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### A Multilevel Model of Police Corruption:

Anomie, Decoupling, and Moral Disengagement

by

Ruth Zschoche

A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy Department of Criminology College of Behavioral and Social Sciences University of South Florida

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Keywords: law enforcement, deviance, organizational, informal norms, susceptibility

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# List of Acronyms/Abbreviations

MSE Model	multilevel structural equation model
SEM	structural equation model
MLM	multilevel model
CFA	confirmatory factor analysis
PCA	principle components analysis
Between	between level, Level 2, department/cluster level of a multilevel analysis
Within	within level, Level 1, individual level of a multilevel analysis
ADN	acceptance of deviant norms instrument
ADN1	acceptance of deviant norms scenario 1 (kickbacks)
ADN2	acceptance of deviant norms scenario 2 (covering for fellow officer)
ADN3	acceptance of deviant norms scenario 3 (false reporting)
DEC	decoupling instrument
DDEC	dichotomous decoupling items
ANO	anomie as concept and instrument
MD	moral disengagement as concept and instrument
LLHO	loglikelihood HO value
RMSEA	root mean square error of approximation
CFI	comparative fit index
TLI	Tucker-Lewis index



WSRMR	standardized root mean square residual for the Within level
BSRSR	standardized root mean square residual for the Between level
ICC	intraclass correlation coefficient
CR	critical ratio test for significance



#### A Multilevel Model of Police Corruption: Anomie, Decoupling, and Moral Disengagement

#### Ruth Zschoche

#### ABSTRACT

Police corruption is a primary concern for law enforcement agencies. The purpose of this study was to identify factors that could predict the likelihood of police officer susceptibility to corruption. Data was collected through surveys of 1083 officers within eight U.S. police agencies that were participating in the National Police Research Platform funded by the National Institute of Justice. The data were analyzed using multilevel structural equation and base multilevel models.

The theoretical model for this study addressed susceptibility to corruption on both the departmental (clusters) and individual officer levels. Four main constructs were utilized in this study. Acceptance of deviant norms was the outcome variable operationalizing susceptibility to corruption. Anomie was a departmental predictor operationalizing expectations that socially accepted goals could not be accomplished through socially acceptable means. Decoupling was a departmental predictor measuring the extent to which departmental pragmatic goals were out of alignment with official ethical codes. Moral disengagement was the individual predictor operationalizing the ability to use cognitive mechanisms to excuse unethical decision-making.

Departments higher in anomie and decoupling were hypothesized to have higher acceptance of deviant norms that condone corruption. Officers with higher levels of moral disengagement were also expected to have a greater acceptance of deviant norms.



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The departmental environment was expected to have more influence than individual officer traits such that anomie and decoupling would moderate the effects of moral disengagement within departments.

The results demonstrated the promise of the multilevel theoretical model. Anomie was a strong predictor of acceptance of deviant norms. Moral disengagement was also a moderately strong predictor of acceptance of deviant norms in the base multilevel models. Anomie moderated the effect of moral disengagement to some degree, although it had no impact on the slope between acceptance of deviant norms and moral disengagement. Differences between departmental subgroups indicated how officer assignments and demographic characteristics may impact susceptibility to corruption.

Study limitations related primarily to the multilevel structural equation model, scale construction, and sampling. Limitations are addressed as regards their general relevance to theory and methodology. Implications of the results for policy and future research are discussed.



#### Chapter One

#### Introduction

Police corruption is a key concern for law enforcement agencies. It betrays public trust, reflecting, at best, a deviation from professional codes of conduct, and at worst, a violation of criminal law on the part of those who have sworn to uphold and enforce it. Corruption may involve expedient actions taken in pursuit of occupational goals or actions taken only for personal gain, and occurs both as an individual act and as an institutionalized form of deviance. It is thus necessary to explore the organizational and individual characteristics that may contribute to corrupt practices in police departments.

Prior research has taken different approaches to measuring and explaining police corruption. These works have focused on either the individual as the unit of analysis, with individual or environmental predictors; or on the organization as the unit of analysis, using organizational factors to explain incidence of corruption. Unlike past approaches, the current study integrates individual traits, environmental factors, and organizational factors in a multilevel model. This model seeks to explain corruption at both the individual and organizational levels. Corruption in this study is operationalized as the inclination to engage in corrupt behavior—or more specifically as the acceptance of deviant norms.

The current study tests a multilevel model of police deviance. This model will test whether and how organizational features may promote a criminogenic environment in departments as measured by acceptance of deviant norms outcomes. It will also test



how individual characteristics may determine an officer's level of susceptibility to a given department's criminogenic environment as measured by acceptance of deviant norms. Thus the organization influences the criminogenic environment, and the environment in turn influences individual characteristics. Based on concepts from anomie, moral disengagement, and organizational theories of deviance, it is hypothesized that agency "decoupling" produces organizational anomie that, in turn, increases the likelihood of susceptibility to corruption at both the individual and organizational levels. It is also hypothesized that likelihood of susceptibility to corruption at both the individual level is influenced by moral disengagement, the effect of which is, in turn, moderated by agency levels of anomie and decoupling. Support for these hypotheses and details of the current study are presented below.



Police Corruption: Challenges for Typologies, Data, and Control

Corruption is a key problem in law enforcement agencies because it erodes professional codes of conduct and betrays public trust. Corruption is considered a form of police deviance (Punch, 2000). Police deviance is a broad term, and encompasses a range of behaviors from acceptance of bribes to abuse of force to drinking on the job (Chappell & Piquero, 2004). Broadly speaking, police deviance can be defined by understanding the use of the word "deviance," which means an action that is in opposition to or not in keeping with the norm or the rule (Ericson, 2007). In the case of police behavior, this translates to behavior by a police officer that is in opposition to the accepted norms of departmental behavior, in breach of official policy guidelines, or a violation of the legal codes governing officer behavior.

In the literature, there is no one accepted definition of corruption. Punch (2000) categorized police corruption as one form of police deviance, along with two other forms: police misconduct and police crime. In his definition, police corruption was "taking something . . . against your duty, to do or not to do something, as an exchange for money or gifts from an external corruptor" (p. 302). He defined police misconduct as an action in violation of internal department rules, while police crime involves a violation of criminal law.

Roebuck and Barker (1974) defined police corruption as "any type of proscribed behavior engaged in by a law enforcement officer who receives or expects to receive, by virtue of his official position, an actual or potential unauthorized material reward or gain" (p. 424). Aultman (1976) defined it as "a mode of behavior that is chosen because it will



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lead to money or other personally desirable rewards and involves a misuse of the authority of a police officer's occupational role" (p. 323).

Ivkovich (2005) argued that what separated corruption from other forms of police deviance was that the primary motivator was "achievement of personal gain" (p. 547; see also Perez & Moore, 2002). She went on to define police corruption as "an action or omission, a promise of action or omission, or an attempt of action or omission, committed by a police officer or a group of police officers, characterized by the police officer's misuse of the official position motivated in significant part by the achievement of personal gain" (Ivkovich, 2005, p. 549). In this understanding, then, corrupt actions are in pursuit of anything considered personal gain, including occupational successes or monetary rewards. Punch (2000) refers to an additional form of corruption, "noble cause" corruption, in which expedient action is taken in pursuit of a socially or organizationally approved goal such as catching a criminal. In this case, the goal is official position (Punch, 2000). In such a case, then, this would not be personal gain but rather occupational or institutional gain.

Variations in definitions of corruption in the literature can also be found by examining the types of behaviors that have been categorized as corruption in various typologies. In police corruption typologies, behavior is often categorized for seriousness based on who is involved, norms or laws broken, peer support, how organized the behavior is, the reaction of the department (sanctions), and the underlying motivations of the actor (Barker & Roebuck, 1973). Corruption typologies tend to vary in their inclusion of overt forms of illegal conduct like theft or excessive force, less severe forms



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of misconduct like altering records, or unethical actions committed for the purpose of furthering an investigation or indicting a criminal (Ivkovic, 2005, p. 547). However, many behaviors that fall into the middle range of seriousness are included in most typologies.

Barker and Roebuck's (1973) typology is still the most widely cited in the literature after more than 30 years. Barker and Roebuck were incredibly thorough and used fairly broad categorizations. In defining police corruption, they included behaviors that reflected all ranges of seriousness. This included the less severe forms of corruption such as any corruption of authority, gratuities, or kickbacks. They also included the more serious forms of corruption, such as opportunistic theft, shakedowns, protecting illegal activities, fixing tickets, or direct criminal behavior. Their definition of the category of direct criminal behavior is actually broad enough to encompass excessive use of force.

Compiling both explicit definitions and the definitions implied by the Barker and Roebuck typology, the following is the definition to be used for the present study. It is meant to encompass noble cause corruption, but exclude excessive use of force. Excessive force is excluded because such behavior is not always committed in pursuit of a specific outcome with a definable gain or reward. Police corruption is thus defined as a behavior by a police officer, officers, or department in pursuit of a specific outcome that is desirable to the actor(s) and offers a definable gain or reward, whether tangible, such as money, or intangible, such as a sense of power. The behavior itself must be in context either ethically, professionally, or legally deviant and must constitute a misuse of authority.



#### Approaches to Explaining Police Corruption

There are several approaches for trying to predict, understand, or explain police corruption. These approaches differ on two main factors: units of analysis and predictors. Past explanatory models, some of which have been tested empirically, have considered either individuals or organizations/agencies to be the units of analysis. Predictors of corruption have varied based on the units of analysis considered. Models with individuals as the units of analysis have used or proposed predictors based on individual characteristics, predictors based on environmental factors, or a combination of both. Models with organizations as the unit of analysis have used or proposed organizational structure or other organizational characteristics as the predictors.

Environmental predictors and organizational predictors are similar concepts, but vary in definition based on the unit of analysis considered. Environmental factors are external pressures that are characteristic of a culture, agency, or group, having an impact on individuals operating within the given culture, agency, or group. Organizational characteristics are features of a company or agency or other structured entity, determining how the organization functions and behaves. Hiring, financial decisions, development of employee policies, mergers, and acquisitions are examples of organizational behaviors. These are all attributes and behaviors of the central and controlling infrastructure of the given organization. Although individuals comprise organizations, in the organizational approach they are considered secondary actors. The organizational approach is discussed in more detail below.

Using each of these units of analysis and predictors, the following example demonstrates how an organization and the individuals that comprise it may be considered



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unique but conjoined entities, and how organizational and environmental predictors may be linked, but distinct:

Organization X has a complex hierarchical structure (organizational predictor) that is believed to be the cause of recent low productivity rates (organizational outcome/unit of analysis). This structure is hypothesized to be causing poor communication between superiors and line-level workers (environmental predictor) creating dissatisfaction in the workers (individual outcome/unit of analysis). Personal dissatisfaction with the company (individual predictor) is proposed to be the cause of workers putting less effort into completing assignments on time (individual outcome/unit of analysis).

In this example, the organizational predictors impact organizational outcomes, but are also believed to create the environmental pressures that may predict individual behaviors.

Explanatory models of police corruption in the extant literature have tended to fall into one of four categories:

- Category 1: individual units of analysis with individual predictors only;
- Category 2: individual units of analysis with environmental predictors only;
- Category 3: individual units of analysis with both individual and environmental predictors; or
- Category 4: organizational units of analysis with organizational predictors.

The first three categories of models, with individual units of analysis, examine differences in the causes of corruption *within departments*, explaining individual



behavior. The fourth category, with organizational units of analysis, has the advantage of being able to compare causes of corruption *between departments*. In these models, the organization is the primary actor and organizational predictors can be evaluated as they vary across multiple agencies.

To explain the distinctions using common police corruption descriptors (Barker, 1977), models using individual units of analysis and only individual predictors (Category 1) can be considered "bad apple" approaches. They tend to focus on the individual defects of morality or personality as the source of the deviance. Until the last few decades, departments commonly relied on the assumption of a "bad apple" as the cause of internal problems and resolved matters by attempting to punish or remove them (Klockars, Ivcovich, Harver, & Haberfeld, 2000).

In the literature, this "bad apple" approach was replaced in popularity as early as the 1970's by the "bad barrel" approach, which focused on group causes, including peer pressure and subculture, instead of on individual causes (Barker, 1977). Studies/proposals with environmental predictors (Category 2) fall into the "bad barrel" approach. They provide environmental explanations for the deviance of officers within individual police departments. However, the "bad barrel" approach often ignores the distinctions between individuals in the same environment or "barrel." The studies/proposals in Category 3 that have both individual and environmental predictors try to address both the "bad barrel" and the "bad apples in the barrels," but all focus on single departments. They are not able to compare departmental factors between agencies.

Models in Category 4, with organizational units of analysis and organizational predictors, take neither "bad apple" nor "bad barrel" approaches. Instead, they consider



the "barrel" (the organization or environment itself) to be the primary unit of analysis, not the "apples." The goal is to measure organizational predictors that can distinguish between agencies on the outcome of organizational corruption.

Before moving on to examples, it is important to note that many of the authors of the explanatory models presented below propose strategies to predict corruption or prevent it, but only a few actually test their theories. These theoretical proposals and commentaries present valuable contributions to the conversation on police corruption and propose interesting ideas about the prediction and categorization of behavior; they do not provide empirical tests. There is a lack of studies that directly *test* causes of the incidence of corruption.

This lack of empirical testing is due in great part to the problems researchers face when attempting to measure corruption. Some researchers attempted to measure corruption directly, asking individuals or departments about corrupt behavior to determine incidence rates. Others measured corruption in departments using archival data, such as history of citizen complaints, legal cases, or public scandals. Still others attempted to derive a measure of corruption from questionnaires, soliciting police perceptions of departmental attitudes toward or responses to corrupt behavior. Incidence estimates based on attitudes are an indirect means of gauging the likelihood that corruption would be accepted and allowed to flourish in a department. Such methods have been adopted more recently in response to the inaccuracies associated with attempts to obtain direct rates of corrupt activities from departments or individuals (Klockars et al., 2000; see the discussion on organizational units of analysis).



Below are examples of each of the four categories of explanatory models attempting to understand or explain corruption: 1) individual units of analysis with individual predictors only, 2) individual units of analysis with environmental predictors only, 3) individual unit of analysis with both individual and environmental predictors, and 4) organizational units of analysis with organizational predictors. More detail is provided on the organizational approach, including the prime example of an attempt to more accurately gauge the incidence of corruption within an organizational unit of analysis using indirect measurement tools.

#### Individual Units of Analysis/Individual Predictors Only

Taking an approach using individual units of analysis and only individual predictors is rare in police corruption literature. One of the few examples is the model by Arrigo and Claussen (2003) who suggested the use of personality screening to predict job performance and susceptibility to police corruption, based on officer ability to cope with emotional and situational stressors. Arrigo and Claussen (2003) discussed the ability of the Inwald Personality Inventory and the Revised NEO Personality Inventory to test if antisocial behavioral tendencies and the trait of conscientiousness could be used to predict which officers might be more likely to commit police corruption. They posited links (a) between antisocial behavior and likelihood of engaging in illegal activities, and (b) between conscientiousness and positive/productive job performances and other occupational behaviors. While they did not empirically test their proposal, they made a strong theoretical argument for how this type of personality screening might prevent persons most likely to commit corrupt behaviors from being hired by police agencies.



#### Individual Units of Analysis/Environmental Predictors Only

The "bad apple" approach led departments to limit their response to corruption to the punishment of individuals caught breaking the rules. As a response to the limited nature of the assumptions underlying the "bad apple" approach, "bad barrel" approaches became quite popular in the literature. These explanatory models had individual units of analysis but measured or proposed measurement of environmental predictors instead of individual predictors. They focused on how the environment of a police department, its subculture, and peer influences may be responsible for individual officers engaging in corrupt activities.

In one of the earliest such works Aultman (1976) examined police corruption as a form of occupational deviance, using the theories of symbolic interactionism, role theory, and social learning theory. He proposed that anomie and subcultural pressures, such as the reinforcement of reference groups, could motivate officers to engage in corrupt behavior as part of an adaptive role. He proposed two paths to corruption (p. 327). In the first, police officers could have pressure from the informal subculture, learning roles from other officers and inappropriately expressing occupational authority though minor forms of corruption. In the second, they could be pressured by the anomie of the occupational environment, where financial rewards fell short of desired material gain. This would lead police officers to seek the illegitimate achievement of financial goals to attain the expected highly paid professional role. Based on reference theory, within both paths an interaction would occur in which an officer would choose an adaptive role in response to the occupational environment and the expectations and reactions of others. The adaptive role chosen would be based on role requirements and the reinforcement of the



occupational group. In sum, while their proposal was not empirically tested, the authors suggested that "the police officer learns to behave corruptly because such behavior is effective in satisfying the requirements of major roles and because significant groups may control reinforcements" (p. 330).

Reed, Burnette, and Troiden (1977) presented a model with a similar focus on the social dynamics of deviant roles which they qualitatively tested through observations of police behaviors. Instead of looking at causes for corrupt behavior, they investigated how police agencies can make use of socially marginalized police officers who may be exhibiting corrupt behavior. They focused on the individual actor and on the environmental influences that supported the individual-level behavior. Based on Burnette's personal experiences and a series of informal interviews with small-town police officers, the authors defined and discussed three types of deviant roles found in small agencies: (1) the "door man" who "cozies up" to the upper brass in an attempt to attain position and standing, literally frequenting the doors of the administrative offices; (2) the "mouth man" who talks to the press and spreads gossip; and (3) the "wheel man" who "hot-rods" and is likely to engage in reckless high speed chases and other dangerous or unprofessional behavior in the attempt to pursue criminals.

Reed et al. (1977) reported that while officers in deviant roles are sometimes social pariahs and avoided by peers, they are rarely officially censored. Each serves a useful role—meeting the needs of the department, especially the administration. Higher officials may use these "deviant" persons to do unpleasant or corrupt tasks or promote deviant expectations while they maintain an outwardly acceptable normative identity. Tasks of deviant actors may include informing on fellow officers (door man), passing



unofficial information or expectations through the ranks (mouth man), or promoting a romantic and threatening image of police officers (wheel man). The authors concluded that, "Deviant roles . . . can be used as institutionalized means for evading or directly violating . . . norms" (p. 573).

In the same year, Barker (1977) published a paper with a parallel theme of peer group support for occupational deviance. He proposed three main elements of police corruption as occupational deviance: examining opportunity structure, socialization through occupational experiences, and group support for deviant behavior. He made convincing arguments for the roles of each in understanding how police deviance is supported and developed in a department. He reported, from the examination of the literature, that the police officer role offered many opportunities for deviant and corrupt actions, that the police occupational environment socialized new recruits into corrupt activities and isolated members of the police force from the rest of society, and that there was group support for rule violations in most police departments with little expectation of sanctions. Though he did not empirically test his proposals, he concluded from the review of past works that environmental forces were considerably stronger predictors of officer behavior than any individual characteristics that officers may bring with them into the occupational role.

Waddington (1999) examined police subculture in the lower ranks, looking for how to best assess the environmental influences on police deviance, including corruption. He defined subculture as a concept that sought to link what officers did and said in private to their public actions. He argued that a police subculture was far from homogeneous even within the same department, and that the realities of policing were



less reflected in the subculture than was the glorification of ideals and delusions. Further, he believed that the power of the subculture on individual officer actions was weakened by contextual factors. While acknowledging the influence of peers, he argued that based on the results of past qualitative analyses of police culture, the influences most frequently portrayed as being the primary forces in police deviance and corruption, namely the "canteen subculture" of talk and peer appraisal, had less to do with what an officer did on patrol than with the conditions of the immediate environment.

Finally, in the last decade, a few authors attempted to fit existing criminological theories of environmental influence to the topic of police corruption. Hickman, Piquero, Lawton, and Green (2001) attempted to connect Tittle's (1995) control-balance theory to the probability of police deviance and the specific types of deviance chosen. They proposed that an imbalance between the control that a police officer can exert *on* their environment and the control that a police officer is subjected to *by* their environment will result in either autonomous or repressive deviance.

Conformity occurs when the two types of control are balanced. However, "as the amount of control one can exercise exceeds the amount of control to which one is subject" one is likely to commit increasingly more autonomous forms of deviance (Hickman et al., 2001, p. 498). Conversely, "as the amount of control to which one is subject exceeds the amount of control one can exercise" one is likely to commit increasingly more repressive forms of deviance (p. 498) The main determinants of how this imbalance translates to behavior include motivation, constraint, and opportunity. Related to police corruption, the authors proposed that, as the police occupational environment creates unbalanced control ratios, police officers have the opportunity and



motivation to act out in deviant ways, mitigated by the constraint of the situation. Thus, under the control-balance theory, yet to be empirically tested, the structure of the environment would determine the behavior in which individual officers are likely to engage.

Chappell and Piquero (2004) applied Akers' social learning theory to police deviance, using the social learning predictors of "differential association, definitions, reinforcement, and modeling" (p. 93). They proposed that social isolation in the policing occupational role results in greater peer influence on behavior, with the subculture allowing for the learning and transmission of deviant cultural values to new recruits. They predicted that differential reinforcement could explain group influences on the deviant beliefs of new officers (Aultman, 1976). Chappell and Piquero (2004) empirically tested their model with data from a survey of the Philadelphia police department, looking at how "peer, definition, and reinforcement variables" impact police misconduct as the dependent variable, operationalized using citizen complaints. They used scenarios from Klockars, Ivkovic, Harver, and Haberfield (1997) to measure perceptions of deviance as independent variables. Results indicated that certain minor forms of corruption were considered normative, and that attitudes about excessive force were stronger indicators of citizen complaints than were attitudes about more minor forms of corrupt behavior. Results implied that officer attitudes about deviance had a strong correlation with actual deviant behavior.

#### Individual Units of Analysis/Individual and Environmental Predictors

Only a couple of models used individual units of analysis with both individual and environmental predictors. Each offered explanations of environmental influences on



police corruption, while still seeking to explain individual differences between officers in the same environments.

Girodo (1991) examined the causes of corruption in undercover drug officers, looking at both personality traits and the situational and environmental pressures of the job. He proposed that officers doing undercover work were more prone to corruption due to occupational opportunities than those assigned to certain other law enforcement jobs. While he believed that the corrupting features of the environment could create opportunities and motivations for corrupt behavior, he predicted that different facets of personality might determine who takes these opportunities (Person-Environment fit model, p. 365). He noted that his theories were in contrast to the "rotten barrel" perspective for explaining deviance in undercover drug investigations (citing the 1989 report by the International Association of Chiefs of Police on drug corruption and its causes), since he included individual personality predictors in his assessments.

Girodo (1991) used a random sampling of officers nationwide to empirically test his perspective combining individual and environmental predictors. Subjects reported on exposure to undercover work and answered items from three prominent personality questionnaires, including the Eysenck Personality Questionnaire, the Zuckerman Sensation-Seeking Scales, and the Sixteen Personality Factor Questionnaire. They also completed the Hilson Career Satisfaction Index that surveyed behaviors considered indicators for drug corruption. Girodo (1991) found that undercover work, along with the personality traits of high extraversion, high neuroticism, and disinhibition, were all significant predictors of risk for corruption. This study supported the value of both



environmental and personality predictors for understanding why officers might engage in corrupt behaviors.

Pogarsky and Piquero (2004) applied deterrence theory to police corruption while also measuring the personality trait of impulsivity. In deterrence theory, a deviant act is more likely to be committed if the benefits and rewards of the act outweigh the costs or punishment in a rational evaluation of the situation. The authors characterized the costs of police corruption as (1) social disapproval or self-disapproval, both considered extralegal sanctions (p. 375); or (2) legal sanctions such as prosecution or suspension. They controlled for impulsivity as a mediator as they measured the deterrent effect of sanctions.

Pogarsky and Piquero (2004) empirically tested their model using a sample of police officers from a single mid-sized police department. Officers were asked to evaluate hypothetical scenarios and determine what severity of sanctions they believed each warranted. They were also given a scale to measure impulsivity. Self-reported likelihood of offending in certain deviance categories was used as the dependent variable. The results indicated that deterrence (likely sanctions) influenced the choice to commit corruption in hypothetical situations, but that extralegal sanctions were more significant deterrents than legal sanctions. Also, impulsivity reduced the deterrent effect of both. This study integrated environmental and individual predictors, showing the importance of both and the likelihood that individual characteristics may mediate the effect of the environment, or perceptions of it, on corrupt behavior.



#### Organizational Units of Analysis and Organizational Predictors Only

All of the previous approaches considered the individual to be the sole behavioral actor (unit of analysis) in police corruption. A complementary, but rare, approach in police corruption literature uses the organization as the unit of analysis and seeks organizational level predictors to explain tendencies in a department or differences between departments. Its rare use necessitates an introduction to arguments for its value and proper usage.

#### Using Organizational Units of Analysis

Primarily, one can argue that understanding and preventing organizational corruption is valuable because the organization is the "basic unit of corrupt practice" with many forms of corruption not just conducted within individual transactions or actions, but by large groups of occupationally interconnected individuals (Luo, 2004, p. 120). It is of great concern that many corrupt activities are instigated or driven by the actions of high ranking officials in an organization. Also, organizations are much more difficult to deter or sanction than individuals. As deterrents, organizations face economic sanctions rather than criminal prosecution (Luo, 2004). Thus, as individual actors are prosecuted and removed, the organization may still continue corrupt practices without censure.

Even with all the benefits of studying organizational corruption, there are risks associated with viewing organizations separately from the individuals that comprise them. As argued by Monahan and Quinn (2006), there are many examples of ways in which "deviant behavior by individuals is shaped by organizational context and processes" (p. 362). And while considering the behavior of organizations as entities is helpful within certain research or economic contexts, treating them as individuals is only



a convenient fiction. An organization is composed of individual persons, and the structure of an organization is indeed the creation of individuals. Monahan and Quinn (2006) thus argued for the exploration of "the relationship between (1) strategically designed and implemented structures and (2) deviant and criminal acts perpetrated at lower levels of the organization" (p. 363). In line with this approach, within the police corruption literature, the study of the organization as the unit of analysis has not discounted the role of individuals or the impact of the organization on the environmental context in which individuals act.

