

# Low Self-Control and Police Deviance: Applying Gottfredson and Hirschi's General Theory to Officer Misconduct

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## Abstract

Prior research assessing police misconduct has generally focused on prevalence and demographic correlates while neglecting traditional criminological theories. Some recent research has begun to fill the void in this area, but the link between self-control and police misconduct has yet to be explored. The current study utilizes a behavioral measure of self-control to evaluate the extent to which low self-control predicts police misconduct. Data from a sample of 1,935 police officers from the Philadelphia Police Department are analyzed, and the results generally indicate that low self-control is related to police misconduct. Specific findings, policy implications, and directions for future research are discussed.

## Keywords

self-control, police misconduct, criminological theory

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## Introduction

Within the criminal justice system, the police are the largest and most visible component. They act as the gatekeeper to the system and are responsible for enforcing laws and maintaining public order. Through these mandates, they are the most likely component of the system to have an impact on the daily lives of citizens. As they carry out their societal function, they are entrusted to *practice what they preach*, and unfortunately, not all police personnel live up to this standard. Therefore, it is important for academics and practitioners alike to investigate and understand why some police officers abuse their power and engage in police deviance. Recent research has uncovered several individual and organizational correlates of police misconduct (e.g., Girodo, 1991; Kane & White, 2009; Lersch & Kunzman, 2001; Wolfe & Piquero, 2011), and the findings from this line of research have helped police administrators create and implement policies to deal with problem officers, reduce the prevalence of misconduct, and rebuild police–community relations. Although these studies have improved the knowledge base of the policing literature, large gaps remain in fully understanding police deviance. Wolfe and Piquero (2011) even suggest that one of the biggest gaps that remains “concerns the largely atheoretical nature of this line of work” (p. 332). Some research has begun to fill the void in this area (e.g., Chappell & Piquero, 2004; Kane, 2002; Pogarsky & Piquero, 2004), but the link between self-control and police misconduct has yet to be explored.

Self-control theory has been widely tested with traditional crime outcomes and analogous behaviors, and the findings largely suggest that individuals with low self-control are more likely to engage in deviant behavior (see, e.g., A. R. Piquero, 2009; Pratt & Cullen, 2000). Within occupations and corporations, a limited amount of research demonstrates that employees with low self-control are more likely to commit employee deviance (e.g., Gibson & Wright, 2001; Langton, Piquero, & Hollinger, 2006). Furthermore, empirical examinations have assessed the relationship between individual personality (Girodo, 1991) and impulsivity (Pogarsky & Piquero, 2004) and police misconduct, but no study to date has tested Gottfredson and Hirschi’s (1990) general theory of crime with a focus on police misconduct. This neglect is surprising considering that police misconduct has been empirically analyzed using other leading criminological perspectives such as strain, social learning, control balance, social disorganization, and deterrence (Arter, 2007; Chappell & Piquero, 2004; Hickman, Piquero, Lawton, & Greene, 2001; Kane, 2002; Pogarsky & Piquero, 2004).

Acknowledging these issues, the current study contributes to the literature by exploring the potential relationship between low self-control and police misconduct. Specifically, the main objective of this study is to investigate whether a police officer’s level of self-control is significantly related to his/her involvement in police misconduct. To this end, and building upon the existing literature linking self-control to occupational deviance (e.g., Gibson & Wright, 2001;

Langton et al., 2006), the current study uses a sample of 1,935 police officers from the Philadelphia Police Department (PPD; Greene & Piquero, 2004) to examine one central research question: Does low self-control influence individual-level police misconduct?

## **Gottfredson and Hirschi's General Theory of Crime**

According to Gottfredson and Hirschi (1990), individual differences in self-control account for individual differences in criminal and deviant behavior. In fact, they assert that "low self-control is . . . *the* individual-level cause of crime" and analogous behaviors (p. 232, original emphasis). The authors contend that those who lack self-control are more likely to pursue the immediate pleasure of deviant behavior when presented with an opportunity to do so. Furthermore, individuals with low self-control tend to engage in crime and analogous behavior because they lack the capacity to consider the long-term consequences of their actions. Specifically, they argue that those with low self-control are "impulsive, insensitive, physical (as opposed to mental), risk-taking, short-sighted, and non-verbal" (Gottfredson & Hirschi, 1990, p. 90). Their theory has received considerable attention since its inception, with a large body of research specifying support for the relationship between low self-control and antisocial behavior (Arneklev, Grasmick, Tittle, & Bursik, 1993; Cochran, Wood, Sellers, Wilkerson, & Chamlin, 1998; Evans, Cullen, Burton, Dunaway, & Benson, 1997; Gibbs, Giever, & Higgins, 2003; Grasmick, Tittle, Bursik, & Arneklev, 1993; Keane, Maxim, & Teevan, 1993; Miller, Jennings, Alvarez-Rivera, & Lanza-Kaduce, 2009; A. R. Piquero & Tibbetts, 1996; Pratt & Cullen, 2000; Sellers, 1999; Tittle, Ward, & Grasmick, 2003).<sup>1</sup>

Although self-control as a predictor of crime and deviance has generally received empirical support, researchers have argued that it is important to measure the construct correctly (see, e.g., A. R. Piquero, 2009). Beyond recognizing that individuals with low self-control "engage in noncriminal acts equivalent to crime" (e.g., accidents, employment instability, illness, smoking, drinking, and poor interpersonal relationships; Gottfredson & Hirschi, 1990, p. 92), the authors did not explicitly state how to measure self-control. In this regard, prior empirical examinations of self-control theory have used attitudinal scales (e.g., Grasmick et al., 1993) that more or less tap into the six elements of self-control specified by Gottfredson and Hirschi (1990) or observable behaviors (e.g., Keane et al., 1993) designed to capture imprudent acts that depict a lack of self-control.

