

CONNECTING CONTROL-BALANCE THEORY AND POLICE CYNICISM:
AN EMPIRICAL TEST

by

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AN EMPIRICAL TEST

by

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Police are often the first point of contact between an individual and the criminal justice system, and as such, their attitudes and behaviors influence the public perception of law enforcement and the legitimacy of the criminal justice system. Extant research on control-balance theory has identified that an imbalance between the amount of control an individual experiences from and the amount of control that they exert over others and their environment can lead to negatively perceived, or deviant, behaviors in individuals. Additionally, cynicism in police has been argued to result as a response to organizational anomie stemming from a transition to professionalism post-Reform Era. However, it is rare that a study will use police misconduct as the outcome variable, often opting to use integrity as a proxy for likelihood of misconduct by gauging officer reactions to vignettes portraying misconduct behavior.

This dissertation uses a sample of law enforcement officers to establish a theoretical extension to control-balance theory, with findings indicating a significant relationship between control deficit, or lack of control, to more cynical attitudes. This is then used to predict the likelihood of misconduct by measuring complaints against the officer and violations of the disciplinary code.

Data were collected as part of the larger project Police Integrity and Accountability in Philadelphia: Predicting and Assessing Police Misconduct, a study originally presented in 2004 by Greene and colleagues in collaboration with the Philadelphia Police Department and the United States Department of Justice.

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CHAPTER 1

INTRODUCTION

Control-balance theory asserts that the amount of control which an individual experiences, relative to the amount of control they exert, impacts the misconduct or deviant behavior they engage in (Tittle, 1995). It was created in the early 1990s as an integration of Merton's anomie, differential association, social control, conflict theories, labeling, routine activities, and deterrence theory, which Tittle argued lacked precision and depth on their own when explaining crime as a general concept. Extant research on control-balance theory has generally supported the main premise that deviant behavior is a result of an imbalance between the control which an individual experiences and the control they exert. Within control-balance theory, control is defined as limitations on behavior, and exists on a continuum which is variable between individuals. Sources of control can include anything which prevents an individual from acting on their behavioral impulses, such as social pressure, codified rules, or other individuals.

Tittle (1995) argued that an imbalance in the control an individual exerts and experiences, or an imbalanced control ratio, can lead to one of two broad categories of crime, depending on which direction the imbalance skews. For those individuals who had a control surplus, or who exerted more control than they experienced, Tittle (1995) predicted engagement in behaviors he called autonomous, which served as a mechanism for the individual to extend or expand the control they already exerted over others. Conversely, those who had a control deficit, or experienced more control than they exerted, were predicted to engage in repressive behaviors, or those that sought to escape the control they experienced.

In 2004, Tittle redefined several key elements to control-balance theory in response to criticism that the theory contained a number of logical flaws. Specifically, the differentiation between repressive and autonomous deviance was difficult to establish, and that within those categories, establishing the subcategories as varying degrees of seriousness was “questionable” (Tittle, 2004:399). Additionally, Tittle noted that autonomous and repressive deviance seemed to overlap, indicating that there was no logical reason to place them at opposing ends of a deviance spectrum. In the 2004 reformulation, Tittle proposed a continuum of deviant behavior along which offenders could be placed, as the broad categories of autonomous and repressive were “irrelevant” (Tittle, 2004:404). Operationalizing the reformulation of the theory is difficult, as Tittle argues that the continuum of deviant behavior is entirely subjective and at the discretion of the individual researcher. Studies testing control-balance theory since Tittle published the proposed reformulation in 2004 have largely remained true to the original form of the theory (Baron & Forde, 2007; Fox et al., 2016; Higgins et al., 2005; Hughes et al., 2015; Hunt & Topalli, 2019; Piquero & Piquero, 2006).

Law enforcement as a profession lends itself to testing control-balance theory for multiple reasons. First, police officers are the epitome of exerting control over others while experiencing control at the same time. Officers have to demonstrate being in control at all times, while under tremendous pressure and scrutiny from the public. Second, using law enforcement to study deviance has primarily focused on a deterrence theory context, leaving a sizeable gap in the knowledge concerning how too much control or too little can impact police misconduct. Third, and most importantly, the theorized sources of control and sources of cynicism in police are conceptually similar to Tittle’s concept of control-balance.

It is interesting to note that sources of control on the individual are similar to sources of cynicism, especially when considering law enforcement officers. Niederhoffer (1967) suggested that cynicism developed as a response to anomie or normlessness which stemmed from increased professionalization of the police post-Reform Era. A key element in studying control-balance in police is also the extent to which the police organization influences the individual officer's attitude, so it is imperative to examine how cynicism and control-balance interact, as they are conceptually close. As yet, there are no studies which connect control-balance to cynicism among police, which has been shown to impact not only police attitudes and behaviors but also citizen perceptions of the police and police legitimacy. A theoretical connection between control-balance and police cynicism is a logical next step in the development of control-balance theory.

While existing literature has not explicitly examined the link between cynicism in police and engagement in misconduct or deviant behavior, studies that connect cynicism to measures of police integrity, or how an individual officer would respond to others' engagement in deviant behavior, have found that less cynical officers are more likely to report deviant or misconduct behavior in others (Hickman et al., 2001). It is possible (and necessary) to integrate cynicism into control-balance theory by making predictions about the types of behavior that officers might engage in depending on the level of cynicism they experience.

The current study builds on the existing control-balance and cynicism literature to make a theoretical connection between control-balance theory and police cynicism, using behavioral outcomes as measures of deviance. This study seeks to determine if there are demographic predictors of control-balance and cynicism, as well as how control-balance has an impact on

cynical attitudes among officers. Additionally, the interaction of control-balance and cynicism is examined to determine whether there is a significant impact of both on behavioral outcomes.

CHAPTER 2
AN OVERVIEW OF CONTROL-BALANCE THEORY, POLICE CYNICISM, AND
POLICE MISCONDUCT

2.1 Theoretical Overview of Control-Balance Theory

Control-balance theory was developed as a general theory of crime with the central premise being that the probability of an individual engaging in deviant acts is influenced by the amount of control the individual is subject to relative to the amount of control the individual can exercise over others and their environment (Tittle, 1995). Tittle drew elements from Merton's anomie, differential association, social control, conflict theories, labeling, routine activities, and deterrence theory, arguing that while each theory was adequate, it was incomplete and needed integration in order to answer questions about crime and deviance (Tittle, 1995). Tittle (1995:54) argued that the aforementioned theories each failed to describe the "larger dynamics" of deviant behavior, that they lacked the descriptive breadth to be applied to a large number of crimes, that they did not explain criminal behavior in close enough detail, and that they lacked precision and depth. Tittle supported integrating theories as a method of theory building over invention or elaboration because elaboration allows for fewer theories that are more comprehensive and general rather than many hyper-specific theories, and that integration prevents redundancy that might occur due to overlapping elements of multiple competing theories (Tittle, 1995).

In developing control-balance theory, Tittle (1995) posits that the theory accepts the premise of existing control theories, that the key variable in explaining deviant or criminal behavior at the individual level is the constraint on the ability to act. However, Tittle (1995)

expands on this concept by asserting that these constraints should be considered alongside the level of motivation the individual would have to engage in deviant behavior.

Tittle defines control as “the degree to which behavioral expressions of impulses or desires can be limited,” arguing that it exists on a continuum and can vary from person to person (1995:143). So when operationalizing control the perceived level of control must be considered, rather than simply whether or not there is control. Under a control-balance paradigm, experiencing control is when an individual’s behavior is constrained or limited due to at least three factors. First, another individual, social group, or organization can prevent the individual from acting on impulses by withholding or threatening to withhold things or experiences of value. This can include revoking privileges for not following rules or taking away a payment bonus for not hitting a sales quota. Second, another individual, social group, or organization can present or threaten to present unpleasant things or experiences. For example, charging a fee or fine for violating a policy, or an athlete being told to run laps for arriving late to practice. Finally, Tittle (1995) suggests that some structural phenomena might make achieving goals difficult, such as poverty preventing an individual from owning a car or means of transportation, thereby constraining them from moving about freely or obtaining adequate employment.

While control experienced is half the control-balance equation, the other half is the amount of control an individual can exercise. This refers to the extent to which an individual can constrain or limit the actions and behaviors of others. Similar to experiencing control, exercising control is exhibited in three forms. First, by withholding or granting things positively valued by others trying to pursue a goal, such as a supervisor withholding a payment bonus for a salesman. Second, presenting or threatening to present an unpleasant thing or experience to others who are

trying to pursue goals, such as a manager assigning unpleasant chores or tasks to an employee trying to be promoted. Finally, exercising control includes control over the environment, and this can include overcoming structural barriers to personal success, such as earning a place in a graduate program despite a lack of academic guidance at the high school or undergraduate level.

Deviance from a control-balance perspective is “any behavior that the majority of a given group regards as unacceptable or that typically evokes a collective response of a negative type” (Tittle, 1995:124). However, Tittle notes that an act’s illegality does not necessarily reflect public opinion, and often reflects the interests of certain groups within a society who are able to garner legislative support via money, social connections, or other types of “coercive power” (Tittle, 1995:131). This is analogous to Wellford’s (1975) assumptions concerning labeling theory and how criminal or deviant behavior is designated as such. Recall that Wellford (1975) argues that certain behaviors are designated as criminal by the powerful in order to control the powerless, and that individuals who engage in those behaviors are labeled as deviant by those in power, the government and special interest groups with influence on legislation. Therefore, Tittle (1995) asserts that deviance is strongly linked to a group context, and whether or not an act is deviant can change over time and between groups. This allows control-balance theory to be relevant when examining not only criminal behavior as defined by the law, but analogous deviant behaviors as well, similar to extant control theories (Tittle, 1995). However, while Hirschi (1969) asserts that low control – that is, very little control exerted over an individual – can lead to deviant behavior, Tittle argues that *too much control* can also lead to deviance, as the individual tries to reclaim some control over themselves (Piquero and Hickman, 1999).

Tittle defines six categories of deviance within the control-balance paradigm: Predation, defiance, submission, exploitation, plunder, and decadence. Furthermore, these categories are designated as autonomous deviance or repressive deviance. Predation, defiance, and submission are designated as repressive forms of deviance, meaning that the individual engages in those behaviors to “escape” the control exerted over them (Piquero and Hickman, 1999:320).

Predatory deviance is made of behaviors that involve direct physical violence, or direct contact between the offender and the victim, in which the offender acts without regard for the wellbeing of the victim (Tittle, 1995). Examples of this include street robbery, homicide, property crime, and sexual assault (Piquero and Hickman, 1999). Defiance is an act in which the perpetrator intentionally breaks or violates a social and cultural norm with the purpose of expressing hostility towards that society or culture, but without physically harming them (Tittle, 1995). Examples of defiance can include vandalism, violating a curfew, or behaving in a manner intended to cause social discomfort (Piquero and Hickman, 1999). Finally, submission is extremely passive behavior, which involves unthinking, almost slavish obedience to others (Tittle, 1995). Submissive behaviors can include both obeying orders which repress or harm others, or self-harm for the benefit of others (Piquero and Hickman, 1999).

Conversely, Tittle (1995) asserts that autonomous forms of deviance, exploitation, plunder, and decadence, are a mechanism for the individual to extend or increase the control they already have over themselves and their environment. Exploitation is similar to predation, however, it involves the use of an intermediary, making it indirect predation. This intermediary role can be an actual person, or it can be structurally or organizationally accepted practices that allow the individual to benefit at the expense of others without regard for the wellbeing of those

they are exploiting (Tittle, 1995). Similarly, plunder is a behavior in which individuals – or organizations such as large corporations – pursue their own goals without considering the effects of their actions on the environment or others. Genocide of an ethnic group can be considered plunder, as can a corporation engaging in activities which destroy the environment in order to make a profit (Tittle, 1995; Piquero and Hickman, 1999). Decadence is a form of deviant behavior in which the individual acts on impulse with no regard for consistency or life organization, just what they desire right then (Tittle, 1995).

Similar to other control theories, Tittle (1995) argues that deviance results from a convergence of a number of variables. First, an individual should have a predisposition toward deviant motivation. Deviant motivation has two components: predispositional and situational. Predispositional motivation is the result of an innate desire for autonomy – escaping control and exerting control over the social and physical environment. An important caveat, Tittle argues, is that this innate desire cannot definitively be proven, but it also cannot be disproven (1995). Predisposition for deviant behavior can also be a result of an individual's control ratio, which is the degree of control that an individual can exercise relative to the control they experience. This is a perceptual measure, and can vary between individuals in the same environment (Tittle, 1995). Situational motivation requires some amount of provocation to act from the environmental and social context, which prompts individuals to become cognizant of their control ratios and the potential to alter that control ratio with deviant behavior (Tittle, 1995). For example, an individual being harassed on the street who then lashes out and assaults the harassers has become aware there is a control imbalance and engages in a deviant act to change their control ratio.

