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The Effects of Higher Education on Police Officer Transgressions:
A Case Study of the El Paso Police Department

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Abstract

Although introduced by August Vollmer as early as 1917, the idea of the college-educated police officer only really became a topic of heated discussion during the last thirty years. This article provides a brief overview of the literature and prevalent beliefs among researchers concerning the correlation between higher education and police performance. Emphasis is placed on how higher education impacts the number and types of transgressions committed by officers. At the heart of the article is the presentation of the results of a study examining the relationship between various levels of college education and police officer propensity to violate department rules, use unauthorized force, and neglect their duties. The study used quantitative data collected on all 242 current two to five year veteran officers of the El Paso Police Department. While controlling for other variables such as assignment, gender, age, and ethnicity, a significant relationship was identified between higher education and decreased levels of founded complaints in all three of the above categories providing convincing evidence that higher education likely has a positive effect on the performance of police officers.

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Introduction

Policing is no longer a simple task. Rather, the role of the police officer and the nature of police work have become increasingly complex, necessitating the importance of hiring and retaining the highest-quality personnel available (Kuykendall & Roberg, 1997). Police officers in our democratic society are called upon not only to enforce law, but to exercise sound Judgment, observe constitutional restraint, and demonstrate compassion, innovation, and flexibility when responding to various situations relating to law enforcement as well as social service and order maintenance issues. Many people believe that the evolving responsibilities of police officers in modern society require police officers to have a college education. A college education is thought to liberate the mind, incline persons towards the habitual reliance on reason, and provide police officers with the basic aptitudes needed to perform effectively on the Job (Bittner, 1990).

The issue of whether college educated officers are more qualified to perform their Jobs and whether they actually perform better has become the cornerstone of the universal movement to improve police performance and professionalize the police. In the United States, this movement began with August Vollmer, the “father of modern Policing,” as early as 1917 (Shernock, 1992). The idea of the college-educated police officer gained little momentum, however, until the 1960’s. It was during this period that the United States began to experience massive social change as illustrated by numerous key Supreme Court rulings regarding criminal procedure, the emergence of a youthful counterculture, and the Civil Rights movement (Krimmer, 1996). Violence and destructive clashes between the police and various groups of protesters were televised and brought into the living room of every American by way of the news media. It was at

this time that the police, as the most visible figures of governmental authority, began to have their rigid tactics and traditional standards of performance widely questioned.

In response to the perceived inability of the police to effectively deal with the Period's civil unrest and adequately adapt to the changing social climate, various blue ribbon commissions were established. These commissions, including the 1967 President's Commission on Law Enforcement and Administration of Justice and the National Advisory Commission on Criminal Justice Standards and Goals, began issuing reports calling for various police reforms. Included among these reforms was the need to increase the educational standards for police officers. The President's Commission on Law Enforcement and Administration of Justice (1997) declared that ultimately, "an police personnel with general enforcement power should have baccalaureate degrees." In general, however, the various national commissions recommended that:

- Some years of college be required for appointment as a police officer;
- Higher requirements be set for promotion;
- Education programs be made a matter formal policy, and
- Education be viewed as an absolute occupational necessity (Carter, Sapp & Stephens, 1989).

With the renewed emphasis on higher education, notable increases began to be seen in the number of police officers possessing college degrees. Between 1960 and 1988, the number of officers with college degrees increased by a margin of almost 20 percent (Hawley, 1998). Although gains in police educational levels continue to be made, the growth has yet to meet the levels recommended by the President's Commission or the Nation of Advisory Commission. In fact, there is some indication that the attention

given to police education may have diminished over the past decade. The results of a recent study conducted by the Bureau of Justice Statistics indicated that of the more than 3,000 state and local U.S. police departments surveyed, only one percent required their officers to possess at least a two-year college degree. Less than half of the agencies with a college degree requisite actually required officers to have a four-year college degree (Reaves, 1996). Clearly, not everyone is completely convinced of the need for college educated police officers.

With this in mind, this research endeavor was undertaken in the hope of providing additional and convincing evidence regarding the benefits of college education on the performance of police officers. Using personnel data collected from the official records of a selected group of the Paso police officers, the study examines how varying levels of college education, controlling for a variety of other descriptive variables, impact not only the number but also types of transgressions committed by these police officers. By controlling for the variable of work experience, the study will add to the existing literature on the issue as most of the previous research findings relating higher education to increased police performance are unclear as to whether the same relationship would hold if experience on the job was taken into consideration (Kakar, 1998). It is anticipated we will find that the number of police transgressions committed by these officers will diminish significantly as levels of education increase.

