POLICE STRESS AND TEACHER STRESS AT WORK AND AT HOME

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ABSTRACT

This study compared police officers and teachers in three communities—which varied in size, geographical location, and economic base—for differences in perceived occupational stress and for differences in the patterns of perceived job stress, perceived nonjob stress, and both perceived job and life stressors. For police officers, higher levels of job stress were associated with higher levels on measures of perceived job stressors. This relationship varied from city to city, with the relationship holding for the city in which both police operations and school operations were relatively normal, with no difference between police and teachers in the city in which the school administration was in conflict with its employees, and with a reversal in the city in which the police administration was noted for its excellent management skills.

While initial interest in stress and related factors which influence employee performance focused on teachers, medical personnel, and the helping professions, a substantial body of information has emerged from studies of public employees. These findings have fostered continuing interest in this area, which has generated research in criminal justice. Studies have been conducted in all fields of criminal justice, but they have been more common in law enforcement (Hageman, 1982; Kroes, Margolis, and Hurrell, 1974; Stotland, Pendleton, and Schwartz, 1989; Terry, 1981; Violanti, 1983; Maslach and Johnson, 1979; Violanti, Vena, and Marshall, 1986), corrections (Poole and Regoli, 1980; Dignam, Barrera, and West, 1986; Cullen, Link, Wolfe, and Frank, 1985), and probation and

parole (Laningham, Taber, and Dimants, 1966; Whitehead, 1984; 1986; 1987; Whitehead and Lindquist 1985). These studies tend to indicate that criminal justice personnel do experience stress and that this stress does reduce job performance.

Police work involves a number of activities and situations which are by their nature stress-producing (Kroes, 1985). These range from the power inherent in police work to the risk to personal safety that police officers must anticipate even though they are unlikely to be exposed to great danger. The fact that they have a great deal of authority, are empowered to use deadly force, and must anticipate personal harm can induce stress (Ellison and Genz, 1983). The police are expected to exercise discretion effectively. They must make decisions (some of which are critical and some of which are likely to create hostility) with little time for deliberation.

Police officers continuously must anticipate personal physical harm. While most police officers will complete their careers and retire without experiencing a life-threatening crisis (Kirkham and Wollan, 1980), beginning with initial training, officers are prepared to anticipate crises and personal harm (Bayley, 1976). The police officer constantly faces situations which observation and experience indicate are safe but which, during training and in stated departmental policies and recommended procedures, have been defined as potentially dangerous (Cullen, Link, Travis, and Lemming, 1983). Police officers must confront personal violence and its consequences as they investigate crime scenes, traffic accidents, and domestic disturbances. These encounters have been identified as stressors in the law enforcement environment (Alkus and Padesky, 1983; Kroes and Hurrell, 1975; Levitov and Thompson, 1981). Police officers rate violence at high levels when evaluating stressors in their environment (Ellison, Cross, and Genz, 1980). They perceive exposure to violence as having an increasing impact as the form of the violence being rated moves from abusive language to processing a case in which the victim has been sexually abused. Incidents in which the police are targets of violence were rated at higher levels than all other stressors (Sewell, 1983).

The competitive advantage law breakers have in the justice system is a source of stress for police officers. An officer must cope with the demands of the public and with official pressure to deal effectively with law breakers while obeying a set of constitutional restraints most police officers perceive as unfair (Ellison and Genz, 1983; Kroes, 1985). Police officers experience stress because they are often caught between the courts and the public. They must capture the law breakers; at the same time they must adhere to a mandate and a professional obligation to enforce the law as it has been enacted. This situation is aggravated when they are urged to use their discretion when processing high-status persons. Police officers do receive very direct pressure to engage in differential enforcement of the law based on political considerations (Terry, 1981).

Police officers must deal with a negative public image (Symonds, 1970; 1972). Ordinary citizens frequently avoid association with them, and some individuals verbally assault police officers because of the widespread negative perceptions of the police. At times police officers feel that they are accepted only by offenders. It is possible that the high degree of group identity and association observed among police officers can be attributed to rejection by others rather than to the personal preferences of police officers.

The administration and structure of police organizations themselves have been found to be a primary source of stress for police officers. The stress-producing characteristics of police organizations include: (1) leaders who are products of closed promotional systems, (2) limited mobility and promotional opportunity, (3) traditionally conservative administrative structures, (4) limited training, equipment, financial resources, and salaries, and (5) unclear policies for rewards, promotions, and career development (Kroes, Margolis, and Hurrell, 1974).

