

STRESS IN SMALL TOWN AND RURAL LAW ENFORCEMENT: Testing the Assumptions†

WILLARD M. OLIVER††
Sam Houston State University

CECIL “ANDY” MEIER
American Red Cross

ABSTRACT: *Sandy and Devine (1978) theorized that small-town and rural police officers experienced stressors different from their urban counterparts. They delineated four rural stress dimensions: security, social factors, working conditions, and inactivity. Despite the number of hypotheses announced by these authors from their exposure to small-town and rural police, they have never been tested. This study is an attempt to rectify this deficiency in the literature by testing their theory/hypotheses with data derived from a survey questionnaire of West Virginia law enforcement officers. The findings of this study lend support for many of the original hypotheses and all four of the dimensions.*

INTRODUCTION

“Stress in small town and rural law enforcement? Hell, yes we have stress. Nothing to do, I’m bored off my ass, and my only friends are the drunks and cows. This job’s killin’ me!”

—West Virginia Law Enforcement Officer

Research in the area of police stress has produced quite an extensive body of literature over the past four decades. Research has adequately examined police perception of stressors (Crank & Caldero, 1991; Cullen, Link, Travis, & Lemming, 1983; Hageman, 1978; Hillgren,

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†† Direct all correspondence to: Willard M. Oliver, College of Criminal Justice, Sam Houston State University, P.O. Box 2296, Huntsville, TX 77340. Email: woliver@shsu.edu.

Bond, & Jones, 1976; Kirkcaldy, Cooper, & Ruffalo, 1995; Kroes, Hurrell, & Margolis, 1974a; Kroes, Margolis, & Hurrell, 1974b; Lotz & Regoli, 1977; McLaren, Gollan, & Horwell, 1998; Morash & Haarr, 1995; Patterson, 1992; Regoli, Crank, & Culbertson, 1989; Singleton & Teahan, 1978; Terry, 1981; Violanti, 1983; Violanti & Aron, 1994, 1995; White, Lawrence, Biggerstaff, & Grubb, 1985), the actual types of stressors police experience (Burke, 1993; Crank, Regoli, Hewitt, & Culbertson, 1993; Hageman, 1978; Kroes, 1985; Lawrence, 1984; Marshall & House, 1985; Morash & Haarr, 1995; Patterson, 1992; Reiser, 1974; Sewell, 1983; Singleton & Teahan, 1978; Terry, 1981; Violanti, Marshall, & Howe, 1985; White et al., 1985; Zhao, He, & Lovrich, 2002), and it has classified these stressors into four major categories: organizational, external, task related, and personal (Kroes et al., 1974b; Territo & Vetter, 1983; Wexler & Logan, 1983). The first of these classifications, organizational stress, consists of those factors brought on by the bureaucratic nature of the typical police agency and the conflicts that arise between management and line officers (Kroes et al., 1974b; Storch & Panzarella, 1996; Toch, 2002). The second, external, consists of those factors related to things that lie outside of policing that are often beyond their control, such as politics and economic constraints (Kroes et al., 1974b; Toch, 2002). The third is task related which tend to center on the dangers inherent within police work as related to the daily tasks which police must perform (Kroes et al., 1974b; Toch, 2002). Finally, the fourth area, personal stressors (Kroes et al., 1974b; Toch, 2002), includes those stressors that affect the individual, such as their family life, conflicts between family life and the police profession, and personal feelings of self-actualization and expression (Coman & Evans, 1991; Crank & Caldero, 1991; Violanti & Aron, 1994).

The research has continually cited the first two, specifically organizational structure and management practices, as being the two leading stressors in policing (Coman & Evans, 1991; Crank & Caldero, 1991; Hillgren et al., 1976; Kirkcaldy et al., 1995; Kroes et al., 1974a, 1974b; Maynard & Maynard, 1982; Patterson, 1992; Storch & Panzarella, 1996; Violanti & Aron, 1994, 1995; White & Marino, 1983). In addition, research has also looked at the issue of coping and effective social support mechanisms for police officers in dealing with these stressors (Aron, 2000; Anshel, 2000; Fain & McCormick, 1988; Finn & Tomz, 1997; Patterson, 2003). Despite all of the research in this field, there is a paucity of research dealing with small-town and rural police departments. The majority of stress studies have dealt with large urban police departments serving populations over 250,000 with over 1,000 police officers or medium size police departments serving populations over 50,000 with over 100 police officers (Crank & Caldero, 1991; Regoli et al.,

1989). Very little research has dealt with departments serving small-town and rural jurisdictions, those serving populations under 50,000 and often with fewer than 20 officers (Scott, 2004).