Many studies have utilized attitudinal scales, and these indicators of low self-control have generally been internally consistent and do not suffer from tautology concerns (e.g., Grasmick et al., 1993; Miller et al., 2009; Sellers, 1999). However, Hirschi and Gottfredson (1993) argue that behavioral measures of self-control are preferable because, in part, they refrain from translating the concept of self-control into a personality concept. Furthermore, while most

tests of self-control theory have utilized deviant/imprudent behavior as a dependent variable, Hirschi and Gottfredson (1993) recommend measuring low self-control with behaviors that would be produced by self-control: "These byproducts may be rightly used to index levels of self-control..."(p. 49). Moreover, the authors emphasize that the best operational measure of the propensity to offend is "a count of the number of distinct problem behaviors engaged in by [participants]" (Hirschi & Gottfredson, 1995, p. 134). Since providing these suggestions, numerous studies have measured self-control behaviorally, and these examinations have commonly found that low self-control is predictive of antisocial behavior (e.g., Arneklev, Elis, & Medlicott, 2006; Benda, 2005; Evans et al., 1997; C. L. Herbert, 1997; Keane et al., 1993; LaGrange & Silverman, 1999; Tittle et al., 2003).

Overall, attitudinal and behavioral measures of self-control have both been found to produce reliable and supportive evidence for the theory (see Higgins, Wolfe, & Marcum, 2008; Pratt & Cullen, 2000; Tittle et al., 2003), but there are limitations when using either measure. For instance, attitudinal scales yield acceptable internal consistency, but they suffer from theoretical limitations (e.g., measuring self-control as a personality trait; Hirschi & Gottfredson, 1993) and methodological weaknesses (e.g., survey response bias; A. R. Piquero, MacIntosh, & Hickman, 2000). In contrast, behavioral measures are preferred by Gottfredson and Hirschi (1990), but they have been shown to suffer from weak internal consistency estimates (e.g., Paternoster & Brame, 1998; Tittle et al., 2003) and tautological concerns (Evans et al., 1997). Nevertheless, it is important to consider the measurement of self-control when predicting any relevant outcome.

## **Self-Control and Occupational Misconduct**

According to Robin (1974), occupational deviance refers to violations by employees during the course of work activity and related to the employee's employment. While this conceptualization seems encompassing, Barker (1977) contends that the definition must also include other forms of misconduct/deviance. He argues that a conceptualization of occupational deviance should "encompass violations of any or all of the following normative systems: criminal acts which are directly related to employment, violations of occupationally prescribed ethical standards, and violations of work rules and regulations" (p. 356).

Several studies have examined the effect of low self-control on occupational deviance (e.g., N. L. Piquero, Schoepfer, & Langton, 2010; Simpson & Piquero, 2002; Van Wyk, Benson, & Harris, 2000), but no study has yet to assess the impact of low self-control on deviance among law enforcement personnel. In their book, Gottfredson and Hirschi (1990) wrote about occupational (i.e., low-level white-collar) crime and argued that it, too, can be explained by low self-control. As previously mentioned, they contend that their general theory is capable of explaining all types of crime for all types of people. Though their

theory has received considerable empirical support with respect to traditional crime outcomes, investigations of occupational deviance have not shown the same degree of support for the theory (Simpson & Piquero, 2002; Van Wyk et al., 2000). For example, Van Wyk et al. (2000) found that low self-control (as measured by the Grasmick scale) was not a significant predictor of employee theft among nursing home staff. More recently, Simpson and Piquero (2002) utilized a behavioral measure of self-control (e.g., number of times divorced, number of sexual partners, and number of vehicle accidents) in an effort to explain corporate offending, and they assert that "On balance, if the theory cannot account for the offending patterns of corporate managers, then one of its main claims-that it is a general theory-is challenged" (p. 514). Using a sample of MBA students, their findings indicated that low self-control was not a significant predictor of corporate offending intentions, and thus, they found that one of the key tenets of the general theory was not unsupported.

Two additional studies utilized both an attitudinal and a behavioral measure of self-control in assessing employee-offending intentions (Langton et al., 2006; N. L. Piquero et al., 2010). Langton et al. (2006) examined employee theft intentions in a sample of undergraduate students. They constructed a 4-item behavioral measure (e.g., *seatbelt use* and *use of a fake ID*), and they found that both of their measures of low self-control were significant predictors of employee theft intentions. N. L. Piquero et al. (2010) used a 7-item behavioral measure of low self-control (e.g., speeding and being fired from a job) in an attempt to explain intentions for corporate offending. Their results were similar to those of Van Wyk et al. (2000) and Simpson and Piquero (2002) in that neither measure of low self-control was found to be significantly related to offending intentions. Finally, results from Gibson and Wright (2001) specified support for the theory among a sample of employed high school seniors. They utilized an attitudinal measure of self-control (e.g., the Grasmick et al. scale) and a 9-item employee delinquency scale (e.g., *Put more hours on time card than actually worked* and *Drank alcohol or used drugs while on the job*), and they found that low self-control was related to employee deviance.

Although these studies provide overall weak support for low self-control theory in explaining occupational deviance, one must carefully consider the outcome of interest. Logically, it is easy to think that low self-control would not predict certain occupational misconduct, especially sophisticated white-collar crimes, because individuals need to have relatively high levels of self-control to secure a job that provides opportunities for such misconduct and carry out a complex crime that requires planning and skill. This might be why Simpson and Piquero (2002) and N. L. Piquero et al. (2010) failed to find support for the theory, and why Gibson and Wright (2001) and Langton et al. (2006) found support for the theory.