Within the control-balance paradigm, constraint is the probability that control will actually be exercised over an individual in response to engaging in deviant behavior (Tittle, 1995). This probability is perceptual, with the potential offender deciding whether there is a high likelihood of experiencing punishment for engaging in deviant behavior (Tittle, 1995). Constraint is a product of three factors. First, the control ratio allows the individual to determine whether or not they will experience adverse effects for engaging in deviant behavior. Second, the seriousness of the act determines whether the controls enmeshed in the control ratio (for example, sentencing guidelines for a particular crime) will be enacted as a response to deviant behavior. And third, the likelihood that the deviant behavior would even be discovered by those who have the power to activate the aforementioned controls, and for whom the deviant behavior is considered serious. The third facet of constraint is also known as risk, and constraint would be irrelevant without considering risk, as deviant behavior would be much more likely if the probability that a deviant act would result in potential harm to the offender were nonexistent (Tittle, 1995).

For deviant behavior to actually occur there must be opportunity, which includes access to a suitable target as well as the physical and mental capacity to engage in the act (Tittle, 1995). Like routine activity theory, control-balance theory assumes that for deviance to occur there must be a convergence of access to a suitable target as well as the ability to carry out the act unimpeded, and these convergences are episodic (Cohen and Felson, 1979; Tittle, 1995).

2.2 Operationalizing Control-Balance Theory

As it is a perceptual theory, control-balance is difficult to operationalize as it depends on the individual's relative perception of the control they experience and exert. Piquero and Hickman (1999) developed a scale to measure individual perception of control-balance ratios, which has been used regularly through subsequent tests of control-balance theory. In a survey of undergraduate students, Piquero and Hickman (1999) asked respondents to rate the degree of control they felt they had over elements such as their friendships, significant others, school performance, employment, family relationships, recreational activities, society as a whole, the physical environment, their own body, and the social environment, and compared this to the degree of control the respondents felt these things had over them. Using a ten-point Likert scale for each element, the authors had respondents rate each from zero (no control) to ten (total control), with five being a medium amount of control. The control-balance ratio was the sum of the control exerted over the sum of control experienced. For example, an individual who answered a seven for each element for control they felt they had but a 5 for each element for control they experienced, their control ratio would be 70:50, or 1.4, indicating that they have a control surplus.

Variations on Piquero and Hickman's (1999) measure were used in Hickman, Piquero, Lawton, and Greene's (2001) study of police officers, however this study used a four-point scale instead of a ten-point scale. This strategy assumed that a maximum score indicated a maximum level of control deficit, while a minimum score indicated a maximum level of control surplus, with a midpoint score indicating a control-balance (Hickman et al., 2001). Additionally, as the authors had no comparable sample to use as a control, they modeled a control-balance ratio with

the mean and standard deviation, with a control surplus modeled as the control ratio being less than or equal to the mean value minus one standard deviation, and a control deficit modeled as being greater than or equal to the mean value plus one standard deviation (Hickman et al., 2001).

Other studies have used the Piquero and Hickman (1999) method, adjusting elements as necessary (Curry & Piquero, 2003; Baron & Forde, 2007; Hughes et al., 2015; Fox et al., 2016). Curry and Piquero (2003) used a seven-point scale and omitted elements such as school performance measures, the individual's own body, and society as a whole, and summed the items measuring control exerted and divided by the sum of items measuring control experienced. Curry and Piquero (2003) designated control ratios below 1.00 to indicate a control deficit while ratios greater than or equal to 1.00 indicated a control surplus. Since control-balance is a perceptual theory, in order to measure control each study must define what constitutes control in the context of the target population.

2.3 Empirical Evidence Surrounding Control-Balance Theory

2.3.1 General Studies of Control-Balance Theory

Support for control-balance theory has been mixed. One of the first empirical tests of control-balance theory hypothesized that an individual's control-balance ratio can predict their likelihood of engaging in deviant behavior. Piquero and Hickman (1999) used hypothetical vignettes with a sample of undergraduate university students, asking the students their likelihood of engaging in the same behaviors as depicted in the scenarios. They found mixed evidence for control-balance theory, suggesting that the theory might be incorrect in the assumption that

control deficits are more likely to lead to predation than control surpluses. Piquero and Hickman (1999) found that while an unbalanced control ratio predisposed individuals to act deviantly, the predicted relationships for predation and defiance behaviors were significant for individuals with control deficits as well as those with control surpluses, rather than only being significant for those with deficits. Hickman and Piquero (2001) then used the data from the 1999 study to examine control ratios in the context of gender and involvement in different types of deviance, finding no statistically significant difference in the mean control-balance ratios of males and females. However, Hickman and Piquero (2001) found a statistically significant relationship between gender and involvement in different types of deviant behavior, with females more likely to engage in repressive types of deviance.

Another study of university students which examined the effect of control imbalances on deviant offending frequency found that there was a relationship between control imbalance and the frequency of defiant deviance, but the nature of the relationship provided mixed support for control-balance theory (Curry & Piquero, 2003). The authors found that control deficits did not have a significant relationship with defiance as predicted, but that control surpluses showed a positive relationship with defiance when constraints on behavior were high, but no effect when they were low. Additionally, the effects of control imbalances were larger when impulsivity was high, a finding which was statistically significant (Curry & Piquero, 2003).

Baron and Forde (2007) surveyed homeless street youths (n=400) using vignettes to represent violent crime, serious property crime, and minor property crime, inquiring whether the youths' sense of control over their environment influenced their participation in crime, as well as examining whether perceptions of risk and thrill, along with measures of deviant values, self-

control, deviant history, and peer support and the impact on criminal engagement. The authors found that a control imbalance was a significant predictor of violent and serious crime, as well as minor or petty theft when the influence of deviant or delinquent peers was considered.

Finally, Fox, Nobles, and Lane (2016) found support for control-balance theory in a study of male and female inmates, using a voluntary survey to determine whether a control imbalance explained criminal behavior among offenders. They found that control imbalances were associated with increased offending, however while control deficits were non-significant for increased offending when separated for men and women, control surpluses significantly increased offending behavior in an inmate population (Fox et al., 2016).

2.3.2 Police-Specific Tests of Control-Balance Theory

In a population of police officers (n=499), Hickman and colleagues (2001) examined the effects of control ratios on the probability of reporting fellow officers for misconduct, by using a series of hypothetical scenarios presented within a survey following roll call. Hickman et al. (2001) found that officers with control deficits were more likely to report fellow officers who engaged in the behaviors portrayed in the scenarios. This might suggest that this behavior is similar to types of repressive deviance, which Tittle argues seeks to reclaim some control (Tittle, 1995). Similarly, Wolfe and Piquero (2011) examined whether perceptions of organizational justice had an impact on the adherence to a code of silence or misconduct among police officers (n=483), finding that a belief that the department is procedurally just at the command level and courteous to subordinates led to a lower likelihood of misconduct throughout the department. Additionally, a higher perception of organizational justice was found to be related to fewer

citizen complaints, internal affairs investigations, and disciplinary charges through the department (Wolfe & Piquero, 2011).

2.4 Police Cynicism

The first comprehensive research on police cynicism was by Arthur Niederhoffer in his 1967 book *Behind the Shield*. Niederhoffer theorized that cynicism resulted as an adaptation to anomie caused by the “conflict in values” between veteran officers who embraced a mentality of toughness and saw themselves as crimefighters protecting the community from villainy and the new organizational emphasis on professionalism and bureaucracy brought about by the police Reform Era of the early twentieth century (Niederhoffer, 1967:4). Niederhoffer suggested three sources of cynicism among police officers. First, he suggested it was a result of police culture and new recruits were socialized to adopt cynical attitudes by older officers. Second, Niederhoffer suggested that cynicism was a product of organizational anomie, which resulted from the old values of policing being replaced with professionalism and bureaucracy. Finally, there is the possibility that cynicism is ingrained in the personalities of police, and the individuals who self-select into law enforcement as a career are cynical by nature (Niederhoffer, 1967).

To test cynicism among police, Niederhoffer designed a survey instrument by which to measure cynicism, using a 20-item sentence completion questionnaire with responses scored from (1) professionalism to (3) cynicism. Niederhoffer’s (1967) research indicated that police recruits are the least cynical, and cynicism increased for the first decade of policework.

Niederhoffer's (1967) research suggested a curvilinear relationship between years of service and cynicism, finding that officers with 7-10 years of service having the most cynical attitudes. However, support for this contention has been mixed, with studies finding both that the relationship between years of service and cynicism was strictly linear and that the relationship was curvilinear as Niederhoffer specified ((Regoli, 1976; Lotz & Regoli, 1977; Langworthy, 1987; Chen, 2015). Burke and Mikkelsen (2005) examined the relationship between police tenure and cynicism, finding a significant linear relationship between tenure and cynicism, that officers who had been on the force longer experienced higher levels of cynicism. Likewise, Sobol (2009) found that while officers with more experience had lower overall levels of cynicism, officers who worked in districts with high rates of violent crime had more cynical attitudes than those in low violent crime districts. Conversely, Zekavica and colleagues (2017) examined police cynicism in Serbia, and found no statistically significant relationship between gender, education, rank, or length of service to cynicism in their sample.

Tests of Niederhoffer's scale argued that it had validity issues, and Regoli (1976) modified it to a Likert scale instead of sentence completion, and divided Niederhoffer's cynicism measures into five subscales or dimensions of cynicism, meant to indicate specific sources of cynicism. Regoli's (1976) dimensions of cynicism were (1) cynicism toward the public, (2) cynicism toward organizational functions, (3) cynicism toward police dedication to duty, (4) cynicism toward police social solidarity, and (5) cynicism toward police training and education. This modified version of the cynicism scale was validated by research, allowing for its use in ensuing studies of police cynicism (Hickman et al., 2004).

Subsequent research of sources of police cynicism considered organizational-level variables that could potentially influence cynicism among officers. Regoli, Crank, and Rivera (1990) found that in a sample of sworn law enforcement officers, cynicism is significantly related to relations with the public and with supervisory personnel, and that officers with more cynical attitudes were also more likely to be dissatisfied with their career in law enforcement overall, and have poor relationships with supervisors as well as with the public. This can connect to control-balance theory when we examine how a control imbalance impacts cynicism, and subsequently how the two concepts interact to influence misconduct behavior.

2.5 Police Misconduct

Police misconduct has been operationalized in a number of ways in previous research. First, there is official misconduct, such as the number of times an officer has been the subject of a formal citizen complaint or has been investigated by the internal affairs division, as well as how many times an officer has been charged with a violation of the department's disciplinary code (Wolfe & Piquero, 2011). Insubordination is also an official form of conduct, operationalized as whether an officer has intentionally disobeyed a commanding officer's command, used abusive language directed toward a superior officer, or if an officer has intentionally gone against policy outlined in the general order (Trotta, 1965). Within the control-balance paradigm the aforementioned forms of misconduct would fall under defiance, which is a repressive form of deviance which Tittle (1995) argues seeks to reclaim control for those in a control deficit.

Another form of police misconduct is those behaviors that would be considered delinquent or deviant among the civilian population as well. This can include unsafe driving, which in previous literature has been operationalized as the number of times an officer has been ticketed for driving above the speed limit, as well as verbal abuse of citizens or other officers (Bishopp et al., 2016). Additionally, some studies have also asked officers if they have had problems with substance use, for example, the over-consumption of alcohol (Machell, 1989). Fitting these into a control-balance framework, verbal abuse can be considered predation, while unsafe driving and substance use can be considered decadence, both of which are autonomous forms of deviance, which Tittle (1995) argues serve to extend the existing control that the individual feels they possess.

Police misconduct is an important avenue of research due to the impact to police legitimacy due to actual or perceived misconduct by law enforcement officers. A study of police behavior during traffic stops found that observing negative interactions with police officers lead to lower perceptions of trust in police, a lesser obligation to obey police orders, and less willingness to cooperate with police (Maguire, Lowrey, & Johnson, 2017). Police are under an intense amount of scrutiny, so much so that a study about the effects of attire and patrol strategy found that officers in uniform were perceived more favorably than those in plainclothes (Simpson, 2017). However, “police misconduct” as a concept encompasses more than simply poor behavior during citizen encounters.

CHAPTER 3

RESEARCH QUESTIONS AND HYPOTHESES

1. What are the demographic predictors of control-balance ratios?

H1: Age, sex, race, years of service, and rank will have a significant influence on control-balance.

