: 0 = none, 1 = low; 2 = light; 3 = moderate; 4 = high and 5 = very high. There were two duplicate items on the survey, variables v23, *violent death of a police officer*, $F(1,266) = 2.64, p < .05$, and v35 *violent death of a police officer*, $F(1,266) = 5.52, p < .05$. The two duplicate items were not discarded and were included in the survey results. Interestingly, the variables had slightly different results. The male respondents reported a moderate level of stress for v23 *violent death of a police officer* ($M = 3.77, SD = 1.54$) and v35 *violent death of a police officer*, ($M = 3.64, SD = 1.57$) compared to the high response from females for v23 *violent death of a police officer* ($M = 4.08, SD = 1.53$) and v35 *violent death of a police officer*, ($M = 4.10, SD = 1.63$).

Characteristics	Men ^a		Women ^b	
	N	%	N	%
Divorce	48	32.4	45	36.6
High cholesterol	46	31.1	15	12.2
Migraine or other headaches	25	16.9	48	39.0
Chronic or severe digestive or gastrointestinal disturbances	18	12.2	17	13.8
Chronic sleep difficulties	16	10.8	17	13.8
Increased anxiety	15	10.1	21	17.1
Depression	13	8.8	20	16.3
Increased use of prescription drugs	8	5.4	5	4.1
Chronic fatigue	7	4.7	23	18.7
Other heart problems (e.g. angina)	6	4.1	6	4.9
Increased use of alcohol	6	4.1	9	7.3
Colitis	3	2.0	4	3.3
Diagnosed cardiovascular disease	3	2.0	1	0.8
Diabetes	3	2.0	1	0.8
Ulcers	2	1.4	5	4.1
Heart attack	1	0.7	0	0
Stroke	1	0.7	0	0
Kidney disease	1	0.7	1	0.8
Other illness	7	4.7	5	.4.1
<i>Treated for a stress-related physical disease or psychological/emotional difficulties, since becoming a law enforcement officer</i>				
No	121	81.8	96	78.0
Yes	22	14.9	21	17.1
Did not answer	5	3.4	6	4.9
I have experienced none of these	32	21.6	15	13.0
^a n = 123 . ^b n = 148.				

Cronbach's Alpha is a measure of scale reliability. A reliability coefficient of .70 or higher is considered acceptable in most social science research environments (Creswell, 2002). All the subcategories, (a) intraorganizational stressors, (b) interorganizational practices, (c) Criminal justice system practices, (d) public practices, (e) law enforcement duties and (f) law enforcement environment, reflected a high internal consistency with a reliability coefficient higher than .70. To illustrate, the Cronbach's Alpha value for the variables in the intraorganizational stress category was .949 and the Cronbach's Alpha value for the variables in the criminal justice practices category was .820.

Intraorganizational Stressors

Intraorganizational practices and characteristics are defined as those stressors related to aspects within the law enforcement agency that might produce psychological stress in officers (Bowman, 1999; Finn & Tomz, 1997). Toch (2002) found that office politics, poor administration, and supervision were perceived as major stressors by police personnel. Many researchers, including Toch (2002), have postulated that such organizational stressors affected law enforcement officers' more than inherent stressors. Those intraorganizational factors intrinsic to females in policing that might be stressful include sexual harassment, ostracism, tokenism, shift work, and sexual discrimination (Brown & Campbell, 1994; Patterson, 2002).

Female law enforcement officers in this study had a slightly higher stress response than did the male law enforcement officers on intraorganizational critical life events. The frequency test on the intraorganizational items reflected there was no significant difference, $F(1,262) = .33, p < .05$, in the level of stress for the critical life event *assignment to evening shift*, with males ($M = 1.41, SD = 1.29$) reporting a slightly higher stress level than females ($M = 1.31, SD = 1.42$).

Interorganizational Practices

Interorganizational practices and characteristics are those situations occurring between different agencies that cause stress (Finn & Tomz, 1999). This category relates to stressors that include jurisdictional protectiveness or territoriality. The Cronbach's Alpha value for the variables in the intraorganizational stress category was .949, reflecting a high level of internal consistency.

A one-way analysis of variance yielded marginal statistically significant differences on the perceived stress level, based on gender, on the critical life events *emergency management responsibilities* $F(1,266) = 7.62, p < .05$ and *different policies across jurisdictions* (e.g. pursuit policies), $F(1,258) = 9.39, p < 0.05$. Female officers reported a slightly significant increase in the perceived stress level for *emergency management responsibilities* ($M = 2.58, SD = 1.28, M = 3.04, SD = 1.46$) and *different policies across jurisdictions* ($M = 1.43; SD = 1.16, M = 1.92, SD = 1.41$) for females when compared to males, respectively.