Specifically, the items comprising Gibson and Wright's (2001) occupational crime measure were conceptually more similar to the imprudent by-products of

low self-control that Gottfredson and Hirschi (1990) refer to in their book than were the corporate offending items used by Simpson and Piquero (2002) and N. L. Piquero et al. (2010). Moreover, Gottfredson and Hirschi (1990) suggest that most antisocial behavior is appealing to individuals with low self-control because it offers immediate gratification, requires little training or skill, is spontaneous and exciting, and it often provides an outlet for frustration. It is reasonable to surmise that individuals who occupy corporate jobs and commit corporate fraud are qualitatively different than police officers who commit spontaneous, short-sighted, low-skill behaviors leading to citizen complaints and departmental discipline (e.g., speeding when no emergency exists). Thus, self-control theory should be able to explain police misconduct among law enforcement personnel.

## Police Misconduct

Police misconduct is a complex phenomenon. The law, which constrains the behavior of people in society, also applies to those who enforce it. As law enforcers, it is somewhat ironic that police personnel sometimes act outside of the law and, by doing so, abuse the trust that society has bestowed upon them. It is no secret that some police personnel lie, steal, accept bribes, rob drug dealers, sell drugs, use alcohol/drugs on duty, and turn a blind eye when they see other police personnel engaging in similar behavior. The consequences of such behavior have the potential to reach far beyond the individual police officer. Prior research has shown that acts of police deviance can result in the loss of legitimacy of, and confidence in, police organizations (for a review, see Goldsmith, 2005).

Beginning with some of the early studies of police behavior (e.g., Black & Reiss, 1970; Reiss, 1971; Sherman, 1980), a large body of research has established numerous individual-, organizational-, and community-level correlates of police misconduct (e.g., Greene, Piquero, Hickman, & Lawton, 2004; Haarr, 1997; Ivkovic, 2009; Kane, 2002; Kane & White, 2009; Lersch & Kunzman, 2001; Sechrest & Burns, 1992; Wolfe & Piquero, 2011). Research trying to explain police misconduct has often relied on individual and organizational correlates. Individual-level research focuses on the *rotten apple* explanation (e.g., Sherman, 1978). The rotten apple perspective emphasizes characteristics of the officer. Specifically, this perspective allows police leaders to explain police deviance within their departments as an interpretation that the deviance is contained within a small number of rotten apples and is not widespread throughout the agency. Demographic characteristics such as age (Greene et al., 2004), gender (Greene et al., 2004; Hickman et al., 2001), race (Greene et al., 2004; Kane & White, 2009), education (Kane & White, 2009; Lersch & Kunzman, 2001), length of service (Hickman, Piquero, & Piquero, 2004), rank (Hickman et al., 2004), prior employment problems (Greene et al., 2004; Kane & White, 2009), criminal history (Greene et al., 2004; Kane & White, 2009), procedural justice (Wolfe &

Piquero, 2011), organizational commitment (Haarr, 1997), and personality (Girodo, 1991) have all been found to be individual-level correlates of police misconduct.

For example, Greene et al.'s (2004) study of the PPD found that female officers were 38% less likely to be involved in misconduct compared with their male counterparts. Their results also indicated that officers younger than age 26 at the time of their application were 47% more likely to receive a departmental disciplinary action and non-White officers were 31% more likely to be disciplined by the department. Findings from Lersch and Kunzman's (2001) study of a southern sheriff's department demonstrated significant differences in mean-level sustained complaints between deputies with a high school education (.60) and those with a 2-year college degree (.16). Kane and White's (2009) study of New York City officers also supported previous findings. That is, Kane and White found that Black and Latino officers were more likely to engage in misconduct, and officers with at least some college were less likely to engage in misconduct.

There is research, however, that has found that police misconduct goes beyond the correlates of individual officers (i.e., rotten apples) to incorporate rampant problems within police departments (i.e., rotten barrels) or units within the agency (i.e., rotten orchards). Police organizations, just as organizations in any field, exert influence over the behavior (including deviant behavior) of their employees (e.g., Brooks, 2005; Crank, 1990; S. Herbert, 1998; Lundman, 1979; Punch, 2000). This influence may be exercised directly (through policies and supervision) or indirectly (through values and culture). Within this area of research, organizational explanations of police misconduct have examined the influence of recruitment and selection (Sechrest & Burns, 1992), police leadership (Goldstein, 1975), organizational response to police deviance (Sherman, 1978), and police culture and socialization (S. Herbert, 1998; Skolnick & Fyfe, 1993; Van Maanen, 1975, 1978; Weisburd, Greenspan, Hamilton, Williams, & Bryant, 2000; Westmarland, 2005).

Although individual and organizational factors are important in guiding department policy to try to reduce the prevalence of police deviance, the empirical research examining police deviance through a criminological lens is limited. While some unethical police behaviors may not be considered serious, and while some acts of misconduct do not occur frequently, police deviance is still a real problem and one that needs further inquiry (see, e.g., Son & Rome, 2004). If police administrators better understood why officers engage in misconduct, they could make more informed policy decisions. According to Wolfe and Piquero (2011)

Absent theory, police administrators are left to blindly apply policies that target a "significant" correlate of misconduct with no idea why the variable has an impact or, perhaps more importantly, whether the variable even has a logical causal relationship with misconduct. (p. 334)



Criminological theories of deviance are not new, but only recently have researchers begun to examine whether traditional theories can explain police deviance (e.g., Arter, 2007; Chappell & Piquero, 2004; Pogarsky & Piquero, 2004). And although some police misconduct represents “administrative nonconformity” and fits well within organizational theories, Kane and White (2009) have argued that a large portion of police misconduct is illegal and can be explained by traditional criminological theories.