2. What are the demographic predictors of cynicism?

H2: Age, sex, race, years of service, and rank will have a significant influence on cynicism.

3. How does the control-balance ratio impact the individual officer's level of cynicism?

H3: Officers with a control deficit will have higher levels of cynicism.

4. How does the control-balance ratio impact the individual officer's behavior?

H4: Officers with a control deficit will have a higher likelihood of engaging in misconduct behaviors.

5. How does cynicism impact the individual officer's behavior?

H5: More cynical officers will have a higher likelihood of engaging in negative behaviors.

6. How does the control-balance ratio interact with cynicism to influence officer behavior?

H6: Officers with both a control deficit and a high level of cynicism will have a higher likelihood of engaging in negative behaviors.

CHAPTER 4

DATA AND METHODS

Data for this study were collected in collaboration with the Philadelphia Police Department by Greene, Piquero, Hickman, and Lawton as part of the 2004 study *Police Integrity and Accountability in Philadelphia: Predicting and Assessing Police Misconduct*. The study sample is made of 499 randomly selected law enforcement officers who were employed by the Philadelphia Police Department and asked to complete the survey in person at roll call. Behavioral outcomes were then added to the data by a member of the research team via administrative records. The sample (n=499) was primarily male (64%) and white (42.8%), with an average age of 34.8 years and average length of service of 7.94 years. The overwhelming majority of the sample were patrol officers, (85.5%). See Table 4.1 for sample descriptives.

Table 4.1. Relationship between control-balance and control variables

		n=499*	%
Sex			
	Male	322	(64%)
	Female	146	(29%)
Race			
	White	214	(42.8%)
	Black	204	(40.8%)
	Hispanic	23	(4.6%)
	Latino	5	(1%)
	Asian	6	(1.2%)
	Other	9	(1.8%)
Age (mean)		34.8	
Years service (mean)		7.94	
Rank			
	P/O	427	(85.5%)
	Sergeant	34	(6.8%)
	Detective	2	(0.4%)
	Lieutenant	9	(1.8%)

*sample n=499, however there are missing values in each demographic category

4.1 Independent Variables

4.1.1 Operationalizing Control-balance

An early study of control-balance theory by Piquero and Hickman in 1999 essentially set the standard for operationalizing control-balance. Piquero and Hickman (1999) used hypothetical

scenarios and a 10-point Likert scale to gauge responses regarding their likelihood of engaging in the same behaviors as the individuals depicted in the scenarios. Piquero and Hickman (1999) asked respondents the degree of control they felt they exercised over others, objects, and circumstances to determine internal control, and then asked the degree of control those others, objects, and circumstances the respondents felt had over them to determine external control. Then, they compared external control to internal control, and this ratio was the individual's control-balance. Piquero and Hickman (1999) used a sample of college students (n=146), which can be considered marginal offenders, who might not offend in most cases but would be at high risk for certain types of offenses (Matza, 1964). This premise can be similarly applied to law enforcement officers as well, since they are a low risk population for many offenses but potentially higher risk for certain specific behaviors.

Piquero and Hickman's 1999 scale was adapted and validated by numerous studies researching the impact of control-balance on individual behavior (Hickman & Piquero, 2001; Curry & Piquero, 2003; Hughes, Antonaccio, & Botchkovar, 2015; Fox, Nobles, & Lane, 2016). For the data used in this study, Hickman, Piquero, Lawton, and Greene (2001) used a 4-point Likert scale for respondents in their sample of law enforcement officers (n=499) to rate the influence each of twelve items (see Table 4.2) had over how they did their jobs, with potential responses being (1) *this has no influence over how I do my job*, (2) *this has some influence over how I do my job*, (3) *this has lots of influence over how I do my job*, and (4) *this has total influence over how I do my job*. The responses were summed to provide a total control-balance score. Higher values indicated a control deficit, and lower values indicated a control surplus, with the midpoint value indicated a control-balance.

Table 4.2. Control-balance Measures

	Mean	SD
1 Follow procedural laws (for example, search and seizure)	3.577	0.645
2 Maintain officer safety	3.634	0.616
3 Exercise discretion in enforcing the law	2.981	0.858
4 Follow Departmental Directives, Rules, and Regulations	3.498	0.617
5 Agree with the decisions of administrators in the “Roundhouse”	2.614	0.906
6 Look good in front of the public	3.208	0.840
7 Quickly respond to risky calls	3.559	0.660
8 Get good performance evaluations from supervisors	3.014	0.989
9 Meet monthly “quotas”	1.673	0.914
10 Look good in front of other officers	2.432	1.093
11 Uphold good morals and ethics in society	3.452	0.734
12 Enforce the PA Crimes Code	3.512	0.640

4.1.2 Operationalizing Police Cynicism

This study uses Regoli’s modified version of Niederhoffer’s police cynicism scale. Niederhoffer (1967) developed a 20-item sentence completion questionnaire in order to gauge cynicism among law enforcement officers, assignment point values to each potential response. Respondents chose between three options to complete statements pertaining to different aspects of policing, and their responses were summed to give them a final cynicism score, with low scores indicating more police professionalism, and high scores indicating cynicism (Niederhoffer, 1967).

For a decade, Niederhoffer’s (1967) scale was the only measure of cynicism among police, and by default was the foundation for estimating police attitudes in a scientific context. In 1976, Regoli undertook the first reliability and validity assessment of Niederhoffer’s scale, finding that the 1967 scale lacked in both reliability and validity. Regoli (1976) altered

Niederhoffer's (1967) scale, changing from an additive sentence completion model to a 5-point Likert scale, the means and standard deviations of which are demonstrated in Table 4.3. In this analysis, items 2, 6, 7, 9, 12, 13, and 14 were reverse coded in the survey and the data in order to prevent response set bias, and were appropriately flipped for the analysis. These items are denoted by an asterisk in Table 4.3. High values for cynicism indicated lower cynical attitudes, while lower values indicated higher cynical attitudes.

Table 4.3. Cynicism measures

	Mean	SD
1 Police supervisors are very interested in their subordinates	3.387	0.906
2 Disciplinary action is a result of pressure on supervisors from command staff*	3.074	1.158
3 Arrests are made because the police officer is dedicated to performing his/her duty	3.911	0.930
4 The best arrests are made as a result of hard work and dedication to duty	3.819	1.047
5 A college degree requirement for appointment to the police department would result in a much more efficient and effective police department	2.943	1.241
6 When you get to know the department from the inside, you begin to think that it is a wonder that it does one-half as well as it does.*	3.216	1.075
7 Police academy recruit training should be cut in half*	1.736	0.956
8 Professionalization of police work is already here for some groups of officers	3.611	0.881
9 When a police officer appears before the Police Board of Inquiry, the officer will probably be found guilty even when he/she has a good defense*	3.365	1.059
10 Police officers are dedicated to the high ideals of police service and would not hesitate to perform police duty even though he/she may have to work overtime without extra pay	2.672	1.110
11 The rules and regulations dealing with officer conduct off duty are fair and sensible	3.116	1.111
12 The public is more likely to obstruct police work than cooperate*	3.181	1.038
13 Getting special assignments in the police department depends on who you know, not on merit*	3.857	1.129

14	When testifying in court, police officers are treated like criminals when they take the witness stand*	3.172	1.072
15	Police department citations for summary offenses are issued by police officers as part of a sensible pattern of law enforcement	3.657	0.851
16	The public shows a lot of respect for the police	2.336	1.012
17	Youth problems are best handled by officers who are trained as juvenile officers	2.729	1.032
18	Police officers have a different view of human nature because of the misery and cruelty of life which they see every day	3.348	1.073
19	The newspapers generally try to help police departments by giving prominent coverage to items favorable to the police	1.901	0.890
20	Detectives have special qualifications and are superior to patrol officers	1.983	0.944

* reverse coded in data, flipped for analysis

Regoli (1976) went on to posit that the cynicism measures Niederhoffer (1967) had itemized could be condensed into five dimensions (Table 4.4) to better describe the aspects of policing that officers might experience cynicism toward. These dimensions were (1) cynicism toward the public, (2) cynicism toward dedication to duty, (3) cynicism toward social solidarity, (4) cynicism toward the police organization, and (5) cynicism toward police training and education (Regoli, 1976).

Three items from the original cynicism measures were not included in the subscales, as Regoli (1976) concluded they did not correspond with any of the five dimensions. These items were (8) *professionalism of police work is already here for some groups of officers*, (15) *police department citations for summary offenses are issued by police officers as part of a sensible pattern of law enforcement*, and (20) *detectives have special qualifications and are superior to police officers*. Regoli's modified scale was subsequently validated by research, with the key finding being that the Likert responses were being used as Regoli intended them to be (Hickman, Piquero, & Piquero, 2004). As such, this study uses a 20-item cynicism scale developed initially

by Niederhoffer (1967) and modified by Regoli (1976) to include a subscale which categorized cynicism measures (see Table 4.3) into dimensions of cynicism (Table 4.4). With this scale, a higher cynicism measure indicates a lower level of cynicism by the respondent.

Regoli's subscales of cynicism	Corresponding cynicism measures
Cynicism toward relations with the public	12. The public is more likely to obstruct police work than cooperate 16. The public shows a lot of respect for the police 19. The newspapers generally try to help police departments by giving prominent coverage to items favorable to the police.
Cynicism toward dedication to duty	1. Police supervisors are very interested in their subordinates 3. Arrests are made because the officer is dedicated to performing his/her duty 4. The best arrests are made as a result of hard work and dedication to duty 10. Police officers are dedicated to the high ideals of police service and would not hesitate to perform police duty even though he/she may need to work overtime without pay
Cynicism toward social solidarity	2. Disciplinary action is a result of pressure on supervisors from command staff to give out discipline 7. Police academy recruit training should be cut in half 9. When a police officer appears before the Police Board of Inquiry, the officer will be found guilty, even when he/she has a good defense 14. When testifying in court, police officers are treated like criminals when they take the witness stand
Cynicism toward the police organization	6. When you get to know the department from the inside, you begin to think that it is a wonder that it does one-half as well as it does 11. The rules and regulations dealing with officer conduct off duty are fair and sensible 13. Getting special assignments in the police department depends on who you know, not on merit 18. Police have a different view of human nature because of the misery and cruelty of life which they see every day

Cynicism toward police training and education

5. A college degree requirement for appointment to the police department would result in a much more efficient and effective police department
17. Youth problems are best handled by officers who are trained as juvenile officers.

4.1.2.1 Control Variables

Control variables for this study included the officer's age, sex, and race, along with their years of service and their rank. This information was collected from official department records. Age was defined in years at the time of answering the survey, as was years of service. Race was designated as either white, black, Hispanic, Latino, Asian, or other. Rank was defined as patrol officer, sergeant, detective, or lieutenant, with the majority (85.5%) of officers at the patrol officer rank. Sex was coded as male or female.

4.2 Dependent Variables

4.2.1 Operationalizing Police Misconduct

The dependent variable for this study is behavioral outcomes of officers, which are defined as those which are in violation of the policy and procedural code of the police department, and that which violates the disciplinary code of the department. Specific behaviors examined in the present study include self-report measures of ever being the subject of a formal citizen complaint, ever being the subject of a formal complaint by another officer, and ever being charged with a violation of the disciplinary code, as well as the frequency of each of the preceding behaviors. Along with the self-report measures, official measures for each of the corresponding behaviors (e.g., being the subject of a formal citizen complaint, being the subject

of a complaint from another officer, ever being charged with a violation of the disciplinary code, along with frequency) were collected from department administrative records. Additionally, the data include whether the officer was ever charged with conduct unbecoming, insubordination, intoxication, neglect of duty, and disobedience of orders along with the corresponding frequency.

The variables measuring misconduct were coded dichotomously, with a 0 indicating the officer had never been the subject of a complaint by a citizen, or the subject of a complaint by another officer, or charged with a violation of the disciplinary code as well as specific violations of the disciplinary code (insubordination, intoxication, neglect of duty, conduct unbecoming, and disobedience of orders). This means eight separate dichotomous measures. Additionally, each misconduct variable was also coded continuously to measure the frequency of occurrence for each behavior.

4.3 Methods

Data was analyzed using linear regression, with behavior outcomes the dependent variable, and cynicism and control-balance the independent variables. Control variables included the officer's demographic information (age, sex, and race), along with the officer's years of service and rank.