#### Organizational Units of Analysis in Police Corruption Literature

There has been some support for the study of police corruption on the organizational level. Punch (2000) argued that "corruption and police misconduct" are "persistent and constantly recurring hazards generated by the organization itself" (p. 301). He believed that organizational structure and practices could either restrict corruption from developing or promote it. He stated that an "organization may condone deviance either by a lax indulgency pattern of slack management with low control and weak supervision or else collude in it by stimulating results" (p. 315). Punch (2000) proposed that organizational research was thus valuable because it could identify flaws in the organizational structure, with institutional reform as the goal rather than attribution of individual blame. Additionally, Klockars et al. (2000) argued that the organizational and occupational deviance approaches were easier to study quantitatively than individual approaches, mainly because of the difficulty in directly measuring corruption.



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#### Indirect Measurement of Organizational Police Corruption

When examining organizational corruption in police departments, the first challenge is how to measure it. Most researchers acknowledge the inherent difficulties in attempting to measure the actual incidence rate of police corruption. There is little motivation for officers or citizens who participate in corruption to report their own illegal activities, and group solidarity within the policing ranks reduces the likelihood that officers will report on the deviant behaviors of fellow officers (Ivkovic, 2003). Further, records of official actions taken by departments against corruption, or incidence of citizen complaints against officers, are poor research measures, representing both bias and underreporting. Most forms of corruption are too minor to be reported or punished, and it is often in the best interest of departments to have little official accountability for more severe forms, unless they garner public notice (Klockars et al., 2000).

Due to these problems with measuring incidence rates, researchers such as Klockars et al. (1997, 2000) have begun to use indirect methods. Indirect instruments measuring likelihood of corruption based on police perceptions have increased the response rate for corruption research while still providing important information for research and reform efforts.

Klockars et al. (1997, 2000) examined the differences in integrity between departments. The study did not evaluate the causes of police corruption, but rather focused on the means of measuring police corruption with organizations as the unit of analysis. This was accomplished through officer opinion surveys of how agencies were likely to respond to corrupt officer behavior. Klockars et al. (1997, 2000) claimed that the use of organizational units of analysis had many advantages for comparison between


departments, and that their methodology enhanced police cooperation through the use of opinion surveys rather than direct incidence reports. Using an organizational perspective, the researchers assumed that a police agency with high integrity is one "whose culture is highly intolerant of corruption" (Klockars et al., 2000, p. 3). Thus, they designed an instrument that attempted to measure the culture of the department as related to corruption, deviance, and integrity through the perspectives of the officers.

Klockars et al. (1997, 2000) surveyed officers in 30 US police departments. For 11 hypothetical corruption scenarios varying in severity, the researchers solicited officers' opinions on the seriousness of the corruption, their willingness to report the corruption, and their willingness to support punishment for the behavior. They then used a scaling system to compare departments and rank them on these three responses. These outcomes were used to distinguish between departments on likelihood for corruption based on the expectations and values of their officers.

External information on corruption levels in each department, such as court cases or history of public corruption scandals, was compared to rankings to determine the validity of the instrument. The authors found that agencies with lower levels of reported corruption tended to have officers who believed that deviant behavior was more likely to result in discipline and more deserving of discipline. Conversely, agencies with higher levels of corruption were consistently unwilling to report corrupt behaviors of other officers, even in the most severe scenarios (Klockars et al., 2000, p. 8).

Klockars et al. (1997, 2000) thus succeeded in creating a viable indirect method for estimating likelihood of organizational corruption, using individual officer



perceptions that could be aggregated to create estimations of the behavior of each department as an organizational entity.

## Testing Organizational Predictors of Police Corruption

While Klockars et al. (1997, 2000) contributed a valuable instrument for measuring organizational police corruption, they did not empirically test organizationallevel predictors. Few studies have. Herbert (1998) examined theories of subcultural influences in police departments, but used ethnographic observations rather than empirical testing in his study. His concept was similar to that of Waddington (1999) except that Herbert used the department, the organization, as the unit of analysis. Herbert (1998) used ethnographic observations of the Los Angeles Police Department to evaluate proposed ways to distinguish likelihood of corruption between departments based on normative values. He believed that to understand deviations from the normative order, it was important to first understand the normative order more fully.

Herbert (1998) proposed the existence of six main normative orders within police organizations based on the values of "law, bureaucratic control, adventure/machismo, safety, competence, and morality" (p. 351). Each of these orders served to enable and constrain officer behavior. He believed that, "these normative orders structure the world view of the police and infuse it with emotive significance" (p. 361) influencing the actions of individual officers. Herbert (1998) proposed that each police department develops a unique subculture based on the comparative predominance of these six normative orders. He acknowledged departmental differences in how these normative orders might translate to police deviance, and recognized the influence of external political bodies on the behavior of individual departments. His observations might make



for interesting future empirical tests comparing levels of normative values across departments and correlating them with perceived levels of corrupt behavior.

Marche (2009) appears to be the only researcher who has attempted to empirically test organizational predictors of police corruption with the organization as the unit of analysis. Conducting secondary analysis of the data produced by Klockars et al. (1997, 2000), he attempted to create an explanation for police corruption based on economic theories. His goal was to "develop an economic model and empirical estimates of how factors related to organizational structure, such as scale of operations and police culture, predict and explain how specific acts of corruption are related to different sizes of police agencies" (Marche, 2009, p. 463). His model included the factors of leadership, organizational structure, and culture as predictors. Marche (2009) focused on incentive structures and agency scales of operations, hypothesizing that greater bureaucratic control offered more opportunities for corruption at the departmental level. He believed that scale of operations would have a consistent effect on corruption regardless of internal departmental features, such as subcultures, group norms, or contextual situations.

Marche's (2009) analyses drew upon the subject officers' responses to the hypothetical deviance scenarios, their personal characteristics such as rank and duties, and the size of the agencies for which the officers worked. He found that size of police agency (organizational structure) and new officer status were both significant predictors of likelihood for corrupt behavior. His results suggested that an established police culture may have more influence on likelihood to commit corrupt behavior than the training and educational features implied by new officer status. He also proposed that corruption may be more prevalent in larger police agencies because centralized supervision is more



difficult to implement. While using the Klockars data required Marche (2009) to "construct" theoretical variables of questionable validity, he did at least try to explain police corruption with the use of organizational predictors and provided a starting point for similar future efforts.

#### A Multilevel Approach – Organizational and Individual Units of Analysis

The approach not yet represented in the literature is a multilevel approach that operationalizes Monahan and Quinn's (2006) argument. This approach would consider organizational units of analysis and organizational predictors while also evaluating how these organizational predictors create the environment which then impacts individual behavior. This would include individual units of analysis with both environmental and individual predictors. The need for this new approach is implied by the weaknesses inherent in the past approaches and the representative studies.

### Weaknesses in Past Studies: Approaches and Methodologies

Each of the works represented under the four approaches added some theory or empirical knowledge to help understand the causes and correlates of police corruption. However, each explanatory model was limited.

First, in the category using individual units of analysis and individual predictors, external influences were not addressed. Arrigo and Claussen (2003) ignored the role of exogenous variables, and did not answer the question of whether the proposed personality traits could significantly improve resistance to an already criminogenic environment.

Second, in the category of individual units of analysis and environmental predictors, some authors did not consider individual predictors and some ignored the possibility of comparing environmental features between departments. For instance,



while both of Aultman's (1976) paths to corruption could work to explain individual motivations for corruption and appropriate environmental influences, neither could predict differences in behavior between individuals exposed to the same environmental pressures. Reed, Burnette, and Troiden (1977) merely discussed peer-perceived police deviance, and did not seek to explain differences in the individual choices to fill deviant roles. Barker (1977) did not offer much to distinguish between the behaviors of individual officers subject to the same structures, and Waddington (1999) failed to distinguish either organizational determinants or individual distinctions between how a subculture would translate into officer decisions. He thus failed to propose a means to distinguish the cause of deviance between departments or between individuals within the same department.

Hickman et al. (2001) measured both individual and environmental influences on behavior, but did not measure individual differences in motivation and control, did not properly draw on subculture as an environmental influence, ignored organizational elements, and provided very limited results (they could only account for likelihood that officers might report the behavior of others). And, while Chappell and Piquero's (2004) theoretical proposals were sound, their research was limited, especially with their use of citizen complaints as a measure of police misconduct, a notoriously biased and unreliable source of information on police misbehavior. Perhaps due to methodological problems, they were unable to account for the causes of normative beliefs, find an impact of these beliefs on citizen complaint outcomes, or adequately explain differences in corruption either within or between departments.



Third, while the models of individual units of analysis using both environmental and individual predictors integrated predictive factors, they were unable to consider the organization as a unit of analysis and did not attempt to compare predictors between departments. Each empirical test of the models also had methodological problems. For instance, Girodo (1991) discussed the role of situational factors, but only empirically assessed the relationship between personality and drug corruption risk (p. 365 - 366). He assumed environmental influences as a part of undercover work, but failed to operationalize them. Pogarsky and Piquero (2004) measured only a limited range of corrupt behaviors, only studied officers in a single department, and were not able to address why specific officers found punishment to be more or less likely for certain scenarios. They could not determine the cause for differences within the department on perceptions of deterrent factors.

Lastly, in the category of organizational units of analysis and organizational predictors, most of the work has been purely theoretical in nature. The single empirical test of a model involved secondary analysis, which limited the researcher's ability to measure his key theoretical constructs. And only Marche (2009) considered characteristics of individuals within organizations and how organizational structure may contribute to environmental influences.

Herbert (1998) acknowledged departmental differences in how normative orders might translate to police deviance, and how external political influences may influence the behavior of individual departments, but he did not attempt to translate the influence of normative roles into a distinction between individuals within departments. He came close to proposing an organizational theory of police deviance, but stopped short of



operationalizing between-department distinctions. Klockars et al. (2000) did not explore individual or organizational predictors of differences in opinions of seriousness, discipline, and reporting within or between departments.

Marche (2009) improved on previous studies by including some individual level variables in his model, such as rank and entry-level status. However, his approach still had several weaknesses. The individual-level variables were only used to approximate organizational constructs. He did not attempt to specify characteristics of new officers that might impact behavioral choices, or make them more open to cultural influences. Also, he made the assumption that scale of operations would have a consistent effect on corruption regardless of internal departmental features, such as subcultures, group norms, or contextual situations. This study thus remained at an organizational level of explanation without tying in some of the individual characteristics that might have distinguished between officers in the same department, or explaining how organizational features may create criminogenic environments that influence individual officer behavior. *Arguments for a Multilevel Approach* 

These examples of problems in the studies representing the four approaches demonstrate the difficulty of adapting a criminological theory to the study of police corruption. Many theorists were unable to test their theories empirically. Some of the research had methodological weaknesses, such as limited sample sizes or faulty measures of police corruption. None of the studies implemented a methodology that included both organizational and individual units of analysis and considered organizational and individual predictors.



An integrated multilevel approach, combining individual and organizational units of analysis, would address these weaknesses in past studies and could be vital to understanding the nature and causes of police corruption. An integrated approach would measure corruption on the level of the organization, acknowledge how organizational factors may create corrupt environments, analyze how these environments may impact individuals, and control for individual differences that may explain why certain persons respond differently within the same environment.

As mentioned previously, there are risks associated with evaluating corruption at only the organizational level or only the individual level. A sole focus on organizational factors runs the risk of ignoring individual culpability and the value of identifying warning signs of deviant behavior in certain officers. Reliance on the structural view, when taken too far, leads to rationalizing and excusing individual police misconduct (Muscari, 1984), negating the importance of personal accountability. As this relates to issues of police corruption, it is important to recognize that police officers are moral agents with independent opportunities for action, regardless of environmental or organizational influences. It is shortsighted to assume that "events that take place can be both defined and considered without reference to the individual" as some proponents of the organizational approach have claimed (Muscari, 1984).

A sole focus on the individual ignores the clear link between persons and organizations in police departments. Individuals are replaceable and fill existing social roles within the departmental structure, while the informal and formal rules guiding these roles survive any individual occupants (Lundman, 1979, p. 84). Also, most decisions made by departments are not made by any single person, but instead are made by



interacting elements within the department. Work group norms supporting certain discretionary actions are taught to new recruits during early socialization, and are often supported by administrative action (Lundman, 1979). Accepting deviance on an organizational level requires that research evaluate departmental characteristics rather than just focus on the actions of the potential "bad apples."

Research is needed that addresses both the organizational features of departments that may promote a culture of corruption and the individual attributes of officers that may make them more or less susceptible to a cultural environment of corruption. The current study addressed this need with an integrated multilevel approach that considers both organizations and individuals as units of analysis for police corruption. It also sought to improve on the methodological weaknesses of previous research.



#### Chapter Two

Proposing a Multilevel Model of Police Corruption:

Organizational Anomie/Decoupling and Individual Morality

The multilevel model used in the current study suggests that organizational features may promote a criminogenic environment in departments. It offers a theoretical explanation for how these organizational features may interact with individual characteristics to determine an officer's level of susceptibility to a given department's criminogenic environment. Thus, the present study seeks to explain likelihood of susceptibility to corruption both between and within police departments using both individual and organizational units of analysis and individual, environmental and/or organizational predictors depending on the analysis level.

Police corruption, or more accurately the likelihood of susceptibility to police corruption, is measured in this study as acceptance of deviant norms, conceptualized on both the organizational and individual levels. On the *organizational level* (organizational units of analysis), deviant group norms are expected to vary between police departments. These deviant norms are hypothesized to result from anomie and a decoupling of the organizational structure (organizational predictors), increasing the likelihood of corruption on both departmental and individual levels. On the *individual level* (individual units of analysis), police officers within departments are expected to vary in their susceptibility to the environmental pressures (anomie and decoupling as the environmental predictors) to accept deviant group norms. This susceptibility, which can



be considered the likelihood for unethical decision-making, is hypothesized to vary by individual officer due to weakened social controls, determined by personal levels of moral disengagement (an individual predictor).

These theoretical constructs, supporting literature, and the proposed relationships between them in the multilevel model are discussed below. The discussion introduces acceptance of deviant norms as the operationalization for corruption, addresses anomie as a potential cause of deviant norms, proposes anomie's development from the organizational deviance concept of decoupling, and supports the use of moral disengagement to predict individual deviant choices.

#### Operationalizing Corruption: Klockars et al. and Acceptance of Deviant Norms

The literature detailed in Chapter 1 informed the theoretical basis of the current study, specifically the need for an approach for measuring corruption that considers the organization as a viable unit of analysis while still measuring corruption likelihood on the individual level. The approach taken by Klockars et al. (1997, 2000)–measuring corruption in departments on an organizational level and indirectly through officer perceptions of departmental policies and practices–is applied to the proposed multilevel outcome of police corruption. The need for an indirect measurement of corruption is supported by weaknesses or biases found in direct approaches such as self-reports, citizen complaints, or departmental actions (Klockars et al., 1997). Use of this measure is also supported by other literature. For instance, Barker (1977) supported the idea that the occupational environment of a police officer may present unusually high levels of opportunity for corruption. He argued that corruption risk in many police departments is increased by social isolation, group support for rule violations, low perceived risk of



sanctions, and a subculture of corruption that socializes rookies into deviant norms. He believed that the perceived culture of the department, whether one of integrity or corruption, may increase actual corruption incidents. This is precisely what is measured in the Klockars instrument.

Using the Klockars scenarios, Chappell and Piquero (2004) found that corrupt tendencies were more strongly shaped by features of the environment than by individual differences. Their results supported the use of the scenarios to measure the outcome of corruption likelihood. Also, Marche (2009), the only study to use organizational factors to try to predict likelihood of corruption as measured by the Klockars scenarios, found that there was more corruption in larger departments. He used an economic theory to explain this, citing the difficulty of maintaining central leadership in an organization with a large and overextended scale of operations.

Building on this past research, the Klockars scenarios will be used in the proposed study as the outcome variable representing police corruption, called here the "likelihood for acceptance of deviant norms." This police corruption variable is more accurately the susceptibility to police corruption. On the individual level, officers who accept deviant norms are considered to be more likely to be susceptible to corruption. On the organizational level, police departments that accept deviant norms are considered to be more likely to be susceptible to corrupt to be susceptible to be sus

<sup>&</sup>lt;sup>2</sup> The Klockars scenarios focus on various forms of deviance. As will be covered in the review of instruments, the corruption construct as operationalized through the Klockars scenarios includes both normative and noble case forms of corruption. In both forms, behavior of officers is not ethical or legal, and violates departmental guidelines. The forms differ on the motivations and goals of the corrupt behavior. Normative corruption tends to have monetary or status goals, while noble cause corruption had occupational success goals.



Lending support to acceptance of deviant norms as the operationalization of corruption, Bent (1974) noted that "because compatibility is deemed essential in view of the dependence that police officers have on their partners for their survival, the pressures to accept and adopt institutional norms are great" (p. 36). Thus, there is significant pressure in departments on individual officers to accept norms, deviant or non-deviant, due to characteristics of the policing occupation, and mental acceptance of deviant norms can lead to actual deviant behavior–the adoption of the norms in practice. As such, this operationalization is also supported by studies linking the deviant actions of police officers to the deviant work norms supported by the departmental structure, such that reported norms will likely be reflected in actual officer behavior (Lundman, 1979; see also Barker, 1977; Harris, 1973; Van Maanen, 1973).

#### Organizational and Environmental Predictors

#### Anomie

Anomie is used in this study's multilevel model as an organizational predictor of organizational corruption (departmental acceptance of deviant norms), and as an environmental predictor of individual corruption (individual acceptance of deviant norms). This choice finds support in the police corruption literature. For instance, Aultman (1976) detailed how anomie within the environment of a department may encourage corruption on the part of employees. Hickman et al. (2001) also proposed that the structure of the environment in a police department can influence likelihood of corruption through motives, opportunity, and constraint. He believed that the more unbalanced the types of controls experienced by officers within a department, such as the imbalance of anomic conditions, the higher the likelihood for deviance.



Anomie, as described by Merton (1968), is produced in societies where there is not equal emphasis placed on important goals and the moral or ethical means of reaching those goals. Anomie is a condition of "normlessness and social disequilibrium" that can "foster a sense of futility, alienation, mistrust and powerlessness at the individual level," resulting in greater likelihood for higher levels of deviance and unethical behavior in the affected society (Cohen, 1993, p. 344). When the ends become more important within the societal culture than following legitimate paths to those ends, deviant and unethical behavior in the pursuit of goals becomes more likely. In society as a whole, Merton (1938) focused on economic and material attainment as the predominant cultural goal, arguing that high rates of criminal and other unethical behavior resulted from a lack of comparable emphasis on using legitimate means to attain economic wealth. Also, while anomie increased in society as a whole, persons who were lower on the socioeconomic ladder were more likely to use illegitimate means to reach goals of economic attainment due to lower access and fewer opportunities.

Merton's theory applied to police departments would predict deviance from an inordinate emphasis on institutionally sanctioned goals over the legitimate means to reach these goals. Institutionally sanctioned goals might include apprehension of criminals, deterrence of crime, maintenance of order, and the attainment of personal status (e.g., through rank, power, money) (Kappeler, Sluder, & Alpert, 1998). Legitimate means to achieve these goals are set forth by laws and agency policy. Anomie would manifest when goal achievement becomes so important within the culture of a department that it ignores or de-emphasizes, through lax enforcement or informal expectations, the legitimate means to achieve these goals.



In an anomic organizational structure, there is dissociation between formal norms or legal guidelines and the informal norms that govern activity in the lower ranks of the department. When this dissociation occurs, informal deviant norms will tend to dominate over formal codes of conduct (Herbert, 1998). Certain forms of corruption are then perceived as normative (Chappell & Piquero, 2004). As Merton (1938) explained, when there is disproportionate emphasis on goals over regulatory norms and moral imperatives governing how to achieve these goals, cultural malintegration–called anomie–results from the imbalance. In the extreme case, the achievement of goals becomes the only consideration and institutional norms become completely irrelevant. In sum, anomie in a police agency can result in deviance, as deviant means are allowed or even promoted to achieve goals.

Anomie may differentially impact on different forms of deviance or corruption, with the greatest distinction likely to be found between noble cause and normative corruption due to a distinction in prescribed goals. For normative corruption, goals tend to be clearly directed at personal gain, typically of a monetary or social nature. These goals tend to be promoted by the departmental subculture, rather than by the official departmental policy. Alternately, the goals relevant to noble cause corruption tend to be those promoted by the official departmental policy, such as criminal apprehension, criminal conviction, or showing decreased crime rates. In both cases, anomic conditions could result in deviant means taken to reach these goals, depending on which goals exert the most pressure on officers and which are the most difficult to achieve through official or ethical means. However, the behavior of departmental leadership would have the most effect on the dissociation of formal and informal norms for goals that would be



considered of "noble cause," such that official departmental attitudes and policies could directly impact the development of anomic conditions that result in noble cause corruption.

When there is a dissociation of formal and informal norms, an anomic condition can produce strain on the organization, and thus on members of the organization. Strain results because the members of the organization, who are producing deviant behaviors, are still confronted by the power of the formal laws imposed by external controlling agencies, and these norms do not mesh with formal expectations.

### Decoupling

The dissociative anomic condition, and the means to manage the strain it produces in an agency, may be created through a process called *decoupling*, a concept that comes from neo-institutionalist and organizational theories of deviance. Decoupling is used in the proposed multilevel model as the second organizational predictor of organizational corruption, and the second environmental predictor of individual corruption. Decoupling is defined as "the organizational practice of disconnecting structure from action" (Monahan & Quinn, 2006, p. 368) that takes place in organizations that have become "institutionalized." An organizational structure of an agency, such as a police department, becomes institutionalized if the official (usually written) code of conduct does not impact occupational behavior on all levels of the organization (Meyer & Rowan, 1977). Formal rules become more symbolic than substantive.

Decoupling, empirically observed as both an outcome and a strategy, resulting in flexibility of behavioral controls at the "ground level," can be accomplished through complicated lines of communication, "vague and conflicting statements of policies and



procedures," or "underground practices that exist alongside official practices" (Monahan & Quinn, 2006, p. 369).

A decoupled police department would "satisfy environmental demands by demonstrating appropriate structure and policies while simultaneously freeing lower-level employees to effectively and efficiently meet the organization's technical goals" (Monahan & Quinn, 2006, p. 364). Decoupling encourages lower-level employees to violate formal rules, yet provides deniability of responsibility for the higher-level management. The management can make reference to the formal rules that they have in place and claim that the corruption in the agency is the work of a few "bad apples." For instance, Reed et al. (1977) found that corruption in the lower ranks of a police agency could be purposefully sustained and utilized by higher ranking officials who want to keep clean images. This type of dynamic can be seen in cases of police corruption, in which a few officers are prosecuted while the agency itself is not required to take steps to reform the organizational structure that may have contributed to the corrupt behavior (Girodo, 1991).

Decoupling can purposefully or unknowingly create anomic conditions. When an organization *purposefully* decouples, it is often the result of a finding that they can function more efficiently if they do not burden their employees with having to act in accordance with formal guidelines. They still present these formal guidelines to constituents to maintain environmental–or in the case of policing, political and popular–support. Even when an organization *unknowingly* decouples, it may accept the resulting dissociation of informal norms from formal codes of conduct in order to take advantage of the resulting efficiency without public censure.



Decoupling may also demonstrate different interaction effects with different forms of corruption, specifically noble cause and normative corruption, in a similar manner to that previously discussed for anomie. Decoupling, stemming from action, or inaction, of the police organization itself, and resulting, as it does, in greater efficiency in accomplishing departmental goals, is likely to be a stronger predictor of noble cause corruption than normative corruption. Unlike normative corruption, noble cause corruption's goals are directed at the accomplishment of occupational directives while bypassing official guidelines for accomplishing them. As such, while decoupling weakens official ethical guidelines and thus would be likely to increase incidence of all forms of deviance, it may have a stronger impact on deviance related to official goals. *Congruity between Decoupling and Anomie* 

Decoupling and anomie are congruous concepts and as such are used together as Level 2 predictors. The decoupling construct is based on the concept of coupling mechanisms, which are the "practices (e.g., rules, norms, values) or processes (e.g., supervisions, coordination by plan or standardization) that cause elements to function together" (Beekun & Glick, 2001, p. 387). To be decoupled, an organization must have structural mechanisms that are separated from each other in practice, such that officially prescribed practices do not correlate to actual processes taking place on varying levels of the organization. This separation can be created to achieve efficiency, or to unburden operations from external review. The anomie construct requires universally prescribed success goals, and the inability by some to achieve these success goals through legitimate means (Menard, 1995).



Decoupling and anomie are complementary not merely because they share the expected organizational outcome of acceptance of deviant norms, but more importantly due to their potential causality and their similarities in processes leading to a deviant outcome.

First, decoupling is thought to cause anomie within an organization. While anomie can be caused by many factors, depending on the prescribed goals that the actors are trying to achieve, decoupling is a potential path to anomie. Decoupling would be likely to result in anomie specifically for goals that are related to organizationally encouraged and mandated outcomes (encompassing goals considered to be of noble cause and hence most strongly related to decoupling as noted above). When an organization decouples, employees are given mandated modes of occupational behavior in order to achieve professional goals that are in conflict with the officially sanctioned behavior of the organization. It is understood on the lower levels of the organization that the goals that the organization expects employees to achieve may not be accomplished by the official governing guidelines, and moreover, that employees are expected to take alternative and unofficial paths to the desired goals.

When decoupling occurs in an organization such as a police agency, which is governed not just by internal company policies but by legal codes and legislative directives, the employees are left "holding the bag." They are expected to perform at a certain level and achieve certain goals; they are expected to use less than officially acceptable methods to achieve those goals, and yet, were a problem involving external review or public violation of the official guidelines to arise, it would be the individual employees that would be primarily held responsible.