Pogarsky and Piquero’s (2004) assessment on the effect of deterrence on police misconduct has come the closest to the goal of the current study and is perhaps of one the few studies to date to utilize self-control items. Specifically, their research examined the impact of the certainty, severity, and celerity of punishment on police misconduct among a sample of 210 police personnel. Participants were given two hypothetical scenarios: failing to report a fellow officer’s driving under the influence (DUI) and conducting an unauthorized record check of a new neighbor (for a detailed review of the scenarios, see Klockars, Ivkovich, Harver, & Habersfeld, 1997). The participants were then asked to rate their likelihood of offending, their likelihood of being caught if they committed the behavior, levels of possible punishment, and timing of possible punishments. While not directly assessing the effects of self-control on police misconduct, Pogarsky and Piquero used the four impulsivity items from the Grasmick scale (e.g., *I don’t devote much thought and effort to preparing for the future*) to assess whether impulsivity mediated the relationship between deterrence and police misconduct. Their analyses found that impulsivity had a direct effect on police misconduct and that it partially mediated the deterrent effect. Thus, while their study was not a complete test of self-control theory, their research did partially assess the theory by exploring one of its six dimensions (i.e., impulsivity) and its potential relationship to police misconduct.

## Current Study

The literature reviewed above suggests that the research on police misconduct is voluminous but limited with regard to criminological theory. In an attempt to remedy some of these issues, the current study utilizes a large sample of 1,935 police officers from Philadelphia, PA, to explore the extent to which Gottfredson and Hirschi’s (1990) general theory of crime predicts police misconduct.<sup>2</sup> Based on this theory, our study examines six hypotheses that reflect the potential effect of low self-control on six police misconduct outcomes. Specifically, it is hypothesized that low self-control will predict a history of physical abuse complaints (H1), verbal abuse complaints (H2), lack of service complaints (H3), internal affairs (IA) investigations (H4), general misconduct (H5), and departmental discipline (H6).



## Methods

### *Data and Sample*

The data for the current study are from the restricted access version of *Supporting Police Integrity in the Philadelphia [Pennsylvania] Police Department, 1991–1998 and 2000* (ICPSR study 9422; Greene & Piquero, 2004). The data were originally collected and coded by Greene and Piquero (2004), which was made possible through a grant from the National Institute of Justice. These data include (a) academy and background data of police recruits in 17 academy classes during the years 1991–1998, (b) official data from personnel files, and (c) official administrative records relating to negative police behavior (e.g., citizen complaints and IA investigations). The records relating to police behavior were originally collected in 2000. According to the original researchers, 2,094 recruits began the academy, but complete background and academy data were obtained for 1,988 recruits. However, some of the recruits did not complete academy training; thus, the final sample for analysis consists of 1,935 officers.

### *Measures*

*Independent variable.* The independent variable, *low self-control*, was constructed from selected behavioral indicators contained within an officer's Personal Data Questionnaire (PDQ).<sup>3</sup> Individuals, who apply to be a Philadelphia Police Officer and pass the entrance examination, are referred to the Background Unit of the police department. Here, qualified applicants are given a PDQ. The PDQ collects self-reported background information, including among other things the applicant's identifying information, family background, residence history, educational history, employment history, credit history, military record, motor vehicle history, adult and juvenile criminal history, and drug-use history. This information is validated through an interview with a background investigator, a full background investigation, and a polygraph examination.

Bearing in mind tautological concerns<sup>4</sup> and Hirschi and Gottfredson's (1993) call to select behavioral items that are logically independent of the outcome variable(s), we selected nine dichotomous (0 = *No*; 1 = *Yes*) items from officers' PDQs for inclusion in the measure of *low self-control*.<sup>5</sup> These items are as follows: (1) Pennsylvania driver license ever been suspended (Simpson & Piquero, 2002), (2) ever involved in a motor vehicle accident (Arneklev et al., 2006; Benda, 2005; Evans et al., 1997; C.L. Herbert, 1997; Marcus, 2003; Simpson & Piquero, 2002; Tittle et al., 2003), (3) received any traffic ticket in the past 5 years (Benda, 2005; Marcus, 2003; N. L. Piquero et al., 2010), (4) ever been dismissed or fired from a job (Evans et al., 1997; N. L. Piquero et al., 2010), (5) ever behind on bills

(Tittle et al., 2003), (6) ever divorced or separated (Simpson & Piquero, 2002; Tittle et al., 2003), (7) ever used marijuana (Evans et al., 1997; C. L. Herbert, 1997; Marcus, 2003; N. L. Piquero et al., 2010), (8) ever received a "D.I." (Deception Indicated) on a polygraph examination (C. L. Herbert, 1997; Langton et al., 2006; Marcus, 2003), and (9) ever received an unexcused absence from the police academy (Benda, 2005; C. L. Herbert, 1997; Marcus, 2003). This additive-index measure ranges from a minimum of 0 (*an officer not having a history of any item in PDQ*) to a maximum of 8 (*an officer having a history of eight of the nine items in the PDQ*). For this variable, *higher scores indicate lower self-control*.