Some research into small-town and rural policing has looked at the psychological characteristics of small-town police officers (Aaron, 2000; Bartol, 1982). In fact, Bartol, with his longitudinal study, has conducted some interesting work in this area, but much of his research has tended to focus on women and gender differences in small-town policing (Bartol, 1982, 1996; Bartol, Bergen, Volckens, & Knoras, 1992). Other research in this area has analyzed the differences between urban/suburban and small-town/rural police agencies with some finding differences in police behavior and attitudes (Brown, 1981; Kowalewski, Hall, Dolan, & Anderson, 1984; Mastrofski, Ritti, & Hoffmaster, 1987; Meyers, Heeron, Hingson, & Kovenock, 1987; Ness & Rogers, 1982; Powell, 1990; Shaw, 1983), while others have found no discernible differences (Brooks & Piquero, 1998; Meagher, 1985). It should be noted that most of these studies have looked at department sizes ranging from 20 to 70 police officers, while none have looked solely at small-town and rural agencies to test many of the theories and hypotheses directly on a population of small-town and rural law enforcement personnel.

One of the first publications regarding police stress in small-town and rural environments came from two researchers, Sandy and Devine, in 1978. Their article explained that small-town and rural police officers often experience the same types of stress as their urban counterparts. However, they also experience four factors, or dimensions, of stress very unique to their environment: security, social factors, working conditions, and inactivity. The issue of security describes the isolation often experienced by rural police due to the large geographical areas they police and the limited number of officers available to respond to calls. The social factors primarily detail the "fish bowl" environment in which small-town and rural police officers operate, as there is no anonymity off-duty and they often police people they know. The working conditions of small-town police departments, such as limited resources and lack of training, also create a unique stressor for police. Finally, the inactivity on the part of rural police often leads to boredom and low self-esteem among officers. Although Sandy and Devine's theory and hypotheses about small-town and rural policing have been oft repeated (Anderson, Swenson, & Clay, 1995; Bartol, 1996; Bartol et al., 1992), they have never been fully tested. This is most likely because the description of their theory and hypotheses compliments conventional wisdom and it has become accepted as verified truth when in fact there has been little to no research to validate the hypotheses.

The purpose of the present study is to begin examining stress in small-town and rural law enforcement by analyzing a sample of a population that truly qualifies as small-town and rural. Because this theory and its subsequent hypotheses have never been adequately tested, it proposes to test these four dimensions using said sample. While it is anticipated that various demographic variables will be related with stress, such as gender, education, and the number of years in law enforcement, it is also anticipated that there will be adequate support for all four dimensions describing stress in small-town and rural law enforcement.

LITERATURE REVIEW

In order to understand the concepts of stress among small-town and rural police, it is important to first define what is meant by each of these concepts. Stress, for the purposes of this article, is defined as "something that is imposed on a person usually from outside, that is, external or personal factors that bring about some degree of physical or psychological discomfort" (Zhao et al., 2002, p. 48; See also Brown & Cambell, 1994; Selye, 1974; Sewell, 1981). Small-town and rural, for the purposes of this study, is defined as a city or county serving a population under 50,000 using the Census Bureau population estimates (See McDonald, Wood, & Pflug, 1996; Weisheit, Flacone, & Wells, 1999). While both of these concepts, stress (See Anderson et al., 1995) and small-town and rural (See Appendix A in Weisheit et al., 1999), face definitional problems, they are generally well accepted in the literature and will be used for the study at hand.

Sandy and Devine (1978) first argued that many of the stress factors found in policing and the findings from various urban studies are, in fact, generalizable to small-town and rural police officers. This would make sense in terms of the studies conducted on the perceived stress of the job (Crank & Caldero, 1991; Morash & Haarr, 1995; Patterson, 1992; Regoli et al., 1989; Violanti, 1983; Violanti & Aron, 1994, 1995; White et al., 1985), for it does not matter whether or not the reality matches the perception; only that perceptions of their job can cause stress. A good example of this is the perception of danger inherent with the job (Cullen et al., 1983). While urban police may face greater danger in their job due to the increased number of violent crimes and calls for service than their rural counterparts, small-town and rural officers still perceive their job as being dangerous, thus contributing to their individual levels of stress. However, Sandy and Devine (1978) theorized that, because of the environment in which small-town and rural police operate, some of the stressors that they confront on a daily basis are

very different from their urban counterparts. They then described four “rural stress factors” or dimensions that are unique stressors to small-town and rural police. These are security, social factors, working conditions, and inactivity.

