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AN ANALYSIS OF OFFICER CHARACTERISTICS
AND POLICE ASSAULTS AMONG SELECTED
SOUTH CENTRAL CITIES

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One Dollar

ABSTRACT

This study demonstrates that a police officer's personal characteristics and the amount and recency of his training account for a mere six percent of the variation in assault frequency. The data on police officers and the number of assaults committed against them was collected from the department records of eleven municipalities on 1470 sworn officers. The personal characteristics included age, rank, length of service, education, height, weight, and mass ratio. Although it was found that increased age, rank and length of service were accompanied by a somewhat lower assault frequency, the significance of these correlations is negated by the tendency to give older, higher ranking officers assignments involving less risk. The other personal characteristics show extremely weak relationships as does training. The conclusion may be drawn that additional training using present-day methods as well as attempts to recruit individuals of certain weights, heights, and other personal characteristics analyzed can serve no real function in preventing assaults.

AN ANALYSIS OF OFFICER CHARACTERISTICS AND POLICE ASSAULTS AMONG SELECTED SOUTH CENTRAL CITIES

Introduction

The problem of assaults on police is a matter of vital concern to all law enforcement personnel, but until recently relatively few efforts have been initiated to investigate the problem in depth.¹ A number of reported studies have done little more than summarize and tabulate figures and percentages representing various aspects of the assault incident.² Other research efforts have focused on the socio-psychological factors that are reflected in police assaults.³ Only recently has research been conducted which attempts to examine empirically the relationships which exist between characteristics of individual police officers and assaults. Unfortunately, these studies have been rather narrowly focused on the single issue of height as it relates to police performance in general and police assaults in particular.⁴

Prior to the present study, no attempt has been made to address the particular problem of assault frequency (i.e., how many times an officer becomes the victim of an assault over a given period of time) and its relationship to individual officer characteristics. Using the relationships between officer attributes and assault frequency as a framework for analysis, this study addressed two specific questions which are of concern to the law enforcement community: (1) Is there a relationship between the personal attributes of a police officer and his proneness to be assaulted? and (2) Is there an association between training characteristics of police officers and frequency of assaults?

An important reason for studying the association between characteristics of police officers and assault frequency is that it may provide a useful insight into the complex matter of police performance. While assaults on police are not necessarily indicative of poor performance, the view persists that those officers who exhibit a consistent pattern of assault victimization are generally considered to be performing less satisfactorily than their non-assaulted counterparts. Thus, assaults on police are generally perceived as constituting a negative indicator of police performance.

Evaluating and predicting police performance is not a new concern of law enforcement officials. Indeed, recent years have witnessed a number of studies designed to provide more reliable means of evaluating and predicting police performance, with particular attention given to selection standards and techniques.⁵ Two key problems, however, have been the continuing difficulty of determining the basis upon which police performance should be assessed and developing criteria which are reflective of satisfactory levels of police performance.

In the present study, attention has been directed not at overall measures of police performance, but at the more narrowly defined aspect of police assaults, which can be ascribed to a combination of factors associated with conflict between the policeman and the citizen. Thus, if it is possible to determine those personal characteristics which are highly associated with assault frequency, then it may be possible to improve current methods of police selection, training and management.

The training of police officers has been generally viewed as inadequate in terms of the tremendous pressures and complex problems associated with modern policing. The amount and type of police training received by the individual police officer is an additional personal characteristic which merits further analysis. While many attempts have been made to upgrade and improve police training procedures, few have been found to have contributed significantly to the improvement of police services.

Too often, police training programs, particularly those found in recruit training academies, are designed to teach police officers the basic mechanical skills of the police profession without developing a basic appreciation for either the mission and role of the police or the fundamental principles and concepts of criminal justice. At the same time, little is done to evaluate existing training programs in an effort to determine their effectiveness. Instead, police agencies continue to rely upon traditional approaches to police training with little apparent concern as to their adequacy in preparing an officer to meet the realities of his role as a law enforcer in a modern, urban, and complex society. The National Advisory Commission on Criminal Justice Standards and Goals, in its report on the police, observed that:

Many police employees graduating from police academies are shocked by reality. They often find the training they received in the academy has little relationship to what happens in the field.⁶

To further complicate the problem, little effort has been made to design police training programs to prevent assaults on police. Those few training attempts initiated to cope with the assault problem have usually been concerned with "officer survival" techniques whereby preventive measures are taken to safeguard against ambushes and sniping incidents.⁷ A few training programs, however, have been developed which are oriented toward the more common types of police-citizen conflict that commonly result in assaults on officers⁸ such as domestic disturbances, drunkenness arrests, and routine interrogations. By analyzing the training profiles of both assaulted and non-assaulted officers, it may be possible to determine what types of training may be most useful in minimizing police assaults.