Review of Literature

In reviewing the literature dealing with the benefits of higher education on police performance, most criticisms seem to center on two points: First, until the 1970s,

virtually no empirical research had been conducted on the effects of college education on police performance and, as such, the recommendations which had originally spurred the “educational movement” in law enforcement had generally been based on rhetoric and intuition rather than empirical evidence (Carter & Sapp, 1990). Second, although the Commission’s reports and increased federal funding for criminal justice related research ultimately lead to empirical studies examining the effects of college education on police performance, the results of these studies to date have been somewhat inconclusive (Cordner & Sheehan, 1995). For example, according to Miller and Fry (1978), police officers experience no direct benefits from possessing a college degree. Sterling (1974) actually found that higher education had a negative affect on police officer attitudes and behavior. Worden (1990), in studying citizen satisfaction with police officer performance, found citizens slightly less satisfied with the levels of courtesy for officers who held a college degree. According to Cordner and Sheehan (1995), most police officer tend to be naturally proud and egotistical, and these qualities may be intensified through education, perhaps negatively changing the officer’s attitude and behavior to the point that they become close minded, offensive, and work counterproductively towards organizational interest (Cordner & Sheehan, 1995).

These conclusions, however, appear to be contrary to the findings of numerous other studies suggesting that education has a positive effect on the performance of police officers. For example, during their 1997 study of twelve police departments in Virginia, Smith and Aamodt (1997) found significant correlations between higher education and most measures of police performance including communications, public relations, report writing, and decision making skills. In Meagher’s study of 183 officers at one agency,

the occurrence of specific positive acts on the part of police officers varied significantly when the level of education among the officers studied was controlled for (Scott, 1986). Finnegan (1976) discovered that officers possessing a formal college education consistently received higher performance ratings from their supervisors and Krimmel (1996) found that college-educated officers also rated themselves higher on self administered performance evaluations than did police officers without a college-degree. Further, Trojanowicz and Nicholson's (1976) research found that college-educated officers were generally more innovative and flexible in performing their police tasks and Roberg (1978) found college-educated officers to be less dogmatic and authoritarian than non-college-educated officers. In addition, other studies have reported that college educated officers were more satisfied in their Jobs, took fewer sick days, had shorter response times, tended to be injured less on the Job, issued more citations, and were involved in fewer traffic accidents than their non-college-educated peers (Carter, Sapp & Kappeler, 1992).

Several studies have also identified a positive relationship between higher education and fewer citizen complaints, fewer disciplinary actions, and fewer allegations of excessive force. For example, Guller (1972) found that officers with a formal college education were less punitively oriented than other officers. Worden (1990) found that officers with a college education tended to have a much "more positive attitude" towards legal restrictions than their non-college educated officers. In a 1992 survey of 177 New England and New York police officers, Shernock (1976) found that the value officers placed on ethical conduct was positively related- to increase levels of" education. In another study, Carter and S-app (198"8) found- that college educated officers tended to

communicate and respond to the needs of the public in a more competent, civil, and human manner. A more recent study conducted by Carter, Sapp and Kappeler (1992) also concluded that college-educated police officers tended to have significantly fewer founded citizen-initiated complaints, including those relating to rudeness and excessive force, than did their non-college-educated counterparts. Further, a 1989 national study, found that 98 percent of the responding police departments reported that those officers employed by their agency having two or more years of college received less complaints and had fewer disciplinary problems than did officers with less education (Carter, Sapp & Stephens, 1989). There is also some evidence to suggest that college educated officers are less likely to use deadly force and are involved in fewer improper shooting incidents than non-college educated officers (Carter & Sapp, 1988).

There are a variety of theorized reasons why a college education is believed to have the type of positive effects on police officers that have been described above. Some of the perceived advantages of a college education include:

1. College education creates a broader base of information for decision making within the individual and allows for additional years of experience and maturity.
2. Course requirements and achievements tend to instill responsibility in the individual officer.
3. General education courses permit the individual to learn more about the history of the country and appreciate constitutional rights and democratic processes and values.

4. College education engenders the ability to be flexible during difficult and/or ambiguous situations and provides for greater levels of creativity and innovation.
5. The academic experience improves conceptual skills permitting a better view of the “big picture,” including the criminal justice system as it relates to the prosecutorial, courts, and correctional roles.
6. Higher education increases cultural sensitivity by developing a greater empathy for minorities and raising one’s understanding and tolerance level for persons of differing lifestyles and ideologies. This can translate into more effective communication and improved community relations in policing.
7. College educated officers are less rigid in decision-making, and demonstrate a greater tendency to use discretion in order to deal with individual cases rather than relying on hard and fast rules to govern all situations.
8. College-educated officers exhibit improved professional demeanor and performance and are better equipped to perform tasks and make decisions under minimal or no supervision.
9. College educated officers develop improved coping strategies for stress and are more likely to seek assistance when stress-related problems do arise.
10. The college experience tends to make officers less authoritarian, less cynical when dealing with others, and more accepting to organizational change (Carter, Sapp, & Stephens, 1988).