In this situation, the decoupling of the official and unofficial occupational behavior guidelines creates anomie, a situation of normlessness in which employees do not expect to be able to achieve desired goals through ethical or official means. They are encouraged, due to the pressure of the occupational situation, to choose unofficial and perhaps unethical or deviant means to accomplish prescribed goals. The situation that is created requires individuals to publicly seem to uphold and subscribe to ethical and legal guidelines while actually using alternative means to accomplish goals. As covered previously in the discussion on anomie, this situation can cause employees to experience feelings of discontent, normlessness, and disillusionment, and lead to a wider range of deviant behaviors.

Second, while decoupling and anomie are not completely parallel concepts, they have similarities in processes proceeding towards a shared outcome. This outcome is deviant behavior—specifically behavior that is taken in pursuit of a goal that is generally acceptable within the prevailing culture, while the behavior to achieve this goal is not in line with officially accepted norms, at least not those publicly promoted by the organization. These officially accepted norms are typically legal, ethical, and moral guidelines, and may be part of the organization's bylaws or codes of operation or part of official policy mandated by an external governing agency (Westphal & Zajac, 2001).

Decoupling and anomie have similar processes in part because they share certain factors in their progression to the outcome of deviant behavior. These factors include the organization/agency, the leadership of the organization/agency, the non-leadership employees of the organization/agency, the official rules by which that agency *should* be operating (due to legal codes, governing agencies, public mandates, etc.), and pressures



for certain goal outcomes (on the organization, the individual, or both). Next are presented, individually for decoupling and anomie, the processes required for development of each state and its progression towards the outcome of deviant behavior. Similarities and differences can be noted between the two.

The process of decoupling within an organization would present as the following: An organization has occupationally prescribed success goals. The leadership of the organization promotes these success goals on all levels of the organization. Certain of the goals may also be independently promoted by the peer culture of the organization (informally) for reasons other than occupational success (peer acknowledgment, personal aggrandizement, monetary achievement). There are clear guidelines for how these goals should be achieved based on legal codes, governing agencies, and public mandates, and these guidelines are officially promoted by the leadership of the organization. The nonleadership employees of the organization are aware of and generally subscribe to these success goals and the officially sanctioned means of reaching those goals. The leadership of the organization realizes that the success goals may be more effectively reached through non-legitimate means. Employees within the organization are also aware of the enhanced ability to reach the desired success goals through non-legitimate means. The leadership of the organization promotes the use of the alternate non-legitimate means to achieve the success goals by not applying official guidelines to the actual work of lowerlevel employees (Meyer & Rowan, 1977). They may do this purposefully to circumvent official restrictions, or negligently through lax enforcement. The resulting outcome is that lower level employees are encouraged to, or at least not prevented from, reaching success goals through non-legitimate means, because the goals are more important to the



organization than the legitimate means to reach those goals. (Depending on the goals, alternate non-legitimate means may be undertaken by persons in leadership roles within the organization as well as non-leadership employees).

The process of anomie within an organization would present as the following: An organization would exist in which there are universally prescribed success goals. The leadership of the organization is aware of these success goals, and promotes them. Certain of the goals may also be independently promoted by the peer culture of the organization (informally). There are clear guidelines for how these goals should be achieved based on legal codes, governing agencies, and public mandates, and these guidelines are officially promoted by the leadership of the organization. The nonleadership employees of the organization are aware of and generally subscribe to these success goals and the officially sanctioned means of reaching those goals. Some employees determine that the prescribed success goals cannot be reached, or cannot be reached easily, though the legitimate means publicly promoted by the organization. This situation is not alleviated by the actions of the organization (offering practical solutions for achieving goals through legitimate means). The resulting outcome is that many employees may attempt to reach success goals through non-legitimate means, because the goals are more important within the *culture* of the organization than the legitimate means to reach those goals. (Depending on the goals, alternate non-legitimate means may be undertaken by persons in leadership roles within the organization as well as nonleadership employees).

These examples for decoupled and anomic organizations present distinct parallels between the two concepts, with some differences. While both anomie and decoupling



result in non-legitimate means to reach success goals, an anomic condition may relate more strongly to culturally emphasized goals, while decoupling relates more clearly to occupational goals. As such, while the lack of action on the part of an organization (lax accountability mechanisms, lack of emphasis on practical and legitimate means to reach goals) can result in both anomie and decoupling, decoupling is often the result of purposeful actions or willful ignorance on the part of the leadership of an organization. Thus, anomic conditions result more from informal culture and inaction by an organization, while decoupling results more from purposeful or negligent action on the part of an organization, honed and specified in outcome by the informal culture of the organization. Due to these differences, as previously noted, decoupling more clearly may result in noble cause (occupationally centered) corruption, while anomie may result in all forms of corruption (due to greater emphasis on cultural pressures versus occupational pressures). While these differences result in different methods for measuring the two conditions, the similarities in factors, processes, and outcomes suggest the potential for a strong relationship between the two constructs.

The cross-sectional design of the current study does not allow for the testing of the causal relationship between decoupling and anomie. However, the two constructs *are* expected to be highly correlated and both predictive of corruption at the organizational level of analysis (between departments). At the individual level of analysis, decoupling and anomie, as correlated concepts, are both expected to act as environmental predictors of individual corruption. Decoupled police departments are hypothesized to be high in anomie, and these departments are expected to have high rates of likelihood for both normative and noble cause corruption as operationalized by the



Klockars items (higher rates of officers accepting deviant norms), such that officers in decoupled and anomic departments are expected to report higher acceptance of deviant norms on the Klockars items.

#### Individual Predictor: Moral Disengagement

While decoupling practices and anomie on the organizational level may explain differences in perceptions of and attitudes toward corruption *between* police departments, they are unable to predict the differences between individuals on the acceptance of deviant norms *within* departments. This is the role that the individual-level theory of moral disengagement plays in the proposed model.

Some police corruption studies have examined individual-level characteristics, such as personality, as predictors of individual-level police corruption. For instance, Arrigo and Claussen (2003) proposed that antisocial personality traits and conscientiousness may be significant predictors of corruption, and Girodo's (1991) results indicated that neuroticism predicts who may choose corrupt behaviors. Past studies have also found, however, that a combination of individual and environmental predictors makes for a more complete causal model. Girodo (1991) believed that the personality traits that make a person susceptible to corruption may only lead to deviant behavior given the right "instigating environment" (p. 361), and Pogarsky and Piquero (2004) found that corrupt behavior could be best explained though an interaction of environmental factors and the individual predictor of personality. In fact, they found a mediating effect of personality on the environment.

Building on these findings, the proposed multilevel model uses the personality/cognitive trait of moral disengagement as the predictor of corruption within



individuals. Moral disengagement is also expected to interact with the environmental predictors of anomie and decoupling, mediating their effects on individual-level acceptance of deviant norms (likelihood for corruption).

The moral disengagement trait was chosen as the individual predictor because past studies support its direct impact on unethical decision-making (Detert, Trevino, and Sweitzer, 2008). Moral disengagement, as a valid predictor of unethical decisionmaking, could be expected to be an equally strong predictor of acceptance of deviant norms due to the definitional and operationalized similarities between the two outcomes. Unethical decision-making requires a choice on the part of an individual to accept a less than moral action given specific circumstances, while acceptance of deviant norms reflects an attitude that deviant behavior is an acceptable option in certain circumstances. This similarity is demonstrated by Moore's (2008) proposal that moral disengagement would ease a person's initiation into an organization's corrupt normative structure, while in the current model acceptance of deviant norms is considered representative of likelihood for an individual to accept a corrupt normative structure.

Moral disengagement forms part of Bandura's social cognitive theory, which seeks to explain human behavior through the self-regulation of thoughts and behavior in interaction with social influences (Bandura, 2002). It is also an offshoot of Matza's (1964) social control theory of moral drift, in which drift is defined as "episodic release from moral constraint" (p. 69). In drift theory, moral norms may be violated through techniques of *neutralization* (Matza, 1964, p. 79), an internal justification or excusing of non-conforming behavior, based on mood, circumstance, or other factors, allowing for a drift toward deviance (p. 83). Neutralization thus results in a weakening of social



controls on behavior. The way a person drifts is proposed to be the result of "underlying influences" (p. 29), including environment, events, and individual personality characteristics.

Pursuant to Bandura's (1986) conceptualization of moral disengagement, moral constraints are conceived of as self-regulation–regulation resulting from internal moral standards and inhibitions; external moral conventions have been internalized to create constraint on behavior. Detert et al. (2008) explained that within this theory, "people make unethical decisions when moral self-regulatory processes that normally inhibit unethical behavior are deactivated via use of several interrelated cognitive mechanisms collectively labeled moral disengagement" (p. 374). The mechanisms of moral disengagement are the "points in the process of moral control at which moral self-censure can be disengaged from reprehensible conduct" (Bandura, 2002, p. 102). The concept of moral disengagement thus subsumes Matza's (1964) idea of neutralization as a cognitive mechanism detaching one from moral constraints, since moral disengagement mechanisms can all be considered forms of neutralization or justification.

Bandura (1986) described eight moral disengagement mechanisms: 1) moral justification, 2) exoneration through social comparison, 3) use of sanitizing or euphemistic language, 4) diffusion of responsibility, 5) displacement of responsibility, 6) minimization of harmful consequences, 7) attribution of blame to victims, and 8) dehumanization of victims. Through the use of these cognitive mechanisms, a person who otherwise would not commit unethical behavior may feel free to do so without "apparent guilt or self-censure" (p. 374), without feeling that they are giving up their moral standards (Bandura, Barbaranelli, Caprara, & Pastorelli, 1996), and without the



cognitive dissonance that otherwise would be present. Moral disengagement can thus foster "detrimental conduct by reducing prosocialness and anticipatory self-censure and by promoting cognitive and affective reactions conducive to regression" (Bandura et al., 1996, p. 364).

Recent studies have found positive correlations between levels of moral disengagement and (1) unethical or transgressive behavior (Bandura, Caprara, Barbaranelli, Pastorelli, & Regalia, 2001; Detert et al., 2008), (2) the ability to engage in morally ambiguous acts such as execute prisoners (Osofsky, Bandura, & Zimbardo, 2005), and (3) prisonization and bullying behavior (South & Wood, 2006). Moore (2008) made a convincing theoretical argument that moral disengagement impacts the initiation, facilitation, and perpetuation of organizational corruption by "releasing" individuals to engage in morally ambiguous acts in the interests of the organization. Detert et al. (2008) noted that "if organizations knew more about whether some individuals were more predisposed to moral disengagement than others, perhaps they could target resources toward improving these individuals' decision-making processes" (p. 374).

When compared to the Level 2 predictors, moral disengagement is expected to act on a level of individual predisposition towards deviance while anomie and decoupling are expected to influence individuals through the organization to which they belong. Moral disengagement is not expected to interact directly with anomie and decoupling, such that the individual predisposition of moral disengagement is not expected to be influenced by organizational environment. Rather, individual levels of moral disengagement may have more or less of an overall impact on the outcome of acceptance of deviant norms depending on the level of anomie and decoupling in the individual's organization. In



organizations with higher anomie and decoupling, it is expected that the effect of moral disengagement on the outcome will be reduced, as the environmental pressures that may encourage deviance become more influential than individual predispositions.

In sum, moral disengagement is hypothesized to distinguish between police officers who are more or less likely to succumb to the deviant norms that may arise in anomic and decoupled occupational environments within police departments. It is also hypothesized to interact with the environmental predictors in explaining the outcome such that its effect on deviance may be diminished depending on the strength of the environmental factors.

## Addressing Potential Tautological Concerns

Within the model created for this study, there was the potential for tautological problems. Tautology could be perceived as a potential concern between departmental anomie and departmental level susceptibility to corruption (acceptance of deviant norms) and between moral disengagement and individual officer susceptibility to corruption (acceptance of deviant norms). Addressing this potential concern requires a clear distinction between both predictors and the outcome variable at both levels, to be discussed here before a presentation of expected study relationships and hypotheses.

First, there is a definite conceptual distinction between departmental anomie and departmental acceptance of deviant norms. *Anomie* can arise in a group (in this case a police department) when a lack of equal emphasis is placed on goals and the ethical means of reaching these goals. It can be considered a state of normlessness and social disequilibrium in which the environment of the group fosters mistrust and alienation because the preferred goals and means do not align. In a police department with an



anomic subculture, the ends become more important than the ethical means of reaching those ends, making deviant behavior in pursuit of goals more likely.

Alternately, when there is an *Acceptance of Deviant Norms*, a majority of the individuals in a group (in this case a police department) dismiss the seriousness of deviant behavior and are less likely to believe that their group should discipline or will discipline such behavior. They also do not believe that others in their group are likely to report on the deviant behavior. This outcome indicates that the subculture has accepted the deviant behavior as a normative state of officer activity, increasing the likelihood that similar deviant behaviors **do** occur in the department (since they are not considered serious), and that they are not disciplined or reported.

The distinction between the two concepts is that anomie, unlike acceptance of deviant norms, does not determine how individuals view corrupt behavior or how the agency is likely to deal with it. It does, however, describe the agency environment that would be more likely to foster this type of acceptance. Anomie is the dissociation of goals and ethical means while acceptance of deviant norms is the adoption of deviant alternatives to accomplish these goals. Further, a measure of anomie would indicate whether the majority of officers in the agency think that the goals that they pursue are not possible to reach without breaking the ethical guidelines, while a measure of acceptance of deviant norms would indicate whether deviant behaviors have thus been accepted as reasonable and normative departmental activities (as a means, perhaps, of reaching the desired goals). *Anomie* can thus be considered the moral "temperament" of the agency, while *Acceptance of Deviant Norms* can be considered the actual perceptions or the officers in the agency as related to their occupational activities. There were some



tautological concerns related to the actual operationalization of anomie and acceptance of deviant norms for the current study, and they are addressed in the bivariate correlation results section.

Second, there is a definite conceptual distinction between moral disengagement and individual officer acceptance of deviant norms. *Moral Disengagement* is the individual cognitive tendency to use mechanisms to release oneself from moral constraints in behavior or decision-making. It is a personal/cognitive trait and can be considered a tendency to view situations or moral quandaries with an emphasis on negating internal moral constraints. This personal tendency is determined by answers to questions about deviant behavior that include possible justifications, rationalizations, or neutralizations to see if the respondent will use one of these methods to accept the need for the deviant behavior.

Acceptance of Deviant Norms on the individual level is **not** a cognitive tendency, but is rather a concrete individual perception of occupational deviant behaviors, their seriousness, their necessary and likely punishment, and the belief that other officers will report on them. Individual acceptance of deviant norms is derived from personal assessments of scenarios and of the response of fellow officers (which can be considered reflective of personal views on reporting infractions). Results represent respondent perceptions to specific forms of deviant police officer behavior.

The distinction between the two concepts is that while moral disengagement may ease a person's initiation into a deviant normative structure, the instrument for measuring it does not (unlike the instrument for acceptance of deviant norms) seek to determine the respondent's stance on specific forms of deviant occupational behavior. It rather



determines if the person is more likely to have the cognitive tendency to "explain away" deviant behavior. Alternately, the acceptance of deviant norms instrument does ask for actual perceptions of specific deviant behaviors that may arise in an agency.

Based on these operational definitions, a person with higher moral disengagement would be determined to have a greater chance of using cognitive mechanisms to justify the personal use of deviant behavior. The use of these mechanisms may make the respondent more likely to be accepting of deviant norms as defined by the specific occupational scenarios in the outcome measure of acceptance of deviant norms, but the use of these cognitive mechanisms could not predict with certainty the specific acceptance of deviant occupational norms. This determination could only be made through the responses to the items for each scenario on the acceptance of deviant norms instrument. So, in sum, *Moral Disengagement* is the use of cognitive mechanisms that may make one more likely to accept deviant norms, while *Acceptance of Deviant Norms* is the actual statement of the acceptance of deviant norms as determined through responses regarding the seriousness and responses required for specific deviant occupational behaviors.

Thus, to conclude the section on tautology, while the concepts contained in the predictors and outcome variables were similar enough in nature to support their predicted relationships in the model, they were not similar enough to pose tautological problems.

#### Summary of Study Concepts and Expected Relationships

To review, the current study uses Klockars as a guide for an organizational approach, conceptualizing likelihood for susceptibility to police corruption as the acceptance of deviant norms. This encompasses: "how seriously officers regard



misconduct, how amenable they are to supporting punishment, and how willing they are to tolerate misconduct in silence" (Klockars et al., 2000, p. 3).

Anomie and decoupling on the organizational level and moral disengagement on the individual level of analysis were expected to interact to explain total variance in acceptance of deviant norms. Police departments with higher decoupling and anomie within the organizational level of analysis were expected to have higher levels of acceptance of deviant norms. On the individual level of analysis, it was hypothesized that officers with higher moral disengagement will exhibit higher likelihood for corruption (acceptance of deviant norms) than others in the same department. Finally, anomie and decoupling in a department were expected to moderate the effect of moral disengagement on acceptance of deviant norms. Anomie and decoupling as environmental predictors were expected to decrease the impact of moral disengagement on corruption likelihood on the individual level of analysis. Thus, the higher the departmental anomie and decoupling, the weaker the effects of moral disengagement on acceptance should become, eventually decreasing to insignificance. Prior research has supported the moderating effects of personality features on environmental factors (Girodo, 1991; Pogarsky & Piquero, 2004). This hypothesis predicts similar moderation in the opposite direction, from the upper to the lower levels of analysis, rather than from the lower to the upper levels of analysis.



## Hypotheses

The following testable hypotheses were drawn from both the organizational-level explanation of corruption (acceptance of deviant norms) as a result of decoupling and anomie, and the individual-level explanation of corruption as a result of moral disengagement:

- Levels of anomie (aggregated from individual evaluations) and rates of decoupling will be strongly and positively correlated within departments.
- 2) Departments with high aggregated individual evaluations of anomie and high rates of decoupling will have higher aggregated rates of officers accepting deviant norms (e.g., evaluating corrupt behaviors as less serious, supporting less punishment for corrupt behaviors, being less likely to say they would report the corrupt behaviors of fellow officers).
- Individual officers with high moral disengagement will be more likely to accept deviant norms.
- 4) Rates of departmental anomie (aggregated from individual evaluations) and decoupling will moderate the effect of moral disengagement on individual officer likelihood to accept deviant norms. In a department with higher anomie and decoupling, moral disengagement will have a weaker effect on the likelihood to accept deviant norms.



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### Chapter 3

# Methods

The previous studies of police corruption detailed earlier had various problems with methodology; these included limited sample sizes, single department samples, and biased means of measuring police corruption likelihood. The current study tried to address these deficiencies. A large number of respondents from multiple departments were surveyed. Corruption likelihood was measured using the indirect response instrument created by Klockars et al. Also, the predictive abilities of anomie, decoupling, and moral disengagement were supported in the literature and were chosen for strength in clarity and validity.

The sections below describe how subjects were selected, the survey methods, and the instruments used to measure the constructs.

## Sampling

The instruments used in the current study were distributed to eight police departments as part of data collection for the National Police Research Platform, funded by the National Institute of Justice. The Platform distributed surveys on a number of different topics to the population of sworn and unsworn employees of 24 law enforcement agencies, including the eight receiving the instruments proposed for this study. Most departments completed two to four surveys on topics that included *Culture*, *Technology*, and *Training*. The instruments used in this study were included in the survey entitled *Accountability*, *Integrity*, *and Discipline*.



The 24 departments participating in the Platform were purposefully selected. Selection criteria included national reputation and visibility (for the largest agencies), size, and geography. The Platform team attempted to include agencies of different sizes. Geographically, many sites were clustered around the universities leading the Platform—the University of Illinois at Chicago, Northeastern University in Boston, and the University of South Florida in Tampa.

The eight departments who administered the *Accountability*, *Integrity and Discipline* survey, of which the proposed instruments are a part, and provided data for the current study are of varying size and demographics. These eight departments included the city police departments for Catasauqua, PA; Skokie, IL; Framingham, MA; Cambridge, MA; Arlington, TX; Chicago, IL; and Los Angeles, CA. Also included was the police department for the tribal nation at Ft. McDowell, AZ. Table 1 presents the most recently available demographics for each of these eight departments and their jurisdictions based on census data and UCR crime estimates. This includes size of jurisdiction, number of sworn personnel, crime rates, ethnic composition of jurisdiction, household income, and poverty rates. There are two large and more diverse agencies, four medium sized agencies, and two small agencies represented.

In all but two of the agencies, the entire population of sworn personnel was asked to complete the *Accountability, Integrity and Discipline* survey. Because of the large number of personnel in the two agencies of Chicago and Los Angeles, the sworn personnel in these agencies were randomly assigned to several groups (five in Los Angeles and nine in Chicago) and each group was assigned to a different survey. One



group from each department was assigned to take the *Accountability*, *Integrity and Discipline* survey.

Due to concerns about this being a convenience sample of departments, the sample agencies were compared on demographic characteristics to others of their same size and geographical region to make sure that values fall within a normal range. Within each agency, such concerns were addressed by comparing respondents to total agency data on available demographic information to see if those who chose to participate were representative of their departments. Lastly, when evaluating differences in the departmental and jurisdictional characteristics included in this small sample, it was determined that the tribal nation of Ft. McDowell may present an outlier on some of the variables of interest. Evaluation determined that it was on the low end for the outcome variables; this was not, however, determined to be a risk to the validity of the data or its generalizability. Rather, keeping at least eight departments at the cluster level was very important, as well as having at least two small departments represented.

Collectively, these agencies employ a total of close to 25,000 sworn personnel, but with the random sampling in the large agencies, only approximately 7,000 sworn personnel were approached for participation in the survey. (This study did not use survey data from the non-sworn personnel in the agencies.)


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ġ	Table 1									
	Department and Jurisdi	ction Demogru	aphics							
		Jurisd.	#	Violent	Property	%	%	Median	% Indiad	% Fom:11.00
ik		Populatio	n Sworn	crime rate per	crime rate per	Anrican American	Hispanic	Housenola	Below	Below
	Agency			10,000	10,000				Poverty	Poverty
	Ft. McDowell, AZ	980	18.5	NA	NA	NA	NA	NA	NA	NA
	Catasauqua, PA	6,594	8.0	348.48	2404.04	1.2	3.5	\$42,432	8.0	5.0
	Framingham, MA	65,478	119.0	311.45	2203.05	5.1	10.9	\$54,288	8.0	6.0
	Skokie, IL	66,659	110.0	659.67	2808.70	4.5	5.7	\$57,375	5.4	4.2
59	Cambridge, MA	108,771	272.0	456.80	2094.30	11.9	7.4	\$47,979	12.9	8.7
	Arlington, TX	367,197	623.0	634.88	5590.19	13.2	18.3	\$47,622	9.9	7.3
	Chicago, IL	2,836,065	13,088.0	673.74	5228.48	36.8	26.0	\$38,625	19.6	16.6
	Los Angeles, CA	3,831,868	9,980.0	628.15	2459.35	11.9	46.5	\$36,687	18.9	15.6

There are a couple of weaknesses related to the sample of subjects. The first weakness was the use of a convenience sample. The second weakness was that the sample included only eight departments. Regarding the first concern, due to the nature of the current investigation, which hypothesizes determinants of between and within department variations, it was not *necessary* to conduct a random sampling of departments. The hypotheses did not require a fully representative sample of departments from the United States as they were not positing anything about the characteristics of police in the United States as a whole. However, the model would have been strengthened by having an adequate variability on the outcome variable (Acceptance of Deviant Norms) between the departments selected. This would have been accomplished by surveying the personnel of a stratified random sample of agencies. A representative sample of US police departments would have increased the chances of finding significant between-department variation on acceptance of deviant norms and on anomie and decoupling.

While the agencies in the proposed study did not represent a stratified, random sample that would promote the likelihood that differences in demographics and Level 2 variables were evenly distributed over the sample, there still *were* demographic differences distributed in the sample. As such it was hoped that even with the limited number of departments, there would be significant differences on the Level 2 variables of interest.

The second concern, about the number of departments in the sample, is relevant to the multilevel structural equation model used for the analysis. It is preferable to have a sample size of at least 25 to 50 Level 2 clusters (police departments) to avoid biased



estimates (Maas & Hox, 2005) and to provide adequate statistical power (Snijders, 2005). Given that eight is too few for a strong multilevel structural equation analysis in absolute terms (related to bias and statistical power) and too few for this model specifically (based on larger number of parameters than clusters expected), Level 2 interdepartmental analyses were interpreted with caution and warning (see Limitations section for further discussion).

A final concern was whether the respondents were representative of the total population of their departments, a concern related to external validity. This was assessed by comparing the demographics of respondents and non-respondents within departments. Respondents were compared to all sworn personnel in their department on the demographics that were available on the survey and for the department as a whole. These included race, gender, and job role. The results are presented in Table 2 and the discussion of the implications of this data can be found in the discussion section.



Comparison of Agency Personnel and Respondents. Percent of Total Sworn in Sample,

Department	% of SW	% FEM	% WH	%BL	% HSP	% PAT
Ft. McDowell						
Agency		9.5	36.8	5.2	10.5	63.2
Respondents	52.6	10.0	30.0	0.0	10.0	60.0
Catasauqua						
Agency		0.0	94.1	5.9	0.0	94.1
Respondents	61.1	0.0	100.0	0.0	0.0	100.0
Framingham						
Agency		10.4	80.0	4.3	14.8	74.8
Respondents	4.2	40.0	100.0	0.0	0.0	40.0
Skokie						
Agency		11.0	81.0	3.0	13.0	81.0
Respondents	48.2	5.7	81.3	0.0	10.4	67.3
Cambridge						
Agency		9.0	72.4	14.7	9.8	76.6
Respondents	27.9	5.3	72.2	9.7	9.7	56.8
Arlington						
Agency		18.6	68.8	14.9	11.3	82.2
Respondents	32.2	19.9	68.2	10.9	10.9	48.0
Chicago						
Agency		24.5	52.9	25.7	18.6	79.4
Respondents	1.5	27.8	69.3	13.8	11.1	44.6
Los Angeles						
Agency		19.0	36.4	11.8	42.2	67.0
Respondents	3.8	18.7	40.6	10.4	30.4	35.1

Percent Female, Percent White, Percent Black, Percent Hispanic, Percent Patrol

### Data Collection

Pursuant to this component of the multi-component Platform study, the populations of both sworn and non-sworn personnel were surveyed electronically in the participating agencies. Chiefs (or other high-level command staff persons) in the participating agencies sent out requests for participation to all sworn and non-sworn personnel in their employ (see Appendix A). Participants were requested to participate, advised of their rights as subjects, and directed to the online survey once they had given their consent to participate (see Appendix B).