Data Characteristics

The data collected for analysis in the present study consisted of two different types:

1. Personal Characteristics which include age, education, length of service, rank, height, weight and mass ratio (weight divided by height, in inches).
2. Training Characteristics which consist of the total number of hours of pre-service and in-service training received by individual officers during their police careers. For the purposes of in-depth analysis, training profiles of individual officers were developed by categorizing police training into five distinct groups:
 - a. Police recruit training
 - b. Mechanical training (i.e., crime scene investigation, accident investigation, patrol procedures, etc.)
 - c. Legal training (i.e., laws of arrest, search and seizure, court decisions, rules of evidence, etc.)
 - d. Human relations training (i.e., police-community relations, ethnic group relations, etc.)
 - e. Leadership-management training (i.e., police supervision, police management, etc.)

To further analyze the training records of individual police officers, training profiles were sub-categorized by the relative recency of such training (i.e., training received during the immediate past six months, training received more than six months and less than one year ago, and training received over one year ago.)

Methodology

Characteristics of individual police officers were collected on 1470 sworn members of 11 municipal police agencies in the four south central states of Arkansas, Louisiana, Oklahoma and Texas.⁹ A survey instrument -- The Personal Data Inventory (PDI) -- was developed for the purpose of collecting the necessary information. Personal Data Inventories were completed on all members of each of the 11 police agencies by on-site representatives who were working members of the police agency. Data was extracted from personnel files and existing police records to ensure completeness, uniformity and accuracy.

In addition to personal characteristics and training data, information was obtained on all police assaults that occurred during

calendar year 1973. This information was received and utilized in conjunction with the Personal Data Inventory information to isolate those officers who became victims of assaults from those who did not. Moreover, those officers who were assaulted more than once during the year 1973 were coded according to the number of assaults against them.

One of the limitations of the present study was the lack of data on officer shift and assignment, thereby making it impossible for the study to control for expected assault potential, e.g. relative degrees of exposure and risk. However, since most officers are rotated with relative frequency and are thus exposed to essentially the same assignments during a twelve-month period, this limitation was not considered to be particularly significant.

City selection was guided by two important considerations. First, the major criterion utilized in agency selection was its relative ranking (low - medium - high) on the Index of Proneness to be Assaulted constructed for 46 south central cities within the population range of 40,000 and above.¹⁰ Thus, an attempt was made to include cities which are representative of various assault levels. Second, given the exigencies of the law enforcement community, agency cooperation was an additional consideration weighed in determining agency participation.

Method of Analysis

To determine the relationship between officer characteristics (independent variable) and assault frequency (dependent variable); Pearson product moment correlations (r) were utilized. In addition, multiple step-wise regression techniques were employed to assess the extent to which the variation in the dependent variable could be explained by the 24 independent variables.

Findings

Looking first at the coefficients of simple correlation between officer characteristics and assault frequency, Table 1 indicates the lack of any strong relationships.

The highest correlation coefficients consist of three personal characteristics -- age of officer (-.18), tenure of officer (-.17), and rank of officer (-.14). The negative relationships between these three variables and assault frequency is not surprising since older, more tenured and higher ranking officers are more likely to be placed in lower risk assignments. Indeed, there is a moderate to strong positive association between officer age, tenure, and rank.¹¹ The formal education of officers, physical characteristics of officers (height, weight and mass) and training characteristics demonstrate extremely weak

TABLE 1

COEFFICIENTS OF SIMPLE CORRELATION BETWEEN OFFICER
CHARACTERISTICS AND ASSAULT FREQUENCY

<u>Personal Characteristics</u>	<u>Assault Frequency</u>
Age of Officer	-.18
Education of Officer	.07
Tenure of Officer	-.17
Rank of Officer	-.14
Height of Officer	-.03
Weight of Officer	.00
Mass of Officer	.00
<u>Training Characteristics</u>	
Recruit Training	
Hours last 6 months	-.04
Hours 6-12 months	.00
Hours 1 year or more	.07
Mechanical Training	
Hours last 6 months	-.03
Hours 6-12 months	.09
Hours 1 year or more	-.07
Legal Training	
Hours last 6 months	-.07
Hours 6-12 months	-.01
Hours 1 year or more	-.06
Human Relations Training	
Hours last 6 months	.01
Hours 6-12 months	-.03
Hours 1 year or more	-.03
Leadership/Management Training	
Hours last 6 months	-.02
Hours 6-12 months	-.05
Hours 1 year or more	-.06

relationships with the dependent variable.