Support for the assertion that these factors produce stress in police officers can be found in a series of studies indicating that police officers experience higher levels of stress (symptoms) than other occupational groups

or the general public. Several studies have found that police officers exhibit a high rate of stress-related illness. Studies of mortality by occupation indicate that police officers experience relatively higher rates than the general public of heart attacks and diabetes and have an increased mortality risk from cancer, particularly for cancers of the colon and liver (Guralnick, 1963; Milham, 1976; Violanti, Vena, and Marshall, 1986). Behavioral symptoms of stress also have been found to be more prevalent among police officers (Maslach and Johnson, 1979). When compared with other groups, police officers have relatively high rates of suicide, alcoholism, and divorce (Terry, 1981; Diviner, Kroeker, Miller, and Reynolds, 1975; Heiman, 1975).

Studies that have examined the actual presence of stressors indicate that police officers experience high levels of stressor activity in their work environments. Hageman (1982) found that a number of situational factors were related to stress for rookie police officers. Stress was linked to: (1) risk of harm, (2) work factors, (3) peer culture, (4) conflict with role expectations held by nonpolice figures (such as family, prosecutors, and probation officers) in the rookies' environment, (5) expectations held by coworkers and supervisors, as well as factors that were not specifically job-related, such as health and diet. Stress in police officers has also been found to be linked to specific justice-system sources, such as a perception of the judicial system as structured to favor law breakers and hinder police officers as they do their job (Ellison and Genz, 1983).

A number of studies have examined the nature of stress in police work and secondary pathologies linked to stress, such as suicide, divorce, and illness; however, only a limited attempt has been made to compare the presence of stress and job-related sources experienced by police officers with those experienced by other occupational groups. While most scholars support the contention that police officers experience high levels of stress, support for that position is not universal (Malloy and Mays, 1984). These authors have suggested a different model and line of research. The present study sought to address

these issues by comparing stress reported by police officers with stress reported by teachers in a number of differing settings.

Teachers are an appropriate comparison group because they consistently have been identified as a group experiencing high stress at work. There is extensive documentation of the presence of stress for teachers because when stress/burnout was first identified by mental health workers as a pathology, it was referred to as a condition observed in medical workers, helping professions, and teachers (Hall, 1979). Thus, many of the initial studies evaluating stress focused on teachers.

Like police officers, teachers experience conflicting expectations for job performance (Alley, 1980; Hodge and Marker, 1978). They are expected to accomplish their tasks with limited resources (Hodge and Marker, 1978), and they receive relatively poor salaries (Grossnickle, 1980). Factors identified as primary sources of stress for teachers include relationships with colleagues, administrative staff, clerical staff, and students; complex communication needs related to the wide range of skills of students; and the tasks of dealing with inattentive students, discussing discipline procedures with students, and listening to students' personal and academic problems (Hodge and Marker, 1978). Several additional occupational factors have been cited, including the need to discipline students (Swick and Hanley, 1980), daily abuse from students and parents (Grossnickle, 1980), pressures to conform to differing philosophies of education (Hodge and Marker, 1978), and the high standards for teacher conformity to social values (Grossnickle, 1980). Teachers, like police officers, demonstrate higher incidence of pathologies associated with stress, such as physical incapacity (Cardinell, 1980) and some forms of cancer (Kossack and Woods, 1980). Thus, teachers would appear to be an appropriate comparison group for estimating the relative levels of occupational stress experienced by police officers.

METHODOLOGY

This study is a replication of an earlier one that examined patterns of stress experienced

by police officers and teachers (Sigler and Wilson, 1988). The original data were collected at a single site in the northeastern United States. The analysis of that dataset indicated that police officers experienced greater stress from job-related sources than teachers. The instrument was then administered at two additional sites to permit an evaluation of the stability of the relationship observed. The combined dataset was composed of the responses to a structured questionnaire which was distributed in police stations and schools in these three sites. All teachers and police officers in (1) a small northeastern bedroom community, (2) a medium-sized southern town with a technical base, and (3) an older urban area in a southern suburban county were included in the study. The research sought to determine if police officers experience greater stress than teachers and if there were differences in the patterns of stressors within each group.

Variables

In this study, stress was defined as the perceived imbalance between societal demands and individual perceived response capability in which failure to meet the demands produces dysfunction that results in reduced performance. This dysfunction is expressed or accompanied by a number of physiological symptoms, such as headaches and minor physical ailments. Stress was measured on two scales composed of a list of these physiological symptoms generated from a comprehensive review of various diagnostic manuals, treatment manuals, and related literature. One scale measured the perceived presence of these symptoms on the job (job stress). The second scale measured the subject's perception of these symptoms off of the job (life stress). Subject scores were the numbers of symptoms subjects indicated that they experienced frequently.