One to three weeks after the initial note was sent from the chief/sheriff, a first reminder note was sent, again requesting participation (see Appendix C). A second reminder note one to two weeks after the first reminder served as the final communication to the personnel within most of the participating agencies. Samples of these forms and communications are contained in Appendices A through C. The survey was completely anonymous, requiring no identifying information such as social security or badge numbers. The strengths and limitations of this survey methodology are discussed below.

#### Instruments

The instruments used in the proposed study were chosen in order to test possible predictors of likelihood for corruption within and between police agencies. Police corruption was operationalized as acceptance of deviant norms using the Klockars et al. (1997, 2000) scenarios. This instrument produced the dependent variable. Anomie and decoupling instruments produced independent variables, predicting likelihood of corruption on the individual level as environmental predictors, and on the organizational level as organizational predictors. The moral disengagement instrument produced data for an independent variable, predicting likelihood of corruption on the individual level as an individual predictor. The following sections discuss instrument development and describe each instrument in the context of the multi-level model.

#### Instrument Development

During the process of survey creation, the instruments from this study were submitted to others working on the Platform Project, and they were considered along with many other items covering similar topics. There was a lengthy revision process during



which all of the constructs contained within this study were reviewed by various academics and police professionals for content, structure, and comprehension. Possible alterations or exclusions were suggested and some acted upon.

The most significant juncture in the evaluation of the content of the current measures came at the final stage when the accountability survey had to be reduced to no more than forty items to promote higher response rates. With this final reduction, the items for measuring this study's constructs underwent additional rigorous review. The instrument for each study construct was reduced to a limited number of items. The final measures include three items for anomie, four items for decoupling, four items for moral disengagement, and three scenarios with four items each for acceptance of deviant norms. The limitations created by the item reductions are discussed below.

### Decoupling

The first organizational-level predictor is organizational decoupling, operationalized as officers acknowledging that a greater emphasis is placed on the achievement of departmental goals than on using legitimate means (set forth in official codes of conduct) to reach them. A decoupling instrument was designed to measure a breach between official codes of conduct that a department publishes to the public, and the actual practices promoted by authority figures within the organization.

In order to measure decoupling levels for purposes of comparing agencies, it was necessary to create survey questions that would represent departmental decoupling practices as evaluated by officers within the organization. The survey instrument attempted to measure dissonance between official statements of principles regulating officer behavior, and the actual understanding of line-duty officers as to what is allowed



and necessary in order to accomplish the pragmatic goals of the organization. The instrument asked individual officers within each agency to answer questions about the relative values their agencies place on pragmatic goals and the ethical means to achieve those goals (e.g., "Hold criminals accountable for their actions" versus "Uphold suspect's rights"). In each case, the pragmatic goals could be achieved by behavior that is in direct violation of the ethical principle noted.

Described another way, the decoupling instrument presented two important mandates in a department: the need for pragmatic results and the need for ethical/formal guidelines. These two mandates are not opposites, but the pragmatic goal may be easier to achieve by sacrificing an ethical guideline that exists within the formal structure. In agencies with lower decoupling, officers should have reported that the ethical goal or guideline was more important to the department than the pragmatic goal. This would match the official response that department leadership would have to give to the public in accordance with formal guidelines of conduct and ethics.

The decoupling instrument was evaluated for item content and structure by several police chiefs and policing researchers. The reviewers provided input leading to minor revisions in wording or focus. The final scale was composed of 4 items presenting two goal options, for instance (a) Increase the public's sense of security by showing crime reduction (pragmatic goal) versus (b) Report crime accurately (ethical/regulatory guideline). Subjects were asked to choose one of six response options along a continuum ranging between the two goals. The respondent choice indicated "whether you believe your department tends to favor the goal on the left side, the right side, or a position in between."



This continuous variable was turned into a dichotomous variable for easy comprehension in the data analysis. The two options to the side of the pragmatic goal were recoded to represent a "decoupled" response, and the four other options on the continuum toward the side of the ethical guideline were recoded to represent a "not decoupled" response. The decoupling instrument can be found in Appendix D. *Aggregated Individual Anomie* 

The second organizational-level predictor is departmental anomie, operationalized as aggregated rates of individual anomie (anomia), representing normlessness within the organization. Personal measurements of anomie attempt to tap into the individual point of view that "there is a high expectancy that socially unapproved behaviors are required to achieve given goals" (Seeman, 1959, p. 788). This expectancy can be considered normlessness (Menard, 1995). Instruments of personal anomie include descriptions of important goals, and measure whether the respondent believes that it is necessary to keep the rules in order to attain these goals. This operationalization of anomie is similar enough to that of the decoupling instrument that the two were expected to be highly correlated.

Menard (1995) created a 6-item scale of normlessness to measure individual-level anomie in adolescent participants, whose goals included keeping the trust of parents, the respect of friends, being popular, staying out of trouble, and succeeding at school. Unacceptable means of attaining these goals included breaking rules, lying to parents and teachers, "playing dirty," and "beating up" on others (p. 143). Respondents answered on a 5-point Likert scale from 1 (strongly disagree) to 5 (strongly agree). This scale, with the adolescent sample, achieved a Cronbach's alpha of .75 to .81.



This scale, having high reliability and strong correlation with deviant behavior, was deemed appropriate for measuring individual anomie in the current study, although it underwent revisions. Adjusting this scale to be used with police officers required altering the goals and unacceptable means presented in the survey items, while maintaining the basic structure of the instrument. The chosen main goals and unacceptable means of reaching those goals were adapted from police corruption literature on types of corrupt activities (Klockars et al., 2000; Roebuck & Barker, 1974).

The three police-specific items that were included in the survey are: "It is sometimes necessary to break department rules in order to advance up the ranks," "One must keep fellow officers' misconduct a secret to be accepted by colleagues," and "To get criminals off the street, it is sometimes necessary to change the details of what happened when writing a report." The main goals reflected in these items are career advancement, acceptance by colleagues, and success at one's job. The unacceptable means that may be perceived as necessary to reach these goals include breaking departmental rules, not reporting fellow officers' misconduct, and lying in official reports. The original measure was a 5-point Likert scale. For inclusion in the Platform agency survey, the items were incorporated into a section with other items that had a 4point Likert scale. The anomie instrument can be found in Appendix E.

#### Moral Disengagement

Moral disengagement measures the ability of a person to use cognitive mechanisms to justify behavior so as to make unethical decisions without internal censure or guilt. Moral disengagement serves as the individual-level predictor in the multilevel model and is operationalized using a version of the adjusted measure created by Detert et



al. (2008). The authors adjusted the original adolescent-oriented instrument created by Bandura (Bandura et al., 1996; Pelton, Ground, Forehand, & Brody, 2004) to make it applicable to adult college students familiar with a business environment. This adult version was composed of 24 items on a 5-point Likert scale from 1 (strongly disagree) to 5 (strongly agree). Using 828 responses from business and education student participants, the authors ran an exploratory factor analysis, finding an eight-factor solution, in keeping with the eight subscales of the moral disengagement concept. They retained the three best-fitting items that loaded on each of the eight expected factors at .40 or above, with cross-loadings no greater than .25. A confirmatory factor analysis supported this structure, finding eight first-order factors and a single second-order factor, with strong fit indices, and an overall Cronbach's alpha of .87.

The version of this scale adapted for the current study still used the adult perspective created by Detert et al. (2008), making slight changes to wording to make certain concepts more easily understood by police officer respondents. The new instrument retained four items from three of the original eight subscales. The original eight subscales were *moral justification, euphemistic labeling, advantageous comparison, displacement of responsibility, diffusion of responsibility, distortion of consequences, attribution of blame,* and *dehumanization.* The 3 subscales retained include *attribution of blame, displacement of responsibility,* and *diffusion of responsibility.* 

This reduction in items and scales resulted from space constraints. The excluded items were selected for deletion based on their relative lack of applicability to the police officer sample and their more obvious wording and content. Obvious wording and content was a factor in item choices because research has found that police officers are



more likely to provide valid responses to surveys on corruption or ethical issues when the surveys are worded in a less direct format, are not as threatening, and are less likely to be perceived as potentially problematic if confidentiality were to be breached (Klockars et al., 2000). The items excluded on that basis were considered too direct to elicit an accurate response.

The moral disengagement instrument–consisting of four relevant items from three subscales–is representative of the type of cognitive mechanisms deemed by Bandura et al. (1996) to neutralize moral constraints, and thus they should still provide a viable, if abbreviated, gauge of moral disengagement in the sample population. The retained items include, "You can't blame a person who plays only a small part in the harm caused by a group" (*diffusion of responsibility*), "People cannot be blamed for misbehaving if their coworkers pressured them to do it" (*displacement of responsibility*), and "People are not at fault for misbehaving at work if their supervisors mistreat them" and "If someone leaves something lying around, it's his/her own fault if it gets stolen" (*attribution of blame*). All items were measured on a 4-point Likert scale from "strongly agree" to "strongly disagree." The moral disengagement instrument can be found in Appendix F. *Acceptance of Deviant Norms* 

Acceptance of deviant norms is the instrument that attempts to measure likelihood for police officers to accept corrupt behavior in their departments and perhaps participate in it. The current study used the perceptual scenarios from Klockars et al. (1997; 2000) as the outcome instrument for likelihood for corruption in police departments.

The original Klockars scenarios covered "a range of activities, from those that merely give the appearance of conflict of interest, to incidents of bribery, and theft"



(Klockars et al., 2000, p. 4). The wording of each scenario, pulled partially from casestudy literature and partially from the experience of the authors, sought to describe situations that are common and plausible forms of police misconduct, while being "uncomplicated by details that might introduce ambiguity into either the interpretation of the behavior or the motive of the officer depicted in the scenario" (p. 4). Respondents were instructed to "assume that the officer depicted in each scenario had been a police officer for 5 years and had a satisfactory work record with no history of disciplinary problems" (p. 4). Honesty of responses has been evaluated by asking two additional questions about whether the respondent thought that most police officers would give honest responses to the survey, and whether they themselves had given honest answers. Of the respondents, 84% believed that most officers would answer honestly, and 98% said that they themselves had done so.

Based on the commonly accepted typology of police corruption put forth by Roebuck and Barker (1974), the eleven scenarios fall into seven different categories of misbehavior. These include violation of internal departmental codes of conduct, covering the inappropriate and illegal actions of fellow officers (code of silence), corruption of authority through the acceptance of gratuities, kickbacks from citizens for referral of services, opportunistic theft, shakedowns that involve accepting bribes for not reporting the illegal behavior of citizens, and excessive use of force.

Each of the original eleven scenarios has been evaluated by respondents through six questions "designed to assess the normative inclination of police to resist temptations to abuse the rights and privileges of their occupation" (Klockars et al, 2000, p. 4), and one item asking if the behavior in the scenario is approved by the official policies of the



department. Of the initial six questions, two have asked about perceived seriousness, two about how severely the behavior should be disciplined, and two about willingness to report such an incident. In each pair, one question asked the officer about his or her own view and a second question asked that officer his or her perception of the view of fellow officers.

For the current study, three scenarios were selected and each was followed by four questions. The first scenario presented an incident of an officer accepting kickbacks from a local auto body shop; the second scenario presented an incident of an officer covering up the illegal behavior of a fellow officer; and the third scenario presented an incident of noble cause corruption in which an officer lies about evidence found on potential suspects in order to make an arrest. Of the four questions retained for each scenario, two questions evaluated the opinions of the officer respondents themselves, and two questions evaluated what the officer thinks others in the department would think or do. One addressed seriousness, two addressed discipline, and one addressed reporting behavior.

They are:

- 1. *How serious do YOU consider this behavior to be?* (seriousness, personal opinion)
- If an officer in your agency engaged in this behavior and was discovered doing it, what, if any, discipline do YOU think <u>SHOULD</u> follow? (discipline, personal opinion)



- 3. If an officer in your agency engaged in this behavior and was discovered doing it, what, if any, discipline do YOU think <u>WOULD</u> follow?
  (discipline, opinion on departmental action)
- 4. Do you think MOST POLICE OFFICERS IN YOUR AGENCY would report a fellow police officer who engaged in this behavior? (reporting, opinion on departmental action)

With the three scenarios, for each respondent, there were 6 responses of personal opinion (seriousness, discipline) and 6 responses reflecting what the respondent thinks others in the department would be likely to do or think (discipline, reporting). Item 4 is a question of the likelihood that fellow officers will report on the behavior, and hence relfects what the respondent thinks others in the department are likely to do. This item has been found to be related to individual perceptions of seriousness and discipline for lower ranking officers, but sometimes not as well for higher ranking officers. Since, in the current sample, this difference was not found, for the purposes of the analyses, Items 1, 2, and 4, were chosen to represent a measure of individual acceptance of deviant norms for each scenario. Separate outcome variables were created for each of the three scenarios using Items 1, 2, and 4. These outcome variables were used as both individual acceptance of deviant norms and aggregated acceptance of deviant norms for each department as part of the total model. Separate outcomes for each scenario were necessary because, even though there was variation in seriousness, there was not an easy, valid way to weight each scenario for seriousness. The acceptance of deviant norms instrument can be found in Appendix G.



## **Control Variables**

A set of items in the survey produced demographic and job-related variables, some which were used as control variables in the analysis. Some of these individual level covariates were evaluated as controls for individual variation that was not explained by moral disengagement. These included civil service rank, job role, gender, shift type, work schedule, supervisory status, racial background, and estimate of neighborhood crime rate in officer service area. The full list of control variables submitted to respondents in the survey can be found in Appendix E. The categorical and ordinal covariates on this list were used to create dummy variables for proper interpretation in the models. These included Rank (dummy coded for Officer, Lieutenant and up, and Captain and up), Neighborhood Crime (Low Crime, Moderately High Crime and up, Very High Crime), Workday (Night Shifts, Mostly Day Shifts, Afternoon/Evening Shifts), Race (White, Black, Hispanic), Gender (Female), and Shift (Fixed Shift, Rotating Shift).

Department-level control variables reflected jurisdiction population size, ethnic composition of jurisdiction, number of sworn officers, crime rates for property and violent crimes, household incomes, and poverty rates (see Table 1). Some of these were used to account for variance on Level 2 of the multilevel analysis that was not accounted for by anomie or decoupling.



#### Data Analysis

First, lower level analyses were conducted on all the data. This included descriptive data on all variables, variance evaluation for summed scales across departments, principal components analysis to verify factor composition for use in confirmatory factor analysis, and bivariate correlations between summed scales. The principal components analysis was used to evaluate acceptance of deviant norms scenarios, moral disengagement, anomie, and decoupling. Items that did not load adequately onto a single component for each of these scales were not included in the measurement portion of the MSE model or in any post-hoc tests. Principal components analysis and bivariate correlations were conducted for each of the outcome variables on each individual department's data to validate the aggregation of departments.

Second, the primary data analysis method used in the current study was the multilevel structural equation (MSE) model, conducted with Mplus version 6.0 (Muthen & Muthen, 2010). The goal of the MSE model analysis was to test hypotheses by determining the level of variance that existed Within and Between departments and determine how well the Level 1 and Level 2 predictors of moral disengagement and anomie/decoupling respectively accounted for that variance when controlling for certain demographic covariates. It also attempted to determine if anomie and/or decoupling impacted the magnitude of the slope between moral disengagement and acceptance of deviant norms on the individual level.

The MSE model was chosen as a superior analytical technique for the hypothesized model for several reasons. OLS regression is not possible with this model because a clustered sample design would create correlated error terms; the residual error



from subjects in the same clusters (departments) would likely be correlated—violating the assumption of independent observations. The multilevel structural equation model provides residual error terms for both individual and cluster levels, accounting for correlated residuals within clusters. This makes the MSE model superior to the base structural equation model (SEM) which does not account for cluster level covariance or residuals. Also, inclusion of the measurement model allows the total model to simultaneously account for measurement error, allowing for more valid results than a base multilevel model [no latent variables, confirmatory factor analysis (CFA) conducted separately within a SEM].

Stated another way, the MSE model allowed for the simultaneous evaluation of a confirmatory factor structure for latent variables along with the measurement of a path model on both levels of the analysis. It was able to evaluate the relationship between moral disengagement and acceptance of deviant norms at the individual (Within) level (Hypothesis 3), and then use the intercept of acceptance of deviant norms on the individual level as the outcome for the group/cluster (Between, departmental) level (Hypothesis 2). The random slope between moral disengagement and acceptance of deviant norms was also able to be evaluated as a possible outcome. Anomie and decoupling then could be regressed on both outcomes to determine the relationships (Hypothesis 4).

Due to problems found in the model identification process for the MSE model, it was deemed appropriate to conduct base level multilevel modeling (MLM) as a post hoc test. This allowed for the testing of hypotheses that could not be tested with the MLE model, and allowed for the possibility that confirmatory factor analysis (hence the use of



the SEM model) may not be appropriate for data in this early stage of project development. Thus results for the base ML models are presented for each scenario.

### Brief Overview of the Multilevel Structural Equation Model

Multilevel modeling (MLM) is an analytic method able to distinguish between outcome variability at different levels of aggregation (Luke, 2004), typically within and between clusters. In the context of the current study, Level 1 is the Within-cluster component of the model containing the individual units of analysis and the individual and environmental predictors. Level 2 is the Between-cluster component of the model containing the organizational units of analysis and the organizational predictors.

The multilevel structural equation model was chosen for use with latent outcomes and predictors. In the current study the MSE model was used to analyze differences on the outcome variable (acceptance of deviant norms) *between* departments (Level 2) due to anomie and decoupling, *within* departments (Level 1) due to moral disengagement, and to examine *cross-level* interactions of how anomie and decoupling interact with moral disengagement on acceptance of deviant norms on the individual level. The MSE model could also determine which predictors—organizational (Level 2, Between) or individual (Level 1, Within)—best accounted for between-level variance in the outcome variable of acceptance of deviant norms. The base level MLM tested the same relationships without the inclusion of the measurement portion of the model. The description of the MSE analysis is applicable to the base MLM for all elements other than the measurement model (confirmatory factor analysis) component.

There are two elements to the MSE analysis: a confirmatory factor analysis and a path analysis specified for two levels of indicators. Both elements were implemented



within Mplus. The measurement element, confirmatory factor analysis (CFA), is necessary to determine whether the latent variables are structured as expected. CFA is chosen when there is an existing hypothesis for the number of common factors. This requires "an understanding of the nature of the variables under consideration, as well as . .. expectations concerning which factor is likely to load on which variables" (Kim & Mueller, 1978, p. 55).

The second model element is the path analysis. In a structural equation model, the structural portion of analysis examines the potential causal dependencies between endogenous and exogenous variables through path modeling (Kline, 2005). To properly identify the model, the number of data points should be more than the number of estimated parameters. Because this is a multilevel model, differences were expected both Within clusters (Level 1) and Between clusters (Level 2), and the goal was to explain variance in the outcome variable based on predictors measured at both levels. This model looked at cross-level propositions, so that Level 2 factors (anomie and decoupling) were expected to impact both the intercept and slope of moral disengagement on acceptance of deviant norms on Level 1. Both of the Level 1 parameters, intercept and slope, were thus expected to be a function of variability on Level 2 predictors. These hypothesized paths are specified in Figure 1.











Multilevel Hypothesized Relationships



There were fixed and random effects to be estimated for each of the levels. Fixed effects are similar to typical regression estimates, whereas random effects determine how much variance is explained by the latent variables. A significant result for random effects (significant amount of residual variance) would indicate that unexplained variability can be diminished with the inclusion of relevant predictors. Random effects were estimated for the acceptance of deviant norms (ADN) latent variable outcome on both Levels.

The multilevel model building process starts with a null model (intercepts for the outcome variable ADN only), and then adds Level 1 predictors (moral disengagement, MD), Level 1 covariates (individual level demographic control variables), Level 2 predictors (anomie, ANO, and decoupling, DEC) with intercepts as outcomes, Level 2 covariates (department level demographic control variables), random slopes (s1 = ADN on MD), and random slopes as outcomes (s1 on ANO, DEC) to examine how the residual variance at each level changes with each new addition. This process was undertaken for each outcome latent variable–one each for the three ADN scenarios. This same process for each scenario, without the inclusion of the latent variables (using summed score variables instead), was used for the base ML modeling post hoc tests.

The model fit for the MSE model was evaluated at each stage using the following indices: 1) the Loglikelihood HO (LLHO) value, which should be as low as possible and is used to create the Deviance Test test statistic for significant of model fit; 2) the root mean square error of approximation (RMSEA) that is related to residual variance, with a desired value under .05; 3) the comparative fit index (CFI) and Tucker-Lewis index (TLI) that evaluate variance accounted for in the model, with desired values above .90; and 4)



the standardized root mean square residual (SRMR) that evaluates residual variance, with a desired value under .05. For each model the residual variance between and within were used to create the intraclass correlation coefficient (ICC) to determine how much variance is left to be explained at the Between level, where ICC = residual variance between/(residual variance between + residual variance within). Also, Pseudo  $R^2$  values were calculated to determine how much of a change in residual variance Between and Within clusters could be attributed to a new addition to the model, where Pseudo  $R^2$  = (old residual variance – new residual variance)/old residual variance. For the base MLM, these same model fit statistics are reported, except for those models containing the random slope, for which only the Loglikelihood HO values are reported (that is all that the statistical program generates).

### Hypothesis Testing with the MSE and ML Models

Each of the four hypotheses was initially tested through the use of the MSE model, and then with the base MLM. The steps taken to test the hypotheses were the same for each modeling method.

Hypothesis 1 predicted that high levels of anomie (aggregated from individual evaluations) and high rates of decoupling would be strongly and positively correlated within departments. Within the MSE and ML models, this means that the two variables should fit together in the same model and be positively correlated.

Hypothesis 2 predicted that departments with high aggregated individual evaluations of anomie and high rates of decoupling would have higher aggregated rates of officers accepting deviant norms. Within the MSE and ML models this means that the addition of both anomie and decoupling should account for a significant portion of the



Between cluster variance. When the acceptance of deviant norms intercept is regressed on these latent variables on Level 2, the regression coefficients should be positive and significant. The coefficients should remain significant after the addition of Level 2 demographic covariates.

Hypothesis 3 predicted that individual officers with high moral disengagement would be more likely to accept deviant norms. Within the MSE and ML models this means that the addition of moral disengagement to the null model should decrease the residual variance on the Within departments level of the model. When acceptance of deviant norms is regressed on the moral disengagement latent variable, the regression coefficient should be positive and significant and remain significant after the addition of Level 1 demographic covariates.

The fourth and final hypothesis predicted that rates of departmental anomie (aggregated from individual evaluations) and decoupling would moderate the effect of moral disengagement on individual officer likelihood to accept deviant norms. Within the MLM, the model-building process was used to evaluate how the explained variance in the acceptance of deviant norms varied with the addition of each new predictor. When the Level 2 predictors of anomie and decoupling were added to the model, it could be determined if they were accounting for a significant portion of the residual variance between departments (not accounted for by moral disengagement or Level 1 demographic covariates) and if their addition impacted the relationship between moral disengagement and acceptance of deviant norms on the within-cluster level. The slope between moral disengagement and acceptance of deviant norms was then added to the model to see if it could be used as an outcome. If this hypothesis were supported, with the effects of moral



disengagement being moderated by anomie and decoupling, then the slope variance should be significant, indicating that the relationship significantly varied between Level 2 clusters. Also, the slope should stay positive but decrease in magnitude when regressed onto anomie and/or decoupling. This would imply that departments with higher anomie and/or decoupling would have weaker relationships between moral disengagement and the acceptance of deviant norms.

#### Sublevel Analyses

Sublevel analyses evaluated differences between categories of employees on the outcome variable within individual departments. Possible differences between sublevels (i.e., different shifts, occupational roles, genders) within the two largest departments (Los Angeles, Chicago) were evaluated by comparing means for each level of the most interesting of these demographic variables. The goal was to acknowledge potential differences in the behavior of the model for groups of employees defined by such factors as shift, level of crime in the assigned geographic area, work schedule, rank, occupational role, and supervisory role. There were also certain potential interaction effects that could create interesting combined variables for sublevel evaluation, including shifts by neighborhood crime rates, and rank by length of service. Relationships between the demographic variable and the outcome or predictor variable were analyzed with ANOVAs to see if any of the test variables could discriminate between sublevel groups.



### Chapter Four

### Results

This section provides the results for all analyses that were conducted on the survey data. This includes the lower level analyses, the multilevel analyses, and the sublevel analyses. The lower level analyses results presented include the descriptives; the variability of summed scales across departments, including coverage of issues of potential departmental outliers; the bivariate correlations between summed scales; and the principal components analyses for all scales. Results are then presented for the multilevel structural equation models and post-host tests, presented separately for each acceptance of deviant norms scenarios. Lastly, the sublevel analysis results are presented, including differences found between groups in the Los Angeles and Chicago departments, and in the total sample.