The findings on the height of officers and proneness to assault are of particular interest and concern to the law enforcement community, since established minimum height requirements for entry into police service is presently a controversial issue. The data on 1470 officers in 11 south central municipal police agencies does not support the premise that height, in and of itself, is related in any meaningful way to assault frequency.

Another significant finding is the lack of any apparent association between the number of instructional hours received in terms of the time elapsed since training and assault frequency. While the data does not suggest that training per se is not related to police performance and competency as measured by assault frequency, it does, however, suggest that the type and quality of training presently received by police officers is only minimally associated with frequency of assault.

To this point in the analysis, simple correlation coefficients have been used exclusively. In addition to examining the relationship between each of the independent variables and the dependent variable, it is also useful to assess the collective impact of these 24 measures of police characteristics and assault frequency. By using the statistical procedure of multiple step-wise regression, a coefficient of determination (R^2) of 6.2 percent was obtained. Table 2 presents summary statistics of the regression analysis for assault frequency. The total R^2 represents the accumulative amount of explained variation in frequency of assault through the 23 steps of the regression equation. The contribution to R^2 represents the individual contribution of each independent variable toward explaining the variation in assault frequency for all officers surveyed.

Thus, when combined, the accumulative explanatory capability of the 24 independent variables accounts for a mere 6 percent of the variance in assault frequency. Of this 6 percent, officer age contributed over 3 percent of the explained variation, while the remaining measures accounted for an even smaller amount of the remaining unexplained variation. It is evident, then, that assault frequency among the individual officers for the cities studied was not closely tied to the personal and training characteristics of these officers.

Conclusion

This study has sought to empirically examine the relationship between characteristics of law enforcement officers and their frequency of assault. The findings suggest that little, if any, association exists between the personal and training characteristics of police officers and their proneness to be assaulted. It is apparent that factors other than the officer characteristics examined in this research may contribute more toward

TABLE 2

REGRESSION ANALYSIS OF ASSAULT FREQUENCY
BY OFFICER CHARACTERISTICS

<u>Variable Description</u>	<u>Total R²</u>	<u>Contribution to R²</u>
All Variables*	.062	.062
Age of Officer	.034	.034
Mechanical Training (6-12 months)	.042	.008
Legal Training (last 6 months)	.047	.005
Recruit Training (1 year or more)	.052	.005
Recruit Training (last 6 months)	.055	.003
Rank of Officer	.056	.001
Height of Officer	.057	.001
Weight of Officer	.058	.001

*Only 8 variables are reported in the table since subsequent to the first 8 steps of regression no appreciable amount of the remaining variance was explained.

understanding the phenomenon of assaults directed against police personnel. This points to the need for further research to better define those factors which are related to the violent behavior accompanying some police-citizen interactions.

FOOTNOTES

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²See, for instance, Allen P. Bristow, "Police Officer Shootings - A Tactical Evaluation," The Journal of Criminal Law, Criminology and Police Science, 54 (1963), pp. 93-95; Albert P. Cardarelli, The Journal of Criminal Law, Criminology and Police Science, 59, (1968), pp. 447-453; J. Shane Creamer and Gerald D. Robin, "Assaults on Police," Police, 12, March-April, 1968, pp. 82-87; Federal Bureau of Investigation, "Law Enforcement Officers Killed Summary," FBI Uniform Crime Reports, 1972; Preston L. Horstman, "Assaults on Police Officers: How Safe Are You?" The Police Chief, 40, December, 1973, pp. 44-53; R.M. Stobart, "Serious Assaults on Police," Police Journal, 45 (1972), pp. 108-126; Shelburne J. Veselka, The Police As Victims, The University of Texas School of Law, Austin, Texas, December, 1971.

³Hans Toch, Violent Men: An Inquiry Into the Psychology of Violence, Chicago: Aldine Publishing Company, 1969. See also, Daniel Cruse and Jesse Rubin, "Police Behavior (Part I)," The Journal of Psychiatry and Law, 1, Summer, 1973, pp. 167-222 and Jesse Rubin and Daniel Cruse, "Police Behavior (Part II)," The Journal of Psychiatry and Law, 1, Fall, 1973, pp. 353-375.