**Dependent variables.** For purposes of the initial study, Greene and Piquero (2004) were granted access to various databases maintained by the PPD Internal Affairs Division (IAD) and Police Board of Inquiry (PBI). Specifically, IAD granted access to their files concerning citizen complaints against officers and other internal investigations. The PBI database contains information regarding charges and subsequent disciplinary actions for violations of the PPD's disciplinary code.

We define police misconduct based on Barker and Carter's (1986, pp. 2–3) conceptualization: "activities which are inconsistent with the officers' legal authority, organizational authority, and standards of ethical conduct." As such, the following are the six dependent measures of police misconduct: (1) *physical abuse complaints*, (2) *verbal abuse complaints*, (3) *lack of service complaints*, (4) *IA investigations*, (5) *general misconduct*, and (6) *departmental discipline*.<sup>6</sup> Each outcome variable is dichotomous (0 = *No*; 1 = *Yes*) and reflects whether each officer had a history with the specified police misconduct outcome.

**Control variables.** Prior research has established several individual correlates of police misconduct, such as age (e.g., Greene et al., 2004), gender (e.g., Hickman et al., 2001), race (e.g., Kane & White, 2009), and education (e.g., Lersch & Kunzman, 2001). Based on the available data, we were able to control for all four of these predictors. *Age* is a ratio-level variable indicating the officer's age (coded in years of age). *Sex* is a nominal-level variable indicating the officer's biological sex (0 = *Female*; 1 = *Male*). *Race* is a nominal-level variable indicating the officer's race (0 = *non-White*; 1 = *White*). Race was originally coded as 1 = *White*, 2 = *Black*, 3 = *Hispanic*, and 4 = *Other*. For simplification and easier interpretation of regression coefficients, race was recoded into a dichotomous variable.<sup>7</sup> We also control for the fact that officers in the sample had time-varying opportunity to commit police misconduct (depending on when an officer entered the academy). *Exposure* is a ratio-level variable indicating an officer's length of service (as of the year 2000 when dependent variable information was collected; coded in months of service).

Analysis Plan

The analysis for this study takes place in three stages. In the first stage, we provide descriptive analyses for the study variables. In the second stage, we examine bivariate correlations to assess any potential associations among the independent, control, and dependent variables. In the final stage of the analysis, we estimate logistic regression models to evaluate whether low self-control is related to police misconduct, net of control variables.

Results

Descriptive statistics for the sample are presented in Table 1. Two thirds of police officers in the sample were male, and the majority of officers (56.00%) were non-White. On average, officers were 26.71 years old (SD=6.19); the youngest officer in the sample was 18 years old, and the oldest was 55 years old. Also, officers had an average of 13.24 years of education (SD = 1.77) and an average length of service of 35.89 months (SD = 12.69).

In terms of low self-control, this group of officers, on average, had a lifetime history of two of the nine behavioral indicators of low self-control (M = 2.68; SD = 1.45). Upon closer inspection, the data reveal that 5.70% of the sample

Table 1. Sample Characteristics (N = 1,935).

Variable	M (SD)/%	Min	Max
Independent variable			
Low self-control (additive index)	2.68 (1.45)	0.00	8.00
Control variables			
Age (in years)	26.71 (6.19)	18.00	55.00
Sex (0 = Female; 1 = Male)	67.00%	0.00	1.00
Race (0 = non-White; 1 = White)	44.00%	0.00	1.00
Education (in years of schooling)	13.24 (1.77)	7.00	22.00
Exposure (in months of service)	35.89 (12.69)	3.00	58.00
Dependent variables			
Physical complaint (0 = No; 1 = Yes)	16.52%	0.00	1.00
Verbal complaint (0 = No; 1 = Yes)	09.75%	0.00	1.00
Lack of service complaint (0 = No; 1 = Yes)	08.31%	0.00	1.00
IA investigation (0 = No; 1 = Yes)	15.34%	0.00	1.00
General misconduct (0 = No; 1 = Yes)	08.47%	0.00	1.00
Departmental discipline (0 = No; 1 = Yes)	30.43%	0.00	1.00

Note. IA = Internal Affairs.

had no history of any of the nine items, 15.20% had a history of one item, and 26.50% had a history of two items. Interestingly, four officers in the sample had a history of eight out of the nine indicators of low self-control, but no one in the sample had a history of all nine indicators.<sup>8</sup>

With respect to the dependent variables, the highest frequency outcome was departmental discipline (30.43%), and physical complaints were the second highest frequency outcome (16.52%). Furthermore, 15.34% were the subject of at least one IA investigation, 9.75% received at least one citizen complaint for verbal abuse, and 8.47% were involved in general misconduct. The lowest frequency outcome was citizen complaints for lack of service complaints, which were levied against 8.31% of the sample.

Table 2 illustrates the bivariate associations among the study variables. Of particular interest are the significant and positive correlations between low self-control and police misconduct. In fact, correlations for only two of the six outcomes (lack of service complaints and departmental discipline) failed to reach statistical significance. Thus, self-control was shown to be statistically associated to a wide variety of police misconduct outcomes at the bivariate level (physical

**Table 2.** Bivariate Correlations for Study Variables.

Variable	1	2	3	4	5	6	7	8	9	10	11	12
1. LSC	—											
2. Age	.17**	—										
3. Sex	.06**	-.16*	—									
4. Race	-.14*	-.11*	.26*	—								
5. Educ.	-.01	-.03	.05*	.00	—							
6. Expo.	-.07*	.01	.06**	.02	-.01	—						
7. PC	.03*	-.07*	.18*	.07*	.03	.19**	—					
8. VC	.09**	.01	.05*	.01	-.03	.12**	.11*	—				
9. LC	.04	-.03	.06*	.00	.01	.05*	.00	-.02	—			
10. IA investigations	.04*	-.07*	.08*	.01	.00	.10**	.15*	.08*	.03	—		
11. Misc.	.05*	-.05*	.06*	.03	.00	.11**	.06*	.09*	-.01	.08*	—	
12. DD	.00	-.10*	.02	-.05*	.01	.19**	.10*	.11*	.06*	.14*	.08*	—