The first dimension, security, detailed the first distinction between urban and rural police as being focused on the “extreme sense of isolation in their attempts to confront both domestic and criminal situations” (Sandy & Devine, 1978, p. 42). Because of the jurisdiction’s size and low manning levels, small-town and rural police officers and deputy sheriffs often work large geographical areas with little to no support in the performance of their duties. Rural police departments often cover extremely large counties with less than 10 deputies, which can entail only one deputy on full patrol during any given shift. In many cases, another deputy is on stand-by, but because of the rural environment and large geographical area, it may take the back-up an enormous amount of time to assist. For example, the Greenbrier County Sheriff’s Department patrols an area covering 1,023 square miles, which is mainly rural with only a few small towns and consists of a total population of 35,000 people. They do this with only 17 deputies (Oliver & Meier, 2001). Due to 24-hour coverage, jail duty, and courtroom duty, the sheriff’s department will often have only five deputies on duty at any given time with usually only two or three available to respond to calls. When back-up is needed, if the only officer available is on the other side of the county, it can often take an hour to respond due to the inadequate road system that consists of small two-lane highways. All of this can mean that officers often have to go to calls alone, without readily available back-up, which can create feelings of isolation for these officers. Thus, while calls like domestic violence may be highly stressful, far more “simple” calls like auto accidents or even giving out a ticket can also become highly stressful to the small-town and rural officer.

The second dimension they described consisted of “social factors” which entailed the “absence of anonymity” in their job (Sandy & Devine, 1978, p. 42). While police officers in large metropolitan police departments can go off-duty and be anonymous among the public, small-town and rural environments do not allow for this. Because everyone knows everyone in a small town, when police officers go somewhere off-duty they are immediately recognized and associated with their full-time occupation. Never having the opportunity to be anonymous, the “fish bowl effect,” as it were, can create high levels of stress among officers. This can cause further stress because when officers respond to calls they may be dealing with family, friends, or at least acquaintances, and perhaps nowhere can this be more difficult than in responding to a DOA (Dead On Arrival) call. This type of dilemma was perhaps best

dramatized in an officer's recollection when he described his response to a domestic disturbance which turned out to be the principal of the local high school from which the officer had graduated. The problem arose from "the officer's inability to be perceived as an authority figure . . . [which] was greatly diminished by the ex-principal's perception of this officer as a student rather than a law enforcement officer" (Sandy & Devine, 1978, p. 43). Moreover, all of this makes it more difficult for officers to have friends outside of the policing profession because the fish bowl makes it difficult for them to distance themselves from their profession. Finally, Sandy and Devine (1978) also explained that because the departments in which officers work are small, they have a limited number of peers with which to communicate, thus decreasing the number of outlets for discussing activities on a normal shift or the response to a highly stressful call.

The third dimension entailed the working conditions of small-town and rural police officers (Sandy & Devine, 1978). Here, they listed the problems of economic constraint and a lack of resources as increasing the level of stress among officers. They noted that the "salary level is often significantly less for rural officers than for those in urban areas" and "the possibility of training is severely limited due to the lack of availability of funds and the inability of the department to provide replacements for officers participating in training programs" (p. 43). One area in which the lack of resources may contribute to the higher levels of stress is in the lack of adequate training regarding stress and stress reduction methods.

The final dimension described by Sandy and Devine (1978) was the problem of "inadequacy." Here they noted that many small-town and rural police officers come to realize that "boredom resulting from long periods of inactivity often is a factor contributing to job dissatisfaction" (p. 44). Because the rate of crime is low and because rural populations tend to not call the police, officers find themselves undergoing long periods of time without a call. This inactivity was hypothesized to have two effects on officers' performance, "first, the lack of activity fails to provide the rural officer with adequate sensory stimulation, and, second, inactivity often has a detrimental effect on officer esteem" (p. 44). As a result, officers begin to feel that they are useless and that they are doing something wrong or evil. Because their expectations and desire to perform in their job do not match the reality, they begin to battle with themselves over their utility, thus increasing their lack of self-confidence. Simply put, they feel they are inadequate.