CHAPTER 5
RESULTS AND ANALYSIS

5.1 Demographic predictors of control-balance and cynicism

None of the control variables (age, sex, race, years of service, or rank) had a significant relationship with the officer's control-balance score (Table 5.1). However, data indicate that lower levels of cynicism are experienced by officers with higher control-balance scores, this relationship being highly significant. (Table 5.2)

Table 5.1. Relationship between control-balance and control variables

	<i>Coef.</i>	<i>S.E.</i>
Age	0.030	0.419
Sex	0.298	0.568
Race		
White	-1.779	1.523
Black	-1.036	1.519
Hispanic	-1.405	1.873
Asian	-1.956	2.704
Other	-3.975	2.725
Years of Service	-0.085	0.053
Rank	0.241	0.053

*p<.05 **p<.01

Higher control-balance scores in this research indicate that the officer has a control deficit, or that they feel they experience more control than they exert, and higher cynicism scores indicate less cynicism. While demographic factors such as sex and race do not have an impact on cynicism, nor did they have an impact on control-balance, years of service and rank were both

significant indicators of cynicism, with fewer years of service indicating lower levels of cynicism as well as higher rank (Table 5.2).

Table 5.2. Relationship between cynicism, control-balance, and control variables

	<i>Coef.</i>	<i>S.E.</i>
Control-Balance Score	0.331	0.070**
Age	0.211	0.060**
Sex	0.495	0.816
Race		
White	-2.603	2.797
Black	-2.263	3.198
Hispanic	0.376	2.730
Asian	-4.691	4.550
Other	-8.636	4.065*
Years of Service	-0.326	0.076**
Rank	4.787	1.314**

*p<.05 **p<.01

Table 5.3. Relationship between cynicism and control-balance with career length

	<i>Coef.</i>	<i>S. E.</i>
Control-balance	0.333	0.070**
Years of service	-0.124	0.055*
Officer's rank	2.802	1.254*

*p<.05 **p<.01

Officer rank and years of service were found to be highly significantly related to the officer's level of cynicism when isolated into a model with control-balance. The data suggests that officers with fewer years of service are less cynical, as are officers with a control deficit, who experience more control than they exert. There was no significant curvilinear relationship between years of service and cynicism found, neither with years of service alone nor with control-balance included in the model (Table 5.3). There was a moderately strong correlation

between years of service and rank, which is expected as officers are likely to be promoted as they spend more time on the police force (Table 5.4).

Table 5.4. Correlation between years of service and rank

	Years of service	Rank
Years of service	1.000	
Rank	0.436	1.000

5.1.1 Impact of control-balance on cynicism

The total cynicism score was created by summing together twenty Likert scale responses to statements about policing. Control-balance was significantly related to the following cynicism measures, indicating that an officer with a higher control-balance score would also have a higher cynicism score toward that aspect of policing, indicating lower cynical attitudes (Table 5.5). These measures were (1) *Police supervisors are very interested in their subordinates*, (2) *disciplinary action is a result of pressure on supervisors from command staff to give out discipline*, (3) *arrests are made because the police officer is dedicated to performing his/her duty*, (4) *the best arrests are made as a result of hard work and dedication to duty*, (10) *police officers are dedicated to the high ideals of police service and would not hesitate to perform police duty even though he/she may have to work overtime without extra pay*, (11) *the rules and regulations dealing with officer conduct off duty are fair and sensible*, (13) *getting special in the police department depends on who you know, not on merit*, (18) *police officers*

have a different view of human nature because of the misery and cruelty of life which they see every day, and (19) the newspapers generally try to help police departments by giving prominent coverage to items favorable to the police.

Table 5.5. Relationship between Control-balance Score and Cynicism

	<i>Coefficient</i>	<i>SE</i>
TOTAL CYNICISM SCORE	.332	.068**
CYN_1	.022	.008*
Police supervisors are very interested in their subordinates		
CYN_2^t	.024	.010*
Disciplinary action is a result of pressure on supervisors from command staff to give out discipline		
CYN_3	.027	.008**
Arrests are made because the police officer is dedicated to performing his/her duty		
CYN_4	.043	.009**
The best arrests are made as a result of hard work and dedication to duty		
CYN_5	-.006	.011
A college degree requirement for appointment to the police department would result in a much more efficient and effective police department		
CYN_6^t	.017	.009
When you get to know the department from the inside, you begin to think that it is a wonder that it does one-half as well as it does.		
CYN_7^t	.011	.008
Police academy recruit training should be cut in half		
CYN_8	.007	.007
Professionalization of police work is already here for some groups of officers		
CYN_9^t	.018	.009
When a police officer appears before the Police Board of Inquiry, the officer will probably be found guilty even when he/she has a good defense		
CYN_10	.047	.009**
Police officers are dedicated to the high ideals of police service and would not hesitate to perform police duty even though he/she may have to work overtime without extra pay		
CYN_11	.039	.009**
The rules and regulations dealing with officer conduct off duty are fair and sensible		
CYN_12^t	-.015	.009
The public is more likely to obstruct police work than cooperate		

Getting special assignments in the police department depends on who you know, not on merit	CYN_13^t	.036	.010*
When testifying in court, police officers are treated like criminals when they take the witness stand	CYN_14^t	-.006	.009
Police department citations for summary offenses are issued by police officers as part of a sensible pattern of law enforcement	CYN_15	.003	.007
The public shows a lot of respect for the police	CYN_16	.002	.008
Youth problems are best handled by officers who are trained as juvenile officers	CYN_17	.008	.009
Police officers have a different view of human nature because of the misery and cruelty of life which they see every day	CYN_18^t	.022	.009*
The newspapers generally try to help police departments by giving prominent coverage to items favorable to the police	CYN_19	.018	.007*
Detectives have special qualifications and are superior to patrol officers	CYN_20	.015	.008

^t reverse coded in data, flipped for analysis

*p<.05 **p<.01

Cynicism when broken down into Regoli's (1976) dimensions, positive and significant relationships were found between control-balance scores and cynicism scores towards organizational functions, cynicism about police dedication to duty, and cynicism about police social solidarity (Table 5.6). This indicates that a control deficit was indicative of lower cynicism towards those specific dimensions of cynicism.

Table 5.6. Relationship between Control-balance and Dimensions of Cynicism

	Coefficient	SE
Cynicism towards relations with the public	.004	.018
Cynicism towards organizational functions	.114	.025**
Cynicism about police dedication to duty	.138	.023**
Cynicism about police social solidarity	.047	.023*
Cynicism about training and education	.001	.015

*p<.05 **p<.01

5.2 The impact of control-balance on the individual officer's behavior

Control-balance was found to have a significant impact on four officer behavior outcomes: being the subject of a formal citizen complaint, being charged with a violation of the disciplinary code, being charged with neglect of duty, and unjustified use of force (Table 5.7). Officers with a lower control-balance score, here indicating a control surplus, were found to be significantly more likely to be the subject of a citizen complaint, however the control-balance score did not have a significant relationship with the frequency of citizen complaints. While the official measure for citizen complaints was not statistically significant, it was approaching significance with a p value of .064, and the officer's control-balance score had a significant relationship with the official number of citizen complaints, the negative coefficient indicating that an officer with a control surplus was likely to have a higher number of citizen complaints. Likewise, while control-balance did not have a significant relationship with whether an officer was ever the subject of a formal complaint from another officer, the frequency of complaints against those who were the subject of a complaint from another officer was significant when considering their control-balance score, with officers with a control surplus, as indicated by the negative coefficient, being more likely to have more complaints filed against them by fellow officers.

Table 5.7. Impact of control-balance on individual officer's behavior¹

	<i>Coef.</i>	<i>Std. Err.</i>	<i>P> t </i>
Ever subject of a formal citizen complaint	-0.011	0.004	0.013*
Frequency of formal citizen complaints	-0.034	0.050	0.502
Official measure of formal citizen complaints	-0.008	0.004	0.064
Number of formal citizen complaints	-0.027	0.013	0.039*
Ever subject of a formal complaint by another officer	-0.002	0.001	0.305
Frequency of complaints by other officers	-0.043	0.013	0.004**
Official measure of formal officer complaints	0.001	0.001	0.387
Official number of officer complaints	0.001	0.001	0.329
Ever charged with a violation of disciplinary code	-0.013	0.003	0.001**
Frequency of disciplinary code violations	-0.055	0.018	0.003**
Official measure of disciplinary code violations	-0.006	0.004	0.121
Official number of disciplinary code violations	-0.014	0.009	0.118
Ever charged with conduct unbecoming	-0.002	0.002	0.172
Official measure conduct unbecoming	0.000	0.001	0.762
Ever charged with intoxication	-	-	-
Official measure intoxication	-	-	-
Ever charged with insubordination	-0.0007	0.0008	0.372
Official measure insubordination	-0.0004	0.0005	0.404
Ever charged with neglect of duty	-0.007	0.003	0.021*
Official measure neglect of duty	-0.006	0.004	0.104
Ever charged with disobedience of order	-0.0003	0.0015	0.843
Official measure disobedience of order	0.0008	0.0014	0.560
Known if they were subject of IAD investigation	-0.007	0.004	0.079
Frequency of known IAD investigations	-0.022	0.031	0.468
Official measure IAD investigation	-0.002	0.003	0.423
Official frequency of IAD investigations	-0.006	0.006	0.278
Ever had a PBI hearing	-0.006	0.003	0.061
Frequency of PBI hearings	-0.261	0.169	0.127
Ever involved in Use of Force incident	-0.012	0.004	0.003
Frequency of Use of Force incidents	-0.106	0.171	0.536
Unjustified use of force	-1.291	0.440	0.004**

*p<.05 **p<.01

¹ Each line in the table was run as a separate regression model which included controls, but since they had no significant effects, were not listed in the table for the sake of brevity.

Officers with a control surplus were also more likely to be charged with a violation of the departmental disciplinary code, which for the Philadelphia Police Department includes conduct unbecoming, intoxication, insubordination, neglect of duty, and disobedience of orders. Generally, officers with a control surplus were more likely to be charged with a disciplinary code violation, this relationship was highly significant for both having ever been charged with a violation as well as for the frequency of being charged with a violation. Conduct unbecoming did not have a significant relationship with control-balance, nor did insubordination or disobedience of orders. No officers reported ever being charged with intoxication. Finally, control-balance did have a significant relationship with neglect of duty, with officers with a control surplus being more likely to have been charged with neglect of duty.

While being the subject of an Internal Affairs Division or Police Board of Inquiry investigation was not significantly impacted by an officer's control-balance, nor was involvement in a use of force incident, whether or not that use of force was found to be justified had a highly significant relationship with an officer's control-balance score, with the large, negative coefficient indicating that officers with a more extreme control surplus were highly likely to be involved in an unjustified use of force incident.

5.3 The impact of cynicism on individual officer behavior

5.3.1 Impact of total cynicism on individual officer behavior

The individual officer's total cynicism score was obtained through the cynicism scale, with higher scores indicating a lower level of cynicism. A negative but significant relationship was

found between cynicism and different officer behavior outcomes, indicating that more cynical officers were likely to have been the subject of formal citizen complaints and general violations of the disciplinary code (Table 5.8). More specifically, there was an inverse and significant relationship between the charges of conduct unbecoming, insubordination, and neglect of duty, indicating that more cynical officers were more likely to be charged with those particular offenses. Additionally, a similar inverse but significant relationship exists between knowledge of an Internal Affairs Division investigation, as well as having ever had a hearing before the Police Board of Inquiry. Finally, more cynical officers were found to be more likely to be involved in a use of force incident, but there was no significant relationship as to whether that use of force was unjustified.

Table 5.8. Impact of total cynicism score on individual officer's behavior²

	<i>Coef.</i>	<i>Std. Err.</i>	<i>P> t </i>
Ever subject of a formal citizen complaint	-0.015	0.003	0.000**
Frequency of formal citizen complaints	-0.078	0.033	0.021*
Official measure of formal citizen complaints	-0.006	0.002	0.026*
Number of formal citizen complaints	-0.021	0.009	0.019*
Ever subject of a formal complaint by another officer	0.0009	0.001	0.469
Frequency of complaints by other officers	-0.109	0.054	0.059
Official measure of formal officer complaints	-0.001	0.000	0.118
Official number of officer complaints	-0.001	0.001	0.086
Ever charged with a violation of disciplinary code	-0.009	0.002	0.000**
Frequency of disciplinary code violations	-0.032	0.016	0.058
Official measure of disciplinary code violations	-0.007	0.002	0.010**
Official number of disciplinary code violations	-0.018	0.006	0.005**
Ever charged with conduct unbecoming	-0.003	0.001	0.017*
Official measure conduct unbecoming	-0.002	0.001	0.066
Ever charged with intoxication	-	-	-
Official measure intoxication	-	-	-
Ever charged with insubordination	-0.001	0.000	0.036*
Official measure insubordination	-0.001	0.000	0.009**
Ever charged with neglect of duty	-0.002	0.002	0.242
Official measure neglect of duty	-0.005	0.002	0.038*
Ever charged with disobedience of order	-0.001	0.001	0.135
Official measure disobedience of order	-0.0004	0.0009	0.582
Known if they were subject of IAD investigation	-0.0102	0.002	0.001**
Frequency of known IAD investigations	-0.037	0.021	0.090
Official measure IAD investigation	-0.007	0.002	0.002**
Official frequency of IAD investigations	-0.014	0.004	0.001**
Ever had a PBI hearing	-0.006	0.002	0.004**
Frequency of PBI hearings	-0.034	0.019	0.085
Ever involved in Use of Force incident	-0.010	0.002	0.000**
Frequency of Use of Force incidents	-0.169	0.100	0.093
Unjustified use of force	-0.423	0.295	0.152

*p<.05 **p<.01

² Each line in the table was run as a separate regression model which included controls, but since they had no significant effects, were not listed in the table for the sake of brevity.

