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## Job Stress in Game Conservation Officers

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During the past decade it has been documented that there is a high degree of job-related stress in law enforcement occupations. Supportive data that occupational stress has significant effects on individuals as well as organizations has been reported in a number of studies (Kroes and Hurrell 1975; Reiser 1974; Stratton 1978; Webb and Smith 1980; and so on). Selye (1978) has indicated that police work causes stress-related maladies such as high blood pressure, cardiovascular disease, gastric ulcers, mental disturbances, and other ailments. Kroes et al. found that though a police officer has much in common with people in other stress-filled occupations, law enforcement has its own unique group of stressors not faced by other workers.

For example, "the very fact of being a policeman sets the officer apart from the rest of the community" (Kroes, Margolis, and Hurrell 1974, p. 155). Ellison and Genz (1978) refer to the ambiguous and occasional conflicting demands made in some agencies that can lead to burnout in individuals. Martin Reiser, a noted police psychologist, has defined the symptoms of burnout as frustration, depression, and fatigue (Davis 1982).

Disclosure of job stress and its related factors has resulted in a positive response from law enforcement administrators. Training programs, both basic and in-service, have devoted blocks of time to the subject of stress identification and reduction. Terms such as meditation, nutrition, biofeedback, anxiety, and fear

are openly discussed and coping skills are suggested. Many departments, those of New York City and Philadelphia being among the most widely known, have developed excellent alcoholism recovery programs. Officers are strongly encouraged to take better care of themselves and the proliferation of exercise rooms, jogging clubs, and other sustained strenuous athletic activities is often supported by agencies.

A problem with the majority of past research and published literature, however, is that it focuses upon law enforcement agencies in urban areas. Only a limited research effort has been undertaken concerning job-related stress and rural agency enforcement. Yet, these agencies constitute a substantial proportion of the total enforcement population in the United States. One analyst, Allen P. Bristow (1982, pp. 7-9), briefly identifies two stressors that he believes are specific to the rural officer: isolation and danger, which are reinforced by the notion that rural officers work alone in geographic areas where they cannot be anonymous on or off duty. Their network of assistance may be miles away and this lack of immediate aid makes them vulnerable to attack.

Sandy and Devine (1978), in an excellent concept paper, focused on four stress factors that they perceived to be unique to rural officers: security, social factors, working conditions, and inactivity. These stressors appear to coincide with Bristow's references to isolation and danger. Unfortunately there is little, if any, empirical evidence to support these perceptions

of rural law enforcement and job-related stress.

For the purpose of this article, rural is defined as a large, sparsely populated land area. Such a region falls under the law enforcement jurisdiction of state, sheriff's department, and small agency officers. One rural enforcement officer often overlooked in police research is the special purpose officer. This is an individual whose enforcement powers are legislatively restricted to certain laws, times, or geographic areas. Special purpose officer functions include the enforcement of environmental, fish, game, and parkland laws.

The intention of this study is to examine the relationship between occupational stress and the special enforcement function in nonurban areas. Its purpose is to see whether those aspects of the police occupational role that have been identified as affecting officer stress in the urban setting are also present in rural enforcement. The subjects of this analysis are the law enforcement officers of the Pennsylvania Game Commission, whose responsibilities are to enforce all game laws and regulations pertaining to property, wildlife, the safety and protection of persons, and the hunting license; to assure the perpetuation of Pennsylvania's wildlife resources; and to pursue, apprehend, and prosecute violators.

## METHOD

During the Pennsylvania Game Commission's Division of Law Enforcement training workshop conducted in September of 1982, a stress survey questionnaire was administered to 194 field officers in attendance. This group was comprised of 139 game conservation enforcement officers, 26 land managers, and 29 law enforcement division supervisors. The respondents represent approximately 95 percent of the total population of the Division of Law Enforcement.

## INSTRUMENT

A self-administered questionnaire was developed from a review of past research.<sup>1</sup> It was divided into two parts, one part to obtain stress information and the other demographic data. Part one contained 36 statements (drawn from the following sources: Kroes, Margolis, and Horrell 1974; Eisenberg 1975; Roberts 1975; Reiser 1976; Territo and Vetter 1981) and 9 stress prevalent behavioral warning signs. The statements

<sup>1</sup>Copies of this questionnaire may be obtained from the authors.

comprised four composite indexes designed to measure officers attitudes toward various components of their jobs. Each index represented one category of law enforcement stress identified in past research (Stratton 1978). The first index which measured the nature of the function included nine items assessing officers' attitudes toward the role of law enforcement in the game commission and its attributes of: work load demand, job satisfaction, role conflict, danger, pride, and boredom. The second index of 10 items measured personal stress by assessing the officers' feelings of: isolation, anxiety, worry, pressure, estrangement from family, powerlessness, alcohol dependency, competency, and frustration. The third index assessed internal stress through officer response to 10 items that measured attitudes toward: training, managerial support, performance evaluation, supervisory pressure, pay, paperwork, resources, and participation in organizational decisions. The last index of seven items measured environmental stress by assessing the officers' sense of estrangement from the citizens they serve, frustration with the criminal justice system, and attitudes about public service.

