

## College Education and Officer Performance: Do College Educated Police Officers Perform Better Than Those Without a College Education?

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### Abstract

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*This literature review seeks to answer the question of whether or not college educated police officers (POs) perform better than those without a college education. This review demonstrates that there is not a consensus in the literature, though most scholars agree that some aspects of an officer's job are supported well by a college education, meaning that in those aspects college-educated POs do perform better than their non-college-educated counterparts. However, the complexity of a PO's job seems to mean that a degree will not always suffice to ensure better performance.*

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### Introduction

The questions of how to produce quality employees and what makes any employee perform better than his/her peers are questions which are not unique to law enforcement. One might argue that an employee is only as good as the education and training s/he receives, and that the obligation is on the employer to provide their employees with quality training and education. However, many employees beginning with organizations (including law enforcement) bring to the job education, experience, and skills that theoretically they are able to use in their new positions. Furthermore, these individuals bring their own motivations to the job which likewise may influence their performance on the job.

Part of the requirements for becoming a police officer (PO) is the attainment of a certain level of education. Virtually all departments require that candidates for PO positions must have a high school diploma or equivalent certificate, such as a GED. However, more police forces are beginning to require that candidates for PO positions must have a Bachelor's degree from a four-year institution of higher learning. Consequently, it does not necessarily need to be a degree related to law enforcement, such as criminal justice, but such a degree would likely be preferred, given its relevance to the position.

The requirement of a college degree or, at least the preference of one, is an issue that has been discussed in the context of law enforcement for several decades. In fact, within the literature, as far back as the 1960s, the issue of the benefits of having a police force with a college education has been discussed (Smith, Locke, & Walker, 1967). The argument for a college-educated police force has rested on the notion that a college education carries with it certain benefits that produce better police officers. From this concept the assumption emerged that college-educated POs performed better than their high school-educated-only counterparts. However, this assumption is just that: an assumption. The reality of whether or not a college-educated officer actually performs better than one who is not is a phenomenon that requires closer examination. The purpose of this literature review is to do just that: to determine, based on the literature, if college-educated police officers perform better than those without a college education.

### Literature Review

As noted earlier, the idea of a college-educated police force being preferable goes back to at least the 1960s. Smith, Locke, and Walker (1967) assert that college education for POs is good for many reasons: greater dignity; improved efficiency; enhanced image; advancement or promotion in the ranks; social awareness and compassion coupled with efficiency; and professionalization. It is hard to disagree with such a plethora of benefits, but the authors do not offer any research to support their assertions.

In fact, by the 1970s, the question of whether or not a college education was even a fair requirement emerged; the fact that such a requirement might have a significant racial impact on the composition of the police force raised an issue (Woska, 1978). Nevertheless, assessments of a PO's daily duties reveal that they often require skills above the 12<sup>th</sup> grade level (Woska, 1978), suggestive of the idea that those POs without a college education may not be performing at the level that they should. This idea would be refuted by Smith, Locke, and Walker (1967), who argue that college is not necessarily the means by which a person proves their intelligence; in other words, plenty of very intelligent individuals without college degrees are able to perform those daily duties because they are intelligent and self-motivated.

This understanding of the requirements of a PO's duties is relevant in understanding how post-high school education may enhance a PO's performance. To actually identify a correlation between college education and performance close and long-term studies are required. One of the earliest long-term studies to assess this relationship was published in 1998. Truxillo, Bennett, and Collins (1998) determined in their 10-year study which followed a cohort of 84 officers in a municipal police department. It is worth mentioning that this study is unique, and not many such longitudinal studies appear to exist in the literature. In the search for material for this review, no other such studies emerged. The authors determined in their study that a college education was positive correlated to promotions and "supervisory ratings of job knowledge," which was one of the measures associated with supervisory performance ratings (Truxillo, Bennett, & Collins, 1998, p. 269). However, the "ratings of job knowledge" was only one of five measures which also included quality of work, volume of work, dependability, and cooperation (Truxillo, Bennett, & Collins, 1998). This does not suggest that a college education supported performance across the board. Furthermore, the authors indicate that there was an "inconsistent relationship with measures of disciplinary action," which were also used as indicators of job performance (Truxillo, Bennett, & Collins, 1998, p. 269). The authors concluded that their findings were suggestive of the idea that *some* aspects of a PO's job are well-served by a college education; furthermore, they determined that a college degree could serve as a meaningful predictor for *some* aspects of a PO's job performance but not all of them. This raises the specter of a question raised by Smith, Locke, and Walker (1967): how much influence does personality have in the job performance equation for police officers?