#### Descriptives

Table 3 presents the individual level demographics for this sample based on valid percentages. The sample composition was 81.2% male, 58.6% White, 10.3% Black, and 18.3% Hispanic. Forty-four percent of respondents were patrol officers and 18.7% were detectives. Of the respondents, 52.4% worked mainly day shifts, 25.2% worked afternoon or evening shifts, and 22.4% worked night shifts. Just under 38 percent of the respondents (37.5%) responded that they were supervising others. Two-thirds (66%) held the rank of officer, 25.4% were ranked as sergeants or higher, 7.9% were ranked as lieutenants or higher, and .7% were ranked as captains or higher. Lastly, 41% reported



that they worked in neighborhoods with very high or moderately high crime rates, 34.4% in neighborhoods with average rates, and 12.6% in neighborhoods with moderately low or very low rates.



Table 3

Demographics o	of Total 3	Sample (	N = 1	1083)
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Measure	Ν	Valid %
Gender		
Male	755	81.2
Female	175	18.8
Race		
Black	92	10.3
White	523	58.6
Latino	164	18.4
Asian	36	4.0
Other	77	8.6
Job Role		
Patrol	408	44.5
Detective	171	18.7
Gang/Tactical	45	4.9
Narcotics/Vice	35	3.8
Community Police	22	2.0
Central Administration	28	3.1
Command Staff	14	1.3
Traffic	44	7.4
Other	149	16.3
Work Day		
Mostly Days	477	52.4
Afternoon/Evening	229	25.2
Night Shifts	204	22.4
Supervisory Status		
Yes-Supervisor	347	37.5
No	579	62.5
Rank		
Police Officer	621	66.0
Sergeant	239	25.4
Lieutenant	74	6.8
Captain and above	7	.7
Neighborhood Crime Rates		
High	381	41
Average	320	34.4
Low	118	12.6
Not Assigned	112	10.3

Table 4 presents the means and standard deviations for items within each of the scales. Means for ADN items were scored so that higher scores represented greater seriousness, more serious punishment, and greater likelihood of reporting. Overall means



were lowest for ADN2 (covering for a fellow officer), indicating that it was considered the least serious offense. Means were highest for ADN3 (false reporting), indicating that this was considered the most serious offense. Anomie items were scored so that higher scores indicated more agreement with the item. Anomie Items 1 and 2 (ANO1, ANO2) had similar means, while Item 3 (ANO3) produced lower scores. This indicated that lying on a report to catch a criminal was less representative of departmental norms in this sample than was breaking departmental rules for advancement or keeping secret the misconduct of fellow officers. Decoupling was scored so that 0 represented "not decoupled" and 1 represented "decoupled." Items 1 and 3 (DDEC1, DDEC3) had higher means than did Items 2 and 4 (DDEC2, DDEC4). This indicated that respondents tended to give more decoupled answers to DDEC1 and DDEC3 (tending toward choosing the pragmatic goal over the ethical guideline) than to DDEC2 and DDEC4. Moral disengagement was scored so that lower scores indicated lower levels of moral disengagment. The means for the items were fairly similar, except that the mean of MD1 was a bit higher than the others. This indicated that respondents tended to give a more morally disengaged response to "You can't blame a person who plays only a small part in the harm caused by a group" than to other items.



Table 4

Measure	М	SD	
ADN1 (Kickbacks)			
1	4.55	.81	
2	4.76	1.24	
4	3.21	1.15	
ADN2 (Covering)			
1	3.35	1.26	
2	3.71	1.26	
4	2.72	1.17	
ADN3 (False Reporting)			
1	4.84	.54	
2	5.46	.92	
4	3.75	1.14	
Anomie			
1	1.82	.75	
2	1.81	.75	
3	1.37	.61	
Decoupling (Dich)			
1	.32	.47	
2	.19	.39	
3	.48	.50	
4	.27	.45	
Moral Disengagement			
1	1.69	.62	
2	1.50	.56	
3	1.58	.61	
4	1.55	.72	

*Means and Standard Deviations for Latent Variable Items* (N = 1083)

## Principal Components Analyses

Principal components analyses (PCAs) were run on each of the four latent variables (decoupling, anomie, moral disengagement, and acceptance of deviant norms) for the total sample, and then the component structures found for the outcome scales of ADN1, ADN2, and ADN3 were confirmed within individual departments to justify aggregation of departments. The PCAs described here were used to confirm and/or modify as needed the expected factor structures. A Cronbach's alpha was computed for



each component with an eigenvalue over 1. Final scale composition depended on eigenvalues, percent explained variance by component, strength of item loadings, and alpha scores. The results of the principal components analyses supported the expected structures for all four latent variables (based on the original measures and an understanding of the constructs).

All ADN scales used Items 1, 2, and 4 as representative of individual perceptions of acceptance of deviant norms. As indicated in Table 5, ADN1, the kickbacks scenario, loaded on a single component with an eigenvalue of 1.80, accounting for 59.96% of total variance with a Cronbach's alpha of .64. Item loadings were between .65 and .83. ADN2, the covering for a fellow officer scenario, loaded on a single component with an eigenvalue of 2.18, accounting for 72.77% of total variance, and with a Cronbach's alpha of .81. Loadings were between .80 and .89. ADN3, the false reporting scenario, also loaded on a single component with an eigenvalue of 1.89, accounting for 62.85% of total variance, and with a Cronbach's alpha of .65. Loadings were between .73 and .83.



Scale	Item	Loading	Communality
ADN1	1	.83	.69
	2	.83	.69
	4	.65	.42
	Eigenvalue	1.80	
	% Variance	59.96	
	Cronbach's a	.64	
ADN2	1	.89	.79
	2	.86	.75
	4	.80	.64
	Eigenvalue	2.18	
	% Variance	72.77	
	Cronbach's a	.81	
ADN3	1	.81	.65
	2	.83	.69
	4	.73	.54
	Eigenvalue	1.89	
	% Variance	62.85	
	Cronbach's a	.65	

Item Loadings from Principal Components Analysis of Acceptance of Deviant Norms Scales. Communalities, Eigenvalues, Percentages of Variance, and Cronbach's Alpha

As shown in Table 6, the anomie scale had three items loading together on a single component with an eigenvalue of 1.70, accounting for 56.58% of total variance, and with a Cronbach's alpha of .62. Loadings were between .70 and .79.



Scale	Item	Loading	Communality
ANO	1	.76	.58
	2	.79	.62
	3	.70	.49
	Eigenvalue	1.70	
	% Variance	56.58	
	Cronbach's a	.62	

Item Loadings from Principal Components Analysis of Anomie Scale. Communalities, Eigenvalues, Percentages of Variance, and Cronbach's Alpha

As seen in Table 7, decoupling loaded initially onto two components. Component 1, composed of Items 2 and 4, had an eigenvalue of 1.44, accounting for 36.01% of total variance, and having loadings of .78 and .79. Component 2, composed of Items 1 and 3, had an eigenvalue of 1.44, accounting for 30.29% of total variance and having loadings of .72 and .82. As all four variables would not load onto a single factor as need for the multilevel models, separate PCAs were run to determine which two items created stronger components. Items 2 and 4 resulted in the stronger model, with greater total variance accounted for, a higher Cronbach's  $\alpha$  value, and higher item loadings than Items 1 and 3. When this structure was tested within an SEM to see how DEC responded to ADN factors being regressed on it, Items 1 and 3 did not load significantly for any of the ADN scenarios. So, for the purposes of the MSE models and the MLMs, DEC was measured by DDEC2 and DDEC4 only. This component, for Items 2 and 4 of DEC only, had an eigenvalue of 1.34, accounted for 66.96% of total variance, a Cronbach's alpha of .50 and item loadings of .82 for both items.



Scale		(	Component	
	Item	1	2	Communality
DEC Original	1	.29	.80	.71
-	2	.78	06	.62
	3	33	.76	.68
	4	.80	.05	.64
	Eigenvalue	1.44	1.21	
	% Variance	36.01	30.29	
	Cronbach's $\alpha$	.50	.33	
DEC Revised	2	.82		.67
	4	.82		.67
	Eigenvalue	1.34		
	% Variance	66.96		
	Cronbach's a	.50		

Item Loadings from Principal Components Analysis of Decoupling Scales, Original and Revised. Communalities, Eigenvalues, Percentages of Variance, and Cronbach's Alpha

As shown in Table 8, moral disengagement as measured by all 4 items loaded onto a single component with an eigenvalue of 2.37, accounting for 59.28% of total variance, and with a Cronbach's alpha of .75. Items 1, 2, and 3 loaded between .79 and .86 while Item 4 loaded at .54. Due to the comparative difference and the disparate content of the 4<sup>th</sup> item, a PCA was run with only Items 1, 2, and 3. This yielded a single component with an eigenvalue of 2.18 that accounted for much greater variance (72.81%) than the original structure, and had a higher Cronbach's alpha (.81), and loadings between .82 and .88. This improved three-item structure was confirmed through a SEM regressing ADN factors onto MD and finding it to be the preferred factor structure for the scale. Based on these results, for the MSE model and the MLM post hoc tests, MD was composed of Items 1, 2, and 3.



Scale	Item	Loading	Communality
MD Original	1	.79	.63
-	2	.86	.74
	3	.84	.71
	4	.54	.29
	Eigenvalue	2.37	
	% Variance	59.28	
	Cronbach's a	.75	
MD Revised	1	.82	.67
	2	.88	.78
	3	.86	.74
	Eigenvalue	2.18	
	% Variance	72.81	
	Cronbach's a	.81	

Item Loadings from Principal Components Analysis of Moral Disengagement Scales, Original and Revised. Communalities, Eigenvalues, Percentages of Variance, and Cronbach's Alpha

It was next necessary to confirm that the structures of the acceptance of deviant norms scales for each scenario remained consistent across all departments in the sample, verifying that comparisons between departments on the outcome variables composed of the chosen items was appropriate. This was accomplished by running principal components analyses on the data for each department individually for ADN1, ADN2, and ADN3. There was a concern about the validity of these individual department PCAs due to the small sample sizes of three of the departments (Ft. McDowell, Catasauqua, Framingham); however, while there has been a general rule of 4:1 ratio of subjects to variables for factor analyses, this is not mandatory. MacCallum, Widaman, Preacher, and Hong (2001) found that "when communalities are high, sample factor solutions correspond closely to population solutions even when *N* is small and factors are weakly determined" (p. 615). This suggests that PCAs can be run for all departments in the



sample, and that the validity of the results for the agencies with small *N* values depends primarily on the communalities. (Communalities are evaluated similarly to factor loadings such that above .30 is acceptable and scores close to 1.00 are desired.)

As can be determined from Tables 9 through 16, overall the three outcome variables perform strongly within all of the departments. The commonalities that fell under .30 are in bold. Based on sample size and communalities, there are a few values that are of concern. For Catasauqua, ADN1 item 4 had a poor communality score, and the *N* was only 12. Also, for Ft. McDowell, there was not enough variance on the items for ADN3 to allow for a PCA analysis to be run. In both cases, there is thus the possibility that the sample may not be close to population values. Since, generally, the scales performed strongly in all eight departments, aggregation of departments was determined to be appropriate with this sample.

Table 9

Scale	Item	Loading	Communality
ADN1	1	.73	.53
	2	.83	.69
	4	.82	.66
	Eigenvalue	1.88	
	% Variance	62.72	
ADN2	1	.91	.82
	2	.78	.61
	4	.61	.37
	Eigenvalue	1.80	
	% Variance	59.98	
ADN3	1	****	****
	2	****	****
	4	****	****
	Eigenvalue	****	
	% Variance	****	

*Ft. McDowell Principal Components Analyses of Acceptance of Deviant Norms Scenarios. Communalities, Eigenvalues, Percentages of Variance (Valid N=12)* 

*Note: Statistics could not be run for ADN3 since two of the items had zero variance.* 



Scale	Item	Loading	Communality
ADN1	1	.83	.70
	2	.91	.83
	4	.39	.15
	Eigenvalue	1.68	
	% Variance	55.91	
ADN2	1	.89	.78
	2	.80	.64
	4	.76	.57
	Eigenvalue	2.00	
	% Variance	66.56	
ADN3	1	.88	.78
	2	.93	.86
	4	.85	.72
	Eigenvalue	2.36	
	% Variance	78.49	

Catasauqua Principal Components Analyses of Acceptance of Deviant Norms Scenarios. Communalities, Eigenvalues, Percentages of Variance (Valid N = 12)

# Table 11

Framingham Principal Components Analyses of Acceptance of Deviant Norms Scenarios. Communalities, Eigenvalues, Percentages of Variance (Valid N = 5)

Scale	Item	Loading	Communality
ADN1	1	.95	.91
	2	65	.42
	4	.85	.73
	Eigenvalue	2.06	
	% Variance	68.69	
ADN2	1	.83	.68
	2	.96	.92
	4	.77	.59
	Eigenvalue	2.19	
	% Variance	72.99	
ADN3	1	.77	.59
	2	.79	.63
	4	.79	.63
	Eigenvalue	1.84	
	% Variance	61.36	


Scale	Item	Loading	Communality
ADN1	1	.73	.53
	2	.82	.66
	4	.79	.62
	Eigenvalue	1.81	
	% Variance	60.34	
ADN2	1	.87	.76
	2	.90	.81
	4	.87	.76
	Eigenvalue	2.33	
	% Variance	77.49	
ADN3	1	.75	.57
	2	.74	.55
	4	.64	.41
	Eigenvalue	1.53	
	% Variance	50.87	

Skokie Principal Components Analyses of Acceptance of Deviant Norms Scenarios. Communalities, Eigenvalues, Percentages of Variance (Valid N = 53-55)

# Table 13

Cambridge Principal Components Analyses of Acceptance of Deviant Norms Scenarios. Communalities, Eigenvalues, Percentages of Variance (Valid N = 76-78)

Scale	Item	Loading	Communality
ADN1	1	.85	.72
	2	.87	.76
	4	.69	.48
	Eigenvalue	1.95	
	% Variance	65.02	
ADN2	1	.91	.82
	2	.85	.72
	4	.71	.51
	Eigenvalue	2.05	
	% Variance	68.38	
ADN3	1	.78	.61
	2	.83	.69
	4	.69	.48
	Eigenvalue	1.78	
	% Variance	59.26	



Scale	Item	Loading	Communality
ADN1	1	.82	.67
	2	.87	.76
	4	.60	.36
	Eigenvalue	1.78	
	% Variance	59.45	
ADN2	1	.89	.78
	2	.88	.77
	4	.72	.51
	Eigenvalue	2.07	
	% Variance	68.98	
ADN3	1	.85	.73
	2	.85	.73
	4	.67	.45
	Eigenvalue	1.91	
	% Variance	63.60	

Arlington Principal Components Analyses of Acceptance of Deviant Norms Scenarios. Communalities, Eigenvalues, Percentages of Variance (Valid N = 206-212)

# Table 15

Chicago Principal Components Analyses of Acceptance of Deviant Norms Scenarios. Communalities, Eigenvalues, Percentages of Variance (Valid N = 199-204)

Scale	Item	Loading	Communality
ADN1	1	.85	.73
	2	.86	.75
	4	.51	.26
	Eigenvalue	1.73	
	% Variance	57.71	
ADN2	1	.84	.71
	2	.82	.68
	4	.70	.49
	Eigenvalue	1.87	
	% Variance	62.34	
ADN3	1	.83	.70
	2	.82	.67
	4	.65	.42
	Eigenvalue	1.79	
	% Variance	59.71	



Scale	Item	Loading	Communality
ADN1	1	.83	.69
	2	.83	.69
	4	.68	.46
	Eigenvalue	1.84	
	% Variance	61.24	
ADN2	1	.89	.79
	2	.84	.71
	4	.80	.64
	Eigenvalue	2.14	
	% Variance	71.31	
ADN3	1	.77	.60
	2	.79	.62
	4	.66	.44
	Eigenvalue	1.66	
	% Variance	55.19	

Los Angeles Principal Components Analyses of Acceptance of Deviant Norms Scenarios. Communalities, Eigenvalues, Percentages of Variance (Valid N = 379-386)

#### Determining Variability of Summed Scales across Departments

The items that were retained for each scale were summed to create overall scale scores that could then be used to evaluate variability across departments, conduct correlations with other scales, and be used in the base multilevel models.

To evaluate how much variance exists across departments on the summed scales, a few difference analyses were conducted. Descriptives and variances are first offered for each summed scale across the total sample. Descriptives are then provided for individual scales in the 8 different departments to allow for comparisons in scores and estimates of variability. The comparisons of mean scores across departments can serve to suggest possible outliers. Following the descriptives are the results of ANOVAs for each of the scales across the departments to verify the significance of the variance and identify possible agency outliers. Table 4 presents the means, standard deviations, minimums,



maximums, valid N, and variances for each of the summed scales across all departments.

The summed scores for ADN1, ADN2, and ADN3 were calculated using Items 1, 2, and 4. DEC is composed of DDEC2 and DDEC4 only, ANO is composed of all three anomie items, and MD is composed of MD1, MD2, and MD3 only. The summed scores thus reflect the item composition of the scales in the complex models with higher scores representing higher acceptance of deviant norms, higher anomie, higher decoupling, and higher moral disengagement. As can be seen in Table 17, of the ADN scenarios, ADN2 has the highest mean and the highest variance. Decoupling and moral disengagement had the lowest variance of all the scales. Subsequent ANOVAs were used to test significance of scale variance across departments.

Table 17

Means, Standard Deviations, Minimums, Maximums, Valid N, and Variances for Summed Latent Variables

Scale	Ν	min	max	М	SD	Var.
ADN1	964	3	16	6.47	2.47	6.08
ADN2	949	3	16	9.22	3.41	11.62
ADN3	941	3	16	4.94	2.06	4.26
ANO	970	3	12	4.99	1.59	2.52
DEC	937	0	2	.46	.69	.47
MD	975	3	12	4.76	1.52	2.32

It is also possible to evaluate the amount of deviance that exists to be explained in the sample based on the means for the acceptance of deviant norms scenarios. The means for ADN1, ADN2, and ADN3 were 6.47, 9.22, and 4.94 respectively. These values are out of a total possible score of 16, with Item one scored from 1 - 5, Item 2 from 1 - 6, and Item 4 from 1 - 5. This means, that if 100% acceptance of deviance is represented with a score of 16, this sample presented deviance acceptance of 40.43% for ADN1, 57.63% for ADN2, and 30.88% for ADN3. This represents how much potential



deviance, a seemingly moderate level as suggested by deviance acceptance, there was to be explained in the sample as a whole.

Table 18 presents the mean and standard deviation for each summed scale for each agency to demonstrate variation between departments on each of the scales. One of the issues to be evaluated with these data is the possible presence of outliers. The most concerning outlier in this sample is Ft. McDowell, which consistently had some of the lowest scores and standard deviations on all items. Since this is a police department servicing an Indian reservation, its characteristics may be considerably dissimilar from the other departments. Thus its outlier status was investigated with the use of ANOVAs. In all these tables, for the sake of anonymity, only Ft. McDowell is listed by name, and the other departments are given letter titles.



Means and Standard Deviations (Excluding pairwise) for Summed Latent Variables by Individual Agency

Scale	Agency	Μ	SD	
ADN1	Ft. McDowell	5.83	2.25	
	В	5.91	2.22	
	С	7.43	2.57	
	D	7.53	2.91	
	E	6.00	2.19	
	F	5.86	2.23	
	G	6.21	2.30	
	Н	6.60	1.52	
ADN2	Ft. McDowell	5.83	2.08	
	В	11.33	3.43	
	С	11.06	3.12	
	D	11.47	3.06	
	E	10.27	3.58	
	F	7.83	2.99	
	G	8.34	3.05	
	Н	10.20	2.17	
ADN3	Ft. McDowell	3.36	.51	
	В	5.62	1.84	
	С	6.57	2.30	
	D	5.74	2.20	
	E	6.00	3.19	
	F	4.48	1.74	
	G	4.07	1.32	
	Н	7.20	2.59	



Table 18 (cont.)

Scale	Agency	М	SD	
ANO	Ft. McDowell	4.17	1.34	
	В	5.15	1.62	
	С	5.69	1.77	
	D	5.44	1.71	
	E	5.45	2.16	
	F	4.89	1.40	
	G	4.57	1.39	
	Н	5.20	1.30	
DEC	Ft. McDowell	.45	.52	
	В	.63	.77	
	С	.40	.63	
	D	.38	.67	
	E	.64	.81	
	F	.41	.68	
	G	.50	.70	
	Н	.80	.84	
MD	Ft. McDowell	4.42	1.62	
	В	4.80	1.82	
	С	4.79	1.51	
	D	5.39	1.61	
	Е	5.27	1.19	
	F	4.64	1.43	
	G	4.68	1.50	
	Н	5.40	1.34	

Means and Standard Deviations (Excluding pairwise) for Summed Latent Variables by Individual Agency

The ANOVAs were run on all summed latent variables across departments to first determine if the mean scores on the scales varied significantly across agencies. The ANOVA for ADN1 was significant at F(7, 955) = 10.15, p < .001, ADN2 at F(7, 940) = 32.70, p < .001, and ADN3 at F(7, 932) = 44.33, p < .001. ANO was significant at F(7, 961) = 12.13, p < .001, and MD at F(7, 966) = 2.74, p = .008. DEC was non-significant at F(7, 928) = 1.48, p = .172. These results indicate sufficient variability of scores across departments for most variables. However, moral disengagement and decoupling,

the two variables that (as can be seen in later results) performed problematically in the complex models, had the lowest variability across departments. This may be due to problems in measurement (too few items or improper items for the scales) or in sampling (not enough diversity between agencies). These concerns are explored in the discussion section. The lack of significant variance for decoupling across the departments indicated that it would not function properly as a level 2 covariate in the complex models. Decoupling was still included in the complex models to further test the hypotheses, but problems were expected due to this preliminary result.

Lastly, Ft. McDowell was compared to other individual departments with the use of Dunnet's C post hoc tests to determine if it was in fact substantially different from other departments and hence an outlier. Due to small sample size in certain departments, differences of .50 in the mean values were considered substantial differences between those departments and were reported. Table 19 presents all of the mean differences above .50, comparing Ft. McDowell to other departments on each latent variable. Significant differences are noted. The interpretation of the substantial differences must account for sample size, such that the cutoff of .50 is most valid when comparing two departments with small sample sizes, and less valid when comparing Ft. McDowell, for instance, to a department with a large sample size, such as department H. Taking this under consideration, while all mean differences above .50 are presented in Table 19, this cutoff is will only be used when comparing Ft. McDowell to the other departments with small sample sizes. When compared to other departments, assessments will use significance estimates (difference scores used for assessments are in bold).



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Scale	Agency	Agency	MD
ADN1	Ft. McDowell		
		С	-1.60
		D	-1.69
		Н	77
ADN2	Ft. McDowell		
		В	-5.50*
		С	-5.23
		D	-5.64*
		Е	-4.44
		F	-2.00
		G	-2.51
		Н	-4.37
ADN3	Ft. McDowell		
		В	-2.26*
		С	-3.21*
		D	-2.38*
		Е	-2.64
		F	-1.12*
		G	71*
		Н	-3.84
ANO	Ft. McDowell		
		В	98
		С	-1.53*
		D	-1.27
		Е	-1.29
		F	73
		Н	-1.03
DEC	****	****	
MD	Ft. McDowell		
		D	97
		Е	86
		Н	98

Dunnet's C Post Hoc Test. Substantial Mean Differences between Ft. McDowell and other Agencies on Latent Variables

\**p* < .05

Based on this method of evaluating substantial differences, Ft. McDowell was determined to be a significant outlier for ADN3, but not for any of the other variables.



This indicates that respondents in the Ft. McDowell agency were significantly more likely to have lower acceptance of deviant norms on the false reporting scenario as compared to other agencies. Since this result was found for only one of the latent variables, it is appropriate to aggregate Ft. McDowell with other agencies.

Based on these analyses, there was determined to be sufficient variability across the sample for ADN1, ADN2, ADN3 and ANO, but insufficient variability for DEC and MD. This may be relevant when interpreting complex model results. Also, the department of Ft. McDowell was determined to be an outlier to the rest of the sample on the outcome variable of ADN3 only, so it was determined appropriate to retain it in the analysis.

#### **Bivariate Correlations**

Table 8 presents first the bivariate correlations between the summed latent variable scores for ADN1, ADN2, ADN3 (using Items, 1, 2, and 4 only to represent individual perspectives as used in the MSE model), ANO, DEC (Items 2 and 4), and MD (Items 1, 2, and 3). All were significantly correlated with each other with the exception of the decoupling measure, which failed to be significantly correlated with ADN1, ADN2, ANO, and MD, and had much lower correlations than other measures on ADN3. All other correlations were significant at p < .001.

The second part of the table presents correlations between the acceptance of deviant norms scenarios and the anomie items. These correlations were examined to determine whether the anomie items had a different relationship with difference forms of corruption (ADN1 and ADN2 as normative corruption, and ADN3 as noble cause corruption). As seen in the first half of the table, all three scenarios were significantly



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correlated with the composite anomie score, with correlations going low to high from ADN1 to ADN3. While there was a stronger correlation of anomie with the noble cause corruption scenario (ADN3), all the coefficients were moderately high and significant at p < .001. As such, while there may be a stronger relationship between noble cause corruption and anomie, this was not considered significant enough to impact interpretations of model results.

These correlations were also examined to determine if the significant correlation between ADN3 (the false reporting scenario) and anomie was due to the similarity between the scenario and anomie item 3. Both ADN3 and Anomie item 3 deal with the issue of false reporting. This similarity of content could account for the higher correlation between the composite anomie score and ADN3 as compared to the other two scenarios. To test this, ADN3 was correlated with anomie item 3 and with a composite score of anomie items 1 and 2 (see last column in Table 8). The correlations were .41 and .38 respectively, indicating that the correlation between the false reporting ADN item and the false reporting anomie item were only slightly higher than correlations to a composite anomie score that contained only the remaining anomie items. As such, it is reasonable to conclude that ADN3 and anomie correlations are not due to potentially tautological item similarities, and that it is unlikely therefore that the higher correlation between ADN3 (compared to ADN1 and ADN2) and anomie is the result of the content similarities.