Note. Correlations with two continuous variables denoted by Pearson correlation coefficients; correlations between a dichotomous variable and a continuous variable denoted by Point Biserial correlation coefficients; correlations between two dichotomous variables denoted with Phi correlation coefficients; and correlations with at least one ordinal variable denoted by Spearman Rho correlation coefficients. LSC = low self-control; Educ. = education; Expo. = exposure; PC = physical complaints; VC = verbal complaints; LC = lack of service complaints; IA = internal affairs; Misc. = misconduct; DD = departmental discipline.

\* $p < .05$  (two-tailed). \*\* $p < .01$  (two-tailed).

abuse complaints,  $r_{pb} = .03, p < .05$ ; verbal abuse complaints,  $r_{pb} = .09, p < .01$ ; IA investigations,  $r_{pb} = .04, p < .05$ ; and general misconduct,  $r_{pb} = .05, p < .05$ . Additionally, and consistent with prior research (Grasmick et al., 1993; Greene et al., 2004; Hickman et al., 2001; Kane & White, 2009), age, sex, race, and opportunity were correlated with several of the police misconduct variables. However, in a departure from previous research (e.g., Lersch & Kunzman, 2001), level of education was not correlated with any of the police misconduct outcomes.

Although the bivariate results suggest that low self-control is significantly correlated to four of the outcome variables of interest, it was still important to investigate these relationships within a multivariate framework. Due to the dichotomous nature of the outcome variables, logistic regression analyses were employed, and Table 3 presents four regression models.<sup>9</sup> Results from Model 1 specified support our first hypothesis as low self-control was positively associated with officers receiving a citizen complaint for physical abuse ( $\beta = 1.09, SE = .04, p < .05$ ). Consequently, officers who are more impulsive, short-sighted, and who prefer immediate gratification are more likely to have a history of physical abuse complaints. Age was negatively related to physical complaints ( $\beta = .97, SE = .01, p < .05$ ), while being male ( $\beta = 3.39, SE = .19, p < .001$ ) and increased exposure (i.e., opportunity) were both positively related to physical complaints ( $\beta = 1.04, SE = .01, p < .001$ ). Our second hypothesis (see Model 2) was also supported as low self-control was positively related to having a history of verbal complaints ( $\beta = 1.23, SE = .05, p < .001$ ). Thus, officers who have

**Table 3.** Logistic Regression Models Predicting Police Misconduct.

Predictors	Model 1			Model 2			Model 3			Model 4		
	Physical abuse complaint			Verbal abuse complaint			Internal affairs investigation			General misconduct		
	b	SE	B	b	SE	B	b	SE	B	b	SE	B
LSC	.09	.04	1.09*	.20	.05	1.23***	.07	.04	1.08 <sup>+</sup>	.17	.06	1.19**
Age	-.03	.01	.97*	.01	.01	1.01	-.04	.01	.96**	-.04	.02	.96*
Sex	1.22	.19	3.39***	.21	.19	1.23	.39	.16	1.48*	.29	.21	1.34
Race	.09	.14	1.09	.13	.17	1.14	-.05	.14	.96	.17	.18	1.19
Education	.04	.03	1.04	.01	.01	1.01	.01	.02	1.02	.01	.02	1.01
Exposure	.04	.01	1.04***	.04	.01	1.04***	.02	.01	1.02***	.03	.01	1.03***
Model diagnostics												
$\chi^2$	153.89***			50.11***			44.58***			41.44***		
-2 LL	1517.89			1157.93			1560.39			1033.00		
Nagelkerke $R^2$	.13			.06			.04			.07		

Note. <sup>+</sup> $p < .10$ . \* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

higher levels of low self-control are more likely to behave in such a way that generates verbal abuse complaints. In this model, the only control variable to predict having received a verbal abuse complaint was exposure ( $\beta = 1.04$ ,  $SE = .01$ ,  $p < .001$ ).

The results illustrated in Model 3 specified support for our fourth hypothesis. Specifically, the findings indicated that low self-control was significantly and positively related with being the subject of an IA investigation ( $\beta = 1.08$ ,  $SE = .04$ ,  $p < .10$ ). Accordingly, officers who are more short-sighted, impulsive, and self-centered are more likely to have a history of being investigated by IA. Additionally, age was negatively related to IA investigations ( $\beta = .96$ ,  $SE = .01$ ,  $p < .01$ ), while being male ( $\beta = 1.48$ ,  $SE = .16$ ,  $p < .05$ ) and increased exposure ( $\beta = 1.02$ ,  $SE = .01$ ,  $p < .001$ ) were both positively related to IA investigations. Results from our last model also were also supportive of our fifth hypothesis in that low self-control significantly predicted general misconduct ( $\beta = 1.19$ ,  $SE = .06$ ,  $p < .01$ ). Here, officers who have a harder time controlling themselves are more likely to engage in general police misconduct. Age was negatively related to general misconduct ( $\beta = .96$ ,  $SE = .02$ ,  $p < .05$ ), and exposure was positively related to the outcome ( $\beta = 1.03$ ,  $SE = .01$ ,  $p < .001$ ).