But personality is not at issue in this paper; performance and education are. Yet several studies raise the issue of job attitudes and job satisfaction as an element of job performance and education, so they are worth examining. PO attitudes regarding and satisfaction with various aspects of their jobs have been examined, often with level of education assessed as a moderating factor. Rosenberg, Sigler, and Lewis (2008) observe that POs with a college education often report less satisfaction with their jobs when compared to POs without a college education, a finding echoed outside of the United States, particularly in Turkey (Balci, 2011). Rosenberg, Sigler, and Lewis (2008) reported that having a college degree is considered a weak predictor in terms of attitudes towards and satisfaction with the job. The authors further report that socialization on the job (that is, integration into a force and how the individual interacts with fellow officers and superiors) appears to have more to do with that satisfaction.

Of course, Rosenberg, Sigler, and Lewis (2008) do not indicate clearly how having a degree influences an individual's performance, but the relationship between job performance and job satisfaction is a well-studied one. On one hand, just because an individual is not satisfied with their current position does not necessitate that they will not perform well. Factors such as intrinsic motivation (and even extrinsic motivation) may prompt an individual to perform well, regardless of how they feel about their jobs (Chomal and Baruah, 2014), a seemingly universal phenomenon regardless of job sector. On the other hand, there are individuals who believe that because they have obtained a college degree – regardless of their competency in that degree, or its relevance to their current position – they deserve special consideration, rewards, and treatment; this phenomenon is called *psychological entitlement* and can muddy the waters of the relationship between college degree and actual job performance (Harvey & Martinko, 2009). Harvey and Martinko's (2009) study included police officers, so their findings can provide insight into the relationship between college education and job performance with regard to POs. The authors determined that individuals who experienced psychological entitlement also appeared to experience "reduced job satisfaction and increased levels of conflict with supervisors" (Harvey & Martinko, 2009, p. 459), a finding which does not reflect positively on such individuals. The authors indicate that such individuals believe that people with college educations deserve good jobs and "base their expectations on their status (i.e., as a college graduate) as opposed to their performance levels" (Harvey & Martinko, 2009, p. 467).

This appears to suggest that their performance levels may not necessarily be up to standard, but such individuals would perceive such measures as irrelevant. Unfortunately, Harvey and Martinko (2009) did not report on the actual performance levels of the individuals in the study relative to their degrees; nevertheless, their findings suggest a complication in the college education/job performance matrix, and not necessarily just for police officers.