Stressors are defined as those life events which are likely to cause stress. General life stressors were measured on a scale listing twenty-six events identified in the literature as causing stress (life stressors). This scale was adapted from the Holmes and Rahe So-

cial Readjustment Scale (Holmes and Rahe, 1967). Subject scores were the numbers of yes responses. A second set of items focused on stressors associated with work (job stressors). This scale was composed of fourteen items measured on a 5-point (0 to 4) scale. Subject scores were the sums of the scores for the items. A subscale measuring the presence of administrative problems was constructed from the five items in the job stressor scale which referenced problems associated with administration of the organization (administrative stressors). Examples of items from these scales can be found in the appendix.

Job dissatisfaction was defined as the extent to which employees were dissatisfied with their employment, and it was of interest in this study as a possible stressor. It was measured with a 30-item Likert-type scale. Following item analysis using interquartile t's, six nonpredicting items were dropped, producing a 24-item scale.

Additional scales measured consumption of alcoholic beverages, use of medication, and smoking. In addition, data were collected for a number of demographic variables, physical-fitness activities, and participation in stress-management activities.

Hypothesis

This replication retested the belief that police officers experience higher levels of stress than other occupational groups by comparing police officers with another high-stress occupational group, teachers. In an earlier study, this hypothesis was supported, and a strong relationship was discovered between on-the-job stress and type of stressors, with police stress found to be more closely related to job stressors than was teacher stress (Sigler and Wilson, 1988). This study sought to examine the extent to which the earlier findings could be generalized to other settings.

In the prior study job stressors and administrative stressors appeared to be related to stress. To explore this relationship further, the additional sites were selected partly on the basis of differing management configurations. To clarify any relationships which might occur, a number of control variables were

evaluated for their impact on stress and occupation.

Setting

The first city (city 1) is located in the northern section of a southern state. It has a technical economic base with a strong government presence and a private research and development presence. The nature of the city's research activities has made its population somewhat transient, resulting in a mix of ethnic, political, and religious groups. Clear socioeconomic areas do not exist, and poor and rich neighborhoods are scattered throughout the city. The population is approximately 165,800, and it has been growing at a steady pace, with corresponding growth in the police department and in the school system. There are five high schools with a total of 453 teachers and administrators. The police department has 242 sworn officers and is recognized by law enforcement professionals as a progressive, exceptionally well managed department. The department's reputation for good management was one factor which influenced the decision to collect data at that site.

The second city (city 2) is one of the oldest cities in the South. It has clearly established racial and socioeconomic neighborhoods, including "suburban communities" outside of its boundaries. It borders the Gulf of Mexico, and it is a major shipping and ship-building center with both light and heavy industry in its economic base. It has a population of approximately 125,000. There is no city school system. The county provides all public education and serves the city population with four schools, which have a total of 424 teachers and administrators. Although the school district lines do not exactly correspond with the city limits, the match is sufficiently close to permit an assumption that the teachers at these four schools and the city police officers serve the same population. The police department has 345 sworn officers. The city and its institutions are relatively stable. The public school system is presently experiencing some turmoil. Teachers and administrators appear to be in conflict over a number of issues. This situation was not known at the time the city was chosen as a site for data collection; it became apparent during the data-collection process. The research assistant collecting the data was approached privately by teachers in two different schools with offers to tell him about the severity of working conditions in the school system.

The third setting (city 3) is a small suburban bedroom community in the Northeast, which borders a larger urban area. It has a population of approximately 31,000 people, and it can be characterized as a predominantly upper-middle-class to upper-class community. Its public education needs are served by one public high school, which has an enrollment of 900 students and has eighty teachers and administrators. The police department is staffed by thirty-two full-time employees.

Population and Sample

The sample population for this study was defined as the sworn officers and administrators of the police departments and the teachers and administrators of the high schools in the three cities. Survey instruments were administered to all members of the defined population. Of the police department respondents, 190 of the 619 returned their questionnaires (28.4 percent), and 270 of the 957 school system respondents returned theirs (28.2 percent). All of the questionnaires were relatively complete and were included in the analysis. Response rates ranged from a low of 17 percent of the teachers in the city which was experiencing difficulties in the schools to a high of 78 percent of the police in the city in which one of the researchers was a police officer. Demographically, the sample was similar to the population from which it was drawn. For variables such as mean salary, mean length of time in the field, and length of time in the current position, accurate figures were not available; however, the sample means approximated the estimated means provided by the agencies. Although the sample appears to have been demographically similar to the population, it is possible that,

given the focus of the study, there was a se-
lective bias. If so, it is likely that those who
experienced the most stress would have been
most likely to respond. Such a bias would not
necessarily produce invalid results; however,
the findings should be interpreted with cau-
tion. Conservative conventional standards re-
garding the use of significance were observed
throughout the analysis.