## Discussion

The purpose of the current study was to investigate the potential relationship between low self-control and police misconduct, an outcome that had been previously unexamined within the theoretical context of Gottfredson and Hirschi's (1990) general theory of crime. Although much of the previous research on the general theory has measured low self-control through attitudinal scales (e.g., Grasmick et al., 1993; Miller et al., 2009; Sellers, 1999), this study further contributes to the literature by employing a behavioral measure of self-control constructed from officers' responses to a preemployment background questionnaire. Self-control research utilizing behavioral measures is important because, although some evidence indicates that either type of measure of self-control can produce valid and reliable results (e.g., Pratt & Cullen, 2000; Tittle et al., 2003), Gottfredson and Hirschi clearly prefer the use of behavioral indexes over attitudinal scales for a variety of reasons (see Hirschi & Gottfredson, 1993).

To examine our central research question and related hypotheses, we used a 9-item behavioral measure of low self-control and six police misconduct outcomes. The bivariate correlations demonstrated that low self-control was significantly associated with four of the six dependent variables. Furthermore, the multivariate results indicated that low self-control was significantly and positively related to the same four misconduct outcomes.<sup>10</sup> Specifically, low self-control was a significant predictor of officers having a history of citizen complaints for physical abuse (9% increase in the odds), having a history of citizen complaints for verbal abuse (23% increase in the odds), being the subject

of an IA investigation (8% increase in the odds), and having engaged in general misconduct (19% increase in the odds). These results are consistent with previous research which has demonstrated a link between low self-control and general deviance (e.g., Cochran et al., 1998; Grasmick et al., 1993; Jones & Quisenberry, 2004; Miller et al., 2009; Sellers, 1999), and more relevantly, the link between low self-control and occupational misconduct (e.g., Gibson & Wright, 2001; Langton et al., 2006). Also consistent with prior research (e.g., Grasmick et al., 1993; Greene et al., 2004; Hickman et al., 2001; Kane & White, 2009), age, sex, race, and opportunity were generally found to be significant predictors of police misconduct. Interestingly and unexpectedly, education was not associated with police misconduct. This finding is inconsistent with prior research (e.g., Kane & White, 2009; Lersch & Kunzman, 2001).

This study is an important contribution to both the self-control and policing literatures. However, it is limited in several respects. First, there are concerns of the generalizability of the results because the study is reliant on data from a single police agency, and future research should attempt to replicate these findings by using data on officers from other departments. Second, five of the six variables are consequences of misconduct rather than misconduct. And although several prior studies have utilized citizen complaints as police misconduct outcome (e.g., Chappell & Piquero, 2004; Greene et al., 2004; Lersch & Mieczkowski, 1996, 2000; Terrill & McCluskey, 2002), they are not without limitations. For example, there are issues with under- and overreporting, they are filed from the perspective of the citizen, and most complaints do not become substantiated (see Chappell & Piquero, 2004; Lersch & Mieczkowski, 1996; Pate & Fridell, 1993). Future research attempting to link low self-control with police misconduct should consider collecting self-report data on actual acts of deviant behavior. Third, the effect sizes for low self-control were fairly small across the four regression models, and the pseudo- $R^2$  measures indicated only a small amount of variance was explained. Thus, it is possible that the effects could disappear if other theoretically relevant variables were included in the models. Finally, and relatedly, this study was unable to control for measures from competing theoretical models which have been linked to police misconduct, such as social learning (Chappell & Piquero, 2004) and strain (Arter, 2007), and it failed to include organizational characteristics. Consequently, the study may suffer from omitted-variable bias which could have artificially inflated the statistical relationships that were detected.<sup>11</sup> It is important for future research on police misconduct to examine the interrelationships between other theoretical correlates, organizational context, and individual self-control.<sup>12</sup>

Overall, the results from this study are meaningful for Gottfredson and Hirschi's (1990) general theory of crime. Our findings indicate that the scope of the theory can be extended beyond general deviance to include a specific form of occupational deviance: police misconduct. However, although the findings from the current study specify support for low self-control as a predictor of



deviance, the indication that low self-control was only related to four of the six outcomes does not provide unequivocal support for the generality of the theory. Ultimately, our research signifies a contribution to the field because the key concept of low self-control has been found to yield predictive utility with respect to an understudied occupationally deviant outcome among law enforcement personnel.

The results from this study also have practical relevance for police administrators. Because self-control is, theoretically, established prior to officers being hired, the findings call for agency leaders to make their hiring criteria more stringent in an effort to disqualify applicants with checkered backgrounds. Police investigators should also more carefully screen their applicants through prudent background investigations and psychological evaluations in an effort to assess possible indicators of low self-control (see, e.g., Arrigo & Claussen, 2003; Champion, 2001; Sellbom, Fischler, & Ben-Porath, 2007). Furthermore, if applicants with low self-control make it through the screening process and become sworn personnel, administrators should monitor their personnel through integrity testing. According to Macintyre and Prenzler (1999), integrity testing can be used as a way to identify the prevalence and nature of potential misconduct, and Hickman et al. (2004) suggest the continuing analysis of citizen complaints to identify officers with a propensity for aberrant behavior. In addition, early warning systems have been used to track officer behavior in an attempt to recognize patterns of wrongdoing. In sum, self-control theory has been found to be a useful in explaining a wide variety of deviant behavior, so it should not be a surprise that it explains some deviant behavior among police officers as well. Thus, it is important that this explanatory factor not be ignored by law enforcement administrators who have a vested interest in reducing police misconduct, upholding the integrity of their departments, and maintaining (or rebuilding) the trust of the public.