A frequent issue of study in terms of POs and attitudes is cynicism. Given the sometimes violent, gory, and otherwise emotionally and psychologically draining and difficult nature of PO work, the notion that POs would develop significantly cynical attitudes is unsurprising. Though Hickman (2008) and Osborne (2014) study the issue of PO cynicism in different contexts, they both agree that it has an inevitable effect on officers. Hickman (2008) studied the issue in terms of its effect on problem behavior in officers. One of the questions utilized to assess level of cynicism in the instrument Hickman (2008) used is the question "A college degree requirement for appointment to the police department would result in a much more efficient and effective police department," a question which reflects Hickman's observation that an increasing number of police departments are requiring a college degree (p. 16). Hickman's (2008) use of this question suggests that those individuals with college degrees regard having a degree as a benefit to the force, but he does not make any conclusions related to the issue. Osborne (2014) studied the issue in the context of police perceptions of different aspects of crime, justice, and supervisors' performance. Much of Osborne's (2014) work is a reflection on and update of an earlier study done by Niederhoffer in 1967. According to Osborne (2014), Niederhoffer determined that POs who had two or more years of college education were likely to score higher on cynicism, though superiors who had two or more years of college were likely to score lower on cynicism "than the total population and their less educated peers" (p. 609). Niederhoffer concluded that this meant that POs with college degrees at lower ranks had "higher levels of cynicism" but that "this interaction might be ameliorated as officers advance" though it was possible "that those who were cynical as patrolmen [were] less likely to advance" (Osborne, 2014, p. 609). Osborne (2014) hypothesized that "officers with higher levels of cynical attitudes would receive lower performance ratings by their superior officers" (p. 614). Based on Osborne (2014) and Hickman (2008), this leads to the conclusion that those POs with college degrees are more likely to be more cynical, leading to lower performance ratings, which suggests that they are not performing well, which suggests that a college education does not predict better performance.

Part of job performance is job productivity, or the efficiency of work output. In other words, a productive employee is likely a well-performing employee. In his study of officer attitudes and management influences on police work productivity, Johnson (2011) includes college education as a moderating factor in the interaction of these variables. Johnson's (2011) findings reveal that "male officers and college educated officers tend to demonstrate higher rates of arrest than female officers and those without a college education" (p. 297), and that "supervisors with a college degree were more likely to supervise patrol officers with higher traffic citation rates than supervisors without a college degree" (p. 301). Furthermore, those supervisors who issued higher numbers of traffic citations were more likely to supervise patrol officers who likewise issued higher numbers of traffic citations (Johnson, 2011). This suggests a relationship between college education and supervisory performance and productivity. However, Johnson (2011) reports that in terms of the role of a college education on non-supervisory officer productivity, having a college degree did not appear to contribute significantly to the statistical findings of the study. In other words, having a college degree did not appear to help or hinder the productivity of the non-supervisory officer, though the supervisory officer appeared to benefit in terms of productivity.

Several authors have explored other elements of police work and behavior which might be considered negative in the context of education and how education might moderate those factors. Manis, Archbold, and Hassell (2008) looked what role education might play in regards to officer misconduct; LaGrange (2003) examined its role in how POs handle cases featuring mentally ill individuals (an area where police are frequently criticized); and Chapman (2012) looked at the use of force by police in minority communities with regards to four factors, one being education. In Manis, Archbold, and Hassell's (2008) study, all of the officers had degrees; the comparison was between those POs which had criminal justice (CJ) degrees and those that didn't. The authors found no statistical differences between those POs with CJ degrees and those who had other degrees in terms of "frequency and type of complaints that are filed against them by citizens and police supervisors" (Manis, Archbold, & Hassell, 2008, p. 509). This suggests that POs with college degrees still in fact have complaints filed against them, and that the type of degree one has does not make a difference.

The authors found in their study, which is the first of its kind to assess whether or not a CJ degree makes a difference as compared to a non-CJ degree, that “officers without four-year degrees are more likely to generate a greater number of formal complaints,” though there were no statistically significant differences with regard to informal complaints (Manis, Archbold, & Hassell, 2008, p. 516). These findings suggest that perhaps officers with college degrees behave and therefore perform better than their non-degreed counterparts, but as the authors observe, their findings are one study, and other findings have been less concrete on the topic.