Methodology

Research Focus

Although not unanimous on the subject, a majority of the research seems to indicate that there is a positive correlation between higher education and police performance. Additional research in this area is needed, however, as many of the previous studies have been criticized for being far too general in nature and for their use of perceptions and opinions as their primary measure of performance (Carter, Sapp & Kappeler, 1992). In recognition of this fact, this study will attempt to provide additional evidence in this critical area of policing while avoiding these pit-falls by objectively examining, in detail, the relationship between education and actual police officer transgressions. This will be done by examining personnel data collected from the official records of the El Paso (Texas) Police Department. The study will examine how varying levels of college education, controlling for a variety of other descriptive variables, impact not only the number but also types of transgressions committed by police officers within the study group. The variable of work experience will also be controlled, as the study group will be composed strictly of officers with two to twelve years on the job. Since most of the previous research findings relating higher education to police performance were unclear as to whether the same relationship would hold if experience on the job was taken into consideration (Kakar, 1998), this study is an important addition to the existing literature exploring this association. For the purpose of this study, the following hypotheses is proposed:

When controlling for a variety of other variables such as assignment, age, gender, and ethnicity, the number of founded allegations relating to rule violations, unauthorized use of force, and dereliction of duty diminish significantly as levels of education among police officers increase.

Research Location and Case Study Entity

The selected case study entity is the El Paso Police Department. The City of El Paso is located in far west Texas directly on the international boundary between the U.S. and Mexico. El Paso has an estimated population of 617,215 (City of El Paso, FY 1999 Annual Report). The fourth largest city in Texas, El Paso is the largest American city bordering Mexico and the 17th largest city in the U.S. In addition to being a port of entry from Mexico, El Paso is a major road, rail, and air transportation center for the Southwest. Tourism is also an important part of the City's economy. The city has an excessively high unemployment rate of 10.5%. The general lack of education among El Pasoans likely plays a role in this unemployment rate as well, as 37% of the city's adult population never graduated high school and only 15% have a college degree (City of El Paso Homepage).

The El Paso Police Department employs just under 1350 commissioned and civilian support staff members. The Department has an authorized strength of 1278 commissioned police officers, however, due to an insufficient applicant pool, the agency generally operates at a level significantly under its authorized strength. At the time of the study, the Department was understaffed by 220 officers with an actual strength of 1058. The department had an average annual turnover rate of 4.5 percent during the two years period under analysis.

The El Paso Police Department operates under a decentralized organizational structure and boasts a strong commitment to Community Oriented Policing. The State of Texas requires that persons be at least 21 years of age in order to be commissioned as a

peace officer, however, neither the State of Texas nor the El Paso Police Department currently have an established maximum age limit relating to new hires. Each police recruit must, however, complete a vigorous 22 week law enforcement training academy and pass a State licensing exam before being commissioned as peace officers. Once commissioned, employees are placed on probation where they are assigned to the Field Training Officer and closely monitored for a period of one year. Although the El Paso Police Department does not require a minimum number of college hours of its applicants, the agency does place a moderate emphasis on education by contractually requiring new officers to have accumulated a minimum of 45 college hours prior to having completed three years of service with the agency. Sworn officers are also provided a small amount of additional incentive pay that is determined by a sliding scale taking into consideration employee tenure, training, and education. The City of El Paso further offers a partial tuition reimbursement plan to all full-time city employees, including police officers, as an incentive for employees to continue their education.

Study Group and Data Collection Procedure

Of the 1278 full-time sworn police officers employed by the El Paso Police Department, the study group included 242 of these officers. The officers comprising the study group represented all officers, including both the ranks of patrol officer and detective, who, at the time of the study, had two to five years of completed service. Officers falling within this group represented those officers having graduated from the El Paso Police Department's 87 through 94 police academy classes. This sample group was selected as, due to the specific employment and promotional practices of the El Paso

Police Department, the officers in this category were predominantly composed of non probationary and non-supervisory personnel. Additionally, officers with less than five years of service tend to experience significantly more complaints than their more tenured counterparts (Wagner, 1980). One reason for this may be that many problematic officers, and/or officers who are unable to develop their policing and/or communication skills, would likely have been terminated or voluntarily separated from the agency prior to having completed five years of service (Johnson, 1998). Officers having separated service, either voluntarily or involuntarily, prior to the start of this study were not included in the sample group due to the inability of the researcher to obtain reliable data on non-current employees. Members of the sample group were engaged in a wide range of functions throughout the department including motor patrol, criminal investigations, and various administrative functions.

Data were collected by examining official departmental records including personnel and internal affairs records. General Descriptive information such as assignment, age, gender, and ethnicity was derived from the personnel record of each officer. Since officers are required to periodically forward college transcripts relating to their educational achievements to Texas Commission on Law Enforcement Officer Standards and Education in order to earn the previously mentioned incentive pay, information relating to the level of college education for each officer was obtained from the Commission. Personal surveys were also distributed to each officer in the sample group in order to cross-verify the information relating to descriptive information and educational level. Ninety-two percent of the officers responded to the verification survey.

Data were also collected on the type and number of founded transgressions reported to have been committed by each officer in the sample group. These data were derived from the examination of individual officer Internal Affairs History Reports which contain information on all internal and external allegations made against officers of the El Paso Police Department that had been determined, through investigation, to be founded. Although data were collected relating to disciplinary history of each employee during their entire tenure with the El Paso Police Department, only those disciplinary entries which related to allegations filed during the two calendar years preceding the study, January 1, 1998 through December 31, 1999, were considered for analysis. This was done in order to ensure consistency in time frame available for examination for each member of the study group.