Criminal Justice System Practices

Criminal justice system practices and characteristics are sources of stress that originate from actions of other agencies or entities within the criminal justice system (Finn & Tomz, 1999). These critical life events include ineffectiveness of the corrections system, unfavorable court decisions, and preoccupation with street crime and police-related civil suits. Criminal justice system practices are considered cumulative or chronic sources of stress (Lombas, 2001).

The descriptive statistics on the items listed as criminal justice practices reflected significant differences in the level of perceived stress, with females having a slightly higher response than males. The results indicated a statistically significant difference in levels of perceived stress based on gender specifically for critical life events *police-related civil suit*, $F(1,264) = 3.94, p < .05$; *criminal indictment of a fellow officer*, $F(1,263) = 4.15, p < .05$; and *release of an offender by a jury*, $F(1,263) = 3.97, p < .05$. There was a slight difference in how male and female law enforcement officers perceive stress on criminal justice practices. The results indicate a slightly significant difference in the perceived stress level for *police-related civil suit*, ($M = 3.21, SD = 1.78, M = 2.80, SD = 1.55$); *criminal indictment of a fellow officer*, ($M = 2.69, SD = 1.61; M = 2.31; SD = 1.43$); and *release of an offender by a jury* for females when compared to males.

Public Practices

A one-way analysis of variance yielded slight but statistically significant differences based on gender on four items characterized as public practices: *personal criticism by the press*, $F(1,264) = 6.45, p < .05$; *citizen complaint against an officer*, $F(1,262) = 6.77, p < .05$; *press criticism of department actions/practices*, $F(1,262) = 3.12, p < .05$; and *verbal abuse from a traffic violator*, $F(1,262) = 6.44, p < .05$ for females when compared to males. Females reported a slightly higher level of stress compared to males.

Law Enforcement Duties

Stressors in the category of police work have been defined as role conflict, fear and danger, human suffering, the mental and physical consequences of police actions, and the cumulative nature of stress (Finn & Tomz, 1997). Previous research has concluded that stress levels might be similar for both male and female officers. The statistically significant differences between male and female law enforcement officers on law enforcement duties are listed in Table 3.

Table 3
Law Enforcement Duties Mean for Women and Men

LECLES item and number	Women ^a		Men ^b	
	Mean	SD	Mean	SD
V41: Response to a "felony in progress" call	3.10	1.362	2.46	1.16
V59: Physical assault of an officer	3.18	1.454	2.66	1.40
V69: Handling of a mentally/emotionally disturbed person	2.62	1.402	2.12	1.16
V75: Violent job-related injury to another officer	3.40	1.497	2.86	1.40
V79: Pursuit of a traffic offender	2.86	1.480	2.34	1.36
V81: Personally striking a prisoner or suspect	2.56	1.616	2.04	1.49
V90: Answering a call to a scene involving the death of an adult	2.20	1.338	1.80	1.12
V103: Assignment to decoy duty	1.64	1.339	1.25	1.12
V107: Interrogation session with a suspect	1.99	1.312	1.38	1.06
LECLES = Law Enforcement Critical Life Events.		^a n = 123 .. ^b n = 148.		

There was a significant difference for *answering a call to a scene involving violent non-accidental death of a child*, $F(1,265) = 11.95, p <.05, (M = 3.66, SD = 1.49; M = 3.04, SD = 1.52)$ and for response to a *felony in progress call*, $F(1,265) = 17.04, p <.05, (M = 3.10, SD = 1.36; M = 2.46, SD = 1.16)$ based on gender, with females reporting a slightly higher level of stress than male law enforcement officers. There was no significant difference based on gender for *shooting someone in the line of duty* $F(1,262) = .844, p <.05$. Over 50% of the females ($M = 3.67, SD = 1.94$) and nearly half of the males ($M = 3.65, SD = 1.76$) reported a very high level of stress for *shooting someone in the line of duty*.