LaGrange’s (2011) study found that officers with college educations were more likely to “report the use of psychiatric referral [for mentally ill individuals, even those involving substance abuse] than officers with other education backgrounds [including high school and two-year community colleges]” (p. 88). While some might jump to the conclusion that this means that college-educated officers perform better by default, LaGrange interprets her findings with more caution. She reports that sees her findings as evidence that while it is true that “college-educated officers differ from their less educated colleagues in a variety of ways that include their decisions and conduct in the field” her findings suggest that these differences do not tend to emerge in the day-to-day activities; rather, they are likely to “be evident only in certain types of complex incidents” (LaGrange, 2011, p. 110). This suggests, as Truxillo, Bennett, and Collins (1998) asserted, that a college educated may improve performance in some areas but not all areas of PO work.

Chapman (2012) studied the influence of several factors on the use of force by police in minority communities. These factors included police education, age, experience, and ethnicity. With regard to the findings on the influence of education, Chapman (2012) reports that among patrol officers *only* (as compared to detectives and other roles in the force) “education predicted less frequent force and lower levels of force use” (p. 421). This is possibly connected, according to Chapman (2012), with the idea that “education is a correlate of humane and effective policing” as well as the fact that “better-educated police officers could rely on communication and problem-solving skills instead of force to defuse volatile criminal engagements” (p. 423). Chapman (2012) also connects with the fact that patrol officers tend to have more immediate and frequent contact with the public “which requires more on-the-spot decision making” which the author asserts “should serve as a caution for other researchers who might not distinguish among the different duties” (p. 433). This echoes the findings of Truxillo, Bennett, and Collins (1998) and LaGrange (2011).

With regard to empathy and the appreciation of victim perspectives, Page (2008) and Foley and Terrill (2008) examined how POs respond to certain kinds of crimes and their victims, with both studies using education as a moderating factor. This is relevant to the discussion of PO performance because it addresses a more humane side of the PO’s daily duties, as well as their perceptions of crimes and their victims which may influence how they respond to such cases and how much work they are willing to put into them. Page (2008) studied POs’ attitudes towards women and the crime of rape. In her study, she observes that “studies have shown that college-educated police officers are more attuned to social problems (e.g., Weiner 1976) than their less-educated counterparts” which includes “gender oppression (e.g., rape)” and that general population studies have found that “individuals with higher levels of education” tend to have “more egalitarian attitudes toward women” (Page, 2008, p. 403). Page (2008) found that officers who had achieved higher levels of education were “less likely to endorse rape myths” and tended to be more egalitarian in their attitudes toward women than their less-educated colleagues, while all the officers studied reflected the absence of old-fashioned sexist attitudes about women (p. 407). Unfortunately, it seems that while all POs regard rape as a serious crime, they were “more likely to discredit victims that do not adhere to stereotyped victim characteristics” regardless of education (Page, 2008, p. 407). While the more ‘enlightened’ educated officers will clearly demonstrate more compassion and empathy towards women than their less educated counterparts, which theoretically translates to less complaints filed about them and more energy invested in their work, it seems as though education does not necessarily counteract the effects of rape myths entirely, especially with regards to what a rape victim should look and act like.

Foley and Terrill (2008) took a broader look at empathetic responses in POs by focusing on a PO’s likelihood to offer comfort to a victim, with education as one of their moderating factors. Foley and Terrill (2008) found that encounters which involved college-educated officers “were less likely to involve comforting behavior” (p. 192). This is a surprising finding, especially in light of Page’s (2008) findings regarding how college-educated POs tended to be aware of social issues more (which would theoretically include an understanding of victims’ rights and the effects of various kinds of trauma), as well as Chapman’s (2012) findings regarding force versus non-violent solutions in the context of the public.

Foley and Terrill's (2008) findings do not inspire much confidence in taking seriously the famous police motto to "serve and protect" – if one were a victim of some crime, one would expect that the serving and protecting might include some comforting as well. In fact, the authors note that a lack of comfort could translate to "a disadvantage in terms of emotional recovery" which can lead to dissatisfaction and distrust of law enforcement and the justice system (Foley & Terrill, 2008, p. 210). Such attitudes can surely not be conducive to effective and productive police work, though the authors admit that while the victims who encountered these educated and experience officers "may have benefited from [their] professional expertise," these victims "missed out on the comforting behavior that is an essential part of police services" (Foley & Terrill, 2008, p. 211). In other words, such officers are not performing their services as well as they could be.