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## Notes

1. It should be noted that some research does not lend support to self-control theory. Prior studies demonstrate that other theoretical explanations are *not* spurious (e.g., Chapple, 2005; Higgins, Fell, & Wilson, 2007; Pratt & Cullen, 2000), self-control is *not* relatively stable over one's life (e.g., Burt, Simons, & Simons, 2006; Mitchell & Mackenzie, 2006), low self-control is *not* related to all deviant outcomes (e.g., Simpson & Piquero, 2002; Van Wyk et al., 2000), and effective parenting is *not* the only source of self-control (e.g., Beaver, Wright, DeLisi, & Vaughn, 2008; Pratt, Turner, & Piquero, 2004).
2. One reviewer noted that the present study may not necessarily be a direct test of self-control theory either because the use of behavioral items can be criticized as tautological by a proponent of attitudinal measures of self-control. Although this may be true, and because the Pogarsky and Piquero (2004) study is the only known partial test of the theory relating it to police misconduct, the present study fills in where others left off by utilizing a behavioral measure of self-control, which, in theory, taps in self-control and not just impulsivity.
3. A potential weakness of constructing a low self-control measure from PDQ items is that respondents (i.e., police applicants) may be less willing to report prior deviance because they fear it may adversely affect their employment chances. However, the validity of the responses is bolstered by the fact that the truthfulness of their PDQ answers are subject to background investigations and polygraph validation prior to an employment offer.
4. Tautology refers to circular reasoning: predicting a dependent variable by using the same construct/behavior as a measure for the independent variable (e.g., prior drug use predicting current/future drug use). Several researchers (e.g., Akers, 1991; Marcus, 2004) have commented that tests of self-control theory using behavioral measures of low self-control are empirically tautological because the independent and dependent variable are both by-products of low self-control. With that said, Hirschi and Gottfredson (1993) state that “. . . school performance or drug use, both of which are affected by self-control, can also measure individual differences in self-control” (p. 49), and they go on to write that “the best indicators of self-control are the acts we use self-control to explain: criminal, delinquent, and reckless acts.” (p. 49) The authors also emphasize that the best (least tautological) behavioral indicators of low self-control are those that are logically independent of the dependent variable(s).
5. Importantly, all nine items (or close variations) have been previously used in behavioral indexes of low self-control. Moreover, though some of these items may themselves be crimes, it is crucial to look at the dependent variable(s) under examination. The current study is using low self-control to predict police misconduct as measured by citizen complaints, IA investigations, etc. The items used in the behavioral index of low self-control are, themselves, logically independent of the outcome variables (e.g., citizen complaints are not being used to predict citizen complaints), and they have been temporally established prior to the occurrence(s) of the dependent variables. At the recommendation of one reviewer, we conducted a principal component analysis on the nine items, and they account for 17% of the variance. A scale reliability analysis was also conducted, and it determined the measure has a Cronbach's alpha of .28. This alpha may seem low; however, the measure of low self-control derives from a count of

- nine types of imprudent behavior, and reliabilities are typically not estimated for summated indexes derived from dichotomous items (they are traditionally estimated for scales; see Jessor, Van Den Bos, Vanderryn, Costa, & Turbin, 1995).
6. The three complaint outcomes refer to citizen complaints generated, not necessarily sustained. IA investigations refer to investigations in which an officer had become the subject of an internal investigation (and not necessarily charged with, or convicted of, wrongdoing) for reasons other than investigations stemming from citizen complaints. General misconduct refers officers who were involved in what was classified by the department as *other* misconduct. Departmental discipline refers to officers who had been the recipient of departmental discipline (Greene & Piquero, 2004).
  7. *Race* was re-coded after finding that the *non-White* races did not significantly differ on the outcome variables based on chi-square analyses. For example, on verbal abuse complaints ( $\chi^2 = 4.46$ ,  $df = 3$ ,  $p = .216$ ) and on general misconduct ( $\chi^2 = 2.43$ ,  $df = 3$ ,  $p = .487$ ).
  8. Reported here are the frequencies for the seven behavioral indicators of low self-control. Officers in the sample had a lifetime history of PA license suspended (19.70%), motor vehicle accident (66.90%), traffic ticket in past 5 years (38.80%), fired from a job (28.00%), behind on bills (27.80%), divorced or separated (9.80%), use marijuana (47.60%), D.I. on polygraph (28.50%), and unexcused academy absence (0.50%).
  9. Because low self-control was not significantly correlated with Lack of Service Complaints or Departmental Discipline, regression models were not estimated for these two outcome variables. Thus, our analyses do not lend support to Hypotheses #3 or #6.
  10. At the recommendation of one reviewer, nine different 8-item low self-control indexes were created (with each index excluding one of the nine items). Logistic regression analyses were re-run on the outcome variable of general misconduct to determine if the results (net of the same control variables) were contingent on one of the items in the measure. Each of the nine 8-item indexes produced the same substantive results as the full 9-item scale. That is, each of the nine different indexes demonstrated positive and significant ( $p < .05$ ) relationships with having a history of general misconduct.
  11. One reviewer noted that a deviant peer measure was used in previous research using the Philadelphia officer data. Unfortunately for this study, data from the *Restricted Access* dataset do not permit the inclusion of other relevant variables. The *Unrestricted Access* and *Restricted Access* datasets contain different data. Moreover, the datasets cannot be merged together because the unique identifiers for each respondent are not the same. For example, Officer #1 in the *Unrestricted Access* dataset is not the same officer as Officer #1 in the *Restricted Access* dataset.
  12. A reviewer noted that citizen complaints are correlated with assignment geography (see, e.g., Fyfe & Kane, 2006). Unfortunately for this study, the data do not permit the inclusion of this variable.

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