The questionnaire was pretested for face validity and unidimensionality. Respondents were instructed to indicate the extent to which they agreed or disagreed with each statement by registering their answer in a blank space provided beside each statement. Responses were coded according to a graduated scale with a numerical designation as follows: strongly agree = 1, agree = 2, disagree = 3, strongly disagree = 4, and don't know or have an opinion were assigned no value. This response format was developed by Rensis Likert and is commonly employed in attitudinal survey instruments (Babbie 1973, p. 269).

Data collected from the survey instrument were first tabulated in a series of frequency distributions to check item variability. Responses on the 36 Likert items were summed to form an overall stress score for each respondent. This overall stress score had a range of 36 (extremely high stress) to 144 (extremely low stress). Respondents were separated into two groups based upon their overall stress scores; high stress participants were those who scored below the scale midpoint of 90 while low stress participants scored above the midpoint.

Also included in part one was a list of nine stress warning signs: excessive alcohol use; excessive medication use; problems with spouse, children, or neighbors; losing control of temper; sudden changes in behavior; excessive worrying; and excessive negative complaints (see Territo and Vetter 1981, p. 6, for a list

of prevalent stress warning signs). The officers were requested to indicate those stress warning factors they have noticed among their three closest associates in the game commission. This approach was taken in order to remove any perceived threat created by self admission.

## CHARACTERISTICS OF THE STUDY GROUP

Part two of the survey instrument disclosed a descriptive profile of the average game conservation officer. At present there is one woman serving in this capacity with the Pennsylvania Game Commission. The respondents' mean age was 39 years 5 months, reflecting a range from 24 to 62 years. The average service time with the agency was 12 years, with a range of 1 to 27 years. Approximately 20.8 percent of the group had earned a bachelor's degree. A low percentage (4.3 percent) of the officers were divorced or separated.

An interesting conflict was disclosed in part two responses. Almost half of the enforcement officers (46 percent) claimed that they exercised at least four times a week but 83 percent of the group fell within the overweight category for their height (*Physical Fitness for Law Enforcement Officers 1972*, p. 56).

Responses reflecting the economic position of these officers indicate that while the majority of them (92 percent) do not have other employment, more than half of the group (58.3 percent) have wives who work outside the home. Accordingly, 51.1 percent of those who have working wives consider this income necessary to support their family.

Indicators of the danger of armed confrontation in rural law enforcement as reported by Bristow (1982) and Sandy and Devise (1978) were found in the respondents' disclosure that 72.7 percent have had a deadly weapon pointed at them in the performance of their duty. Further, 25.2 percent report being assaulted in the performance of their duty but for some undisclosed reason did not report this to management.

## FINDINGS

Forty-six percent of the land managers and 25 percent of the supervisors scored in the high stress range of the overall stress score as compared with 67 percent of the game conservation enforcement officers. The supervisors' moderate scores may reflect job control decision-making capacities which have been identified as psychological stress or strain modifiers in the recent research of Karasek et al. (1981).

In addition to being used in computing the overall

stress scores, each Likert item was cross-tabulated by officer category (for example, enforcement officer, land manager, supervisor) and the results of these analyses can be found in table 1. These items are listed according to the category of law enforcement stress within which they fall. Only those items yielding significant statistical value at or below the .05 level are included.

The stress category nature of the function contains the most statistically significant findings compared to the other three sources of stress. The law enforcement officer agreement response rate varied significantly from the land managers and supervisors in the following areas: work dangerous, demanding, long hours, physically threatening, and authority challenged.

In the category of internal agency stress a minority of the law enforcement officers, 28.1 percent, believe that management supports their decision compared to 42.3 percent of the land managers and 34.4 percent of the supervisors. A majority of the enforcement officers agree that job-related paper work is a waste of time (55.2 percent) and that they lack input in decisions that, compared to the two other officer categories, affect them (57.6 percent).

A majority of enforcement officers, 64 percent as compared to 34.6 percent of the land managers and 41.4 percent of the supervisors, believe that their work is a source of isolation from their family. Responses to the external stress Likert items did not prove statistically significant.

The request to indicate those stress warning factors noticed among their closest associates in the enforcement division disclosed the data reported in table 2.