In terms of recruitment, White and Escobar (2008) present several compelling arguments both against and for college-educated candidates which bear examination in this discussion. On the 'against' side of the issue, White and Escobar (2008) report that requiring a college degree diminishes the applicant pool by excluding individuals who would otherwise be qualified; such a requirement "has a disproportionate negative impact on minorities because of unequal opportunities for secondary education," an argument made by Woska (1978) and which could likewise be made based on economic status; a college education does not necessarily provide an individual with the skill set required to be a PO, since some aspects of a PO's job can only be learned through on-the-job experience; and – a point which has significance in the current discussion – the literature on the benefits of a college education for POs is mixed (p. 122). Many of these arguments against requiring a college degree have made appearances throughout this review already and should not be ignored.

Yet, there are some compelling arguments on the 'for' side as well. The authors note that law enforcement is a complex occupation which requires skills and knowledge that cannot be obtained through on-the-job experience or training alone; as society becomes more educated, the expectation is that the police force should likewise become more educated in order to understand society; candidates with college degrees are more likely to "be older, more mature, and more well-rounded"; the exposure to diversity that comes with a college experience prepares individuals who attend college to deal with diverse populations, creating greater tolerance and understanding in the individual; college-educated individuals, especially those who study CJ, have a better understanding and more in-depth knowledge of the justice system and law enforcement which enhance their abilities to do the job; individuals who attend college tend to have better problem-solving, analytical, and critical thinking skills which serves problem-oriented styles of policing better; and two critical features of the work that POs do involves writing and communication, "both of which can be enhanced in college" (White & Escobar, 2008, p. 122). Both sides of the argument are compelling, but White and Escobar (2008) observe that the trend will likely be to require a college degree, and that the expectations put on officers currently create a lot of pressure which might be better met by individuals with college degrees.

As a final note in the conversation, it must be considered that there has been a "need to professionalize the criminal justice field" which "has been an issue for nearly 100 years" (Hall, Ventura, & Lambert, 2007, p. 116). Smith, Locke, and Walker (1967) even addressed this issue in their study. It may well be that the question about the benefits of a college education for a PO cannot be adequately studied or answered because the field has not been consistently professionalized. Hall, Ventura, and Lambert (2007) argue in favor of the professionalization of the CJ field, including law enforcement, because professionalization includes "shared values, shared standards, and shared competencies," not to mention "the ability to make informed, ethical, and independent decisions that contribute to the public good" (p. 116-117). They cite many of the benefits of a college-educated PO heretofore examined, noting that "higher education has been posited as an essential element in the professionalization process," tying together the notion of such benefits being directly derived from such an education. While the literature reviewed thus far does not necessarily unanimously support the benefits that the authors list, the point about the lack of professionalization across the CJ field cannot be ignored, and it may be attributed as the reason for mixed results regarding the benefits of a college education for POs.

### **Summary of Major Points**

An examination of the literature has yielded several noteworthy points regarding the issue of college education and PO performance. First, and perhaps most frequently, the literature observed that while college education does, in fact, support and enhance *some* aspects and skills of a PO's job, it does not universally make for better performance or better police officers.

Second, a college education does not necessarily counteract problematic – and potentially personality-related – attitudes about certain populations, crimes, behaviors, and/or individuals which can affect a PO's job performance. Third, the literature seems to agree that there is not a consensus on whether or not a college degree is a good, strong predictor for better work performance when compared to POs without college degrees.