The last column in Table 20 confirms this; it presents correlations for all three ADN scenarios with a composite anomie score of Items 1 and 2 only–removing the false reporting item. Total correlations drop in magnitude, but they are all still significant, and



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the same trends appear, with the highest correlation being between anomie with ADN3 and the lowest between anomie and ADN1. These analyses indicate that the results for the composite scales are not due to tautological conflicts, and that the higher correlation of anomie to noble cause corruption is indeed valid. The significance of this will be presented in the discussion regarding future research.

Table 20

Intercorrelations for Summed Latent Variables,	and for ADN Scenarios and
Individual/Combined Anomie Items ( $N = 1083$ )	

Measure	1	2	3	4	5	6
1. ADN1						
2. ADN2	.48**					
3. ADN3	.44**	.49**				
4. ANO	.29**	.36**	.45**			
5. DEC	.04	04	.07*	02		
6. MD	.25**	.24**	.26**	.48**	.01	
		Anomie 1	Anomie 2	Anomie 3	Anomie 1 + 2	
1. ADN1		.15**	.24**	.28**	.23**	
2. ADN2		.23**	.29**	.29**	.31**	
3. ADN3		.29**	.35**	.41**	.38**	
** < 001	* 05					

 $p < .001 \quad p < .05$ 

#### Multilevel Structural Equation Models and Post-Hoc Tests

Overview

MSE modeling was conducted separately on each latent variable outcome representing the three ADN scenarios: ADN1) kickbacks, ADN2) covering for a fellow officer, and ADN3) false reporting. Numerous problems were encountered during the testing of these models due to large variances for some of the variables, or variances close to zero. After resetting these variances and other adjustments, it was possible to partially test the hypotheses with MSE modeling. The results presented here represent



the testing of the hypothesized structure, with some alterations for poor performance, low correlations, and lack of convergence. Different control variables were used for each outcome variable. They were used in their dummy-coded versions for proper model interpretation. These were chosen based on strong bivariate correlations with the outcome variable, model convergence, and contribution to model fit. This selection process allowed for the use of the control variables for each outcome variable that were likely to create the most accurate evaluation of variance accounted for by the predictors alone.

Below, for each ADN model, the main steps for reaching the final model are explained and presented in a tabular format. Following descriptions of the MSE model tests for each scenario, the results of the post-hoc tests for each are detailed. The Within clusters/departments residual variance ( $\sigma_0$ ) and the Between clusters/departments variance ( $\mu_0$ ) will be used to evaluate the value of each addition, both directly, using the critical ratio (CR) test for significance, and indirectly through the creation of the ICC and the Pseudo  $R^2$ .

Due to problems with MSE model convergence and identification, base Multilevel Modeling (MLM) was utilized as the post hoc test for all ADN scenarios. Summed scores for each of the latent variables were used in the MLMs to test the hypothesized relationships. In order to ensure proper model identification for all model iterations, a minimal number of demographic covariates were included. In this manner, all hypotheses were able to be tested with the MLMs.

All models have been nested for proper interpretations of the LLHO fit statistic through model comparisons. Models including decoupling have been compared to the



relevant less complex models within a separate nesting scheme including decoupling as a parameter (as substitution for, or in combination with, anomie, depending on the model).

ADN Scenario 1: Kickbacks

Multilevel structural equation model results. As indicated in Table 21, the null model for ADN1 had significant Within ( $\sigma_0 = .328$ , CR = 3.629, p < .001) and Between  $(\mu_0 = .023, CR = 2.19, p = .028)$  level variance values indicating a significant portion of variance in the outcome variable to be explained on both levels. The ICC indicated that 6.55% of total model variance is explained on the Between departments level. The model had a Loglikelihood HO (LLHO) = -15691.98, RMSEA = .136, CFI = .10, TLI = .09, Within SRMR = .143, and a Between SRMR = .270. These values indicated a moderately well fitting null model.

Table 21

Effects (L1, L2), ICC, and Me	odel Fit Indices (Valid N	=870, 8 clusters)	
Fixed Effect	Est.	s.e.	
ADN1-1	1.439	0.060	
ADN1-2	2.225	0.073	
ADN1-4	2.773	0.162	
Random Effect	Est.	s.e.	Critical Ratio
ADN1 Level 2 Effect	0.023	0.010	2.19*
ADN1 Level 1 Effect	0.328	0.090	3.63*
Interclass Correlation	0.066 (6.55%)		
* <i>p</i> < .05			

Acceptance of Deviant Norms Scenario 1 MSEM: Null Model. Fixed Effects and Random

Model Fit: LLHO = -15691.98, RMSEA = .136, CFI = .10, TLI = .09, WSRMR = .143, and BSRMR = .270

Next, MD was added to the model on the Within level and ADN1 was regressed on MD. As indicated in Table 22, the total model had a LLHO = -15691.84 indicating almost no change in fit although other fit indices showed a slight improvement (RMSEA



= .112, CFI = .41, TLI = .38, WSRMR = .126, BSRMR=.270). In the measurement portion of the model, ADN1 loaded strongly on both Within and Between levels. Standardized loadings for MD were moderate, ranging from .38 to 1.00. However, ADN1 regressed on MD was not significant (b = -.02, CR= -.463 p = .643). Both the Within and Between variances remained significant, with none of the Within variance accounted for by the addition of MD (Pseudo  $R^2 = 0$ ). The ICC stayed the same at 6.55% indicating little change in the total model variance to be explained at the Between level.

Table 22

N=870, 8 clusters)Fixed Effect Critical Ratio Est. s.e. -.46 ADN1 on MD -0.023 0.049 Random Effect Est. Critical Ratio s.e. 2.15\* ADN1 Level 2 Effect 0.023 0.011 ADN1 Level 1 Effect 0.328 0.090 3.66\* Interclass Correlation 0.066 (6.55%) Within Pseudo  $R^2$ 0.000(0.00%)Between Pseudo  $R^2$ -0.217 (-21.74%) \**p* < .05

Acceptance of Deviant Norms Scenario 1, MSEM: Moral Disengagement only. Fixed Effects and Random Effects (L1, L2), ICC, Pseudo  $R^2$  and Model Fit Indices (Valid N=870, 8 clusters)

Model Fit: LLHO = -15691.84, RMSEA = .112, CFI = .41, TLI = .38, WSRMR = .126, and BSRMR = .270

Level 1 (individual level) covariates, chosen based on strong bivariate

correlations with ADN1, were then added to the model. As indicated in Table 23, those retained showed positive contribution to model fit. These were Officer (OFFICER), Lieutenant and above (LIEUTUP), Captain and above (CAPTUP), Supervisory status (SUPER), low neighborhood crime rates (LOWCR), and Dayshift (DAYSHIFT). The total model had a LLHO = -13851.79, a significantly better model fit than with MD



alone, and other model fit indices improved as well. The measurement model was unaffected by the addition, and the ADN1 on MD regression coefficient showed only slight improvement while remaining non-significant. Thus moral disengagement did not contribute anything to the model, with or without the control variables.

When ADN1 was regressed onto the control variables, OFFICER was positive and significant, LIEUTUP was negative and non-significant, CAPTUP was negative and significant, DAYSHIFT was negative and significant, SUPER was negative and nonsignificant, and LOWCR was negative and non-significant. These results indicated that respondents with higher ranks, supervisors, and those who worked dayshifts and in neighborhoods with lower crime tended to have lower ADN1 scores. The ICC value indicated an increased amount of variance to be explained at the Between level (8.52%), while the addition of the Level 1 covariates accounted for 14.94% of the Within level variance (see Table 23).



Acceptance of Deviant Norms Scenario 1, MSEM: Moral Disengagement, L1 covariates. Fixed Effects and Random Effects (L1, L2), ICC, Pseudo  $R^2$  and Model Fit Indices (Valid N=870, 8 clusters)

Fixed Effect	Est.	s.e.	Critical Ratio
ADN1 on MD	-0.047	0.040	-1.64
on Officer	0.186	0.054	3.46*
on Lieutenant up	-0.093	0.048	-1.94*
on Captain up	-0.261	0.108	-2.40
on Supervisor	-0.060	0.040	-1.50
on Low Crime	-0.053	0.045	-1.18
on Dayshift	-0.091	0.032	-2.87*
Random Effect	Est.	s.e.	Critical Ratio
ADN1 Level 2 Effect	0.026	0.012	2.14*
ADN1 Level 1 Effect	0.279	0.087	3.21*
Interclass Correlation	0.085 (8.52%)		
Within Pseudo $R^2$	0.149 (14.94%)		
Between Pseudo $R^2$	0.071 (-7.14%)		
$\overline{*p < .05}$			

Model Fit: LLHO = -13851.79, RMSEA = .084, CFI = .66, TLI = .62, WSRMR = .083, and BSRMR = .270

Decoupling was attempted as an addition to the model. As indicated in Table 24, its addition created a test statistic of only 1.22 indicating that the model fit improved but not significantly. ADN1 regressed on DEC was b = -.58, CR = -.71, p = .480, meaning that decoupling did not function as a significant predictor. Residual Between variance was decreased, with a Pseudo  $R^2 = .962$ , indicating that the addition of decoupling to the model did account for 96.15% of the variance to be explained at the Between level, with an ICC of .36%.



Acceptance of Deviant Norms Scenario 1, MSEM: MD, L1 cov, Decoupling only. Fixed Effects and Random Effects related to Decoupling addition, ICC, Pseudo  $R^2$  and Model Fit Indices (Valid N=870, 8 clusters)

Fixed Effect	Est.	s.e.	Critical Ratio
ADN1 on MD	-0.047	0.040	-1.16
on DEC	-0.584	0.821	-0.71
Random Effect	Est.	s.e.	Critical Ratio
ADN1 Level 2 Effect	0.001	0.061	0.02
ADN1 Level 1 Effect	0.279	0.087	3.21*
Interclass Correlation	0.003 (.36%)		
Within Pseudo $R^2$	0.000 (0%)		
Between Pseudo $R^2$	0.962 (96.15%)		
* <i>p</i> < .05			

Model Fit: LLHO = -13850.57, RMSEA = .083, CFI = .66, TLI = .63, WSRMR = .083, and BSRMR = .322

Since it was not possible to add ANO to DEC to serve as mutual Level 2 predictors (model would not identify), the model was tested with the addition of ANO instead of DEC to see how the two compared in terms of their contribution to the model. (Due to this identification problem it was not possible to evaluate the correlative relationship between anomie and decoupling for Hypothesis 1, and this had to be investigated with the MLM post hoc test.)

When adding ANO instead of DEC, the test statistic was 16.5, significantly better than the prior model and indicating that ANO was a better fit than DEC. That ANO was a better fit to the model than DEC was indicated not only by the test statistic but also by the higher significance for regressing ADN1 on ANO (b = 1.75, CR = 4.02, p < .001). More importantly, after the addition of ANO, the ICC = 0, and the Between Pseudo  $R_2 =$ 1.00, indicating that the addition of ANO accounted for 100% of the residual Between



variance. Based on these results DEC was not included in the final MSE model for ADN1.

The final model thus included MD as a latent predictor with the covariates of OFFICER, LIEUTUP, CAPTUP, SUPER, LOWCR, and DAYSHIFT all on Level 1. ANO was the only predictor on Level 2. No Level 2 covariates could be added to the model as there was no more Between variance to be explained. The final ADN1 model statistics were LLHO = -13835.29, RMSEA = .083, CFI = .67, TLI = .63, WSRMR = .083, and BSRMR = .183, indicating that, although it served to test some of the hypotheses, the final model was still not a good fit to the data. Final structural model statistics can be found in Table 25.

Table 25

Fixed Effect	Est.	s.e.	Critical Ratio
ADN1 on MD	-0.046	0.041	-1.12
on Officer	0.182	0.054	3.39*
on Lieutenant up	-0.095	0.044	-2.15*
on Captain up	-0.252	0.122	-2.06*
on Supervisor	-0.061	0.042	-1.43
on Low Crime	-0.053	0.040	-1.32
on Dayshift	-0.092	0.032	-2.84
on ANO	1.175	0.292	4.02*
Random Effect	Est.	s.e.	Critical Ratio
ADN1 Level 2 Effect	0.000	0.014	-0.00
ADN1 Level 1 Effect	0.269	0.084	3.22*
Interclass Correlation	0.000 (0%)		
Within Pseudo $R^2$	0.000 (0%)		
Between Pseudo $R^2$	1.000 (100%)		

Acceptance of Deviant Norms Scenario 1, MSEM Final Model: MD, L1 cov., Anomie. Fixed Effects and Random Effects (L1, L2), ICC, Pseudo  $R^2$  and Model Fit Indices (Valid N=870, 8 clusters)

\**p* < .05

Fit of ADN1 Model: LLHO = -13835.29, RMSEA = .083, CFI = .67, TLI = .63, WSRMR = .083, and BSRMR = .183



Due to the inability to evaluate anomie and decoupling together in the MSE models, Hypothesis 1 could not be tested (ANO and DEC correlated) and was tested in the MLM post hoc analyses. For ADN1, Hypothesis 2 was supported for anomie, such that the addition of ANO accounted for all of the Between level variance, and ADN1 regressed on ANO neared significance. Hypothesis 2 was not, however, supported for DEC; the regression coefficient was not significant. ADN1 regressed on MD was not significant and accounted for no within variance, thus Hypothesis 3 was not supported. Hypothesis 4 could not be tested in the MSE model because the random slope of s1 = ADN1 on MD required too many integration points. Based on these results and what was possible with the MSE model, all four hypotheses were tested further with a post hoc base MLM. All ADN1 MSE models can be viewed together in Table 26.



Decoupling), and Fin 870)	nal Model	(MD, L1 co	ov., Anomie	): Fixed Eff	fects and Ro	indom Effec	ts (L1, L2),	ICC, and P	seudo R <sup>2</sup> (Vo	did N =
	Nul	-	B				D		Fin	al
Fixed Effect	Est.	s.e.	Est.	s.e.	Est.	s.e	Est.	s.e.	Est.	s.e
ADN1										
on MD			-0.027	0.049	-0.047	0.040	-0.047	0.040	-0.046	0.041
on Officer					0.186	$0.054^{*}$			0.182	$0.054^{*}$
on Leiut. up					-0.093	0.048*			-0.095	$0.044^{*}$
on Captain up					-0.261	0.108			-0.252	$0.122^{*}$
on Supervisor					-0.060	0.040			-0.061	0.042
on Low Crime					-0.053	0.045			-0.053	0.040
on Dayshift					-0.091	$0.032^{*}$			-0.092	0.032
on Decoupling							-0.584	0.821		
on Anomie									1.175	0.292*
	N	111	B			0	D		Fin	al
Random Effect	Est.	s.e.	Est.	s.e	Est.	s.e.	Est.	s.e	Est.	s.e
ADN1 L2 Effect	0.023	0.010*	0.023	0.011*	0.026	0.012*	0.001	0.061	0.000	0.014
ADN1 L1 Effect	0.328	0.090*	0.328	*060.0	0.279	0.087*	0.279	0.087*	0.269	$0.084^{*}$
Interclass Corr.	0.066		0.066		0.085		0.003		0.000	
Within Ps. $R^2$			0.000		0.149				0.000	
Between Ps. $R^2$			-0.217		0.071		0.962		1.000	
* <i>p</i> < .05										

Acceptance of Deviant Norms Scenario 1, MSEMs. Null Model, Interim Models B (MD only), C (MD, L1 covariates), D (MD, L1 cov.

Table 26

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Multilevel model post-hoc tests. The base level MLM used non-latent summed variables to evaluate 2-level path relationships. These models had to be pared down, eliminating most demographic covariates in order to allow convergence with a random slope. The major steps from the null model to the final model, with the purpose of hypothesis testing, are discussed below.

First, the null model was evaluated, including just the outcome variable of acceptance of deviant norms for Scenario 1 (ADN1). As indicated in Table 27, the null model for ADN1 had significant Within ( $\sigma_0 = 5.687$ , CR = 12.99, p < .001) and Between  $(\mu_0 = .439, CR = 3.38, p = .001)$  level variance values indicating a significant portion of variance in the outcome variable to be explained on both levels. The ICC indicated that 7.17% of total model variance could be explained on the Between departments level. The model had a Loglikelihood HO value of -6029.03, with an RMSEA=.244, CFI=.00, TL1=.00, Within SRMR=.20, and Between SRMR=.25. This indicated a poorly fitting null model.

Table 27

Effects (L1, L2), ICC, and MC	pael Fil Indices (Valla	N=903, 8 clusters)	
Fixed Effect	Est.	s.e.	
ADN1 Mean	6.457	0.269	
Random Effect	Est.	s.e.	Critical Ratio
ADN1 Level 2 Effect	0.439	0.130	3.38*
ADN1 Level 1 Effect	5.687	0.438	12.99*
Interclass Correlation	0.072 (7.17%)	)	
* <i>p</i> < .05			
Model Fit: $LLHO = -6029.03$	, RMSEA = .244, CFI	t = .00, TLI = .00, W	SRMR = .204,

Acceptance of Deviant Norms Scenario 1, MLM: Null Model. Fixed Effects and Random Efforts (11, 12) ICC and Model Fit Indians (Valid N=003, 8 abustars)

and BSRMR = .248



Next, MD was added to the model on the Within level and ADN1 was regressed on MD. As indicated in Table 28, the total model had a LLHO = -4340.17 indicating a significantly better fit than the null model and other fit indices improved slightly (RMSEA = .247, CFI = .126, TLI = 1.00, WSRMR = .191, BSRMR=.248). ADN1 regressed on MD was also significant (b = .36, CR= 5.88, p < .001). The Within variance remained significant, as did the Between variance. Only 5.12% of the Within variance was accounted for by the addition of MD (Pseudo  $R^2$  = .051). The ICC decreased to 6.50% indicating a decrease in the total model variance to be explained at the Between level.

Table 28

Acceptance of Deviant Norms Scenario 1, MLM: Moral Disengagement only. Fixed Effects and Random Effects (L1, L2), ICC, Pseudo  $R^2$  and Model Fit Indices (Valid N=903, 8 clusters)

Fixed Effect	Est.	s.e.	Critical Ratio
ADN1 on MD	0.358	0.061	5.88*
Random Effect	Est.	s.e.	Critical Ratio
ADN1 Level 2 Effect	0.375	0.106	3.54*
ADN1 Level 1 Effect	5.396	0.380	14.22*
Interclass Correlation	0.065 (6.50%)		
Within Pseudo $R^2$	0.051 (5.12%)		
Between Pseudo $R^2$	0.146 (14.58%)		
* <i>p</i> < .05			

Model Fit: LLHO = -4340.17, RMSEA = .247, CFI = .13, TLI = -.02, WSRMR = .191, and BSRMR = .248

Level 1 (individual level) covariates were tested in the model based on strong bivariate correlations with ADN1, and the best fitting one for the model, Officer (OFFICER), was retained. As indicated in Table 29, the total model had a LLHO = -3709.93, a significant better model fit than with MD alone. Other model fit indices



remained about the same. The ADN1 on MD regression coefficient did maintain significance with the addition of the covariate (b = .33, CR = 6.53, p < .001). This indicated that MD contributed something to the model over and above the control variable, supporting Hypothesis 3. The coefficient produced from ADN1 regressed onto OFFICER was positive and significant, indicating that respondents with a rank of officer tended to have higher ADN1 scores than those of higher ranks. The ICC value indicated an increased amount of variance to be explained at the Between level (8.24%), while the addition of the Level 1 covariates accounted for 5.12% of the Within level variance.

Table 29

Acceptance of Deviant Norms Scenario 1, MLM: Moral Disengagement, L1 covariate. Fixed Effects and Random Effects (L1, L2), ICC, Pseudo  $R^2$  and Model Fit Indices (Valid N=903, 8 clusters)

Fixed Effect	Est.	s.e.	Critical Ratio
ADN1 on MD	0.328	0.050	6.53*
on Officer	0.981	0.161	6.09*
Random Effect	Est.	s.e.	Critical Ratio
ADN1 Level 2 Effect	0.465	0.285	1.63*
ADN1 Level 1 Effect	5.175	0.244	21.73*
Interclass Correlation	0.082 (8.24%)		
Within Pseudo $R^2$	0.041 (4.10%)		
Between Pseudo $R^2$	-0.240 (-24.00%)		
*n < 05			

Model Fit: LLHO = -3709.93, RMSEA = .276, CFI = .23, TLI = -.15, WSRMR = .176, and BSRMR = .248

The next stage involved the addition of the Level 2 predictors to the model. When it was determined that it would not be possible to test the random slope of ADN1 on MD as the outcome with both ANO and DEC in the model as predictors (model would not terminate properly), it was necessary to determine which of the two was a better fit





model iterations to the final "random slope as outcome" model. DEC was then evaluated in the same way. Both contributed significantly to an explanation of ADN1 variance between departments and had similar results as predictors of the random slope. As such, both versions of the model for ADN1 (anomie and decoupling) have been presented here.

Since ANO and DEC did not function together in the full model, Hypothesis 1 for ADN1 (significant correlation between ANO and DEC) was tested on a model that included MD, Rank, ANO, and DEC with a command of ANO with DEC to evaluate the correlative relationship. The resulting estimate was b = -.01, indicating a very low correlation, and the model would not terminate properly. Thus Hypothesis 1 could be rejected.

The following will present first the sequence of models that include anomie as the only Level 2 predictor. Then the second sequence of models will be presented that instead use decoupling as the only Level 2 predictor. Each sequence of models will test Hypotheses 2 and 4 for the respective Level 2 predictors (anomie or decoupling), determining the significance of the regression coefficient with ADN1, and with the slope between ADN1 and moral disengagement.

As indicated in Table 30, when anomie was added to the model, the LLHO was -3581.71 indicating that the model fit significantly improved. Other test statistics supported this. Also, ADN1 regressed on ANO was b = 1.56, CR = 2.81, p = .005, indicating that it functioned as a significant predictor, thus supporting Hypothesis 2 for anomie. Residual Between variance decreased, with a Pseudo  $R^2 = .684$ , indicating that the addition of anomie to the model accounted for 68.39% of the variance to be explained at the Between level, with an ICC of 2.76%.



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Acceptance of Deviant Norms Scenario 1, MLM: MD, L1 cov, Anomie only. Fixed Effects and Random Effects related to Anomie addition, ICC, Pseudo  $R^2$  and Model Fit Indices (Valid N=903, 8 clusters)

Fixed Effect	Est.	s.e.	Critical Ratio
ADN1 on MD	0.329	0.050	6.55*
on ANO	1.599	0.556	2.81*
Random Effect	Est.	s.e.	Critical Ratio
ADN1 Level 2 Effect	0.147	0.144	1.02
ADN1 Level 1 Effect	5.177	0.245	21.17*
Interclass Correlation	0.028 (2.76%)		
Within Pseudo $R^2$	0.000 (04%)		
Between Pseudo $R^2$	0.684 (68.39%)		
* <i>p</i> < .05			

Model Fit: LLHO = -3581.71, RMSEA = .152, CFI = .80, TLI = .21, WSRMR = .041, and BSRMR = .006

The addition of the random slope of ADN1 on MD to the model containing MD, Officer, and ANO did not significantly change the Between or Within variance, and the ICC remained similar at 2.71%. The intention of adding the random slope to the model was to determine how much the relationship between ADN1 and MD varied across clusters. The mean for the random slope of s1 (ADN1 on MD) was .34, with CR= 5.74, p < .001. This indicated that the average effect for moral disengagement on ADN1 was positive and significant. However, the variance estimate for the slope was not significant (Est. = .00, CR = .39, p = .697), indicating that the effect of moral disengagement on ADN1 did not vary significantly across departments. As such, there was not enough variance to try to explain with the use of a predictor. However, since Hypothesis 4 required the regression of s1 on ANO, this was still attempted.

The results of this final model–which includes the random slope of ADN1 on MD as the outcome, regressed onto ANO–are presented in Table 31 as the final MLM model



for ADN1. The LLHO was -3579.87. The resulting ICC was 2.68% with a nonsignificant Level 2 residual variance. The Within Pseudo  $R^2$  as compared to the model containing no random slope was .004, and the Between Pseudo  $R^2$  was .034. This indicated that the inclusion of the random slope as outcome to the model accounted for .41% of the Within variance and 3.4% of the Between variance. As expected, the regression of s1 on ANO was not significant (b = .25, CR = .03, p = .978) indicating that ANO did not have a significant effect on the relationship between MD and ADN1 across departments, leading to a rejection of Hypothesis 4.

Table 31

Acceptance of Deviant Norms Scenario 1, MLM Final Model (Anomie):MD, L1 cov, Anomie, Random Slope as Outcome (s1=ADN1 on MD). Fixed Effects and Random Effects, ICC, Pseudo  $R^2$  and Model Fit Indices (Valid N=903, 8 clusters)

<b>VV</b>	1		/
Fixed Effect	Est.	s.e.	Critical Ratio
ADN1 on Officer	0.975	6.154	0.16
on ANO	1.549	13.512	0.12
s1 on ANO	0.248	9.079	0.03
Random Effect	Est.	s.e.	Critical Ratio
ADN1 Level 2 Effect	0.142	4.589	0.03
ADN1 Level 1 Effect	5.156	4.182	1.23
Interclass Correlation	0.026 (2.68%)		
Within Pseudo $R^2$	0.004 (.41%)		
Between Pseudo $R^2$	0.034 (3.40%)		

#### \**p* < .05 Model Fit: LLHO = -3579.87

When decoupling was added to the model, its addition created a test statistic of 4.48, indicating that the model fit significantly improved. Other test statistics supported this. However, as seen in Table 32, ADN1 regressed on DEC was b = 11.31, CR = -1.66, p = .096, indicating that decoupling did not function as a significant predictor, thus leading to the rejection of Hypothesis 2 for decoupling. Residual Between variance was



decreased, with a Pseudo  $R^2 = .694$ , indicating that the addition of decoupling to the model accounted for 69.43% of the variance to be explained at the Between level, with an ICC of 2.74%. This suggested that while decoupling was not a significant predictor, it added slightly more to the total model than anomie, and accounted for a large amount of variance between departments.