5.4. Impact of cynicism towards the public on individual officer's behavior

Cynicism towards the public did not have a significant impact on any officer behavior outcomes, except for the self-reported disobedience of order measure (Table 5.9).

Table 5.9. Impact of cynicism towards the public on individual officer's behavior³

	<i>Coef.</i>	<i>Std. Err.</i>	<i>P> t </i>
Ever subject of a formal citizen complaint	0.006	0.011	0.595
Frequency of formal citizen complaints	0.113	0.125	0.365
Official measure of formal citizen complaints	0.020	0.011	0.076
Number of formal citizen complaints	0.038	0.035	0.282
Ever subject of a formal complaint by another officer	0.001	0.005	0.713
Frequency of complaints by other officers	-0.278	0.323	0.402
Official measure of formal officer complaints	0.002	0.003	0.579
Official number of officer complaints	0.001	0.004	0.715
Ever charged with a violation of disciplinary code	0.007	0.010	0.491
Frequency of disciplinary code violations	0.001	0.078	0.980
Official measure of disciplinary code violations	0.014	0.011	0.194
Official number of disciplinary code violations	0.019	0.025	0.441
Ever charged with conduct unbecoming	0.001	0.005	0.798
Official measure conduct unbecoming	-0.003	0.004	0.468
Ever charged with intoxication	-	-	-
Official measure intoxication	-	-	-
Ever charged with insubordination	0.001	0.002	0.601
Official measure insubordination	-0.000	0.001	0.720
Ever charged with neglect of duty	0.001	0.008	0.856
Official measure neglect of duty	0.015	0.010	0.141
Ever charged with disobedience of order	0.008	0.003	0.037*
Official measure disobedience of order	0.000	0.003	0.813
Known if they were subject of IAD investigation	0.018	0.011	0.114
Frequency of known IAD investigations	-0.007	0.080	0.927
Official measure IAD investigation	-0.012	0.009	0.200
Official frequency of IAD investigations	-0.008	0.016	0.605
Ever had a PBI hearing	0.005	0.009	0.550
Frequency of PBI hearings	0.205	0.437	0.640
Ever involved in Use of Force incident	-0.007	0.011	0.482
Frequency of Use of Force incidents	0.283	0.372	0.448
Unjustified use of force	0.607	1.171	0.604

*p<.05 **p<.01

³ Each line in the table was run as a separate regression model which included controls, but since they had no significant effects, were not listed in the table for the sake of brevity.

5.5 Impact of cynicism toward organizational functions on individual officer behavior

Cynicism towards organizational functions had a significant relationship with the number of citizen complaints filed against the officer, with more cynical officers being more likely to have a complaint on record (Table 5.10). Likewise, more cynical officers were more likely to be charged with a violation of the disciplinary code, with the only specific significant relationship among disciplinary code violations being neglect of duty.

Table 5.10. Impact of cynicism toward organizational functions on individual officer's behavior⁴

	<i>Coef.</i>	<i>Std. Err.</i>	<i>P> t </i>
Ever subject of a formal citizen complaint	-0.028	0.011	0.005**
Frequency of formal citizen complaints	-0.191	0.098	0.054
Official measure of formal citizen complaints	-0.024	0.009	0.009**
Number of formal citizen complaints	-0.073	0.029	0.014
Ever subject of a formal complaint by another officer	-0.006	0.004	0.113
Frequency of complaints by other officers	-0.025	0.221	0.910
Official measure of formal officer complaints	-0.001	0.003	0.558
Official number of officer complaints	-0.002	0.003	0.541
Ever charged with a violation of disciplinary code	-0.023	0.008	0.008**
Frequency of disciplinary code violations	-0.082	0.060	0.175
Official measure of disciplinary code violations	-0.018	0.009	0.047*
Official number of disciplinary code violations	-0.019	0.021	0.356
Ever charged with conduct unbecoming	-0.008	0.004	0.072
Official measure conduct unbecoming	0.000	0.004	0.914
Ever charged with intoxication	-	-	-
Official measure intoxication	-	-	-
Ever charged with insubordination	-0.001	0.001	0.430
Official measure insubordination	-0.001	0.001	0.200
Ever charged with neglect of duty	-0.015	0.007	0.027*
Official measure neglect of duty	-0.018	0.008	0.033*
Ever charged with disobedience of order	-0.003	0.003	0.249
Official measure disobedience of order	-0.002	0.002	0.374
Known if they were subject of IAD investigation	-0.038	0.009	0.000**
Frequency of known IAD investigations	-0.171	0.064	0.009**
Official measure IAD investigation	-0.008	0.007	-0.200
Official frequency of IAD investigations	-0.015	0.013	0.257
Ever had a PBI hearing	-0.011	0.007	0.130
Frequency of PBI hearings	-0.294	0.381	0.442
Ever involved in Use of Force incident	-0.028	0.009	0.002**
Frequency of Use of Force incidents	-0.741	0.304	0.016*
Unjustified use of force	-2.543	0.965	0.009**

*p<.05 **p<.01

⁴ Each line in the table was run as a separate regression model which included controls, but since they had no significant effects, were not listed in the table for the sake of brevity.

More cynical officers were also highly significantly more likely to be the subject of an Internal Affairs Division investigation, and to be involved in a use of force incident. The relationship between cynicism towards the organization and unjustified use of force was of a much higher magnitude than the other behavioral outcomes, with more cynical officers being more likely to have a use of force incident found to be unjustified, and this relationship was highly significant.

5.6 Impact of cynicism toward dedication toward duty on individual officer behavior

There were no significant relationships between an officer's behavioral outcomes and cynicism towards dedication to duty (Table 5.11).

Table 5.11. Impact of cynicism toward dedication to duty on individual officer's behavior⁵

	<i>Coef.</i>	<i>Std. Err.</i>	<i>P> t </i>
Ever subject of a formal citizen complaint	-0.010	0.009	0.230
Frequency of formal citizen complaints	-0.043	0.096	0.649
Official measure of formal citizen complaints	-0.002	0.008	0.771
Number of formal citizen complaints	0.014	0.026	0.590
Ever subject of a formal complaint by another officer	-0.002	0.003	0.594
Frequency of complaints by other officers	-0.257	0.162	0.134
Official measure of formal officer complaints	-0.005	0.002	0.054
Official number of officer complaints	-0.005	0.003	0.134
Ever charged with a violation of disciplinary code	-0.011	0.007	0.151
Frequency of disciplinary code violations	-0.061	0.053	0.247
Official measure of disciplinary code violations	0.002	0.008	0.721
Official number of disciplinary code violations	-0.012	0.019	0.532
Ever charged with conduct unbecoming	0.000	0.004	0.881
Official measure conduct unbecoming	0.000	0.003	0.832
Ever charged with intoxication	-	-	-
Official measure intoxication	-	-	-
Ever charged with insubordination	-0.001	0.001	0.547
Official measure insubordination	-0.000	0.001	0.534
Ever charged with neglect of duty	-0.004	0.006	0.502
Official measure neglect of duty	0.000	0.007	0.933
Ever charged with disobedience of order	0.000	0.002	0.877
Official measure disobedience of order	0.002	0.002	0.321
Known if they were subject of IAD investigation	0.004	0.008	0.634
Frequency of known IAD investigations	0.061	0.061	0.320
Official measure IAD investigation	0.003	0.007	0.592
Official frequency of IAD investigations	0.002	0.012	0.829
Ever had a PBI hearing	-0.006	0.007	0.358
Frequency of PBI hearings	-0.066	0.339	0.844
Ever involved in Use of Force incident	-0.005	0.008	0.546
Frequency of Use of Force incidents	0.036	0.301	0.904
Unjustified use of force	-0.403	0.880	0.647

*p<.05 **p<.01

⁵ Each line in the table was run as a separate regression model which included controls, but since they had no significant effects, were not listed in the table for the sake of brevity.

5.7 Impact of cynicism toward social solidarity on individual officer behavior

Cynicism towards social solidarity had significant relationships with four behavioral outcomes (Table 5.12). Officers with lower cynicism levels had a higher likelihood of being the subject of a complaint by another officer, while higher levels of cynicism towards social solidarity had a significant relationship with violation of the disciplinary code. Finally, officers with more cynicism towards social solidarity did not have a significant relationship with whether or not they ever were the subject of an Internal Affairs Division Investigation, but of those that had been, cynicism towards social solidarity had an inverse relationship with the frequency of Internal Affairs investigations.

Table 5.12. Impact of cynicism toward social solidarity on individual officer's behavior⁶

	<i>Coef.</i>	<i>Std. Err.</i>	<i>P> t </i>
Ever subject of a formal citizen complaint	-0.016	0.010	0.117
Frequency of formal citizen complaints	-0.097	0.107	0.363
Official measure of formal citizen complaints	-0.008	0.009	0.407
Number of formal citizen complaints	-0.038	0.030	0.209
Ever subject of a formal complaint by another officer	0.013	0.004	0.003**
Frequency of complaints by other officers	-0.112	0.307	0.719
Official measure of formal officer complaints	0.000	0.003	0.821
Official number of officer complaints	-0.000	0.003	0.541
Ever charged with a violation of disciplinary code	-0.001	0.009	0.847
Frequency of disciplinary code violations	-0.022	0.061	0.720
Official measure of disciplinary code violations	-0.020	0.009	0.033*
Official number of disciplinary code violations	-0.050	0.021	0.023*
Ever charged with conduct unbecoming	-0.003	0.004	0.396
Official measure conduct unbecoming	-0.008	0.004	0.041*
Ever charged with intoxication	-	-	-
Official measure intoxication	-	-	-
Ever charged with insubordination	-0.003	0.002	0.090
Official measure insubordination	-0.000	0.001	0.878
Ever charged with neglect of duty	0.012	0.007	0.087
Official measure neglect of duty	-0.011	0.009	0.212
Ever charged with disobedience of order	-0.005	0.003	0.112
Official measure disobedience of order	-0.000	0.003	0.848
Known if they were subject of IAD investigation	-0.011	0.010	0.258
Frequency of known IAD investigations	-0.012	0.066	0.852
Official measure IAD investigation	-0.012	0.008	0.112
Official frequency of IAD investigations	-0.029	0.013	0.033*
Ever had a PBI hearing	-0.013	0.008	0.101
Frequency of PBI hearings	-0.415	0.378	0.276
Ever involved in Use of Force incident	-0.003	0.009	0.731
Frequency of Use of Force incidents	0.030	0.335	0.928
Unjustified use of force	0.793	1.001	0.429

*p<.05 **p<.01

⁶ Each line in the table was run as a separate regression model which included controls, but since they had no significant effects, were not listed in the table for the sake of brevity.

5.8 Impact of cynicism toward police training and education on individual officer behavior

Cynicism towards police training and behavior had no significant relationship to individual officer behavioral outcomes (Table 5.13).