These four dimensions provide a number of hypotheses for the theory that while small-town and rural police may experience stressors similar to their urban counterparts, they also have a very different set of

stressors due to their environment. These four dimensions are also closely related to the four factors of stressing previously cited, particularly the external stressors (the nature of small towns, "fishbowl" effect, etc.) and task-related stressors (inadequacy, limited resources, etc.), but in a very different manner from previous research, primarily due to size. This, then, becomes an important theory for understanding whether or not size matters as it relates to the problem of stress in policing (Brooks & Piquero, 1998; Brown, 1981; Kowalewski et al., 1984; Mastrofski et al., 1987; Meagher, 1985; Meyers et al., 1987; Ness & Rogers, 1982; Powell, 1990; Shaw, 1983).

The aim of the present study, then, was to test the theory and hypotheses as delineated by these two authors. In order to do this, the hypotheses were divided into the four dimensions previously described to answer the following questions: 1) How does level of security influence stress among small-town and rural officers?; 2) What influence do social factors have on officers' stress?; 3) Do working conditions in small-town and rural areas promote or reduce stress?; and 4) How do personal factors contribute to stress?

METHODS

The testing of Sandy and Devine's theory is derived from a larger study investigating stress in small-town and rural police departments. Assistance was received through an open solicitation grant in 1997 (Bureau of Justice Assistance, 1997), and in the spring of 1998, a train-the-trainer session was held to instruct personnel from both the policing profession and criminal justice academic field in an eight-hour block of instruction dealing with stress, stress in policing, stress in small-town and rural policing (the Sandy and Devine material), stress management/coping mechanisms, and Critical Incident Stress Debriefing. The instruction began in the fall of 1998 and was offered to every police and sheriff's department in West Virginia. The training was also offered on-site at the police and sheriff's departments at no cost to the agency, which provided a strong incentive for police and sheriff's departments to request the training. The training also met the mandatory eight hours of in-service training required of all law enforcement by the state for recertification purposes each year.

Participants were notified at the beginning of the training that the study was not a requirement for receiving the eight hours of training, that their participation was entirely voluntary, and they were provided a consent form describing the nature of the study. Individuals who agreed to participate in the study were asked to first complete the consent form, complete all of the survey questions, and then return it in a sealed

envelope to the instructor. The instructors, at the completion of the training, were required to mail all of the sealed envelopes to a blind, who was then responsible for coding each survey, removing the consent form and any identifying information, and mailing them to the researchers. Demographic information on respective departments was withheld until the training and study was completed in the spring of 2002. The survey instrument used in this study was approved by the West Virginia University Human Subjects Board in the spring of 1998, and was pre-tested on three departments during that same time period.

A total of 776 officers and deputies in West Virginia ultimately received the training. A number of officers were excluded from this specific study ($n = 111$) for the fact that they were either employed by the West Virginia State Police and the Department of Natural Resources ($n = 78$), a state level parks and environment police force, or they worked for either the Charleston or Huntington Police Departments ($n = 24$), which exceeded the 50,000 citizens served level, thus not qualifying as small-town and rural under the definition of this study. In addition, several subjects only provided demographic information and failed to answer any of the survey questions ($n = 9$). The remaining surveys ($n = 664$) provided a substantial database representing small-town and rural law enforcement.

In West Virginia at the time of this study, there were 271 law enforcement agencies with a total number of 3,078 sworn officers. As two state level agencies (West Virginia State Police and the Department of Natural Resources) and the only two municipal agencies serving populations over 50,000 (Charleston and Huntington) in West Virginia were removed from the study, this left a total of 267 agencies classified as small-town and rural with 2,070 sworn personnel. As a result, the sample represented 39% of the total population of small-town and rural police agencies and 32% of the total population of small-town and rural police officers in West Virginia (See Table 1).

The sample consisted of a slight under-representation of police and a slight over-representation of sheriff's departments. The average size of each law enforcement department in West Virginia was 14, while the sample had a mean of 18. However, the median and modal number of officers in West Virginia law enforcement agencies is 14 and four, respectively, and the sample reflected these numbers identically. The average age of the sample was 38, the average length of police experience was 12 years, and 96% were men. In terms of race, 95% reported they were Caucasian and 4% reported they were Black. Eighty-six percent reported they were married, 18% reported they were divorced, and 10% reported they were separated. In terms of education, 24% reported only a high school diploma and 21% reported a college degree.