It is important to note that these founded complaints represented the minority of the complaints filed against officers as most internal investigations do not find the accused officer responsible (Landau, 1996). In fact, the El Paso Police Department substantiates less than one out of every three complaints filed against its officers. Some of the situations are cleared because it is determined that the alleged police conduct never took place or the complainant simply misinterpreted the legal and ethical behavior of the officer. Most complaint situations, however, are not sustained due to a lack of physical evidence or unbiased witnesses to support the claims of the complainant (Wagner, 1980). By measuring only founded complaints, the extent of misconduct among the officers within the study group is very likely underestimated.

Although the data collected for this study came from a single municipal police agency, the some meaningful inferences can be made as the study does involve a

relatively large group consisting of all officers possessing a specific range of tenure with the El Paso Police Department. Although the entire sworn police officer population of the El Paso Police Department was not examined, complete data were able to be collected on all officers within the identified study group, avoiding the disadvantages experienced with sampling techniques. Since our examination includes the total population of a specifically identified group of police officers, statistical differences detected represent real differences and are not subject to sampling error. The chi-square non-parametric test and multivariate regression analysis has also been used in order to establish an objective criterion from which to determine whether differences detected between the variables relating to the study group are statistically significant (Nachmias & Nachmias, 1996).

Findings

Study Group Characteristics

The 242 officers comprising the study group were predominantly male (87.6%) and, as a result of the case study entity's border location, Hispanic (71.1%). Although little research has been conducted on how ethnicity affects performance among individual police officers, there is ample research available suggesting that female officers will experience lower levels of public complaints than their male officers (Alley, 1998). At the time of the case study, 201 (90.8%) of the officers were also assigned to uniform operations. Research has also shown that it is these officers, those with the most contact with the public, that tend to receive the most complaints (Johnson, 1998). The remainder of the officers studied were assigned to criminal investigations and various administrative positions, 35 (14.5%) and 6 (2.5%) respectively.

The age of officers in the group ranged from 24 to 51 with a mean age of 30.6 and a mode age of 29. For comparison purposes, officers within the study group were categorized as either 24 to 30 years of age or 31 to 51 years of age. This age distinction was selected as many law enforcement agencies tend to set 30 years of age as the cut off for police applicants. The most common reasons cited for this are pension provisions and physical fitness concerns. Available research on age and police performance suggests, however, that officers over 30 years of age are far less likely to generate citizen complaints (Morgan, 1980). Older, more mature, officers are generally believed to be less aggressive and better able to communicate with others as a result of increased level of personal life experience (Johnson, 1998). For this reason, it was felt that our findings would be more meaningful if they should bear out a relationship between age, within these specific intervals, and police performance.

As for educational levels, the mean years of college within the study group was 2.02 with a mode of 1. Although each of the 242 officers had some college, only 37 (15.3%) had completed a four year college degree. Six (2.5%) of the officers had less than 1 year of college, 98 (40.5%) had more than 1 but less than 2 years, 71 (29.3%) had more than 2 but less than 3 years, and 30 (12.4%) had more than 3 but less than 4 years of college. For comparison purposes, educational levels were collapsed into 3 categories, including officers with less than two years of college (<2), officers with at least two but less than four years of college ($2 \leq 4$), and officers with four or more years of college ($4 \leq$). These particular categories were selected as they tend to pragmatically identify officers as either having no college degree, an associates degree or equivalent, or a baccalaureate degree or better.

Founded Complaints

During the 24 month time frame under analysis, a total of 143 founded complaints were generated by the study group. Only 84 of the officers were responsible for these complaints, however. The remaining 158 officers had recorded no founded complaints during the 2-year study period. As mentioned earlier, unfounded and not sustained complaints were excluded from analysis as the El Paso Police Department does not record non-substantiated allegations on individual officer Internal Affairs History Reports. Total founded complaints had a range from 0-5, a mode of 0, and a mean of .347. Two officers had five complaints each, three had four, four had three, thirty-four had two, and forty-one had only one founded complaint during the study period.

As a matter of practice, the El Paso Police Department records complaints into one of three general categories: Rule Violations, Unauthorized Use of Force, and Dereliction of Duty. Rule Violations included acts of illegal searches, misuse of office, making false statements, rudeness, improper operations of vehicles, failure to follow proper procedures, losing equipment or evidence, insubordination, improper radio procedure. Unauthorized Use of Force incidents generally involved the use of excessive force, improper physical tactics, or the discharging of a firearm outside of departmental policy. Examples of Dereliction of Duty complaints included, inattention to duty, tardiness, absent without leave, missing court, sleeping on duty, failure to take reports, and failure to act. Of the 143 total founded complaints, Rule Violations were the most common (60.8%), followed by Dereliction of Duty (30.1%), and finally Unauthorized Use of Force (9.1%).

Descriptive Characteristics of the Sample Group: Control Variables

In order to examine the independent and direct effects of higher education on the police complaints examined here, several comparisons between descriptive variables and founded complaints were also made. Besides work assignment, the descriptive variables of gender, age, and ethnicity were analyzed. Each of these variables and their individual correlations to officer complaints are presented in Table 1. As shown below, no statistically significant differences were found in any of the variables when compared to the number and types of complaints generated despite the manipulation of several of the variables into broadened categories and using simple bivariate complaint measures.