Table 5.13. Impact of cynicism toward police training and education on individual officer's behavior⁷

	<i>Coef.</i>	<i>Std. Err.</i>	<i>P> t </i>
Ever subject of a formal citizen complaint	-0.011	0.013	0.420
Frequency of formal citizen complaints	-0.151	0.155	0.330
Official measure of formal citizen complaints	0.004	0.013	0.736
Number of formal citizen complaints	-0.012	0.041	0.758
Ever subject of a formal complaint by another officer	0.002	0.006	0.637
Frequency of complaints by other officers	0.520	0.389	0.200
Official measure of formal officer complaints	-0.001	0.004	0.782
Official number of officer complaints	-0.003	0.005	0.549
Ever charged with a violation of disciplinary code	-0.007	0.012	0.527
Frequency of disciplinary code violations	0.060	0.086	0.491
Official measure of disciplinary code violations	-0.107	0.012	0.406
Official number of disciplinary code violations	-0.024	0.029	0.404
Ever charged with conduct unbecoming	-0.006	0.006	0.281
Official measure conduct unbecoming	-0.004	0.005	0.450
Ever charged with intoxication	-	-	-
Official measure intoxication	-	-	-
Ever charged with insubordination	-0.000	0.002	0.928
Official measure insubordination	-0.002	.001	0.219
Ever charged with neglect of duty	-0.003	0.009	0.713
Official measure neglect of duty	-0.005	0.012	0.671
Ever charged with disobedience of order	-0.005	0.004	0.196
Official measure disobedience of order	-0.002	0.004	0.568
Known if they were subject of IAD investigation	0.005	0.013	0.703
Frequency of known IAD investigations	-0.002	0.100	0.981
Official measure IAD investigation	-0.007	0.010	0.508
Official frequency of IAD investigations	-0.022	0.018	0.228
Ever had a PBI hearing	0.002	0.010	0.834
Frequency of PBI hearings	0.848	0.522	0.108
Ever involved in Use of Force incident	0.012	0.012	0.339
Frequency of Use of Force incidents	0.680	0.537	0.208
Unjustified use of force	0.999	1.357	0.462

*p<.05 **p<.01

⁷ Each line in the table was run as a separate regression model which included controls, but since they had no significant effects, were not listed in the table for the sake of brevity.

5.9 Impact of cynicism and control-balance on officer behavior.

Cynicism is significantly related to both whether an officer was the subject of a formal citizen complain as well as the frequency of formal citizen complaints, with the data indicating that more cynical officers are more likely to have been subject to citizen complaints as well and more frequently the subject of citizen complaints (Table 5.14). The data suggest that officers with a lower control-balance score, or a control surplus, would be more likely to and more frequently be the subject of a citizen complaint, however this relationship was not significant.

Table 5.14. Impact of cynicism and control-balance on formal citizen complaints

	Self-Reported			Official Measure		
	Coef.	SE	p> t	Coef.	SE	p> t
<i>Ever the subject of a formal citizen complaint</i>						
Total Cynicism Score	-0.014	0.003	0.000**	-0.006	0.003	0.024*
Control-balance Score	-0.007	0.004	0.112	-0.006	0.004	0.183
<i>Frequency of formal citizen complaints</i>						
Total Cynicism Score	-0.074	0.035	0.045*	-0.021	0.009	0.021*
Control-balance	-0.023	0.053	0.662	-0.022	0.014	0.114

*p<.05 **p<.01

When cynicism was divided into Regoli's (1976) subscales, the only significant relationships found for the officer being the subject of a formal citizen complaint were with cynicism toward the organization and cynicism toward social solidarity, both with negative coefficients indicating that officers with a higher level of both types of cynicism were more likely to be the subject of a citizen complaint (Table 5.15).

Table 5.15. Impact of Regoli's dimensions of cynicism and control-balance on formal citizen complaints

	Self-Reported			Official Measure		
	Coef.	SE	p> t	Coef.	SE	p> t
<i>Ever the subject of a formal citizen complaint</i>						
Cynicism toward the public	0.006	0.012	0.580	0.015	0.011	0.197
Cynicism toward the organization	-0.023	0.010	0.021*	-0.022	0.010	0.023*
Cynicism toward dedication to duty	-0.008	0.009	0.340	-0.001	0.009	0.859
Cynicism toward social solidarity	-0.022	0.010	0.039*	-0.009	0.010	0.355
Cynicism toward police training and education	-0.009	0.014	0.484	0.002	0.013	0.862
Control-balance Score	-0.006	0.004	0.155	-0.005	0.004	0.247
<i>Frequency of formal citizen complaints</i>						
Cynicism toward the public	0.125	0.131	0.343	0.021	0.036	0.561
Cynicism toward the organization	-0.183	0.105	0.083	-0.077	0.030	0.013*
Cynicism toward dedication to duty	-0.016	0.100	0.873	0.028	0.028	0.313
Cynicism toward social solidarity	-0.106	0.112	0.347	-0.035	0.032	0.266
Cynicism toward police training and education	-0.182	0.163	0.265	-0.015	0.042	0.711
Control-balance Score	-0.018	0.053	0.736	-0.022	0.014	0.111

*p<.05 **p<.01

There was no significant relationship found between cynicism, control-balance, and the likelihood of being the subject of a formal complaint by another officer, however those that were the subject of a formal complaint by another officer had a higher likelihood for multiple complaints if they themselves had a lower control-balance score (Table 5.16).

Table 5.16. Impact of cynicism and control-balance on formal complaints by another officer

	Self-Reported			Official Measure		
	Coef.	SE	p> t	Coef.	SE	p> t
<i>Ever the subject of a formal complaint by another officer</i>						
Total Cynicism Score	0.001	0.001	-0.346	-0.001	0.001	0.068
Control-balance Score	-0.002	0.002	0.203	0.001	0.001	0.229
<i>Frequency of formal complaints by another officer</i>						
Total Cynicism Score	0.005	0.014	0.715	-0.002	0.001	0.045*
Control-balance	-0.048	0.018	0.017*	0.002	0.001	0.175

*p<.05 **p<.01

Cynicism toward social solidarity had a small but significant relationship with the likelihood of being the subject of a formal complaint by another officer, as did cynicism toward dedication to duty (Table 5.17). Control-balance did not have a significant relationship with whether an officer was ever the subject of a formal complaint by another officer, but it did with the frequency, with officers with a lower control-balance score having a higher likelihood of frequent formal complaints by other officers, this relationship being highly significant.

Table 5.17. Impact of Regoli's dimensions of cynicism and control-balance on formal complaints by other officers

	Self-Reported			Official Measure		
	Coef.	SE	p> t	Coef.	SE	p> t
<i>Ever the subject of a formal complaint by another officer</i>						
Cynicism toward the public	0.001	0.005	0.830	0.002	0.003	0.546
Cynicism toward the organization	-0.006	0.004	0.159	-0.002	0.003	0.457
Cynicism toward dedication to duty	-0.001	0.004	0.755	-0.006	0.003	0.025*
Cynicism toward social solidarity	0.014	0.004	0.004**	0.000	0.003	0.840
Cynicism toward police training and education	0.002	0.006	0.685	-0.001	0.004	0.721
Control-balance Score	-0.001	0.002	0.375	0.002	0.001	0.116
<i>Frequency of formal complaints by another officer</i>						
Cynicism toward the public	-0.056	0.054	0.314	0.002	0.004	0.677
Cynicism toward the organization	0.057	0.035	0.124	-0.003	0.004	0.441
Cynicism toward dedication to duty	-0.040	0.027	0.162	-0.006	0.003	0.066
Cynicism toward social solidarity	0.066	0.053	0.233	-0.000	0.004	0.923
Cynicism toward police training and education	0.005	0.072	0.945	-0.003	0.005	0.497
Control-balance Score	-0.054	0.018	0.010**	0.003	0.001	0.107

*p<.05 **p<.01

Cynicism and control-balance had a significant relationship with whether an officer was charged with any violation of the disciplinary code (Table 5.18). Officers with lower cynicism scores (indicating higher cynicism) as well as lower control-balance scores were more likely to have been charged with any violation of the disciplinary code. However, when cynicism is divided into Regoli's (1976) subscales, there is not a significant relationship with any dimension of cynicism and disciplinary code violation, except for cynicism toward social solidarity, when considering the official measure of disciplinary violation (Table 5.19). However, control-balance did have a significant relationship with both the likelihood of disciplinary code violation and the frequency of disciplinary code violation, with lower control-balance scores being indicative of a higher likelihood of disciplinary code violation.

Table 5.18. Impact of cynicism and control-balance on disciplinary code violation charges

	Self-Reported			Official Measure		
	Coef.	Std. Err.	p> t	Coef.	Std. Err.	p> t
<i>Ever charged with a disciplinary code violation</i>						
Total Cynicism Score	-0.005	0.002	0.032*	-0.005	0.002	0.090
Control-balance Score	-0.011	0.003	0.004**	-0.004	0.004	0.354
<i>Frequency of disciplinary code violation charges</i>						
Total Cynicism Score	-0.007	0.013	0.589	-0.014	0.006	0.029*
Control-balance	-0.052	0.020	0.011*	-0.009	0.009	0.348

*p<.05 **p<.01

Table 5.19. Impact of Regoli's dimensions of cynicism and control-balance on disciplinary code violation charges

	Self-Reported			Official Measure		
	Coef.	SE	p> t	Coef.	SE.	p> t
<i>Ever charged with a disciplinary code violation</i>						
Cynicism toward the public	0.010	0.010	0.308	0.019	0.011	0.089
Cynicism toward the organization	-0.016	0.008	0.068	-0.013	0.009	0.153
Cynicism toward dedication to duty	-0.007	0.008	0.383	0.006	0.008	0.473
Cynicism toward social solidarity	-0.003	0.009	0.747	-0.022	0.010	0.024*
Cynicism toward police training and education	-0.001	0.012	0.892	-0.006	0.013	0.613
Control-balance Score	-0.009	0.004	0.018*	-0.004	0.004	0.325
<i>Frequency of disciplinary code violation charges</i>						
Cynicism toward the public	0.041	0.058	0.477	0.021	0.026	0.421
Cynicism toward the organization	-0.041	0.045	0.362	-0.017	0.022	0.422
Cynicism toward dedication to duty	0.016	0.041	0.685	-0.007	0.019	0.723
Cynicism toward social solidarity	-0.025	0.047	0.597	-0.044	0.022	0.053
Cynicism toward police training and education	-0.035	0.064	0.584	-0.021	0.030	0.484
Control-balance Score	-0.054	0.021	0.012*	-0.009	0.010	0.359

*p<.05 **p<.01

Disciplinary code violation could be further specified to the type of disciplinary code violation, including conduct unbecoming, intoxication, insubordination, neglect of duty, and disobedience of orders. Cynicism and control-balance did not have a significant impact on conduct unbecoming charges (Table 5.20), but when cynicism was further divided into Regoli's (1976) subscales cynicism toward social solidarity had a small but significant inverse relationship with conduct unbecoming charges when looking at the official record (Table 5.21).

Table 5.20. Impact of cynicism and control-balance on conduct unbecoming charges

	Self-Reported			Official Measure		
	Coef.	SE	p> t	Coef.	SE	p> t
<i>Ever charged with conduct unbecoming</i>						
Total Cynicism Score	-0.002	0.001	0.078	-0.001	0.001	0.130
Control-balance Score	-0.002	0.002	0.319	0.001	0.001	0.565

*p<.05 **p<.01

Table 5.21. Impact of Regoli's dimensions of cynicism and control-balance on conduct unbecoming charges

	Self-Reported			Official Measure		
	Coef.	SE	p> t	Coef.	SE	p> t
<i>Ever charged with conduct unbecoming</i>						
Cynicism toward the public	0.002	0.005	0.596	-0.001	0.005	0.748
Cynicism toward the organization	-0.006	0.004	0.153	0.001	0.004	0.731
Cynicism toward dedication to duty	0.002	0.004	0.586	0.001	0.003	0.759
Cynicism toward social solidarity	-0.004	0.004	0.380	-0.009	0.004	0.036*
Cynicism toward police training and education	-0.005	0.006	0.383	-0.003	0.005	0.550
Control-balance Score	-0.002	0.002	0.300	0.000	0.001	0.769

*p<.05 **p<.01

No officers reported they had been charged with intoxication, nor were any officially recorded as having intoxication charges against them (Table 5.22, 5.23).

Table 5.22. Impact of cynicism and control-balance on intoxication charges

	Self-Reported			Official Measure		
	Coef.	SE	p> t	Coef.	SE	p> t
<i>Ever charged with intoxication</i>						
Total Cynicism Score	-	-	-	-	-	-
Control-balance Score	-	-	-	-	-	-

*p<.05 **p<.01

Table 5.23. Impact of Regoli's dimensions of cynicism and control-balance on intoxication charges

	Self-Reported			Official Measure		
	Coef.	SE	p> t	Coef.	SE	p> t
<i>Ever charged with intoxication</i>						
Cynicism toward the public	-	-	-	-	-	-
Cynicism toward the organization	-	-	-	-	-	-
Cynicism toward dedication to duty	-	-	-	-	-	-
Cynicism toward social solidarity	-	-	-	-	-	-
Cynicism toward police training and education	-	-	-	-	-	-
Control-balance Score	-	-	-	-	-	-

*p<.05 **p<.01

Cynicism had an inverse relationship with the likelihood of insubordination charges, with more cynical officers being significantly more likely to be charged with insubordination (Table 5.23). However, this was not found to be significant when cynicism was divided into Regoli's (1976) dimensions (Table 5.24).