TABLE 1
Characteristics of the Sample and West Virginia
Police Population

Variables	West Virginia	Police Sample
Agency		
Rural Agencies (%)	100	39
Police (%)	79	60
Sheriff (%)	20	39
Special PD (%)	1	1
Sex		
Male (%)	96	96
Female (%)	4	4
Race		
White (%)	95	95
Black (%)	4	4
Other (%)	1	1
Marital Status		
Married (%)	—	86
Divorced (%)	—	18
Separated (%)	—	10
Education		
GED (%)	—	<1
High School (%)	—	24
Some College (%)	—	51
College Degree (%)	—	21
Military (%)	—	35
Officers		
Number of Officers*	2,070	664
Mean (per Dept.)	14	18
Median (per Dept.)	14	14
Mode (per Dept.)	4	4
Average Age (Years)	38	38
Average Years of Police Experience	11	12
Income (mode)	—	\$15,000–\$19,999

* Excludes West Virginia State Police, West Virginia Department of Natural Resources Law Enforcement Division, and the Charleston and Huntington Police Departments.

Finally, 51% reported “some college,” but this is primarily due to the fact that for more than a decade, all new recruits at the West Virginia Police Academy (there is only one for the state) earn 60 college credits in the academy through Marshall University in Huntington, West Virginia. As Table 1 demonstrates, the demographic characteristics of the sample are largely reflective of the population of West Virginia law enforcement officers in terms of size, age, experience, gender, and race.

Dependent Variable

The study consisted of three sections. The first included general questions based upon the stress in policing literature, the Police Stress Survey, and the specific research on stress in small-town and rural policing. The second section was based upon the Adult Manifest Anxiety Scale (AMAS) (Reynolds, Richmond, & Lowe, 2003). The third section consisted of demographic variables. One question was a five-point Likert scale asking respondents to rate the stress inherent within their job. High stress was recorded as a 5, with 1 representing low stress and 3 representing average stress. For the purposes of this study, this question was selected to represent the perceived level of stress among small-town and rural police officers in order to test the theory and hypotheses of Sandy and Devine.

Explanatory Variables

The explanatory variables for this study were derived from both the first and second sections of the survey. The first section included basic questions related to the percentage of respondent calls dealing with family, friends, and acquaintances, and how far away their average back-up is, in minutes. In addition, a number of Likert scale questions were asked, such as whether or not they found writing tickets, responding to auto accidents, and domestic violence calls to be stressful. The second section consisted of questions from the AMAS that specifically looked at behaviors related to anxiety posed in a simple "yes/no" format. The AMAS includes such questions as "I certainly feel useless at times," "I am certainly lacking in self-confidence," and "I work under a great deal of tension" (Reynolds et al., 2003). A number of these questions provided good explanatory variables for the hypotheses that Sandy and Devine (1978) delineated in their article. For instance, when they explained that inactivity would lower an officer's self-esteem and that they would have feelings of uselessness, the AMAS question stating, "I certainly feel useless at times," addresses this variable.

Control Variables

The control variables for this study were those demographic variables that previous research had associated with higher levels of stress in both work and personal environments. These variables included marital status (Horwitz, McLaughlin, & White, 1997; Patterson, 2003), gender (Patterson, 2003; Roxburgh, 1996; Thoits, 1986; Turner & Marino, 1983), age (Patterson, 2003; Turner & Marino, 1983), race (Zhao et al., 2002), education (Ayres & Flanagan, 1992; Patterson, 2003), the number of years of police experience (Buzwa, Austin, & Bannon, 1994; Ev-

ans, Coman, & Stanley, 1992; Patterson, 1992, 2003; Zhao, Thurman, & He, 1999), and income (Patterson, 2003; Zhao et al., 1999).

The variables age and years of experience were measured in raw years, gender was coded as 1 for male and 0 for female, and race was coded as 1 for white and 0 for other. The marital status variable was broken down by asking the respondent if they were married and if they were divorced. These variables were kept separate due to the high rate of officers reporting multiple divorces so that someone answering that they were married, who had also been divorced a number of times, would be captured. For both variables, a 1 reported in the affirmative and a 0 reported in the negative. Income was reported in brackets of \$5,000 with the last category being \$40,000 or more. Finally, education was coded as 1 for college degree and 0 for no college degree. This was done for the purposes of avoiding the high number reporting "some college" due to Marshall University.