Table 32

Acceptance of Deviant Norms Scenario 1, MLM: MD, L1 cov, Decoupling only. Fixed Effects and Random Effects related to Decoupling addition, ICC, Pseudo  $R^2$  and Model *Fit Indices (Valid N=905, 8 clusters)* 

Fixed Effect	Est.	s.e.	Critical Ratio
ADN1 on MD	0.330	0.050	6.64*
on DEC	-11.313	6.798	-1.66
Random Effect	Est.	s.e.	Critical Ratio
ADN1 Level 2 Effect	0.144	0.295	0.49
ADN1 Level 1 Effect	5.108	0.241	21.20*
Interclass Correlation	0.027 (2.74%)		
Within Pseudo $R^2$	0.000 (.04%)		
Between Pseudo $R^2$	0.694 (69.43%)		
*n < 05			

rp < .05

Model Fit: LLHO = -2969.27, RMSEA = .034, CFI = .99, TLI = .95, WSRMR = .014, and BSRMR = .000

The addition of the random slope of ADN1 on MD to the model containing MD, Rank, and DEC did not change the Within variance very much, although it increased the Between variance by 15%. The ICC remained very low at 2.64%, and evidencing a slight drop. The intention of adding the random slope to the model was to determine how much the relationship between ADN1 and MD varied across clusters. The mean for the random slope of s1 (ADN1 on MD) was .337, with CR= 5.69, p < .001. This indicated that the average effect for moral disengagement on ADN1 was positive and significant.

However, the variance estimate for the slope was not significant (Est. = .00, CR = .47, p



= .641), indicating that the effect of moral disengagement on ADN1 did not vary significantly across departments. As such, similar to the model containing anomie, there was not enough significant variance to try to explain with the use of a predictor.
However, since Hypothesis 4 required the regression of s1 on DEC, this was still attempted.

The results of the model including the random slope of ADN1 on MD as the outcome, regressed onto DEC, are presented in Table 33 as the final MLM model for ADN1. The LLHO was -2968.00. The resulting ICC was 3.94% with a non-significant Level 2 residual variance. The Within Pseudo  $R^2$  as compared to the model containing no random slope was .004, and the Between Pseudo  $R^2$  was -.451. This indicated that the inclusion of the random slope as outcome to the model accounted for .35% of the Within variance and -45.14% of the Between variance (creating *more* variance to be explained between clusters as opposed explaining variance). As expected, the regression of s1 on DEC was not significant (b = 1.57, CR = -.03, p = .975) indicating that DEC did not have a significant effect on the relationship between MD and ADN1 across departments, leading to a rejection of Hypothesis 4. The most relevant ADN1 base multilevel models can be viewed together in Table 34.



Acceptance of Deviant Norms Scenario 1, MLM Final Model (Decoupling): MD, L1 cov, Decoupling, Random Slope as Outcome (s1=ADN1 on MD). Fixed Effects and Random Effects, ICC, Pseudo R<sup>2</sup> and Model Fit Indices (Valid N=905, 8 clusters)

Fixed Effect	Est.	s.e.	Critical Ratio
ADN1 on Officer	0.957	7.843	0.12
on DEC	-8.737	27.059	-0.32
s1 on DEC	-1.565	49.118	-0.03
Random Effect	Est.	s.e.	Critical Ratio
ADN1 Level 2 Effect	0.209	4.133	0.05
ADN1 Level 1 Effect	5.090	1.097	4.64*
Interclass Correlation	0.039 (3.94%)		
Within Pseudo $R^2$	0.004 (.35%)		
Between Pseudo $R^2$	-0.451 (-45.14%)		

\*p < .05

Model Fit: LLHO = -2968.00



Acceptance of Devia	nt Norms 5	Scenario 1,	MLMs. Nu	ll Model, In	terim Mode	els B (MD o	nly), C (MI	), L1 covaria	ates), D (MI	), L1 cov.,
Anomie), and Final A	Model (ML	), LI cov., A	lnomie, an	d Random S	lope sI = H	IDNI on M	D as Outcoi	me): Fixed l	Effects and I	landom
Effects (L1, L2), ICC	, and Pseu	ido R <sup>2</sup> (Vali	(dN = 903)							
	Nul	-	В				D		Fir	al
Fixed Effect	Est.	s.e.	Est.	s.e.	Est.	s.e	Est.	s.e.	Est.	s.e
ADN1										
on MD			0.358	$0.061^{*}$	0.328	0.050*	0.329	0.050*		
on Officer					0.981	$0.161^{*}$			0.975	6.154
on Anomie							1.599	0.556*	1.549	13.512
s1 on Anomie									0.240	9.079
	Nu	ıll	B				D		Fir	al
Random Effect	Est.	s.e.	Est.	s.e	Est.	s.e.	Est.	s.e	Est.	s.e
ADN1 L2 Effect	0.439	0.130*	0.375	$0.106^{*}$	0.465	0.285*	0.147	0.144	0.142	4.589
ADN1 L1 Effect	5.687	0.438*	5.396	0.380*	5.175	$0.244^{*}$	5.177	0.245*	5.156	$4.182^{*}$
Interclass Corr.	0.072		0.065		0.082		0.028		0.026	
Within Ps. $R^2$			0.051		0.041				0.004	
Between Ps. $R^2$		R	0.146		-0.240		0.684		0.034	
p < .05										

*Summary*. Based on the results from the two modeling methods, for ADN1, Hypothesis 1 was not supported; decoupling and anomie not significantly correlated. Hypothesis 2 was only partially supported, indicating that anomie was a significant predictor of ADN1, but that decoupling, while contributing considerably to the base MLM, was not a significant predictor. Hypothesis 3 was supported in the MLM with a significant and positive relationship between moral disengagement and ADN1 after the inclusion of a covariate, but this significance vanished in the more complex MSE model. Finally, Hypothesis 4 was not supported in the MLM, as there was not a significant proportion of variance in the slope of ADN1 on MD to be explained across departments, and with neither DEC nor ANOMIE having a significant effect on this relationship. The best model for the data for Scenario 1, based on the MLM results, is presented in Figure 2. This includes the coefficients for the final multilevel relationships and the random slope.





Level 1

Figure 2

Acceptance of Deviant Norms Scenario 1. Final Multilevel Relationships from Base MLM plus Random Slope as Outcome \*p < .05



ADN Scenario 2: Covering for a Fellow Officer

*Multilevel structural equation model results.* As indicated in Table 35, the null model for ADN2 had significant Within ( $\sigma_0$  = .996, CR = 27.37, *p* < .001) and Between ( $\mu_0$  = .174, CR = 3.71, *p* < .001) level variance values indicating a significant portion of variance to be explained on both levels. The ICC indicated that 14.87% of total model variance could be explained on the Between departments level, a great deal more than was found for ADN1. The model had a Loglikelihood HO (LLHO) = -8495.29, RMSEA = .29, CFI = .00, TLI = -.15, Within SRMR = .128, and a Between SRMR = .301. These values indicated a well-fitting null model.

Table 35

Acceptance of Deviant Norms Scenario 2, MSEM: Null Model. Fixed Effects and Random Effects (L1, L2), ICC, and Model Fit Indices (Valid N=862, 8 clusters)

Fixed Effect	Est.	s.e.	
ADN2-1	2.891	0.166	
ADN2-2	3.567	0.219	
ADN2-4	3.524	0.168	
Random Effect	Est.	s.e.	Critical Ratio
ADN2 Level 2 Effect	0.174	0.047	3.71*
ADN2 Level 1 Effect	0.996	0.036	27.37*
Interclass Correlation	0.149 (14.87%)		
* <i>p</i> < .05			
$M_{\rm e}$ del Ett. LLUO 9405 20	DMCEA 200 CEL 0		WCDMD 100

Model Fit: LLHO = -8495.29, RMSEA = .290, CFI = .00, TLI = -.15, WSRMR = .128, and BSRMR = .301

Next, MD was added to the model on the Within level and ADN2 was regressed onto MD. As indicated in Table 36, the total model had a LLHO = -8126.99, indicating a better fit, although other fit indices remained good, similar to the results for ADN1 (RMSEA = .135, CFI = .77, TLI = .75, WRMSR = .091, BRSRMR = .301). In the measurement portion of the model, ADN2 items loaded strongly on both Level 1 and 2,



with standardized loadings ranging from .59 to .85. MD items also loaded strongly on the Within level, with standardized loadings from .38 to 1.00. Similar to the model for ADN1 however, ADN2 regressed on MD was not significant (b = -.05, CR = -.42, p =.673). There was no change in the Within variance with the addition of MD, which remained significant at p < .001. The addition of MD slightly reduced the Within variance, with a Pseudo  $R^2 = .001$ , although the total Within variance remained significant, with an ICC of 14.96%, indicating only a small drop.

Table 36

Acceptance of Deviant Norms Scenario 2, MSEM: Moral Disengagement only. Fixed Effects and Random Effects (L1, L2), ICC, Pseudo  $R^2$  and Model Fit Indices (Valid N=862, 8 clusters)

,,,				
Fixed Effect	Est.	s.e.	Critical Ratio	
ADN2 on MD	-0.050	0.118	-0.42	
Random Effect	Est.	s.e.	Critical Ratio	
ADN2 Level 2 Effect	0.175	0.047	3.75*	
ADN2 Level 1 Effect	0.995	0.037	26.81*	
Interclass Correlation	0.150 (14.96%)			
Within Pseudo $R^2$	0.001 (.10%)			
Between Pseudo $R^2$	-0.006 (57%)			
* <i>p</i> < .05				

Model Fit: LLHO = -8126.99, RMSEA = .135, CFI = .77, TLI = .75, WSRMR = .091, and BSRMR = .301

Next, Level 1 covariates were added to the model based on their strong bivariate correlations with ADN2. Those retained showed a positive contribution to model fit. These were Nightshift (NIGHTSHIFT), Low Neighborhood Crime Rate (LOWCR), and Captain and above (CAPTUP). As indicated in Table 37, the total model had a LLHO = - 14134.09, a significantly worse model fit than with MD alone, and the other model fit indices also worsened somewhat. The total model remained reasonably acceptable



(RMSEA = -.072, CFI = .63, TLI = .60, WRSRMR = .104, BSRMR = .299). The ADN1 on MD regression coefficient also diminished and remained non significant. This indicated that MD was not significantly contributing to an explanation of ADN2 variance, with or without the addition of control variables.

When ADN2 was regressed onto the control variables, NIGHTSHIFT was positive and significant, LOWCR was negative and significant, and CAPTUP was negative and significant. These results indicated that although ADN2 was similar to ADN1, in that those ranked captain and up had significantly lower scores than those ranked below them, unlike ADN1, respondents in neighborhoods with higher crime rates and those working night shifts had higher ADN2 scores. The ICC value indicated that some of the Between variance (1.71%) was explained by these covariates. The addition of the Level 1 covariates accounted for 3.42% of the Within level variance. Hence the demographic variables explained more of the Within variance for ADN2 than did MD.


Table 37

Acceptance of Deviant Norms Scenario 2, MSEM: Moral Disengagement, L1 covariates. Fixed Effects and Random Effects (L1, L2), ICC, Pseudo  $R^2$  and Model Fit Indices (Valid N=862, 8 clusters)

Fixed Effect	Est.	s.e.	Critical Ratio
ADN2 on MD	-0.056	0.109	-0.52
on Nightshift	0.303	0.052	5.83*
on Captain Up	-0.561	0.124	-4.52*
on Low Crime	-0.251	0.062	-4.08*
Random Effect	Est.	s.e.	Critical Ratio
ADN2 Level 2 Effect	0.053	0.038	1.39*
ADN2 Level 1 Effect	0.959	0.033	28.87*
Interclass Correlation	0.152 (15.18%)		
Within Pseudo $R^2$	0.034 (3.42%)		
Between Pseudo $R^2$	0.017 (1.71%)		
* <i>p</i> < .05			
Model Fit: LLHO = -14134 0	9 RMSEA = $072$ CFL	= 63  TL I = 60	WSRMR = 104

and BSRMR = .299

When DEC was added to the model the model failed to identify, indicating that DEC was a poor fit to the model, despite a correction for high variances. In contrast, as seen in Table 38, the addition of only ANO to the model improved the overall model fit (LLHO = -8154.44, RMSEA = .134, CFI = .80, TLI = .76, WSRMR = .088, BSRMR = .152) and accounted for a large portion of the Between level variance to be explained. ANO had high item loadings, close to 1.00, and ADN2 regressed on ANO was significant at b = 2.92, CR = 4.10, p < .001. The Between variance was diminished, with an ICC of 5.24% remaining. The addition of ANO thus accounted for 69.19% of remaining Between variance (Pseudo  $R^2 = .692$ ). Unlike the ADN1 model, however, the inclusion of ANO did not impact the relationship between ADN2 and MD, which remained at the same level of non-significance.



## Table 38

Acceptance of Deviant Norms Scenario 2, MSEM: MD, L1 cov, Anomie only. Fixed Effects and Random Effects related to Anomie addition, ICC, Pseudo  $R^2$  and Model Fit Indices (Valid N=862, 8 clusters)

Fixed Effect	Est.	s.e.	Critical Ratio
ADN2 on MD	-0.056	0.109	-0.52
on ANO	2.915	0.710	4.10*
Random Effect	Est.	s.e.	Critical Ratio
ADN2 Level 2 Effect	0.053	0.038	1.39
ADN2 Level 1 Effect	0.959	0.033	28.87*
Interclass Correlation	0.052 (5.24%)		
Within Pseudo $R^2$	0.002 (.21%)		
Between Pseudo $R^2$	0.692 (69.19%)		
* <i>p</i> < .05			

Model Fit: LLHO = -8154.44, RMSEA = .134, CFI = .80, TLI = .76, WSRMR = .088, and BSRMR = .152

Based on bivariate correlations and model identification requirements, only AA (percentage African Americans in jurisdiction) could be added to the model as a Level 2 covariate. As seen in Table 39, there was a significant improvement in the model with its addition. The final LLHO = -8126.50, with a deviance test statistic at p < .001. ADN2 regressed onto ANO remained significant with the inclusion of the Level 2 covariate, while ADN2 significantly and negatively regressed onto AA. This indicated that as percentage of African Americans in a jurisdiction increased, ADN2 scores for respondents decreased. AA accounted for 64.72% of remaining Between variance (Pseudo  $R^2 = .647$ ), with a final ICC = 2.14%.

The final model included MD, Nightshift, Captain and higher, and Low Crime on Level 1 and ANO and AA on Level 2. Similar to the model for ADN1, while the final model allowed for the testing of certain hypotheses, the model statistics did not represent



a good fit (RMSEA = .135, CFI = .80, TLI = .76, WSRMR = .088, BSRMR = .184). Full

measurement and structural model statistics can be found in Table 39.

Table 39

Acceptance of Deviant Norms Scenario 2, MSEM Final Model: MD, L1 cov., Anomie, L2 cov. Fixed Effects and Random Effects (L1, L2), ICC, Pseudo  $R^2$  and Model Fit Indices (Valid N=862, 7 clusters)

Fixed Effect	Est.	s.e.	Critical Ratio
ADN2 on MD	-0.055	0.110	-0.50
on Nightshift	0.303	0.051	5.98*
on Captain up	-0.544	0.126	-4.32*
on Low Crime	-0.254	0.062	-4.11*
on ANO	4.105	1.051	3.90*
on AA	-0.377	0.171	-2.20*
Random Effect	Est.	s.e.	Critical Ratio
ADN2 Level 2 Effect	0.021	0.020	1.05
ADN2 Level 1 Effect	0.962	0.034	28.07*
Interclass Correlation	0.021 (2.14%)		
Within Pseudo $R^2$	-0.003 (03%)		
Between Pseudo $R^2$	0.647(64.72%)		
	(J, U = I + U = I + Z + U = I		

\*p < .05

Model Fit: LLHO = -8126.50, RMSEA = .135, CFI = .80, TLI = .76, WSRMR = .088, BSRMR = .184

Based on the MSE model results, Hypothesis 1 could not be tested, as DEC could not be added to the model (the inability to fit it to the model suggested problems with the latent variable). Hypothesis 1 was thus tested in the MLM post hoc analysis. Hypothesis 2 was supported for anomie, such that the addition of ANO accounted for a large portion of the Between level variance, and ADN2 regressed onto ANO remained significant even with the addition of a Level 2 covariate. Hypothesis 2 could not, however, be evaluated for decoupling. In the final model, ADN2 regressed on MD was not positive or significant. MD did not seem to contribute positively to the model or account for any Within level variance, leading to the rejection of Hypothesis 3 as tested with the MSE



model. Hypothesis 4 could not be tested with the MSE model because, similar to the ADN1 model, the addition of the slope s1 = ADN2 on MD required too many integration points. Based on these results and what was possible with the MSE model, all four hypotheses were further tested with a post hoc base MLM. All ADN2 MSE models can be viewed together in Table 40.



Anomie), and Final = 862)	Model (ML	D, LI cov., .	Anomie, Lz	cov.): Fixe	ed Effects av	id Kandom	Effects (L1,	LZ), ICC, a	nd Pseudo h	- (Valid N
	Nul	11	щ			0			Fin	al
Fixed Effect	Est.	s.e.	Est.	s.e.	Est.	s.e	Est.	s.e.	Est.	s.e
ADN2										
on MD			-0.050	0.118	-0.056	0.109	-0.056	0.109	-0.055	0.110
on Nightshift					0.303	0.052*			0.303	$0.051^{*}$
on Captain up					-0.561	$0.124^{*}$			-0.544	$0.126^{*}$
on Low Crime					-0.251	0.062*			-0.254	$0.062^{*}$
on Anomie							2.915	$0.710^{*}$	4.105	$1.051^{*}$
on AA									-0.377	$0.171^{*}$
	N	ull	Щ	_		D	Ω		Fin	al
Random Effect	Est.	s.e.	Est.	s.e	Est.	s.e.	Est.	s.e	Est.	s.e
ADN2 L2 Effect	0.174	0.047*	0.175	0.047*	0.053	0.038*	0.053	0.038	0.021	0.020
ADN2 L1 Effect	0.996	$0.036^{*}$	0.995	$0.037^{*}$	0.959	0.033*	0.959	0.033*	0.962	$0.034^{*}$
Interclass Corr.	0.149		0.150		0.152		0.052		0.021	
Within Ps. $R^2$			0.001		0.034		0.002		-0.003	
Between Ps. $R^2$			-0.006		0.017		0.692		0.647	
*p < .05										

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*Multilevel model post hoc tests.* The base level MLM used non-latent summed variables to evaluate 2-level path relationships. This model was pared down, eliminating most demographic covariates in order to allow convergence with a random slope. The major steps from the null model to the final model for ADN2, with the purpose of hypothesis testing, are discussed below.

First, the null model was evaluated, including only the outcome variable of acceptance of deviant norms for Scenario 2 (ADN2). As indicated in Table 41, the null model for ADN2 had significant Within level variance value ( $\sigma_0$  = 9.290, CR = 36.34, *p* < .001), and a significant Between ( $\mu_0$  = 2.984, CR = 2.52, *p* = .012) level variance value indicating that a considerable portion of variance in the outcome variable was explained on both levels. The ICC indicated that 24.31% of total model variance could be explained on the Between departments level. The model had a Loglikelihood HO value of -5923.66, with an RMSEA=.229, CFI=.00, TL1= .00, Within SRMR=.203, and Between SRMR=.240. This indicated a poorly fitting null model.

Table 41

Effects (L1, L2), ICC, and Mo	Daei Fii Indices (Valia	N=075, 0  clusters)	
Fixed Effect	Est.	s.e.	
ADN2 Mean	9.526	0.665	
Random Effect	Est.	s.e.	Critical Ratio
ADN2 Level 2 Effect	2.984	1.187	2.52*
ADN2 Level 1 Effect	9.290	0.256	36.34*
Interclass Correlation	0.243 (24.31%	)	
* <i>p</i> < .05			

Acceptance of Deviant Norms Scenario 2, MLM: Null Model. Fixed Effects and Random Effects (L1, L2), ICC, and Model Fit Indices (Valid N=873, 8 clusters)

Model Fit: LLHO = -5923.66, RMSEA = .229, CFI = .00, TLI = .00, WSRMR = .203 and BSRMR = .240



Next, MD was added to the model on the Within level and ADN2 was regressed on MD. As indicated in Table 42, the total model had a LLHO = -4290.68 indicating a significantly better fit though other fit indices remained poor (RMSEA = .232, CFI = .118, TLI = -.029, WSRMR = .189, BSRMR=.240). ADN2 regressed on MD was significant (b = .46, CR= 7.32, p < .001). The Within variance remained significant, and the Between variance remained significant at around the same value. Only 5.08% of the Within variance was accounted for by the addition of MD (Pseudo  $R^2 = .051$ ), and 11.46% of the Between variance (Pseudo  $R^2 = .115$ ). The ICC also decreased to 23.05% indicating a slight decrease in the total model variance to be explained at the Between level.

Table 42

Acceptance of Deviant Norms Scenario 2, MLM: Moral Disengagement only. Fixed Effects and Random Effects (L1, L2), ICC, Pseudo  $R^2$  and Model Fit Indices (Valid N=873, 8 clusters)

Fixed Effect	Est.	s.e.	Critical Ratio
ADN2 on MD	0.455	0.062	7.32*
Random Effect	Est.	s.e.	Critical Ratio
ADN2 Level 2 Effect	2.642	1.047	2.52
ADN2 Level 1 Effect	8.818	0.337	26.19*
Interclass Correlation	0.231 (23.05%)		
Within Pseudo $R^2$	0.051 (5.08%)		
Between Pseudo $R^2$	0.115 (11.46%)		
* <i>p</i> < .05			

Model Fit: LLHO = -4290.68, RMSEA = .232, CFI = .12, TLI = -.03, WSRMR = .189, and BSRMR = .240

Level 1 (individual level) covariates were tested based on strong bivariate

correlations with ADN2, and the covariate that best fit the model, Workday

(WORKDAY), was retained. As indicated in Table 43, the total model had a LLHO = -



3817.37, a significantly better model fit than with MD alone. Other model fit indices remained about the same. The ADN2 on MD regression coefficient maintained significance with the addition of the covariate (b = .45, CR = 6.85, p < .001). This indicated that MD contributed something to the model over and above the control variable, supporting Hypothesis 3. The coefficient produced from ADN2 regressed onto NIGHTSHIFT was positive and significant, indicating that those working night shifts tended to have higher ADN2 scores. The ICC value indicated a slightly increased amount of variance to be explained at the Between level (23.50%), while the addition of the Level 1 covariates accounted for 1.17% of the Within level variance.

Table 43

Acceptance of Deviant Norms Scenario 2, MLM: Moral Disengagement, L1 covariate. Fixed Effects and Random Effects (L1, L2), ICC, Pseudo  $R^2$  and Model Fit Indices (Valid N=873, 8 clusters)

<u>11-075, 0 clusters)</u>			
Fixed Effect	Est.	s.e.	Critical Ratio
ADN2 on MD	0.452	0.066	6.85*
on Nightshift	0.828	0.245	3.38*
Random Effect	Est.	s.e.	Critical Ratio
ADN2 Level 2 Effect	2.673	1.553	1.72
ADN2 Level 1 Effect	8.702	0.418	20.79*
Interclass Correlation	0.235 (23.50%)		
Within Pseudo $R^2$	0.013 (1.32%)		
Between Pseudo $R^2$	0.012 (1.17%)		
* 05			

\**p* < .05 Model Fit: LLHO = -3817.37, RMSEA = .292, CFI = .16, TLI = -27, WSRMR = .185, and BSRMR = .240

The next stage involved the addition of the Level 2 predictors to the model. As with the ADN1 MLM, it was determined that it was not possible to test the random slope of ADN2 on MD as the outcome with both ANO and DEC in the model as predictors (model would not terminate properly). It was thus again necessary to determine which of



the two predictors (anomie or decoupling) was a better fit for the total model. ANO was evaluated as an addition to the model and used through the model iterations to the final "random slope as outcome" model. DEC was then evaluated in the same way. While anomie was a significant predictor of ADN2 between departments, decoupling was not. Comparatively, anomie also contributed more to the model (accounted for more Level 2 variance). Due to these differences, decoupling will be presented first only to show its initial contribution to the model. Then the series of models leading to the "random slope as outcome" final model will be presented using only ANO as the level 2 predictor, since the results indicate that anomie is a better fit to the model than decoupling.

Similar to the ADN1 model, since both variables of ANO and DEC did not function in the full model, Hypothesis 1 for ADN2 (significant correlation between ANO and DEC) was tested on a model that included MD, Rank, ANO, and DEC with a command of ANO with DEC to evaluate the correlative relationship. The model would not identify, indicating that the relationship was not an appropriate fit to the model. Thus Hypothesis 1 could be rejected for ADN2.

The following will present first the model for decoupling (as added to the model with the Level 1 predictor and covariate) to test Hypothesis 2 for decoupling, determining the significance of its regression coefficient with ADN2. Subsequently, the sequence of models that includes anomie as the only Level 2 predictor will be presented. These will test Hypotheses 2 and 4 for anomie only, determining the significance of the regression coefficient with ADN2, and with the slope between ADN2 and moral disengagement.

When decoupling was added to the model, its addition created a test statistic of 1.17 indicating that the model fit improved but not significantly. Other model fit



statistics supported a strong model. As indicated in Table 44, ADN2 regressed on DEC was b = -11.97, CR = -.28, p = .782, indicating that it did not function as a significant predictor, thus leading to the rejection of Hypothesis 2 for decoupling. Residual Between variance was decreased, with a Pseudo  $R^2 = .077$ , indicating that the addition of decoupling to the model accounted for only 7.69% of the variance to be explained at the Between level, with an ICC of 21.92% remaining. This suggested that decoupling was not a significant predictor, and did not account for much of the variance between departments, although remaining Between variance was non-significant.