Table I
Distribution of Officers with Complaints by Descriptive Variables

Distribution of Officers with Complaints by Descriptive Variables

Percentage of Police Officers with Complaints by Current Assignment					
Type of Complaint	Patrol		Investigations & Administration	Total	Chi-Square
	201 (83.1%)		41 (16.9%)	242 (100%)	
One or More founded Complaints	74 (88.1%)		10 (11.9%)	84 (100%)	2.320

Percentage of Police Officers with Complaints by Gender					
Type of Complaint	Male		Female	Total	Chi-Square
	212 (87.6%)		30 (12.4%)	242 (100%)	
One or More founded Complaints	73 (86.9%)		11 (13.1%)	84 (100%)	0.058

Percentage of Police Officers with Complaints by Age					
Type of Complaint	24-30		31-51	Total	Chi-Square
	140 (57.9%)		102 (42.1%)	242 (100%)	
One or More founded Complaints	47 (56.0%)		37 (44.0%)	84 (100%)	0.190

Percentage of Police Officers with Complaints by Ethnicity						
Type of Complaint	Hispanic	White	Black	Other	Total	Chi-Square
	172 (71.1%)	55 (22.7%)	7 (2.9%)	8 (3.3%)	242 (100%)	
One or More founded Complaints	59 (70.2%)	18 (21.4%)	3 (3.6%)	4 (4.8%)	84 (100%)	1.138*

Contains cell(s) less than 5.

Effects of Education on Founded Complaints

The analysis did reveal a significant relationship between complaints and level of education among officers in the study group. Officers with less than 2 years of college had proportionately more complaints in each of the three complaint categories. Overall, officers with less than 2 years of college accounted for 58.7% of the total complaints while only accounting for 43.0% of the total officers in the study group. At the same time, officers with 2 and 3 years of college accounted for 30.1 % of complaints while comprising 41.7% of the study group. Similarly, only 11.2% of the complaints had been logged against officers with 4 or more years of college (baccalaureate degree or better), while these officers accounted for 15.3% of the officers being studied. A more detailed illustration of these findings can be found in Table II. These differences were significant as officers with less than 2 years of college averaged just under one (mean 0.81) founded complaint each during the 2 year study period, as compared to officers with 2 to 3 years of college (mean 0.43) and 4 plus years of college (mean 0.43) who averaged almost half as many complaints per officer.

Table II
Percentage of Police Officer Complaints by Level of Education

Type of Complaint	<2 Years College	2≥4 Years College	4≥ Years College	Total
	104 (43.0%)	101 (41.7%)	37 (15.3%)	242 (100%)
Rule Violations	84 (55.2%)	31 (35.7%)	8 (9.2%)	87 (100%)
Unauthorized Force	10 (76.9%)	2 (15.4%)	1 (7.7%)	13 (100%)
Dereliction of Duty	26 (60.5%)	10 (23.3%)	7 (16.3%)	43 (100%)
Total Complaints	84 (58.7%)	43 (30.1%)	16 (11.2%)	143 (100%)

Further examination of the education variable was done by arranging these same three educational categories into the same type bivariate tables which were used for the descriptive variables, classifying officers as either having or not having recorded one or more complaints during the study period. This analysis also showed significant

differences in complaint history based on level of education. As Table III illustrates, there is clearly a negative relationship between higher levels of education and complaints. A total of 84 officers had received complaints classified as founded by the department during the two-year study period. Of those 84, 46 (54.8%) were attributed to the 104 officers in the study group who had less than 2 years of college, even though this group accounted for only 43.0% of the overall study group. Complaints showed a solid decrease among the 101 officers with 2 and 3 years of college with only 27 (32.1 %) of officers with complaints deriving from this group. This was again notable as officers with 2 and 3 years of college accounted for some 41.7% of the overall study group. The ratio of complaints among officers with 4 or more years of education was also considerably lower than that found in officers with less than two years of education. Eleven (13.1 %) of the officers with complaints involved the 37 officers with 4 or more years of college. Officers with 4 or more years of college accounted for 15.3% of the study group. These differences in complaints based on educational levels were significant at the .05 level, using the Chi-Square test for probability.

Table III
Officers with Founded Complaints by Educational Level: Overall

Type of Complaint	<2 Years College N/%	2≥4 Years College N/%	4≥ Years College N/%	Total Officers
No Founded Complaints	58 (55.8%)	74 (73.3%)	26 (70.3)	158
One or More Founded Complaints	46 (44.2%)	27 (26.7%)	11 (29.7%)	84
Total Officers	104 (100%)	101 (100%)	37 (100%)	242

Significant at the .05 level (Chi-Square= 7.401, df=2)

When analysis was performed on individual types of complaints, similar findings were obtained. The most common type of complaint noted in department records was that of Rule Violations, illustrated in Table IV. A total of 71 officers had recorded complaints for Rule Violations during the two-year study period. In short, over half, 39 (54.9%), of the officers with Rule Violations were officers with less than two years of college. Again, complaints for Rule Violations decreased notably among the officers in the study group who had two or more years of college. Only 25 officers with 2 and 3 years of college recorded complaints for Rule violations; this represented 35.2% of all officers recording complaints of this type. Officers with 4 or more years of college also tended to record fewer complaints for Rule Violations. In fact, of the 71 officers who had recorded complaints of this type, only 7 were officers with 4 or more years of college. This means that officers with 4 or more years of college accounted for only 9.9% of the officers found to have violated rules during the study period. These differences were also significant at the .05 level of probability.