RESULTS

Table 2 presents the Pearson correlations which examined the direction and strength of the relationship between the independent variables and the perceived level of stress (Patterson, 2003). As the table shows, although the associations were weak, female officers ($r = -.01, p < .05$), White officers ($r = .08, p < .05$), and veteran officers ($r = .07, p < .05$) were more likely to report higher levels of stress. These relationships are in keeping with the findings of previous studies (Buzwa et al., 1994; Evans et al., 1992; Patterson, 1992, 2003; Roxburgh, 1996; Thoits, 1986; Turner & Marino, 1983; Zhao et al., 1999, 2002). However, there were no other variables that were significantly associated with stress.

Table 3 presents the results of the multivariate analysis exploring the degree to which police officer stress can be predicted by each explanatory variable and the control variables (Zhao et al., 2002). The *R*-squared statistics for all of the models were statistically significant, ranging from .03 in the majority of models to .14 in the "more stress than friends" model. It is recognized that the impact is modest for the explained variance does not exceed 14% of the total variance. However, it should be noted that each of the four dimensions reported at least one of the variables being significant, while the security models reported nearly all of the variables to be statistically significant.

All of the variables in the security regression models, except for jurisdiction size, were statistically significant. Sheriff's deputies did report higher levels of stress than their small-town counterparts; however, when looking simply at jurisdiction size, there was no support for the hypothesis that larger jurisdiction size would increase stress. Yet, both

TABLE 2
Correlations Among Demographic Variables and
Reported Level of Stress

	X ¹	X ²	X ³	X ⁴	X ⁵	X ⁶	X ⁷	X ⁸
X ¹ Age								
X ² Sex	-.06							
X ³ Race	.00	.05						
X ⁴ Marriage	.34*	.06	.12*					
X ⁵ Divorce	.10*	-.18*	-.02	.10*				
X ⁶ Education	-.13*	.02	.07*	-.05	-.02			
X ⁷ Police Exp.	.73*	.02	.04	.27*	.06	-.09*		
X ⁸ Income	.05	.03	-.00	.15*	.01	.08*	.37*	
Y ¹ Stress	-.03	-.01*	.08*	.01	-.01	.01	.07*	-.04

* Denotes statistical significance at the .05 level.

the lack of back-up and feelings of isolation variables were highly associated with increased levels of perceived stress. In addition, while domestic violence calls were associated with higher levels of stress, so were the more "routine" activities such as auto accidents and writing tickets.

The social factors regression models had only three models demonstrating significance: department size, the perception of more stress than their friends, and difficulty talking after a shift. The first variable, department size, was significant, but not in the direction hypothesized by Sandy and Devine (1978). This study found that the larger the department among small-town and rural agencies, the higher the levels of stress. The most significant model in this study was found in the perception that officers experienced greater stress than their friends, accounting for 14% of the explained variance. The only other significant variable was difficulty in talking after a shift. All of the variables associated with the "fishbowl" effect did not appear to be associated with higher levels of stress.

In terms of the working conditions dimension, the only model reporting statistical significance was the amount of stress training during their lifetime. As hypothesized, the more training the officers and deputies had regarding stress and stress management, the lower the perceived levels of reported stress. However, while stress training over a lifetime was highly associated, it should be noted that stress training over the previous 12 months was not significantly associated.

The last dimension, inadequacy, confirmed two of the four hypotheses. Those who had personal feelings of always battling with themselves and feelings of uselessness reported higher levels of stress. The

TABLE 3
Regression Analyses with Reported Stress Level as
the Dependent Variable

Variables	R^2	b	β
Security			
Sheriff's Department	.05*	.26	.14*
Jurisdiction Size	.03*	.00	.06
Back-Up	.08*	.01	.23*
Feelings of Isolation	.06*	.33	.16*
Auto Accidents	.04*	.28	.12*
Domestic Violence	.06*	.34	.18*
Tickets	.05*	.51	.16*
Social Factors			
Department Size	.04*	.00	.08*
More Stress than Friends	.14*	.74	.34*
Talking after Shift	.04*	.24	.45*
Talking after Bad Call	.03*	.21	.04
Known DOA	.03*	.00	.02
Calls with Family	.03*	-.02	-.00
Calls with Friends	.03*	.00	.01
Calls with Acquaintances	.03*	-.00	-.04
Talking with Family	.03*	.00	.01
Working Conditions			
Income	.03*	.01	.02
Stress Training (12 mo.)	.03*	-.01	-.00
Stress Training (lifetime)	.03*	-.02	-.22*
Inadequacy			
Lack Self-Confidence	.03*	.15	.05
Battle with Self	.04*	.21	.11*
Done Wrong/Evil	.03*	.22	.06
Feel Useless	.05*	.27	.13*

* Denotes statistical significance at the .05 level.

other two variables, lack of self-confidence and having done wrong or evil, were not statistically significant.