### Conclusion

As noted in the review and in the summary section, there is not a consensus on whether or not police officers with college degrees perform better than their non-degreed counterparts. What does emerge clearly is that a college degree can enhance performance in some regards, such as in writing, communication, and problem-solving skills; but a college degree does not necessarily make a PO more compassionate or empathetic, even if they are more socially aware. This lack of consensus seems to be linked to a lack of professionalization in the criminal justice field as well as a lack of longitudinal studies like that of Truxillo, Bennett, and Collins (1998). And the point about personality and attitude, including cynicism, as made by Smith, Locke, and Walker back in 1967 still seems to apply currently. While many studies focused on job satisfaction, studies on personality were scarce as well as those which explored other psychological dimensions of job performance such as motivation. The literature needs such studies to better understand the complexity of factors which compose job performance.

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Balci, F. (2011). The effects of education on police officer job satisfaction: The case of Turkish National Police. *International Journal Of Human Sciences*, 8(2), 265-285.

This study offered insight into the relationship between PO job satisfaction and level of education attained. Its particular benefit was that it presents a non-Western perspective.

Chapman, C. (2012). Use of force in minority communities is related to police education, age, experience, and ethnicity. *Police Practice & Research*, 13(5), 421-436.

This article connected use of force to several factors, one of which was education. Since force must sometimes be used in the course of a PO's job, it is linked to job performance. This article revealed that college-educated POs tended to use less force, probably because they have better problem-solving skills.

Chomal, N., & Baruah, P. (2014). Performance linked reward and job satisfaction: Banking sector. *SCMS Journal of Indian Management*, 11(4), 53-60.

Though this article is not on policing, it offered valuable insights into the connections between job satisfaction and work performance. These insights were useful for workplace/workforce psychology.

Foley, T., & Terrill, W. (2008). Police comfort and victims. *Victims & Offenders*, 3(2/3), 192-216.

This article used education as a moderating factor in studying how, when, and to whom POs offered comfort. Surprisingly, college-educated POs were less likely to offer comfort to victims. This does not build public confidence or trust in the force, reducing positive viewpoints of police performance.

Hall, D., Ventura, L., & Lambert, E. (2007). Factors influencing the higher education decisions of criminal justice professionals. *American Journal of Criminal Justice*, 32(1/2), 116-128.

This article argues for the professionalization of CJ occupations, citing the benefits of higher education in the process. The authors discuss the benefits of a college education for CJ occupations, including policing, which seem to suggest why the literature has produced mixed results when trying to study the link between college education and work performance.

Harvey, P., & Martinko, M. J. (2009). An empirical examination of the role of attributions in psychological entitlement and its outcomes. *Journal Of Organizational Behavior*, 30(4), 459-476.

The authors look at disconnects between education, work performance, and job satisfaction as they pertain to the phenomenon of psychological entitlement. It may well be that ideas about the direct connection between college and work performance are complicated by personality issues.

Hickman, M. J. (2008). On the context of police cynicism and problem behavior. *Applied Psychology in Criminal Justice*, 4(1), 1-44.

Hickman tackles a common topic in policing literature: cynicism. One of the questions used in the study focuses on how a college education can produce a more efficient, effective police force. This suggests that a workforce run by educated individuals would be better, which reveals a great deal about attitudes towards education in law enforcement.

Johnson, R. (2011). Officer attitudes and management influences on police work productivity.

*American Journal of Criminal Justice*, 36(4), 293-306.

Johnson's study determined that supervisory officers with college degrees appeared to have higher levels of productivity than ones that did not. Regular officers did not show statistically significant differences in terms of productivity with education as a moderating factor.

LaGrange, T. C. (2003). The role of police education in handling cases of mental disorder. *Criminal Justice Review (Georgia State University)*, 28(1), 88-112.

LaGrange's study revealed a key factor in the discussion: that PO jobs are complex occupations in which some aspects are served well by a college degree while others are not. In the case of handling mentally ill individuals on the job, college educated POs were more likely to utilize psychiatric referrals than POs without degrees.