Table IV
Officers with Founded Complaints by Educational Level: Rule Violations

Type of Complaint	<2 Years College N/%	2≥4 Years College N/%	4≥ Years College N/%	Total Officers
No Founded Complaints	65 (62.5%)	76 (75.3%)	30 (81.1%)	171
One or More Founded Complaints	39 (37.5%)	25 (24.7%)	7 (18.9%)	71
Total Officers	104 (100%)	101 (100%)	37 (100%)	242

Significant at the .05 level (Chi-Square= 6.304, df=2)

Turning our attention to those complaints classified as Unauthorized Use of Force, illustrated in Table V, we again find that officers with less than 2 years of college recorded proportionately more complaints of this type than did their counterparts with 2

or more years of college. Although only 13 total Unauthorized Use of Force complaints were recorded during the study period, 10 (76.9%) involved the 43.0% of the officers in the study group who had less than two years of college. Officers in the study group with 2 and 3 years of college accounted for only 2 (15.4%) of the officers with complaints for Unauthorized use of Force. Again, this was a significant reduction when we recall that officers with 2 and 3 years of college comprised 41.7% of the overall study group. Only one officer with 4 or more years of college recorded a complaint for Unauthorized Use of Force during the study period. This represents only 7.7% of the Unauthorized Use of Force complaints within a group comprising 15.3% of the total officers within the study; these differences were significant at the .05 level of probability.

Table V
Officers with Founded Complaints by Educational Level: Unauthorized Force

Type of Complaint	<2 Years College N/%	2≥4 Years College N/%	4≥ Years College N/%	Total Officers
No Founded Complaints	94 (90.4%)	99 (98.0%)	36 (97.3%)	229
One or More Founded Complaints*	10 (9.6%)	2 (2.0%)	1 (2.7%)	13
Total Officers	104 (100%)	101 (100%)	37 (100%)	242

Significant at the 0.05 level (Chi-Square= 6.488, df=2)

*Contains cell(s) less than 5.

Next, complaints for Dereliction of Duty were examined, as illustrated in Table VI. Of the 38 total officers who recorded Dereliction of Duty complaints during the study period, 24 (63.2%) had less than 2 years of college, 9 (23.7%) had 2 and 3 years of college, and 6 (15.8%) had four or more years of college. Again, officers with 2 or more years of college accounted for proportionately less of the officers with complaints for Dereliction of Duty than did their less educated counter parts. Relying on the Chi Square test as a criterion, these differences were found to be significant at the 0.1 level.

Table VI
Officers with Founded Complaints by Educational Level: Dereliction of Duty

Type of Complaint	<2 Years College N/%	2≥4 Years College N/%	4≥ Years College N/%	Total Officers
No Founded Complaints	80 (76.9%)	93 (92.1%)	31 (83.8%)	204
One or More Founded Complaints	24 (23.1%)	8 (7.9%)	6 (16.2%)	38
Total Officers	104 (100%)	101 (100%)	37 (100%)	242

Significant at the 0.1 level (Chi-Square= 8.901, df=2)

In order to determine the percentage of variation in officer complaints that is accounted for by education while controlling for other independent variables, multivariate regression analysis was conducted. Table VII presents the results of this analysis for the variables of education, assignment, gender, age, and ethnicity. Although the regression line was not significant at the .05 level, it was clearly significant within the 0.1 range. This was likely the result of the limited sample size. As indicated, the Adjusted R Squared value of 0.02 indicated that the multivariate regression explains only 2% of the variation in the total officer complaints. None of the control variables, assignment, age, gender, or ethnicity, significantly contributed to the variance in officer complaints while the regression coefficient showed strong support for our hypothesis with education remaining statistically significant in relation to the number of founded complaints received by police officers. As predicted, the regression analysis showed that police officer complaints decreased proportionately as education levels increase among police officers. As officers increased from one education category (<2, 2≥4, and 4≥ Years of College) to another, on average, the number of complaints received decreased by 0.22% each time. With a constant complaint value of 1.10, we could surmise that, if all police officers were required to have at least 4 years of college, police complaints would be reduced by almost half (44%).