DISCUSSION

The correlational analysis results suggested that the variables of gender, race, and police experience were related to higher levels of stress. As found in previous studies analyzing stress among law enforcement officers (Buzwa et al., 1994; Evans et al., 1992; Patterson, 1992, 2003; Roxburgh, 1996; Thoits, 1986; Turner & Marino, 1983; Zhao et al., 1999, 2002), police officers from all jurisdictional sizes tend to experience similar types of stress using the variables typically found in urban studies. In addition, looking at the results more fully demonstrates that

age is associated with marriage, divorce, and police experience. This would stand to reason, for as officers become older, they move through various stages of life and gain more experience on the job (Patterson, 2003). It was also noted that age was negatively associated with education, suggesting that the younger officers in small-town and rural agencies are taking advantage of higher education opportunities much like their urban counterparts (Patterson, 2003). Finally, it is interesting to note that among small-town and rural officers, there was a significant correlation among women officers being divorced, suggesting increased difficulties for female officers in small-town and rural agencies in maintaining their marriages and coping with stress (Bartol, 1982, 1996; Bartol et al., 1992; Wexler & Logan, 1983).

Turning to the four dimensions and the regression models, it would appear that there is enough evidence to support the theory and hypotheses of Sandy and Devine (1978). However, it would be problematic to assert a blanket affirmation of their hypotheses. Perhaps the most dynamic dimension they articulated is in the area of security. Sheriff's deputies, policing larger geographical areas than their small-town counterparts, reported significantly higher levels of stress. In addition, all officers reporting long distance and wait times for back-up, as well as feelings of isolation, reported higher levels of stress. This offers strong support for the security dimension. The only variable that was not significant was based upon jurisdictional size, which may suggest a difference between reality and perception. Because most of the variables were based upon officer/deputy responses to the question, whereas the jurisdiction size was drawn from census data, this may suggest that perceived risk is more important than actual risk based on geographical size.

The social factors dimension found some support in this study, but not the full breadth theorized by Sandy and Devine (1978). The department size variable hypothesized that the smaller the department, the greater the stress due to the lack of peers with which to communicate. Therefore, the relationship should have been negatively correlated, but it was found to be a positive correlation. Hence, the larger the department among small-town and rural police, the higher the level of perceived stress. However, officers that stated they had difficulties talking with fellow officers after a typical shift reported higher levels of stress, which may suggest some support for the hypothesis due to the fact that officers from small departments have fewer peers to communicate with at the end of a shift. The most significant of the social factors and the model that explained the most variance, however, was the perception among officers that they experience higher levels of stress than their friends. Because small-town and rural officers have fewer peers, they

often are more likely to maintain friendships outside of policing. As a result, this increased interaction with friends in other jobs may increase their awareness of the stress inherent within their job by comparison, thus contributing to higher levels of perceived stress. Yet, what is perhaps most important in terms of the social factors dimension is the fact that none of the variables assessing the fishbowl effect were found to be correlated. This suggests, unlike Sandy and Devine's hypothesis, that most officers do not find this "fishbowl" living to be overly stressful and that perhaps they perceive it as a normal aspect of living in a small-town and rural environment.

The working conditions dimension had only one significant variable, and that was the lack of stress training throughout their career. As hypothesized, the officers with more stress training over their careers reported lower levels of stress. While income and stress training over the previous twelve months were not significant, the lack of training resources, primarily in the area of stress training, does appear to reduce the levels of stress (Crank & Caldero, 1991; Cullen et al., 1983; Hageman, 1978; Hillgren et al., 1976; Kirkcaldy et al., 1995; Kroes et al., 1974a, 1974b; Lotz & Regoli, 1977; McLaren et al., 1998; Morash & Haarr, 1995; Patterson, 1992; Regoli et al., 1989; Singleton & Teahan, 1978; Terry, 1981; Violanti, 1983; Violanti & Aron, 1994, 1995; White et al., 1985).