	Self-Reported			Official Measure		
	Coef.	SE	p> t	Coef.	SE	p> t
<i>Ever charged with insubordination</i>						
Total Cynicism Score	-0.0007	0.0005	0.234	-0.0010	0.0004	0.013*
Control-balance Score	-0.0005	0.0008	0.534	-0.0001	0.0006	0.789

*p<.05 **p<.01

	Self-Reported			Official Measure		
	Coef.	SE	p> t	Coef.	SE	p> t
<i>Ever charged with insubordination</i>						
Cynicism toward the public	0.001	0.002	0.596	-0.000	0.001	0.672
Cynicism toward the organization	-0.001	0.001	0.499	-0.001	0.001	0.242
Cynicism toward dedication to duty	-0.000	0.001	0.790	-0.000	0.001	0.582
Cynicism toward social solidarity	0.002	0.002	0.214	-0.000	0.001	0.886
Cynicism toward police training and education	0.001	0.002	0.613	-0.002	0.001	0.221
Control-balance Score	-0.000	0.000	0.612	-0.000	0.000	0.752

*p<.05 **p<.01

Likewise, total cynicism and dimensions of cynicism did not have a significant impact on the likelihood of neglect of duty charges (Table 5.25), but control-balance did for self-reported neglect of duty, with a lower control-balance score, indicating a control surplus, being significantly related to the likelihood of neglect of duty charges (Table 5.26).

	Self-Reported			Official Measure		
	Coef.	SE	p> t	Coef.	SE	p> t
<i>Ever charged with neglect of duty</i>						
Total Cynicism Score	-0.000	0.002	0.809	-0.003	0.002	0.203
Control-balance Score	-0.007	0.003	0.020*	-0.004	0.004	0.267

*p<.05 **p<.01

	Self-Reported			Official Measure		
	Coef.	SE	p> t	Coef.	SE	p> t
<i>Ever charged with neglect of duty</i>						
Cynicism toward the public	0.004	0.008	0.639	0.020	0.010	0.060
Cynicism toward the organization	-0.010	0.007	0.148	-0.014	0.009	0.110
Cynicism toward dedication to duty	-0.002	0.006	0.663	0.001	0.008	0.897
Cynicism toward social solidarity	0.010	0.007	0.190	-0.013	0.009	0.169
Cynicism toward police training and education	-0.000	0.010	0.955	-0.001	0.012	0.887
Control-balance Score	-0.006	0.003	0.072	-0.004	0.004	0.332

*p<.05 **p<.01

Total cynicism and control-balance did not have a significant impact on disobedience of orders charges (Table 5.27), however cynicism toward the public had a positive, significant effect on disobedience of orders, indicating that less cynical officers were more likely to disobey orders (Table 5.28).

	Self-Reported			Official Measure		
	Coef.	SE	p> t	Coef.	SE	p> t
<i>Ever charged with disobedience of orders</i>						
Total Cynicism Score	-0.001	0.001	0.130	-0.000	0.000	0.443
Control-balance Score	0.000	0.001	0.921	0.001	0.001	0.373

*p<.05 **p<.01

	Self-Reported			Official Measure		
	Coef.	SE	p> t	Coef.	SE	p> t
<i>Ever</i>						
Cynicism toward the public	0.008	0.004	0.039*	0.000	0.003	0.801
Cynicism toward the organization	-0.003	0.003	0.310	-0.002	0.003	0.354
Cynicism toward dedication to duty	0.000	0.003	0.947	0.002	0.002	0.451
Cynicism toward social solidarity	-0.006	0.003	0.102	-0.000	0.003	0.859
Cynicism toward police training and education	-0.006	0.004	0.214	-0.002	0.004	0.541
Control-balance Score	0.000	0.001	0.869	0.001	0.001	0.451

*p<.05 **p<.01

Total cynicism had a significant impact on whether an officer was the subject of an Internal Affairs Division investigation, both known to the officer/self-reported and the official record, with more cynical officers being more likely to be the subject of an Internal Affairs Division investigation (Table 5.29). Cynicism was significant as well for the frequency of Internal Affairs Division investigations, but only for the official recorded measure of frequency.

Table 5.30. Impact of cynicism and control-balance on Internal Affairs Division investigation

	Self-Reported			Official Measure		
	Coef.	SE	p> t	Coef.	SE	p> t
<i>Ever the subject of an IAD investigation</i>						
Total Cynicism Score	-0.010	0.003	0.001**	-0.006	0.002	0.010**
Control-balance Score	-0.004	0.004	0.310	-0.001	0.003	0.588
<i>Frequency of IAD investigations</i>						
Total Cynicism Score	-0.026	0.021	0.215	-0.012	0.004	0.003**
Control-balance	-0.035	0.030	0.246	-0.004	0.006	0.509

*p<.05 **p<.01

Broken down into dimensions, only cynicism toward the organization had an impact on whether or not the officer was ever the subject of an Internal Affairs Division investigation (Table 5.30). In addition to cynicism toward the organization, cynicism toward social solidarity was significant concerning the frequency of Internal Affairs Division investigations. Control-balance was not significant for either.

Table 5.31. Impact of Regoli’s dimensions of cynicism and control-balance on Internal Affairs Division investigation

	Self-Reported			Official Measure		
	Coef.	SE	p> t	Coef.	SE	p> t
<i>Ever the subject of an IAD investigation</i>						
Cynicism toward the public	0.018	0.011	0.115	-0.011	0.009	0.226
Cynicism toward the organization	-0.034	0.010	0.001**	-0.008	0.008	0.265
Cynicism toward dedication to duty	0.004	0.009	0.647	0.009	0.007	0.213
Cynicism toward social solidarity	-0.016	0.010	0.122	-0.010	0.008	0.196
Cynicism toward police training and education	0.008	0.013	0.561	-0.010	0.011	0.338
Control-balance Score	-0.004	0.004	0.369	-0.003	0.003	0.357
<i>Frequency of IAD investigations</i>						
Cynicism toward the public	-0.020	0.078	0.790	-0.006	0.017	0.698
Cynicism toward the organization	-0.154	0.064	0.018*	-0.013	0.014	0.329
Cynicism toward dedication to duty	0.095	0.059	0.111	0.009	0.012	0.456
Cynicism toward social solidarity	-0.006	0.064	0.917	-0.030	0.014	0.041*
Cynicism toward police training and education	-0.035	0.031	0.268	-0.025	0.019	0.198
Control-balance Score	-0.035	0.031	0.268	-0.006	0.006	0.349

*p<.05 **p<.01

Cynicism was significant to the likelihood of having a hearing before the Police Board of Inquiry, but only total cynicism (Table 5.31, 5.32). The negative coefficient indicates that more cynical officers were more likely to have hearings with before the Police Board of Inquiry. Control-balance did not have a significant relationship with Police Board of Inquiry hearings.

Table 5.32. Impact of cynicism and control-balance on hearings before the Police Board of Inquiry

	Coef.	SE	p> t
<i>Ever had a PBI hearing</i>			
Total Cynicism Score	-0.005	0.002	0.017*
Control-balance Score	-0.002	0.003	0.436
<i>Frequency of PBI meetings</i>			
Total Cynicism Score	-0.011	0.008	0.201
Control-balance	0.003	0.013	0.796

*p<.05 **p<.01

Table 5.33. Impact of Regoli’s dimensions of cynicism and control-balance on hearings before the Police Board of Inquiry

	Self-Reported		
	Coef.	SE	p> t
<i>Ever had a PBI hearing</i>			
Cynicism toward the public	0.004	0.009	0.603
Cynicism toward the organization	-0.008	0.008	0.284
Cynicism toward dedication to duty	-0.007	0.007	0.324
Cynicism toward social solidarity	-0.012	0.008	0.136
Cynicism toward police training and education	0.005	0.011	0.619
Control-balance Score	-0.003	0.003	0.370
<i>Frequency of PBI hearings</i>			
Cynicism toward the public	0.167	0.451	0.711
Cynicism toward the organization	-0.097	0.414	0.814
Cynicism toward dedication to duty	0.102	0.373	0.784
Cynicism toward social solidarity	-0.519	0.400	0.198
Cynicism toward police training and education	0.904	0.553	0.107
Control-balance Score	-0.303	0.190	0.115

*p<.05 **p<.01

Cynicism and control-balance were both highly significant for the likelihood of being involved in a Use of Force incident, with more cynical officers with lower control-balance scores, or a control surplus, being more likely to have ever been involved in a Use of Force incident (Table 5.33). The frequency of involvement in a Use of Force incident was not significantly impacted by cynicism or control-balance.

Specifically, officers who experienced higher levels of cynicism toward the organization had a highly significant likelihood of being involved in a Use of Force incident, as well as more frequent use of force incidents (Table 5.34). Lower control-balance scores were significantly related to involvement in use of force incidents, but not the frequency of involvement.

Table 5.34. Impact of cynicism and control-balance on involvement in Use of Force incidents

	Coef.	SE	p> t
<i>Ever involved in a UoF incident</i>			
Total Cynicism Score	-0.01	0.002	0.001**
Control-balance Score	-0.009	0.004	0.028*
<i>Frequency of involvement in UoF incidents</i>			
Total Cynicism Score	-0.162	0.102	0.117
Control-balance	-0.105	0.169	0.535

*p<.05 **p<.01

Table 5.35. Impact of Regoli's dimensions of cynicism and control-balance on involvement in Use of Force Incidents

	Coef.	SE	p> t
<i>Ever involved in UoF incident</i>			
Cynicism toward the public	-0.009	0.011	0.406
Cynicism toward the organization	-0.025	0.009	0.010**
Cynicism toward dedication to duty	-0.001	0.008	0.833
Cynicism toward social solidarity	-0.006	0.010	0.544
Cynicism toward police training and education	0.007	0.013	0.589
Control-balance Score	-0.008	0.004	0.043*
<i>Frequency of involvement in UoF incidents</i>			
Cynicism toward the public	0.261	0.379	0.491
Cynicism toward the organization	-0.719	0.311	0.023*
Cynicism toward dedication to duty	0.066	0.314	0.834
Cynicism toward social solidarity	0.031	0.345	0.928
Cynicism toward police training and education	0.709	0.547	0.198
Control-balance Score	-0.073	0.182	0.690

*p<.05 **p<.01

Whether or not the use of force by an officer was unjustified was impacted by the officer's control-balance score, with a lower control-balance score being highly significantly related to being involved in an unjustified use of force incident (Table 4.35). The negative coefficient indicates that officers with a control surplus are more likely to be involved in an unjustified use of force incident.

	Coef.	SE	p> t
<i>Ever involved in an unjustified UoF incident</i>			
Total Cynicism Score	-0.188	0.310	0.543
Control-balance Score	-1.11	0.458	0.015*

*p<.05 **p<.01

While total cynicism does not have a significant impact on unjustified use of force, cynicism toward the organization has an inverse relationship with unjustified use of force, with more cynical officers being significantly more likely to be involved in an unjustified use of force incident (Table 5.36).

	Coef.	SE	p> t
<i>Ever involved in unjustified UoF incident</i>			
Cynicism toward the public	1.363	1.210	0.267
Cynicism toward the organization	-2.126	1.01	0.037*
Cynicism toward dedication to duty	0.050	0.918	0.956
Cynicism toward social solidarity	0.281	1.054	0.790
Cynicism toward police training and education	1.166	1.400	0.405
Control-balance Score	-1.024	0.466	0.029

*p<.05 **p<.01

CHAPTER 6

DISCUSSION, LIMITATIONS, AND IMPLICATIONS FOR FUTURE RESEARCH

6.1 Discussion

The purpose of this work was to expand control-balance theory by examining the impact of cynicism on police misconduct behavior. The primary finding is that there is indeed a relationship between control-balance and cynicism, this relationship being significant and positive, and can be interpreted to mean that officers with control deficits are more likely to report less cynical attitudes, and officers with control surpluses are more likely to report more cynical attitudes. This seems contrary to expectation, that feeling less control would lead to higher cynicism, however the influence of age, rank, and years of service must be recognized. Logically, we should find that officers with a higher rank and more years of service are more likely to have control surpluses, as they exert more control than they experience, and age correlates strongly with both variables. However, for the present study, there were not enough officers ranks above patrol to find a meaningful relationship. Additionally, extant research on police cynicism indicates that officers with fewer years of service are less cynical than those with a longer tenure, giving credence to the finding that officers who exert less control over their environment than they experience report lower levels of cynicism (Burke & Mikkelsen, 2005).