Table VII
Multivariate Regression Analysis of Officer Complaints

Independent Variable	Regression Coefficient
F	2.06+
Adjusted R Squared	0.02
Assignment	-0.26
Gender	0.12
Age	0.08
Ethnicity	0.02
Education	-0.22*
Constant	1.10*

+ Significant = <0.1

* Significant = <0.05

Discussion and Conclusions

This study focused on how higher education, while controlling for a variety of other variables, impacts the number and types of transgressions committed by officers. The study entity was the El Paso (Texas) Police Department. Although the entire population of the department was not studied, complete sets of data were collected on all officers with 2 to 5 years of service, thereby avoiding many of the sampling error weaknesses generally associated with sampling distributions. Using data collected from official department records, cross-verified by individual study participants, this study examined the number and types of complaints recorded by officers in comparison with their assignment, gender, age, ethnicity and educational level as an indicator of police officer performance. Although transgressions committed by police officers were shown to be relatively independent of assignment, gender, age, and ethnicity, there did appear to be a significant correlation between educational levels and police officer complaints. The results showed strong support for our hypotheses and corroborated the previous research findings asserting that college education leads to increased job performance, including fewer employee transgressions, among police officers.

Educational levels were divided into three categories, those officers with less than 2 years of college, officers with 2 or 3 years of college, and officers with 4 (baccalaureate degree) or more years of college. Complaints were also further differentiated as Rule Violations, Unauthorized Use of Force, and Dereliction of Duty. The study results provided strong evidence that higher education and police transgressions are highly correlated. In short, officers with less than 2 years of college recorded significantly more complaints in each category than did their peers with 2 or more years of college. The findings did not, however, show significant differences in the numbers and types of complaints between officers with 2 and 3 years of education and those with a 4 year college degree. This may suggest that conformity to agency rules and increased sensitivity towards others is related more to college attendance than to the possession of a college degree. Perhaps the self-discipline, general knowledge, and understanding of others that is learned in college may peak after 2 and 3 years and may not significantly increase after that point.

While the findings of this study seem to lend support for the requirements of college education among police officers, caution should be used when attempting to make generalizations as this study does have its shortcomings. For instance, in order to avoid other methodological weaknesses of earlier studies that relied on qualitative measures, this study used strictly quantitative measures of police officer performance and all data were collected from official, verifiable, data sources. Because only quantitative variables were used, however, the measures may have limitations and biases. By measuring only official records of complaints, the extent of misconduct is likely underestimated as complaints are often limited by various uncontrolled factors such as

socioeconomic status of citizens, community perceptions of administrative responses to complaints, level of individual supervisory competence, and individual agency investigatory practices (Carter, Sapp & Kappeler, 1992).

Further, as originally pointed out by Carter, Sapp and Kappeler (1992) in their study relating to higher education and police complaints, the possibility of complaint bias relating to college-educated officers also exist if: 1) college educated officers receive different types of assignments by virtue of their level of education, or 2) complaints against college-educate officers are treated differently than complaints against non college-educated officers. While no significant differences appeared to emerge based on assignment in this study, the categories studied were quite broad, including Patrol Operations, Investigations, and Administration. As such, a great deal of differentiation could exist in the types of duties with which individual officers are tasked even within these individual categories. For example, officers included within the Patrol Operations group may be assigned primarily to traffic enforcement, community policing, or general patrol duties. Additionally, although the internal investigatory practices of the El Paso Police Department did not appear to differ based on the educational level of officers, the possibility must be considered if generalizing these results to other police departments.

Further, as with any study of this nature, the possibility of spurious relationships exists. A spurious relationship is an association that results from variables other than those specifically tested for (Nachmias & Nachmias, 1996). In the case of this study, we must not overlook the fact that the college educated officer may have been different before he or she went to college and, had they decided not to attend college for any reason, would still have experience fewer complaints. In other words, we cannot

discount the possibility that officers with increased levels of education may have experienced decreased levels of complaints not as a result of having attended college, but rather as a product of some other internal or external factor which not only positively effected the officers ability to interact with others, but also his or her desire and/or ability to attend college. This is to say that perhaps it is some unknown factor (personality, social up-bringing, religion, etc.) that caused the officers to experience fewer complaints and, although officers possessing this factor also experience a stronger attraction towards college, the college experience may have had little or no impact on complaint levels.

Nevertheless, if there are any indications available that could assist police administrators in improving the levels of performance and professionalism of their employees, such information must be identified, examined, and acted upon. While additional research into the effects of higher education on police performance is certainly needed, the findings of this study, and many others like it, must not be slighted. Clearly, there exist identifiable levels of higher education that appear to significantly reduce the propensity of police officers to break the rules, use excessive levels of force, and neglect their duties. An advanced education provides police officers with a better understanding of the world around them, self-discipline, and improved communication, critical thinking and problem solving skills (Braunstein, 1992). The issue facing policing today may not be whether police officers should have a college education, but rather how and when police administrators will implement higher education requirements within their agencies (Breci, 1997). There is little question that higher education is a good thing, a necessary thing, for police officers and the expectations of our modern society demand that law enforcement executives and community leaders alike work affirmatively to fill this void.

References

Aamodt, M. & Smith, S. (1997). The relationship between education, experience, and police performance. Journal of Police and Criminal Psychology, 12 (2), 7-14.