Data Collection

The questionnaires were delivered to the
subjects in their work places. In the case of
the teachers, they were placed in the individ-
ual mail boxes maintained by the schools. The
questionnaires were hand-delivered to the po-
lice officers during roll call or at their work
stations. In each setting, a clearly labeled
collection box was established in an area
identified as line-staff territory. The box was
sealed and had a slot for receiving the in-
struments. The instructions which accom-
panied the questionnaires directed subjects to
complete them at their leisure and to deposit
the completed instruments in the box. A re-
searcher collected the questionnaires at the
end of a two-week period. Three question-
naires from teachers in city 3 were mailed
directly to the office of the reseachers.

FINDINGS

The data were analyzed using the Statisti-
cal Package for the Social Sciences. In ad-
dition to hypothesis-testing procedures, all
possible relationships with the perceived stress
and job satisfaction measures were exam-
ined. The results reported here are limited to
differences between police officers and
teachers for the demographic variables and
the stress-related variables. The distribution
of each of the interval variables was evalu-
ated and was found to approximate a normal
curve. All measures for skewness and kur-
tosis were less than ±1.

The two occupational groups differed on
several demographic variables: age, educa-
tion, sex, salary, and length of time em-
ployed in the field and in their current posi-

tions. While approximately 65 percent of the
teacher sample was female, only about 8 per-
cent of the respondents in the police officer
sample were female. Teachers were found to
have more education than police officers.
However, it should be noted that, for this
population, all but about 14 percent of the
police officers had attended college and 28
percent had earned at least a bachelor's de-
gree. Teachers were more likely to be reli-
giously active (p for chi square $= .0001$) and
more likely to associate with people other than
their colleagues (p for chi square $= .0005$).
Police officers were more likely to have been
subjects of disciplinary action (p for chi square
$< .0001$).

Age, salary, and the employment history
variables were found to be interrelated ($r >
.3826$ and $p < .001$ for all comparisons).
Teachers earned more money ($p < .0001$, $t
= 4.23$), were older ($p < .0001$, $t = 12.22$),
had worked longer in their field ($p < .0001$,
$t = 8.27$), and had worked longer in their
present positions ($p = .0001$, $t = 6.46$). This
probably can be attributed to the difference
in career paths for teachers and police offi-
cers. Police officers tend to leave police work
after twenty years, whereas teachers remain
until actual retirement age, which influences
age, length of employment, and salary fac-
tors. There were no significant differences
among the cities for the demographic vari-
ables, with the exception of marital status and
salary. Salaries were higher in city 3 ($F =
16.741$, $p < .0001$) by approximately \$5,000.
The respondents from the old southern city
were more likely to be single people who had
never married and less likely to be married
at present than those from the other cities ($p
for chi square $= .0297$). The subjects in city
2 were more likely to associate with their col-
leagues (p for chi square $- .0002$). There
were no significant differences among the
cities for any of the stress or stressor variables.

Mixed support was found for the hypoth-
esis. For the total sample the relationships
between job type and both perceived job stress
and perceived life stress were not significant.
However, there were differing patterns for the
individual cities (see Table 1). In the city in
which the police department and the school

TABLE 1

OCCUPATION BY STRESS AND STRESSOR VARIABLES

Variable	City 1 N = 132			City 2 N = 265			City 3 N = 56			All N = 457	
	mean	mean difference	p	mean	mean difference	p	mean	mean difference	p	mean	mean difference
Stress											
Job stress											
Police	3.0			2.9			3.7			3.0	
Teacher	2.8	.2	.597	2.8	.1	.880	2.1	1.6	.026	2.7	.3
Off-job stress											
Police	2.8			2.2			2.5			2.4	
Teacher	3.0	-.2	.642	2.7	-.5	.116	1.7	.8	.180	2.6	-.2
Stressors											
Life stressors											
Police	5.0			4.2			5.2			4.6	
Teacher	3.2	1.8	.001	3.1	1.1	.001	2.9	2.3	.003	3.1	1.5
Job stressors											
Police	31.7			29.6			33.1			30.7	
Teacher	26.9	4.8	.005	29.3	.3	.782	23.3	9.2	.001	27.9	2.8
Administrative stressors											
Police	9.3			9.1			10.6			9.4	
Teacher	6.8	2.5	.001	8.1	1.0	.01	7.0	3.6	.001	7.6	1.8
Job satisfaction											
Police	68.9			66.6			72.1			68.0	
Teacher	62.7	6.2	.006	63.3	3.3	.002	57.6	14.5	.001	61.7	6.3