The implication of this finding is that one could potentially use an officer's control-balance score to predict how cynical he or she might feel. This is imperative to consider as cynicism is thought to stem from organizational anomie, which in turn results from a conflict between organizational values imparted by the department (which manifest as control) and the personal values of the individual officer. Now, this can be difficult to measure since both

control-balance and cynicism are perceptual concepts and as such might vary between individuals, so the next step in this work was to determine whether we can use an officer's demographic information to predict their control-balance score, and subsequently their cynicism. However, there was no significant relationship between demographic variables like age, race, or sex and control-balance, meaning we cannot predict an individual's control-balance score with just that. There was also no significant relationship between sex or race and cynicism. However, there was a strong significant relationship between cynicism, control-balance, years of service, and rank, which was expected based on the cynicism literature. Essentially, officers with higher rank and a shorter tenure with the police department, who had a control deficit, are less likely to report cynical attitudes. Conversely, officers with a lower rank and longer tenure, who had a control surplus, were more likely to report high levels of cynicism. Considering this along with the moderately strong correlation between years of service and rank, we can reasonably infer that longer tenure but lower rank indicates an officer has trouble promoting up, which can lead to cynical attitudes about the organization.

As the control variables (age, sex, race, years of service, and rank) did not have a significant relationship to cynicism, we can draw the conclusion that the influence of an individual officer's control-balance is strong enough to predict their potential cynical attitudes, especially when we consider cynicism as divided into different dimensions of policing. When cynicism was divided into Regoli's (1976) subscales, control-balance had a positive, significant effect on the cynicism measures for cynicism toward organizational functions, cynicism about police dedication to duty, and cynicism about police social solidarity, which can be interpreted to mean that officers with control deficits had lower levels of cynicism toward these aspects of

policing. Officers who reported higher levels of cynicism toward organizational functions were more likely to experience negative behavior outcomes, such as being the subject of a citizen complaint, being the subject of an Internal Affairs Division investigation, and are more like to be involved in a use of force incident, as well as having an unjustified use of force incident. Cynicism towards social solidarity had significant relationships with behavioral outcomes that were related to interpersonal relationships. Specifically, lower cynicism levels were significantly related to being the subject of a complaint by another officer, and higher cynical attitudes were positively related to violation of the disciplinary code and frequency of Internal Affairs Division investigations.

It was also necessary to examine the impact that control-balance had on an officer's behavior outcomes. Significant findings here were that officers with a control surplus were more likely to have ever been the subject of a formal citizen complaint, have more frequent citizen complaints, and be charged with any violation of the departmental disciplinary code, specifically neglect of duty. Additionally, officers with a control surplus, while they might not be significantly more likely to be involved in a use of force incident, it was significantly more likely that their use of force was found to be unjustified. This aligns theoretically with control-balance theory, as control surpluses are argued to influence the individual to engage in behavior that extend their control, such as an officer using force against a subject when it is not strictly necessary.

Finally, this research sought to determine the impact of both cynicism and control-balance on officer behavior outcomes. The regression models estimated mirrored those for control-balance alone and cynicism alone, and the inclusion of either one in the model did not

render the other insignificant if it had been significant previously. Control-balance and cynicism are positively correlated, and although this correlation is significant, it is fairly weak. Likewise, control-balance and cynicism did not have significant interaction effects, which indicates that while control-balance has a significant relationship with cynicism, and cynicism has a significant relationship with certain misconduct behaviors, control-balance and cynicism do not interact to impact the likelihood of misconduct variables together, contrary to the prediction that control-balance and cynicism would interact and lead to a higher likelihood of misconduct behavior.

6.2 Limitations

The data for this project were limited by two key aspects. First, the data was collected in 2000, making it 20 years old at time of use. In that time, attitudes and behaviors within the police department might have changed, and it is necessary to replicate the study on a more recent sample to examine whether the theoretical assumptions hold and are generalizable. Second, the data operationalizes misconduct as behaviors that the police department would know about and would include in the disciplinary code, and as such does not include behaviors not included within. It would be interesting to examine misconduct behaviors beyond disciplinary code violations, in order to assess whether the impact of job-related control-balance and cynicism towards policing can extend to determining the likelihood of deviant behaviors outside of the workplace. Additionally, these behaviors were categorized as whether or not the officer had ever been charged, which prevented analyzing whether they had engaged in the behavior but not been charged, and the frequency of charges did not have any sort of temporal clarification. For example, an officer who had three disciplinary charges over a thirty year career would be categorized in the same way as an officer who had three charges in one year.

Another limitation was the exclusion of certain demographic variables from the data, such as schooling, relationships with other people (outside of work), or housing type, which would have contributed to a more holistic measure of control-balance (see Piquero & Hickman, 1999) as well as allowed for examining these variables in the context of cynicism. For example, by including dimensions of control that encompass interpersonal relationships, such as friends, neighbors, and family, it is possible then examine if a control deficit outside of the work environment correlates with a desire for more control at work, or vice versa. This is an important avenue of research as the influence of factors external to the department might impact the officer's attitude and actions on the job. Recognizing the impact of such factors can allow departments to develop training to mitigate the influence of externalities that might be preventing an optimally effective police force.

6.3 Implications and next steps

Findings of this research can provide insight to the potential causes of police use of force and police misconduct behaviors. It is critical to understand why officers might experience cynical attitudes, and to implement ways to alleviate cynicism. This could entail developing mindfulness skills for officers, or implementing systems of communication between officers and command staff. Since we now understand that control-balance has a significant relationship with cynicism, and cynicism has a significant relationship with certain misconduct behaviors, the next step is to determine the extent of the relationship between control-balance and cynicism, and how this relationship can contribute to misconduct behavior. This can be achieved by expanding the initial questionnaire to include control-balance factors external to the officer's employment, such as housing status, educational achievement, and social relationships, in order to examine

potential sources of cynical attitudes that might impact on-the-job behavior despite having external origins. Looking at sources of control outside of the police organization that might impact an officer's attitude and behavior on the job is essential, as police are often the first point of contact between the public and the criminal justice system, and as such must represent a fair and just legal process.

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BIOGRAPHICAL SKETCH

Vrishali Kanvinde grew up in and graduated high school from Chagrin Falls High School in Chagrin Falls, Ohio. She completed a Bachelor of Arts in 2013 at the University of Oklahoma, studying criminology, psychology, and international security. She earned a Master of Science in Criminology from The University of Texas at Dallas in 2016, and continued on into the PhD program. Prior to become a teaching assistant within the criminology program, Vrishali was a research associate at the Caruth Police Institute, based out of Dallas Police Headquarters in Dallas, Texas. At The University of Texas at Dallas, Vrishali has taught police and society, criminal prosecution and the court process, and advanced criminal justice. Her research interests include criminological theory and policing.

CURRICULUM VITAE

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Education

- 2020 PhD, Criminology
The University of Texas at Dallas
Dissertation: Connecting Control Balance Theory and Police Cynicism: An Empirical Test
Nicole Leeper Piquero, PhD, Chair.
Bruce A. Jacobs, PhD; Alex R. Piquero, PhD; John L. Worrall, PhD
- 2016 Masters of Science, Criminology
The University of Texas at Dallas
Thesis: The Misuse of Prescription Medication among Undergraduate Students
Bruce A. Jacobs, PhD, Chair.
Tomislav Kovandzic, PhD; Nicole Leeper Piquero, PhD
- 2013 Bachelor of Arts, Sociology-Criminology major, Psychology and International Security Studies (Middle East) minors

Certificates

- In progress Online Teaching Certificate
Training in best practices for online and hybrid instructional techniques.
- 2020 Advanced Graduate Teaching Certificate
Program conducted by the Office of Graduate Studies to build on the Graduate Teaching Certificate to further develop teaching skills.
- 2019 Graduate Teaching Certificate
Program conducted by the Office of Graduate Studies for Teaching Assistants to improve instructional performance through the use of evidence-based best practices in education.
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Professional Experience

- 2019-present Graduate Teaching Assistant – Independent Instructor, Criminology, *The University of Texas at Dallas*
Youth Crime and Justice (Summer 2020)
Advanced Criminal Justice (Spring 2020)
Criminal Prosecution and Court Process (Fall 2019)
Police & Society (Summer 2019)
- 2018-2019 Graduate Teaching Assistant, Criminology, *The University of Texas at Dallas*
Introduction to Criminal Justice (Spring 2019)
Advanced Criminal Justice (Spring 2019)
Introduction to Terrorism (Fall 2018)
Crime and Civil Liberties (Fall 2018)
Criminal Prosecution and the Court Process (Spring 2018)

Introduction to Criminal Justice (Spring 2018)

- 2017 Research Associate, *Caruth Police Institute*
Police strategy and evidence-based crime prevention program evaluation
- 2015 Research Intern, *Caruth Police Institute*
Conducted phone interviews on citizen perception of body-worn cameras
- 2013 Undergraduate Research Assistant, Sociology-Criminology, *University of Oklahoma*
Conducted in-person qualitative interviews concerning student perceptions of race and inequity.

Research Interests

Criminological theory, policing, evidence-based crime prevention, public policy

Publications

Book Chapters

- Kanvinde, V.** (2019) Antiterrorism and Effective Death Penalty Act of 1996. In *American Prisons and Jails*. (Edited by Vidisha Barua Worley and Robert M. Worley) ABC-CLIO, Santa Barbara. Pp. 23-24
- Kanvinde, V.** (2019) Guantanamo Bay. In *American Prisons and Jails*. (Edited by Vidisha Barua Worley and Robert M. Worley) ABC-CLIO, Santa Barbara. pp. 252-255.
- Kanvinde, V.** (2019) Trends in the United States Mass Incarceration Rates. In *American Prisons and Jails*. (Edited by Vidisha Barua Worley and Robert M. Worley) ABC-CLIO, Santa Barbara. pp. 297-301.
- Piquero, N.L. & **Kanvinde, V.** (forthcoming) Dallas Police Officers Ambush (2016). In *Guns in American Society*. (Edited by Jaclyn Schildkraut) ABC-CLIO, Santa Barbara.

Piquero, N.L, **Kanvinde, V.**, & Sanders, W. (forthcoming) Factorial Surveys and Crime Vignettes. In *Cambridge Handbook of Compliance*. (Edited by Benjamin van Rooih & D. Daniel Sokol)

Conference Presentations

- 2020 (Cancelled due to COVID-19) Examining the impact of cynicism on police misconduct
Vrishali M. Kanvinde
Phishing on a college campus: Who's most likely to get hooked?
Vrishali M. Kanvinde, Whitney Sanders, Nicole Leeper Piquero, Scott Belshaw
American Society of Criminology Annual Meeting
Washington D.C.
- (Cancelled due to COVID-19) Factors Influencing the Duration of a Terry Stop and the Likelihood of Ensuing Arrest
Vrishali M. Kanvinde, Melissa Bailey Hayslip
Academy of Criminal Justice Sciences Annual Meeting
San Antonio, TX
- 2019 Testing Control Balance Theory in a Sample of Law Enforcement
Vrishali M. Kanvinde
American Society of Criminology Annual Meeting
San Francisco, CA
- 2019 Officer-Involved Shootings in a Historical Context
Vrishali M. Kanvinde, Melissa Bailey Hayslip
Academy of Criminal Justice Sciences Annual Meeting
Baltimore, MD
- 2018 A Visualization of Crime Pattern Theory

Vrishali M. Kanvinde, Luke A. Canfield

American Society of Criminology Annual Meeting

Atlanta, GA

Evaluation of the Dallas Police Department Field Training Officer Program

Vrishali M. Kanvinde

Academy of Criminal Justice Sciences Annual Meeting

New Orleans, LA

Under Review

Kanvinde, V. Examining the Relationship between Control Balance Theory and Police Cynicism

Current Projects

Kanvinde, V. & Bishopp, S.A. Influence of control-balance on police burnout

Kanvinde, V. Officer experience and likelihood of injury during a use of force encounter

Kanvinde, V. & Hayslip, M.B. Factors Influencing the Duration of a Terry Stop and the Likelihood of Ensuing Arrest

Kanvinde, V., & Hayslip, M.B. Examining the Influence of Years of Service on Outcomes in Officer-Involved Shooting Incidents

Kanvinde, V. & Canfield, L. A. A Visualization of Crime Pattern Theory

Kanvinde, V., Hayslip, M.B., & Bishopp, S.A. Police officer years of service and shooting outcomes

Kanvinde, V., Sanders, W., Piquero, N.L, Belshaw, S. Phishing on a college campus: Who's most likely to get hooked?

Kanvinde, V. Examining the Impact of Police Cynicism on Misconduct Behaviors

Professional Affiliations

American Society of Criminology – Student Member

Academy of Criminal Justice Sciences – Student Member

Service

2018-2019 Immediate Past President, UT Dallas Criminology Graduate Student Association

2017-2018 President, UT Dallas Criminology Graduate Student Association