The last dimension, inadequacy, demonstrated some support for Sandy and Devine's hypothesis that inactivity and boredom can lead to feelings of uselessness and self-conflict due to the disconnect between what they perceive to be their job and the realities they discover in serving in a small-town or rural agency. As officers who reported they often battled with themselves and felt useless had higher levels of stress, the hypothesis of Sandy and Devine appears to be only partially supported. Since officers and deputies did not report a perceived lack of self-confidence or that they had done anything wrong or evil, it might be safe to conclude that the job may contribute to some self-conflict and feelings of uselessness, but it does not necessarily lower their self-confidence or feelings of righteousness.

CONCLUSION

The findings reported here have some important theoretical and practical implications. First, they provide the first test of the theory and hypotheses announced by Sandy and Devine (1978) which have often been repeated in the literature on stress when dealing with the topic of small-town and rural law enforcement (Anderson et al., 1995; Bartol, 1996; Bartol et al., 1992). This test of the theory and hypotheses pro-

vides some insight into the validity of their assertions as grouped into the four dimensions. The research thus concludes nearly full support for their security dimension in that officers and deputies in small-town and rural law enforcement agencies clearly have an important stress dimension, security, created by the environment in which they police, but that this may primarily be a factor of perceived risk rather than actual risk. In terms of the social factor dimension, this study finds only partial support for Sandy and Devine's (1978) hypotheses in that the fishbowl effect may not truly impact officer stress, but relationships with friends outside of law enforcement may highlight the differences of stress inherent within their jobs. The conclusion for the working conditions dimension only contributes the affirmation that a lack of resources, preventing adequate stress training, can contribute to higher levels of stress. Finally, the inadequacy dimension is given only partial support in that while officers may feel useless and are self-conflicted, this does not necessarily contribute to a lack of self-confidence or feelings of wrongdoing.

The second important implication, derived from the study's findings on security, is the concern over officer safety. Because small-town and rural agencies face limited resources and budgets, the ability to expand the number of officers for purposes of officer safety is not feasible. Even if they were, unless they went to two-officer teams, the response times due to the environment would not improve. Therefore, providing training in officer safety would appear to be the next best solution to the limited resources that might serve to alleviate the high levels of stress expressed by these officers (Blum, 2000).

The third important implication for the present study is that stress awareness, management, and coping training for small-town and rural law enforcement agencies should include a discussion of these four unique stressors when addressing small-town and rural law enforcement officers and deputies. While stress training tailored to the larger police departments does appear to have practical application to small-town and rural agencies, the affirmation that these departments experience at least some of these four unique dimensions of stress would indicate a need for specialized training when dealing with agencies serving populations under 50,000. Therefore, agencies should be encouraged to provide training and education not only in officer safety, but in all aspects of stress, including basic concepts of stress, the signs and symptoms of stress, and stress management.

The fourth implication that this study would suggest is that stress intervention programs need to be implemented across the small-town and rural agencies. While their larger urban counterparts often have these types of programs, small agencies often lack the resources and/or

knowledge about these types of programs. Bringing them to these agencies is just as important as keeping them active in the large metropolitan police departments. These should include peer support and counseling programs such as Critical Incident Stress Debriefing (CISD) teams, but should also include the opportunity for mental health counseling (Finn & Tomz, 1997; Scott, 2004; Sewell, 2002). This need was highlighted by the fact that shortly after beginning, training sessions had to be stopped because many of the small-town and rural officers were approaching their instructors and identifying themselves as needing help. Since there was no mechanism in place to help these officers, a peer support network had to be established and mental health workers brought in to conduct confidential counseling.

Finally, this study would suggest that future research continue to explore the topic of small-town and rural law enforcement agencies, especially by researching truly small-town and rural samples. It would also suggest that further research into stress in small-town and rural agencies be conducted through such methods as personal interviews, focus group studies, or further surveying, in order to develop more robust knowledge of those unique factors related to these specific police environments. It seems a shame that nearly a quarter of a century would have to go by before the theory that small-town and rural law enforcement experience these four unique stressors would be tested. Yet, all of this should provide a future direction for research and perhaps the next step is to determine if education on these unique stressors would in fact reduce the level of stress among small-town and rural law enforcement officers and deputies.

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