Alley, A; Ede, A & Waugh, L. (1998). Police culture, women police and attitudes towards misconduct. International Journal of Police Science and Management, 1 (3), 288-300.

Barry, D. (1978), A survey of student and agency views on higher education in criminal justice. Journal of Police Science and Administration, 6 (3), 345-354.

Bittner, E. (1990). Some reflections on staffing problem-oriented policing. American Journal of Police, 9, 189-196.

Braunstein, S. & Tyre, M. (1992), Higher education and ethical policing. The FBI Law Enforcement Bulletin, 61 (6), 6-10.

Breci, M. (1997), What motivates officers to continue their college education? Journal of Criminal Justice Education, 8 (1), 51-60.

Carter D.; Sapp, A & Stephens, D. (1988). Higher education as a bona fide occupational qualification for police: A blueprint. American Journal of Police, 7 (2), 1-27.

Carter, D.; Sapp, A & Stephens, D. (1989). The state of police education: Police direction for the 21st century. , Washington, D.C.: Police Executive Research Forum.

Carter, D.; Sapp, A & Kappeler, V. (1992). Police officer higher education, citizen complaints and department rule violations. American Journal of Police, 11 (2), 37-54.

Carter, D. & Sapp A. (1988). The effects of higher education on police liability: implications for personnel policy. American Journal of Police, 8 (1), 153-166.

Carter, D. & Sapp A. (1990), The evolution of higher education in law enforcement: Preliminary findings from a national study. Journal of Criminal Justice Education, 1 (1), 58-85.

Cordner, D. & Sheehan R. (1990). Police administration (3rd ed). Cincinnati, OH: Anderson Publishing.

Dantzker, M. (1992). An issue for policing- education level and job satisfaction: A research note. American Journal of Police, 12 (2), 101-118.

Finnegan, J. (1996), A study of relationships between college education and police performance in Baltimore, Maryland. American Journal of Police, 15 (1), 85-96.

Guller, I. (1972), Higher education and police: Is there a need for a closer look? Journal of Criminal Law. Criminology. and Police Science, 63 (3), 396-401.

Hawley, T. (1998). The collegiate shield: Was the movement purely academic?. Police Quarterly, 1 (3), 35-59.

Johnson, R. (1998), Citizen complaints: What the police should know. FBI Law Enforcement Bulletin, 12, 1-5.

Kakar, S. (1998). Self-evaluations of police performance: An analysis of the relationship between police officer's education level and job performance. National Journal of Police, 2 (24), 632-647.

Krimmel, J. (1996). The performance of college educated police: A study of self rated police performance measures. American Journal of Police 15 (1), 85-96.

Kuykendall, J. & Roberg R. (1997). Police management (2nd ed). Roxbury, MA: Roxbury Publishing.

Landau, T. (1996, July), When police investigate police: A view from complainants. Canadian Journal of Criminal Justice, 38, 291-315.

Miller, I. & Fry L. (1978). Some evidence on the impact of higher education for law enforcement personnel. The Police Chief: 45 (8), 30-33.

Morgan, J. (1980). The use of age by law enforcement policymakers as a predictor of performance. Journal of Police Sciences and Administration, 8 (2), 166-172.

Nachmias, C. & Nachmias D. (1996). Research methods in the social sciences (5th ed). New York, NY: St. Martin's Press.

President's Commission on Law Enforcement and Administration of Justice. The challenge of crime in a free society: Looking back looking forward. June 19-20, 1997, Washington, D.C (NCJ 170029).

Reaves, B. (1997), Law enforcement management and administrative statistics. Washington, D.C.: Bureau of Justice Statistics.

Roberg, R. (1978). An analysis of the relationship among higher education, belief systems, and job performance of patrol officers. Journal of Police Science and Administration, 6, 336-344.

Scott, W. (1986). College education requirements for police entry level and promotion: A study. Journal of Police and Criminal Psychology, 2 (1), 10-28.

Shernock, S. (1992). The effects of college education on professional attitudes among police. Journal of Criminal Justice Education, 3 (1), 71-91.

Shernock, S. (1997). Education and training: No longer just a badge and a gun. In M. Dantzker (Eds.), Contemporary policing: Personnel, issues, and trends (pp. 13-29). Boston, Mass: Butterworth-Heinemann.

Stalans, L. (1997). Police officers: A gender perspective. In M. Dantzker (Eds.), Contemporary policing: Personnel, issues, and trends (pp. 13-29). Boston, Mass: Butterworth-Heinemann.

Sterling, J. (1974). The college level entry requirement: A real or imagined cure-all. The Police Chief, 41 (8), 28-31.

Travis, J. (1995, February 10). Forum on the police and higher education. [Online]. Available: <http://www.ojp.usdoj.gov/nij/speeches/police.htm>

Trojanowicz, R. & Nicholson T. (1976, January). The role of a college education in decision making. Public Personnel Review, 29-32.

Wagner, A. (1980). Citizen complaints against the police: The complainant. Journal of Police Science and Administration, 8, 247-252.

Wooden, R. (1990). A badge and a baccalaureate: Policies, hypotheses, and further evidence. Justice Quarterly, 7 (3), 565-592.