Law Enforcement Environment

Cognitive appraisal reflects an individual's overall perception or assessment of a situation or stressor (Kreitner, Kinicki, & Buelens, 2002; Williamson & Mattiske, 2003). Individuals do not interpret stress in the same manner; therefore, cognitive appraisal is an essential element within the stress process (Kreitner et al., 2002). The transactional approach of cognitive appraisal places focus on understanding how an individual copes with stress and is related to understanding how the individual interacts with the environment (White, 2004). The relationship between the individual and the environment and the individual's cognitive and psychological disposition are crucial in evaluating environmental events (Coman, 1990). For instance, research found that one officer may appraise a transfer as a career challenge, and another officer may appraise a transfer as disciplinary action, resulting in different kinds of stress (Scarborough & Collins, 2003).

A one-way ANOVA on the 25 critical life events items categorized as *law enforcement environment* stressors revealed statistically significant differences on nine items. The difference between these variables was significant for *working with incompetent officer*, $F(1,266) = 9.89, p <.05$; *lack of control over personal schedule*, $F(1,265) = 5.63, p <.05$; *attending a police funeral*, $F(1,261) = 5.51, p <.05$; *promotion with assignment to another unit*, $F(1,261) = 10.31, p <.05$; *promotion within existing assignment*, $F(1,260) = 5.83, p <.05$; *working with an officer who is afraid*, $F(1,263) = 5.70, p <.05$; *job-related illness*, $F(1,262) = 9.00, p <.05, 54.31$; and *dating non-police persons*, $F(1,263) = 15.80, p <.05$. The difference between these variables was significant. Female law enforcement officers reported a slightly higher level of stress on the critical life events for law enforcement officers than male law enforcement officers (see Table 4).

The study confirmed that female law enforcement officers, when compared to male law enforcement officers, do not report different critical life events that contribute to stress. Based on the one-way ANOVA, most of the critical life events that contributed to stress had a significance level greater than 0.05, indicating no statistically significant differences existed based solely on gender.

Discussion and Conclusion

Overall, female law enforcement officers did not report higher levels of stress or perceptions of critical life events, than the male law enforcement officers. Several factors might account for the lack of statistically significant differences in the perception of stress, based on gender, on the critical life events found in this study. For instance, female officers represent a growing demographic in many police agencies (He et al., 2002). The females in this study were veterans with a mean of 16.20 years of law enforcement experience ($SD = 6.90$), and 69% of the female respondents had an associates degree or above. Thus, the

demographics of the female respondents were similar to the male respondents for age, education, years of law enforcement experience, and marital status, perhaps contributing to a similar professional outlook on stressful events.

Table 4

Law Enforcement Environment Mean for Women and Men

LECLES item and number	Women ^a		Men ^b	
	Mean	SD	Mean	SD
V36: Failure on a promotional examination	2.70	1.66	2.44	1.63
V 45: Working with incompetent officers	3.38	1.28	2.89	1.28
V54: Lack of control over personal schedule	2.83	1.54	2.42	1.35
V73: Attending a police funeral	3.47	1.45	3.06	1.33
V80: Promotion with assignment to another unit	2.42	1.46	1.67	1.34
V84: Promotion within existing assignment	1.95	1.42	1.55	1.24
V87: Working with an officer who is afraid	3.39	1.36	2.98	1.40
V92: Job-related illness	2.54	1.39	2.04	1.27
V123: Dating non-police persons	1.40	1.56	.758	1.04
^a n = 123. ^b n = 148.				

Although the rationale behind pursuing a career in law enforcement might be different for each female, the stresses that are associated with females in male-dominated fields are similar (Norvell, Hills & Murrin, 1993). To illustrate a few of them, females employed in male-dominated occupations must cope with particular employment stressors, such as gender-role stereotypes and occupational sex discrimination (Ellison, 2004), in order to be seen as successful and to fit into the police culture and environment (Brown & Heidensohn, 2000).

The data collected in this study suggested that females appear to experience similar, or the same, sources of stress despite the fact that they are in a male-dominated profession and have had to overcome discrimination and role conflicts to function and survive for years in policing. Several researchers have examined work environments and distributive justice patterns and concluded that females are generally as satisfied as males with their jobs (Norvell et al., 1993). As researchers have concluded, females might be reluctant to acknowledge injustices in their own work environment; therefore, the extent of inequalities is not known. In law enforcement and in a police culture that has an influence in defining and structuring policing, an individual expressing emotions, except at funerals or similar situations, might be perceived as not being capable of handling the inherent stressors of the job. For example, previous literature revealed that female officers are likely to encounter higher levels of harassment, overt hostility, and other negative social interactions on the job compared to their male counterparts (Ellison, 2004; He et al., 2002; Lonsway et al., 2002)

This study has found out that, female respondents reported illnesses similar to those reported by male respondents. Although migraine headaches, other headaches, and chronic back problems were the most commonly reported illnesses for females, the females in the study also reported heart problems. This disclosure is consistent with the growing awareness that females are at high risk for heart attacks (Lonsway et al., 2002).