A majority within each officer category identified excessive negative complaining as the major observable stress behavioral warning factor among their colleagues. More than half of the supervisors (62.1 percent) identified excessive worrying by their associates. Within the law enforcement officer category 44.6 percent identified spouse problems and 41.7 percent indicated excessive worrying.

In addition to the survey questionnaire, several unstructured interviews were conducted. The officers interviewed informed us that the following events are commonplace:

1. Drunks waking the family late at night, in person or by telephone, asking the game officer to settle an argument regarding hunting laws;
2. Being called away from home during important family social events to perform official duties;

TABLE 1  
OCCUPATIONAL STRESSORS

	% Respondents Agree			X <sup>2</sup>	λ	P
	Officers (N = 139)	Land Managers (N = 26)	Supervisors (N = 29)			
<b>Nature of Function</b>						
Work Dangerous	93.5	65.3	58.6	39.96	.00	
Work More Demanding	84.9	68.2	72.4	22.62	.00	
Work Hours Too Long	82.7	57.1	55.2	22.41	.00	
Work Physically Threatening	51.8	23.1	24.1	20.26	.01	
Authority Challenged	61.9	57.9	51.7	15.51	.05	
<b>Internal Stress</b>						
Management Support for Officer's Decisions	28.1	42.3	34.4	17.98	.02	
Paper Work a Waste of Time	55.2	46.2	27.6	35.78	.05	
No Voice in Decisions That Affect Me	57.6	46.2	20.7	18.33	.00	
<b>Personal Stress</b>						
Work Isolates From Family	64.0	34.6	41.4	15.56	.05	

TABLE 2  
STRESS WARNING SIGNS

Behavioral Factors	% Respondents		
	Officers (N = 139)	Land Managers (N = 26)	Supervisors (N = 29)
Excessive Negative Complaints	67.6	69.2	69.0
Problems with Spouse	44.6	26.9	37.9
Excessive Worrying	41.7	30.8	62.1
Excessive Alcohol Use	27.3	30.8	27.6
Sudden Changes in Behavior	20.1	23.1	24.1
Problems with Their Children	17.3	11.5	10.3
Problems with Neighbors	10.1	3.8	6.9
Excessive Medication Use (e.g., tranquilizers, energizers, sleeping pills)	5.0	7.7	0

- Children and spouses being verbally abused after an act of enforcement against a local community member; and
- Demands of service during all hours of the night and day without regard to on-duty and off-duty hours.

An additional concern expressed by the officers was a sense of increased poaching by people who are normally law abiding but due to economic circumstances opt to violate the law and take game illegally. There were perceptions of increased use of state lands for all kinds of recreational activities and a belief that

more people coming into any area increases the potential for law enforcement problems. Of some concern to a few was the possibility of "stumbling" into non-game enforcement problems out in the wilderness. Several officers, for example, explained how they happened upon drug transactions and how they suddenly felt helpless to do anything.

### CONCLUSION

From this analysis we may draw some initial conclusions that at best require further study and clarification. We conclude that the majority of the game con-

servation enforcement officers surveyed perceived their job as a potential source of physical threat and danger. In the performance of their duty they must work long hours and face a demanding work load and numerous challenges to their authority. The finding that 72.7 percent of the respondents have faced the threat of deadly weapons as they performed their duties provides additional empirical support for the validity of this conclusion. The importance of this finding is that it provides the empirical data Sandy and Devine (1978, p. 42) indicated were not available to substantiate the rural officer's perception of danger from highly armed citizenry.

It would appear that Skolnick's (1966) emphasis on danger as a determinant of the police working personality and Wilson's (1968) belief that the unexpected nature of the danger makes the officer more apprehensive is true for both rural and urban enforcement officers. But, one difference between the effect of danger upon the two types of enforcement officers is the level of its intensity. Rural officers do not have a police back-up system that will respond to their assistance within minutes. Game officers usually work alone with their nearest support as much as 50 miles away. They face a population which is generally armed and skilled in the use of weapons. Thus, they must face the threat of danger alone with the knowledge that they have limited, if any, support systems to aid them if they are injured.

The interrelationship between the game conservation enforcement officer and management is similar to studies of line and management relations in urban agencies (Reuss-Lanni 1983). The opinion of the majority of the respondents is that the administrative aspects of their functions are of little value. Further, they perceive that management affords them little opportunity to participate in decisions that affect their role. This may result because the game conservation officer, while performing a specialized enforcement function, is an employee in a statewide agency which is a traditional bureaucracy similar to any large police department.

Regarding perceptions of a more personal nature, the majority of the respondents feel that their work causes isolation from their family. Problems with one's spouse was the second most frequent (44.6 percent) stress behavioral warning sign noticed by game conservation officers in their associates. Conversations with the officers disclosed that there is an intuitive belief that divorce is high among their colleagues although the data do not support this assumption.