⁴Raymond L. Hoobler and J.A. McQueeney, "A Question of Height," The Police Chief, 40, November, 1973, pp. 42-48; Portland (Ore.) Police Bureau, Analysis of Assaulted and Non-Assaulted Officers by Height, Weight, Tenure, and Assignment, Portland, Oregon, February, 1973, 25 pp., mimeo.

⁵Melany E. Baehr, John E. Furcon and Ernest C. Froemel, Psychological Assessment of Patrolman Qualifications in Relation to Field Performance, Washington, D.C.: U.S. Department of Justice, 1968; David H. Smith and Ezra Stotland, "A New Look at Police Officer Selection," in John R. Snibbe and Homa M. Snibbe, eds., The Urban Policeman in Transition, Springfield, Ill.: Charles C. Thomas, 1973, pp. 5-24.

⁶National Advisory Commission on Criminal Justice Standards and Goals, Police, Washington, D.C.: U.S. Government Printing Office, 1973, p. 389.

⁷Charles Bozza and Tim R. Holbrook, "Officer Survival," The Police Chief, 39, September, 1972, pp. 32-35.

⁸Morton Bard and Bernard Berkowitz, "Family Disturbance as a Police Function," Law Enforcement Science and Technology II, Chicago: Illinois Institute of Technology Research Institute, 1968, pp. 565-568; Morton Bard and Joseph Zacker, "Design for Conflict Resolution," Law Enforcement Science and Technology III, Chicago: IIT Research Institute, 1970, pp. 287-290. Also see: Milton K. Davis and Harvey A. Goeman, Evaluation of Police Training in Conflict Management Conducted by the Family Crisis Project, Portland, Oregon: Northwest Psychological Services, 5488 S.W. Dover Court, February 18, 1972, 37 pp.; and Richard K. McGee, Crisis Intervention in the Community, Baltimore: University Park Press, 1974.

⁹Police departments from the following cities participated in the study: Arkansas -- North Little Rock, Pine Bluff; Louisiana -- Bossier City, Lake Charles, Monroe; Oklahoma -- Lawton, Norman; Texas -- Abilene, Amarillo, Austin, and Galveston.

¹⁰The Index of Proneness to be Assaulted (IPA) was computed by ranking the 46 south central cities from high to low according to the number of police assaults per 10,000 population in 1972. The ranking of the 46 cities on the IPA is set out below:

<u>City</u>	<u>Assaults per 10,000 Population *</u>	<u>City</u>	<u>Assaults per 10,000 Population *</u>
Fort Worth	.3	Pine Bluff**	2.1
North Little Rock**	.3	Austin**	2.2
Lake Charles**	.5	Garland	2.2
Abilene**	.6	Irving	2.3
Midland	.7	Lubbock	2.5
Norman**	.8	Lawton**	2.6
Odessa	.9	Oklahoma City	2.7
Corpus Christi	.9	San Antonio	3.0
Wichita Falls	1.0	Mesquite	3.1
Longview	1.1	Beaumont	3.1
Monroe**	1.1	Midwest City	3.3
Victoria	1.2	Fort Smith	3.5
Tyler	1.2	Pasadena	3.5
Arlington	1.2	Tulsa	3.6
Port Arthur	1.2	Shreveport	3.6
Brownsville	1.3	Grand Prairie	3.9
Laredo	1.4	Little Rock	4.1
Waco	1.5	San Angelo	4.2
El Paso	1.6	Bossier City**	4.6
Baytown	1.8	Amarillo**	4.7
Dallas	1.9	Galveston**	4.9

<u>City</u>	<u>Assaults per 10,000 Population</u>	<u>City</u>	<u>Assaults per 10,000 Population</u>
New Orleans	5.7	Baton Rouge	6.7
Houston	5.8	Albuquerque	12.5

* Assault information is based on 1972 data reported to the Federal Bureau of Investigation. Population figures were obtained from the 1970 Census.

** Indicates those cities which were selected for collection of personal data and training characteristics.

11 The intercorrelations between age, tenure and rank are as follows:

	<u>Age</u>	<u>Tenure</u>	<u>Rank</u>
Age	1.00		
Tenure	.87	1.00	
Rank	.54	.63	1.00

END

7 Miles/more