system were "normal" (city 3), police offi-
cers experienced more job stress than teach-
ers. In the city in which the police depart-
ment was recognized for the excellence of its
operations (city 1), there was virtually no dif-
ference in reported job stress. In the city in
which the school system was experiencing
exceptional conflict between the teachers and
the administration (city 2), there was also vir-
tually no difference in reported job stress be-
tween teachers and police. It should be noted
that police officers reported higher levels of
stressors of all types than teachers for all
comparisons except for the levels of job
stressors reported for city 2. That is, in city
2 the teachers reported about the same level
of stressful events in the working environ-
ment as police officers reported.

The examination of the relationship be-
tween the stressors and stress for the two oc-
cupations began with an examination of the
relationships among all stress and stressor
variables. A comparison of perceived on-the-
job stress and perceived off-the-job stress with
the various stressors indicated that these vari-
ables tended to be interrelated; all compari-
sons were significant except for the relation-
ship between life stress and administrative
stressors. When these relationships were ex-
amined for job type and city, the patterns
remained fairly stable except for city 3. For
city 3, job stress and life stress were not
significantly related to job stressors and ad-
ministrative stressors. None of the relation-
ships between the stress variables and the
demographic variables were found to be
significant.

DISCUSSION

There appears to be support for the con-
tention that perceived job stress is related to
perceived job stressor levels and for the con-
tention that police experience higher levels of
job stress than teachers. In city 3, the police
department and the school system appear to
have been operating normally. In this setting,
police officers demonstrated higher levels of
job stress related to job stressors and admin-
istrative stressors than did teachers. In city 2,
the police department appears to have been
operating normally while the school system
appears to have been experiencing difficulty
that created conflict between managers and
teachers. In this setting teachers and police
officers demonstrated similar levels of job
stress related to perceived job stressors. In city
1, the police department was recognized for
the competence and innovative skills of its
managers, and the school system appears to
have been operating normally. In this setting,
teachers demonstrated higher levels of job
stress related to job stressors than did police
officers.

Stress-related illnesses and reduced perfor-
mance are expensive consequences for an
agency, both in terms of operating costs and
in terms of damage to employees; therefore,
it is important to understand the relationships
among job stressors, administrative stressors,
and job stress. The present line of research
indicates that stress for police officers is re-
lated to their work experiences and that dif-
ferent levels of stress exist in different man-
agement environments. At the next stage,
research should focus on the development and
dynamics of stress in police officers and on
the specific factors that are related to the de-
velopment and functioning of stress in the
work environment. The discovery of the fac-
tors or processes that lead to elevated stress
will provide a broader basis for understand-
ing stress and will give police managers in-
formation needed to redesign work tasks, to
develop intervention and treatment programs,
or to develop coping skills for dealing with
the factors or processes that cause stress.

APPENDIX

This section deals with general life stress. If
you have experienced any of these within the
past 6 months, please check the yes box.

1. Death of a spouse	yes	_____	no	_____
2. Divorce	yes	_____	no	_____
3. Marital separation	yes	_____	no	_____
4. Death of any family member	yes	_____	no	_____

This section deals with on the job stress. If
you have experienced any of these within the
past 6 months, please check the yes box.

21. Promotion	yes	_____	no	_____
22. Promotion of a close friend	yes	_____	no	_____
23. Court testimony	yes	_____	no	_____
24. Increased recognition for good work	yes	_____	no	_____
25. Experiencing transfer or retirement of friend	yes	_____	no	_____
26. Change in hours on the job	yes	_____	no	_____
27. Target of a job related lawsuit	yes	_____	no	_____

How often have you experienced each of the
following while *at work* during the past
month?

	sometimes	seldom	never
86. Feeling faint	_____	_____	_____
87. Headaches	_____	_____	_____
88. Loss of appetite	_____	_____	_____
89. Nausea	_____	_____	_____
90. Feeling tense	_____	_____	_____
91. Backaches	_____	_____	_____

How often have you experienced each of the
following while *not* at work during the last
month?

	sometimes	seldom	never
100. Feeling faint	_____	_____	_____
101. Headaches	_____	_____	_____
102. Loss of appetite	_____	_____	_____
103. Nausea	_____	_____	_____
104. Feeling tense	_____	_____	_____
105. Backaches	_____	_____	_____

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