Intraorganizational stressors are the most stressful events for police officers. This study supports that, when compared on the basis of their law enforcement duties, females and males perceive similar levels of stress. One factor might be that, as a whole, recruit training and mandatory training requirements have increased for law enforcement officers, and the training is the same for males and females.

Yet certain gender-related stressors remain. Law enforcement is a caring and self-contained environment; however, policing has hierarchical structures with the same characteristics of any subculture: unwritten rules and codes of conduct. For instance, females are faced with the brass or glass ceiling and have not yet fully positioned themselves to reform the system. Changes are difficult in a male-majority profession; therefore, leaders in law enforcement must take the lead and move policing to a progressive system.

The perceived stressors that the majority of the female respondents rated very high were dismissal (at 68% compared to males at 61%); promotion of inexperienced/incompetent officer over you (females, 33%, compared to males, 21 %); observing an act of police corruption (females, 39%, compared to males, 28%); and duty under a poor supervisor (females, 27%, compared to males, 12%).

In conclusion, this study provided empirical data related to stress resulting from critical life events as perceived by male and female officers in the Tampa Bay, Florida, area, which expand and are supportive of earlier research studies (Ellison, 2003; Snipes, 2002; Toch, 2002).

References

- Bowman, M. A. (1999). *Female specific police stress: A study of the stressors experienced by female police officers*. Unpublished master's thesis, University of South Florida.
- Brown, J. M., & Campbell, E. A. (1994). *Stress and policing*. New York, NY: John Wiley & Sons.
- Brown, J., & Heidensohn, F. (2000). *Gender and policing*. New York, NY: St. Martin's Press, LLC.
- Collins, P. A., & Gibbs, A. 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.
- Creswell, J. W. (2002). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research*. Upper Saddle River, NJ: Prentice Hall.
- Ellison, K. W. (2004). *Stress and the police officer* (2nd Ed.). Springfield, IL: Charles C Thomas.
- Finn, P., & Tomz, J. E. (1997). *Developing a law enforcement stress program for officers and their families*. Washington, DC: National Institute of Justice.
- Harrington, P. E., Spillar, K., Lonsway, K. A., Webber, R., Baldwin, K. A., Besser, A., et al. (2001). *Recruiting & Retaining Women: A self-assessment guide for law enforcement*. Washington, DC: Bureau of Justice Assistance.

- He, I., Zhao, J., & Archbold, C. A. (2002). Gender and police stress: The convergent and divergent impact of work environment, work-family conflict and stress coping mechanisms of female and male police officers. *Policing, 25*(4), 687-708.
- Lombas, T. M. (2001). A naturalistic exploration of stress and coping among rural law enforcement officers: Implications for the counseling profession. (Doctoral dissertation, University of New Orleans, 2001). *Dissertation Abstracts International, DAI-A 62/11*, 3701.
- Lonsway, K., Carrington, S., Aguirre, P., Wood, M., Moore, M., Harrington, P., Smeal, E., & Spillar, K. et. al. (2002). *Equality denied. The status of women in policing 2001*. California: National Center for Women and Policing.
- Norvell, N. K., Hills, H. A., & Murrin, M. R. (1993). Understanding stressing, female and male law enforcement officers. *Psychology of Women Quarterly, 17*(3), 289-301.
- Patterson, G. T. (2002). Predicting the effects of military service experience on stressful occupational events in police officers. *Policing, 25*(3), 602-618.
- Reaves, B. A., & Hickman, M. J. (2004). *Law enforcement management and administrative statistics, 2000: Data for individual state and local agencies with 100 or more officers*. Washington, DC: U.S. Department of Justice.
- Renck, B., Weisaeth, L., & Skarbo, S. (2002). Stress reactions in police officers after a disaster rescue operation. *Nordic J Psychiatry, 56*(1), 7-14.
- Sewell, J. D. (1983). The development of a critical life events scale for law enforcement. *Journal of Police Science and Administration, 11*(1), 109-116.
- Snipes, D. E. (2002). Gender differences in the perception of stressors among law enforcement officers (Doctoral dissertation, University of Florida, 2002). *Dissertation Abstracts International, 64/03*, 1536.
- Toch, H. (2002). *Stress in Policing*. Rockville, MD: National Criminal Justice Reference Services.