Manis, J., Archbold, C. A., & Hassell, K. D. (2008). Exploring the impact of police officer education level on allegations of police misconduct. *International Journal of Police Science & Management*, 10(4), 509-523.

Work performance may be oversimplified into 'good' and 'bad,' where 'bad' performance may manifest as misconduct. The authors of this article sought to determine if education had any bearing on misconduct. Their findings suggest that POs with college degrees behave better and therefore likely perform better than their non-degree counterparts.

Osborne, R. E. (2014). Observations on police cynicism: Some preliminary findings. *North American Journal of Psychology, 16*(3), 607-628.

Osborne revisits the 1967 work of Niederhoffer and finds that POs with college educations tend to be more cynical; higher cynicism scores are connected to lower performance rating. These two conclusions suggest that POs with college degrees are more likely to not perform as well as their non-degreed counterparts, who appear less cynical.

Page, A. D. (2008). Judging women and defending crime: Police officers' attitudes toward women and rape. *Sociological Spectrum, 28*(4), 389-411.

Page discovered that college-educated POs tended to be more egalitarian towards women and less likely to believe rape myths than their non-degreed counterparts. And while both groups regard rape as a serious crime, both groups are also less likely to believe alleged rape victims who do not meet the 'standards' of a stereotypical rape victim. While overt sexism does not appear in the force in either group, their shared views of 'stereotypical' rape victims suggest that a college education does not necessarily override such attitudes.

Rosenberg, H., Sigler, R. T., & Lewis, S. (2008). Police officer attitudes toward community policing: A case study of the Racine Wisconsin Police Department. *Police Practice & Research, 9*(4), 291-305.

Despite its title, this article offered a great deal of information on job satisfaction among POs, where education was considered a moderating factor in satisfaction, a common consideration in studies on job satisfaction. They also conclude that a college education is a weak predictor in terms of job satisfaction, which also suggests it is a weak predictor in job performance.

Smith, A. B., Locke, B., & Walker, W. F. (1967). Authoritarianism in college and non-college oriented police. *Journal of Criminal Law, Criminology & Police Science, 58*(1), 128-132.

This study – the oldest in the review – provides a historical context for the issue, indicating that the discussion of degree vs. no degree goes back decades. The authors assert that a degree brings with it certain benefits for the PO but does not clearly connect it with performance, though they do raise the question of personality and how it may influence job performance.

Truxillo, D. M., Bennett, S. R., & Collins, M. L. (1998). College education and police job performance: A ten-year study. *Public Personnel Management, 27*(2), 269-280.

This study was the most relevant and most useful resource in this review. It revealed what several other studies found: the complexity of a PO's job means that some aspects are supported by a college degree, while other aspects are better supported by on-the-job training and experience. This study quantitatively presents evidence of how the results in the rest of the literature can be so mixed.

White, M. G., and Escobar, G. (2008). Making good cops in the twenty-first century: Emerging issues for the effective recruitment, selection and training of police in the United States and abroad. *International Review of Law, Computers & Technology, 22*(1/2), 119-134.

The authors in this article admit that there are pros and cons for POs having college degrees, but they also admit that more and more forces and departments are likely to require the degree nonetheless. Their findings also argue, as Truxillo, Bennett, and Collins and several others do, that in some ways, college-educated POs will perform better than their non-degreed counterparts, but NOT in all ways.

Woska, W. J. (1978). Police officer academic standards. *Public Personnel Management, 7*(5), 312-315.

Woska argues that many aspects of a PO's job require skills above the 12<sup>th</sup> grade level, meaning that POs without a college degree are not performing as well as they could. Woska does admit – as White and Escobar do – that requiring a PO candidate to have a college degree will have an impact on minorities joining the force, given the unevenness of higher education opportunities available to minorities. It is worth mentioning that White and Escobar wrote their article in 2008, 30 years after Woska's article, meaning that the recruitment of minorities to the force remains a significant issue which could be exacerbated by the college requirement.