The family may serve as a support against stress as

well as a source of it. Prior research has revealed that many enforcement families suffer occupational domination (Depeu 1981; Niederhoffer and Niederhoffer 1978). The game commission officer is a highly visible member of a rural community and spends long hours at his function and, in fact, is never really free of his occupational role. Strain between the occupational role and familiar roles may be an additional source of stress to game officers because of the impact of occupational status in the rural communities.

Further, in the area of external stress, while not statistically significant, the responses may indicate the source of the excessive negative complaints and worrying reported by the officers. The respondents revealed that they felt estranged from the public, and often persons whom they cite for violations of game laws are hostile towards them. They also expressed some vague concerns over "civilian complaints."

### SUMMARY

While the respondents have expressed, in interviews, pride and a sense of esprit in their role, there appears to be a paradoxical element in their perception of their occupation. There is clearly a sense of danger, anxiety, hostility, and estrangement. While public perception of game conservation officers ranges from the "sportsman's ally" who teaches hunting safety to the legalistic law enforcer, there is little empirical research related to the nature of this specialized enforcement function and the effects it has on its role occupants. The findings related to this data are both exploratory and tentative. Yet, there is a similarity between these new findings and prior research findings. It would appear that what has been found to affect the urban law enforcement officer also impacts on his rural colleague, but with one major difference. Urban officers have on-duty relationships with the populations they serve and their personal lives are often separate and distinct from their occupational lives. In fact, one of the major stress reduction techniques recommended for urban police officers is meaningful off-duty activity to displace stress.

Conversely, game conservation officers are highly visible members of the community they serve and are in fact never off duty. The officers' homes are their offices, with the game commission logo prominently displayed outside their houses as well as on their vehicles. Their telephone numbers are published statewide. The officers and their families are under constant observation because they are members of the communities where they enforce the law. Thus, they

can never develop personal identities other than their official roles. They cannot, like their urban counterparts, disengage from this role, seek comfort in their occupational peer group, and find relief from anxiety privately. Because they lack peer companionship, their families play a very important and sensitive role. However, even then, the officers must be guarded lest confidential case information becomes a source of rural gossip.

At present, an extensive research project is being developed with assistance from members of the Pennsylvania Game Commission that will enable further exploration of the issues reported on this paper. What is needed in the field of law enforcement research is more analysis in those areas of policing such as rural and specialized enforcement that have not received attention in the past.

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## Personality and Performance Sex Differences of Law Enforcement Officer Recruits

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Due to changes in society's attitude toward women's participation in male-dominated occupations, as well as successful litigation on the rights of women to secure such employment (EEOC), females are now applying and being hired for jobs as law enforcement officers. Since law enforcement involves occasional physical confrontations as well as the protection of others (a role previously secured by males), there has been much observed resistance within the law enforcement population to the admittance of females into the field. Research in the area of sex differences and similarities in law enforcement officers is crucial so that appropriate job suitability and performance measures can be identified and utilized. Through such research, agencies may be aided in making effective adaptations to the changes within their organizations.

Since women have only recently filled law enforcement positions in numbers sufficient for research, there is little information currently available on this subject. Studies have focused on the attitudes of male workers toward females (Koster 1977; Martin 1979), and perceptions of college students regarding women as law officers (Steffensmeier 1979; Johns 1979). These studies have upheld the importance males place on traditional sex roles in the work environment. One study by Bowersox (1981) observed the attitudes of 263 male and 70 female correctional officers toward female officers working in a male penitentiary. Findings, from an attitudinal questionnaire, revealed that

the attitudes of the male officers were determined by stereotypical sex roles. Despite the fact that the females in this study tended to feel self-reliant, male officers still believed themselves responsible for their female colleagues.

Such studies, however, are not examinations of sex differences which may actually affect job performance. One study (Wood 1980) did take into account job performance by comparing absences, supervisory ratings, and level of job involvement to objective tests which were believed to reflect skills necessary for job duties. These tests were administered while workers were on the job. After analyzing his sample of 45 male and 45 female packaging plant employees, Wood concluded that females who tested well were not receiving supervisory ratings commensurate with their tested abilities. A major weakness in this research was that conclusions were not based upon actual observation of performance, but upon correlations between performance evaluations and paper-and-pencil tests administered concurrently.

In 1982, Harkan and Weiss followed 50 female retail-store managers and 50 male managers over a three-year period, during which time psychological tests and lengthy interviews were administered. Data were received from information in personnel files, as well as from interviews with the managers' supervisors. The researchers concluded that females received less supervisory feedback than did males, and