Table 44

Acceptance of Deviant Norms Scenario 2, MLM: MD, L1 cov, Decoupling only. Fixed Effects and Random Effects related to Decoupling addition, ICC, Pseudo  $R^2$  and Model Fit Indices (Valid N=877, 8 clusters)

Fixed Effect	Est.	s.e.	Critical Ratio
ADN2 on MD	0.464	0.066	7.05*
on DEC	-11.968	43.259	-0.28
Random Effect	Est.	s.e.	Critical Ratio
ADN2 Level 2 Effect	2.444	1.973	1.26
ADN2 Level 1 Effect	8.722	0.418	20.84*
Interclass Correlation	0.219 (21.92%)	)	
Within Pseudo $R^2$	0.000 (0%)		
Between Pseudo $R^2$	0.077 (7.69%)		
*n < 05			

Model Fit: LLHO = -3114.85, RMSEA = .012, CFI = 1.00, TLI = .99, WSRMR = .011, and BSRMR = .017

As indicated in Table 45, when anomie was added to the model, its addition created a test statistic of -3685.71 indicating that the model fit significantly improved. Other test statistics supported this. ADN1 regressed on ANO was b = 3.29, CR = 2.67, p = .008, indicating that it functioned as a significant predictor, thus supporting Hypothesis

2 for anomie. Residual Between variance was decreased, with a Between Pseudo  $R^2$  =



.593, indicating that the addition of anomie to the model accounted for 59.26% of the variance to be explained at the Between level, with a drop in the ICC to 11.13%. This demonstrated that anomie was a much better addition to the model than decoupling, in terms of significance as a predictor and explanation of Level 2 variance.

Table 45

Acceptance of Deviant Norms Scenario 2, MLM: MD, L1 cov, Anomie only. Fixed Effects and Random Effects related to Anomie addition, ICC, Pseudo  $R^2$  and Model Fit Indices (Valid N=873, 8 clusters)

Fixed Effect	Est.	s.e.	Critical Ratio
ADN2 on MD	0.447	0.066	6.78*
on ANO	3.291	1.235	2.67*
Random Effect	Est.	s.e.	Critical Ratio
ADN2 Level 2 Effect	1.084	0.821	1.33
ADN2 Level 1 Effect	8.699	0.418	20.80*
Interclass Correlation	0.111 (11.13%)	)	
Within Pseudo $R^2$	0.000 (.03%)		
Between Pseudo $R^2$	0.593 (59.26%)	)	
*n < 05			

Model Fit: LLHO = -3685.71, RMSEA = .208, CFI = .61, TLI = -.57, WSRMR = .056, and BSRMR = .004

The addition of the random slope of ADN2 on MD to the model containing MD, Rank, and ANO did not cause much change to the Between or Within variance, with the ICC remaining nearly the same at 11.28%. The intention of adding the random slope to the model was to determine how much the relationship between ADN2 and MD varied across clusters. The mean for the random slope of s1 (ADN2 on MD) was .44, with CR= 2.97, p = .003. This indicated that the average effect for moral disengagement on ADN2 was positive and significant. The variance estimate for the slope was not significant (Est. = .01, CR = .10, p = .918), indicating that the effect of moral disengagement on ADN2 did not vary significantly across departments. As such, there was not enough significant



variance to try to explain with the use of a predictor. However, since Hypothesis 4 required the regression of s1 on ANO, this was still attempted.

The results of the model including the random slope of ADN2 on MD as the outcome, regressed onto ANO, are presented in Table 46 as the final MLM model for ADN2. The LLHO was -3685.74. The resulting ICC was 11.01% with a non-significant Level 2 residual variance. The Within Pseudo  $R^2$  as compared to the model containing no random slope was .002, and the Between Pseudo  $R^2$  was .014. This indicated that the inclusion of the random slope as outcome to the model accounted for only .16% of the Within variance and 1.38% of the Between variance. As expected, the regression of s1 on ANO was not significant (*b* = -.04, CR = .00, *p* = 1.00) indicating that ANO did not have a significant effect on the relationship between MD and ADN2 across departments, leading to a rejection of Hypothesis 4. The relevant ADN2 base multilevel models can be viewed together in Table 47.

Table 46

Acceptance of Deviant Norms Scenario 2, MLM Final Model: MD, L1 cov, Anomie, Random Slope as Outcome (s1=ADN2 on MD). Fixed Effects and Random Effects, ICC, Pseudo  $R^2$  and Model Fit Indices (Valid N=873, 8 clusters)

Fixed Effect	Est.	s.e.	Critical Ratio
ADN2 on Nightshift	0.830	72.733	0.12
on ANO	3.323	260.951	0.01
s1 on ANO	-0.040	91.671	0.00
Random Effect	Est.	s.e.	Critical Ratio
ADN2 Level 2 Effect	1.074	36.933	0.03
ADN2 Level 1 Effect	8.685	72.733	0.12*
Interclass Correlation	0.110 (11.019	%)	
Within Pseudo $R^2$	0.002 (.16%)	,	
Between Pseudo $R^2$	0.014 (1.38%	)	
*n < 05			

Model Fit: LLHO = -3685.74



Acceptance of Devia	nt Norms	Scenario 2, .	MLMs. Nu.	Il Model, In	terim Modé	ls B (MD o)	nly), C (MI	), L1 covariu	ates), D (M	D, L1 cov.,
Anomie), and Final	Model (MI	D, L1 cov., A	1nomie, an	d Random S	A = Is adol	IDNI on M	D as Outco	ne): Fixed I	Effects and	Random
Effects (L1, L2), ICC	, and Psei	udo R <sup>2</sup> (Vali	dN = 873							
	luN	11	B			0	D		Fi	nal
Fixed Effect	Est.	s.e.	Est.	s.e.	Est.	s.e	Est.	s.e.	Est.	s.e
ADN2										
on MD			0.455	$0.062^{*}$	0.452	$0.066^{*}$	0.447	$0.066^{*}$		
on Nightshift					0.828	0.245*			0.830	72.733
on Anomie							3.291	1.235*	3.323	260.951
s1 on Anomie									-0.040	91.671
	N	ull	B			D	D		Fi	nal
Random Effect	Est.	s.e.	Est.	s.e	Est.	s.e.	Est.	s.e	Est.	s.e
ADN2 L2 Effect	2.984	1.187*	2.733	1.047	2.592	1.553*	1.084	0.821	1.074	36.933
ADN2 L1 Effect	9.290	$0.256^{*}$	8.818	0.337*	8.702	0.418*	8.699	0.418*	8.685	72.733*
Interclass Corr.	0.243		0.231		0.235		0.111		0.110	
Within Ps. $R^2$			0.051		0.013				0.002	
Between Ps. $R^2$			0.115		0.012		0.593		0.014	
* <i>p</i> < .05										

Summary. The results from the two modeling methods for ADN2 were similar to those for ADN1. Hypothesis 1 was not supported, and Hypothesis 2 was only partially supported, indicating the usefulness of anomie, but not decoupling, in the model. In both the MSE and ML models, anomie served as a significant predictor while decoupling did not. Hypothesis 3 was not fully supported. In the more complex MSE model, MD did not have a significant relationship with ADN2, although within the MLM post hoc test the regression coefficient remained positive and significant even after the inclusion of a covariate. These results suggested that while moral disengagement may have a significant impact on ADN2 scores in simpler models, this significance vanishes with the inclusion of a measurement model. This may lead to the conclusion that there was not enough variation on MD within departments. Finally, similar to the results for the ADN1 model, Hypothesis 4 was not supported in the MLM; anomie did not serve as a significant predictor of the ADN2 on MD slope across departments. The best model for the data for Scenario 2, based on the MLM results, is presented in Figure 3. This includes the coefficients for the final multilevel relationships and the random slope.









Level 1

# Figure 3

Acceptance of Deviant Norms Scenario 2. Final Multilevel Relationships from Base MLM plus Random Slope as Outcome \*p < .05



## ADN Scenario 3: False Reporting

*Multilevel structural equation model results*. As indicated in Table 48, the null model for ADN3 had significant Within level variance values ( $\sigma_0$  = .129, CR = 2.10, *p* = .036) and significant Between level variance values ( $\mu_0$  = .012, CR = 3.04, *p* = .002) indicating sufficient variance to be explained on both levels (although the Within variance to be explained was considerably lower than for either ADN1 or ADN2). The ICC indicated that only 8.51% of total model variance could be explained on the Between departments level (between that found for ADN1 and ADN2). The model had a Loglikelihood HO (LLHO) = -13218.59, RMSEA = .07, CFI = .33, TLI = .29, Within SRMR = .145, and a Between SRMR = .001. These values indicated a moderately well-fitting null model.

Table 48

Effects (L1, L2), ICC, and Mc	pael Fit Indices (Valla N=	=854, 8 clusters)	
Fixed Effect	Est.	s.e.	
ADN3-1	1.195	0.042	
ADN3-2	1.621	0.092	
ADN3-4	2.454	0.222	
Random Effect	Est.	s.e.	Critical Ratio
ADN3 Level 2 Effect	0.012	0.004	3.04*
ADN3 Level 1 Effect	0.129	0.062	2.10*
Interclass Correlation	0.085 (8.51%)		
* <i>p</i> < .05			

Acceptance of Deviant Norms Scenario 3, MSEM: Null Model. Fixed Effects and Random Effects (L1, L2), ICC, and Model Fit Indices (Valid N=854, 8 clusters)

Model Fit: LLHO = -13218.59, RMSEA = .065, CFI = .33, TLI = .29, WSRMR = .145, and BSRMR = .001

Next, MD was added to the model on the Within level and ADN3 was regressed onto MD. As indicated in Table 49, the total model had a LLHO = -6742.39, indicating a better fit, while other fit indices improved slightly (RMSEA = .07, CFI = .35, TLI = .24,



WRMSR = .045, BRSRMR = .001). In the measurement portion of the model, ADN3 items loaded strongly on both Level 1 and 2, with standardized loadings ranging from .43 to 1.00. MD items also loaded strongly on the Within level, with standardized loadings from .47 to 1.00. However, similar to the results for ADN1 and ADN2, ADN3 regressed on MD was not significant (b = .03, CR = .69, p = .493). There was no change in the Within or Between variance, with Pseudo  $R^2$  values at 0 and -.008. Hence, MD did not help to explain variation in ADN3 either within or between departments.

Table 49

N=854, 8 clusters)Fixed Effect Critical Ratio Est. s.e. 0.69 ADN3 on MD 0.028 0.040 Random Effect Est. Critical Ratio s.e. ADN3 Level 2 Effect 0.012 0.004 3.02\* ADN3 Level 1 Effect 0.130 0.061 2.14\* Interclass Correlation 0.085(8.45%)Within Pseudo  $R^2$ -0.008 (-.78%) Between Pseudo  $R^2$ 0.000(0%)

Acceptance of Deviant Norms Scenario 3, MSEM: Moral Disengagement only. Fixed Effects and Random Effects (L1, L2), ICC, Pseudo  $R^2$  and Model Fit Indices (Valid N=854, 8 clusters)

\*p < .05

Model Fit: LLHO = -6742.39, RMSEA = .067, CFI = .35, TLI = .24, WSRMR = .045, and BSRMR = .001

Next, Level 1 covariates were added to the model based on their strong bivariate correlations with ADN3. Those retained showed a positive contribution to model fit. These were Female (FEMALE), White (WHITE), Nightshift (NIGHTSHIFT), and Officer (OFFICER). As indicated in Table 50, the total model had a LLHO = -4676.34, a significant better model fit than with MD alone, although other model fit indices worsened. The total model fit was rather poor (RMSEA = .068, CFI = .43, TLI = .23,



WRSRMR = .030, BSRMR = .001). The measurement model was not much impacted by the addition, with loadings remaining between .47 and 1.00. The ADN3 on MD regression coefficient remained similar and still non significant. This indicated that MD did not significantly contribute to the explanation of ADN3 variance, with or without the addition of control variables.

When ADN3 was regressed onto the control variables, FEMALE was positive and significant, WHITE was positive and not significant, NIGHTSHIFT was positive and not significant, and OFFICER was positive and significant. These results indicated that respondents with lower ranks had significantly higher ADN3 scores, similar to the other two scenarios. Also similar to the other two scenarios, those working night shifts had higher ADN3 scores, although this was not significant. Interestingly, gender and race contributed to the model fit of ADN3 (race was not significant), though not to any of the other two scenarios. Results indicated that females were significantly more likely to have higher ADN3 scores than males, and that Whites tended to have higher scores on ADN3. The addition of the Level 1 covariates accounted for 13.85% of the Within level variance. Hence the demographic variables explained more of the Within variance for ADN3 than did MD, similar to what was found for the other scenarios.

For ADN3, the MSE model would not converge with the addition of either ANO or DEC. This was indicative of poor model fit, and was likely due to insufficient variance in these predictors across the Level 2 clusters. The final possible model, including MD and Level 1 covariates only, can be found in Table 50. Owing to these convergence problems, Hypotheses 1, 2, and 4 could not be tested with the MSE model. MSE model results supported the possible rejection of Hypothesis 3 due to the lack of a



significant relationship between ADN3 and MD, and MD's lack of contribution to the

model. Based on these results and what was possible with the MSE model, all four

hypotheses were tested with the post hoc MLM. All ADN3 MSE models can be viewed

together in Table 51.

Table 50

Acceptance of Deviant Norms Scenario 3, MSEM Final Model: Moral Disengagement, L1 covariates. Fixed Effects and Random Effects (L1, L2), ICC, Pseudo  $R^2$  and Model Fit Indices (Valid N=854, 8 clusters)

Fixed Effect	Est.	s.e.	Critical Ratio
ADN3 on MD	0.019	0.035	0.56
on Female	0.087	0.043	2.03*
on White	0.030	0.036	0.85
on Nightshift	0.074	0.048	1.55
on Officer	0.092	0.027	3.46*
Random Effect	Est.	s.e.	Critical Ratio
ADN3 Level 2 Effect	0.012	0.004	3.23*
ADN3 Level 1 Effect	0.112	0.051	2.20*
Interclass Correlation	0.097 (9.68%)		
Within Pseudo $R^2$	0.139 (13.85%)		
Between Pseudo $R^2$	0.000 (0.00%)		
* <i>p</i> < .05			

Model Fit: LLHO = -4676.34, RMSEA = .068, CFI = .43, TLI = .23, WSRMR = .030, BSRMR = .001



Final Model (MD, L1 covariates):						~										
B (MD only), and 4)		s.e		0.035	.043*	).036	.048	.027*		s.e.	.004*	.051*				
interim Model $Valid N = 85.$	Final	Est.		0.019 0	0.087 0	0.030 0	0.074 0	0.092 0	Fina	Est.	0.012 0	0.112 0	0.097	0.139	0.000	
Vull Model, I I Pseudo R <sup>2</sup> (	~	s.e.		0.040					~	s.e	$0.004^{*}$	$0.061^{*}$				
MSEMs. N ), ICC, and	H	Est.		0.028					I	Est.	0.012	0.130	0.085	-0.008	0.000	
Scenario 3, cts (L1, L2)	[]	s.e.							ull	s.e.	0.004*	$0.062^{*}$				
int Norms . indom Effe	Nul	Est.							Ź	Est.	0.012	0.129	0.085			
Acceptance of Devic Fixed Effects and Rc		Fixed Effect	ADN3	on MD	on Female	on White	on Nightshift	on Officer		Random Effect	ADN3 L2 Effect	ADN3 L1 Effect	Interclass Corr.	Within Ps. $R^2$	Between Ps. $R^2$	*p < .05

Table 51 *Acceptance* <u>Fixed Effec</u> ADN3 On MD *Multilevel model post hoc tests.* The base level MLM used non-latent summed variables to evaluate 2-level path relationships. This model was pared down, eliminating most demographic covariates in order to allow convergence with a random slope. The major steps from the null model to the final model for ADN3, with the purpose of hypothesis testing, will be discussed below.

First, the null model was evaluated, including only the outcome variable of acceptance of deviant norms for Scenario 3 (ADN3). As seen in Table 52, the null model for ADN3 had a significant Within level variance value ( $\sigma_0$  = 3.253, CR = 21.12, *p* < .001), and a near significant Between level variance value ( $\mu_0$  = 1.092, CR = 2.69, *p* = .091) indicating a significant portion of variance in the outcome variable was explained on both levels. The ICC indicated that 25.13% of total model variance could be explained on the Between departments level. The model had a Loglikelihood HO value of -5769.44, with an RMSEA = .258, CFI= .00, TL1= .00, Within SRMR = .220, and Between SRMR=.316. This indicated a poorly fitting null model.

Table 52

Fixed Effect	Est.	s.e.	
ADN3 Mean	3.561		
Random Effect	Est.	s.e.	Critical Ratio
ADN3 Level 2 Effect	1.092	0.645	1.69*
ADN3 Level 1 Effect	3.253	0.154	21.12*
Interclass Correlation	0.251 (25.13%	6)	
* <i>p</i> < .05			
$\hat{M}$ odel Fit: LLHO = -5769.44	, RMSEA = .258, CFI	I = .00, TLI = .00, V	VSRMR = .220,
and $BSRMR = .316$			

Acceptance of Deviant Norms Scenario 3, MLM: Null Model. Fixed Effects and Random Effects (L1, L2), ICC, and Model Fit Indices (Valid N=901, 8 clusters)



Next, MD was added to the model on the Within level and ADN3 was regressed on MD. As seen in Table 53, the total model had a LLHO = -4075.08 indicating a significantly better fit than the null model, and other fit indices remained about the same (RMSEA = .333, CFI = .00, TLI = -.48, WSRMR = .203, BSRMR=.316). ADN3 regressed on MD was significant (b = .32, CR= 10.71, p < .001). However, both the Within and Between variances remained significant. Only 7.04% of the Within variance was accounted for by the addition of MD (Pseudo  $R^2 = .070$ ), and 13.83% of the Between variance (Pseudo  $R^2 = .138$ ). The ICC did decrease to 23.73%, indicating a decrease in the total model variance to be explained at the Between level.

Table 53

Acceptance of Deviant Norms Scenario 3, MLM: Moral Disengagement only. Fixed Effects and Random Effects (L1, L2), ICC, Pseudo  $R^2$  and Model Fit Indices (Valid N=901, 8 clusters)

1(=)01, 0 clusters)							
Fixed Effect	Est.	s.e.	Critical Rati				
ADN3 on MD	0.317	0.030	10.71*				
Random Effect	Est.	s.e.	Critical Ratio				
ADN3 Level 2 Effect	0.941	0.341	2.76*				
ADN3 Level 1 Effect	3.024	0.741	4.08*				
Interclass Correlation	0.237 (23.73%)						
Within Pseudo $R^2$	0.070 (7.04%)						
Between Pseudo $R^2$	0.138 (13.83%)						
* <i>p</i> < .05							

Model Fit: LLHO = -4075.08, RMSEA = .333, CFI = .00, TLI = -.48, WSRMR = .203, and BSRMR = .316

Level 1 (individual level) covariates were tested based on strong bivariate correlations with ADN3, and the covariate that best fit the model, Officer (OFFICER), was retained. As indicated in Table 54, the total model had a LLHO = -3459.18, a significantly better model fit than with MD alone. Other model fit indices remained the



same. The ADN3 on MD regression coefficient maintained significance with the addition of the covariate (b = .31, CR = 8.01, p < .001). This indicated that MD contributed something to the model over and above the control variable, supporting Hypothesis 3. The coefficient produced from ADN3 regressed onto OFFICER was positive and significant, indicating that those respondents with the rank of officer tended to have higher ADN3 scores than those of higher ranks. The ICC value indicated an increased amount of variance to be explained at the Between level (24.06%), while the addition of the Level 1 covariates did not account for much of the Within level variance (Pseudo  $R^2 = .011$ ).

Table 54

Acceptance of Deviant Norms Scenario 3, MLM: Moral Disengagement, L1 covariates. Fixed Effects and Random Effects (L1, L2), ICC, Pseudo  $R^2$  and Model Fit Indices (Valid N=901, 8 clusters)

Fixed Effect	Est.	s.e.	Critical Ratio				
ADN3 on MD	0.306	0.038	8.01*				
on Officer	0.376	0.123	3.07*				
Random Effect	Est.	s.e.	Critical Ratio				
ADN3 Level 2 Effect	0.948	0.556	1.71*				
ADN3 Level 1 Effect	2.992	0.142	21.13*				
Interclass Correlation	0.241 (24.06%)						
Within Pseudo $R^2$	0.011 (1.06%)						
Between Pseudo $R^2$	-0.007 (74%)						
* <i>p</i> < .05							

Model Fit: LLHO = -3459.18, RMSEA = .307, CFI = .178, TLI = -0.233, WSRMR = .197, and BSRMR = .316

The next stage involved the addition of the Level 2 predictors to the model. As with the ADN1 and ADN2 MLMs, it was found that it would not be possible to test the random slope of ADN3 on MD as the outcome with both ANO and DEC in the model as predictors (model would not terminate properly). It was thus again necessary to



determine which of the two predictors (anomie or decoupling) was a better fit for the total model. ANO was evaluated as an addition to the model and used through the model iterations to the final "random slope as outcome" model. DEC was then evaluated in the same way. While neither anomie nor decoupling were significant predictors of ADN3, anomie accounted for much more Level 2 variance than did decoupling, accounting for nearly all the Between variance to be explained. Due to this finding, anomie was chosen as the preferable Level 2 predictor to use in the subsequent model sequence. Decoupling will be presented first only to show its initial contribution to the model. Then the series of models leading to the "random slope as outcome" final model will be presented using only ANO as the Level 2 predictor.

Similar to the ADN1 and ADN2 models, since neither ANO nor DEC functioned in the full model, Hypothesis 1 for ADN3 (significant correlation between ANO and DEC) was tested on a model that included MD, Rank, ANO, and DEC with a command of ANO with DEC to evaluate the correlative relationship. Similar to the result for the ADN2 model, a model containing this correlation term would not identify, indicating that the relationship was not an appropriate fit to the model. Thus Hypothesis 1 was rejected for ADN3.

Below, presented first, is the model for decoupling (as added to the model with the Level 1 predictor and covariate) to test Hypothesis 2 for decoupling, determining the significance of the regression coefficient with ADN3. Following this, the sequence of models that include anomie as the only Level 2 predictor will be presented. These will test Hypotheses 2 and 4 for anomie only, determining the significance of the regression coefficient with ADN3, and with the slope between ADN3 and moral disengagement.



When decoupling was added to the model, its addition created a test statistic of 3.06 indicating that the model fit improved but not significantly. Other test statistics actually worsened. As indicated in Table 55, ADN3 regressed on DEC was b = -14.50, CR = -.60, p = .550, indicating that it did not function as a significant predictor and leading to the rejection of Hypothesis 2 for decoupling. Residual Between variance was decreased, with a Pseudo  $R^2 = .278$ , indicating that the addition of decoupling to the model still accounted for 27.82% of the variance to be explained at the Between level, with an ICC of 18.71% remaining. This suggested that while decoupling accounted for some of the Between level variance, it was not a significant predictor of ADN3.

Table 55

Acceptance of Deviant Norms Scenario 3, MLM: MD, L1 cov, Decoupling only. Fixed Effects and Random Effects related to Decoupling addition, ICC, Pseudo  $R^2$  and Model Fit Indices (Valid N=903, 8 clusters)

Fixed Effect	Est.	s.e.	Critical Ratio
ADN3 on MD	0.305	0.038	8.01*
on DEC	-14.503	24.236	-0.60
Random Effect	Est.	s.e.	Critical Ratio
ADN3 Level 2 Effect	0.685	0.853	0.80
ADN3 Level 1 Effect	2.976	0.141	21.15*
Interclass Correlation	0.187 (18.71%)		
Within Pseudo $R^2$	0.000 (.04%)		
Between Pseudo $R^2$	0.278 (27.82%)		

\**p* < .05 Model Fit: LLHO = -2717.45, RMSEA = .099, CFI = .89, TLI = .57, WSRMR = .032, and BSRMR = .073

When anomie was added to the model, its addition created a test statistic of

132.64 indicating that the model fit significantly improved. Other test statistics supported

this. As indicated in Table 56, ADN1 regressed on ANO was b = 2.51, CR = 1.18, p =

.240, indicating that, similar to decoupling, it did not function as a significant predictor,



leading to the possibility of rejecting Hypothesis 2 for anomie. However, with the addition of anomie, the Residual Between variance was almost entirely eliminated, with a Between Pseudo  $R^2 = .998$ . This indicated that the addition of anomie to the model accounted for 99.79% of the variance to be explained at the Between level, with a drop in the ICC to .07%. These results illustrated that anomie was a much better addition to the model than decoupling, at least in terms of explanation of Level 2 variance.

Table 56

Acceptance of Deviant Norms Scenario 3, MLM: MD, L1 cov, Anomie only. Fixed Effects and Random Effects related to Anomie addition, ICC, Pseudo  $R^2$  and Model Fit Indices (Valid N=901, 8 clusters)

Fixed Effect	Est.	s.e.	Critical Ratio
ADN3 on MD	0.298	0.102	2.93
on ANO	2.506	2.133	1.18
Random Effect	Est.	s.e.	Critical Ratio
ADN3 Level 2 Effect	0.002	0.182	0.01
ADN3 Level 1 Effect	2.993	0.069	43.48*
Interclass Correlation	0.001 (.07%)		
Within Pseudo $R^2$	0.000 (03%)		
Between Pseudo R <sup>2</sup>	0.998 (99.79%)		
ADN3 Level 2 Effect ADN3 Level 1 Effect Interclass Correlation Within Pseudo $R^2$ Between Pseudo $R^2$	0.002 2.993 0.001 (.07%) 0.000 (03%) 0.998 (99.79%)	0.182 0.069	0.01 43.48*

\**p* < .05

Model Fit: LLHO = -3326.54, RMSEA = .295, CFI = .52, TLI = -.91, WSRMR = .078, and BSRMR = .000

As indicated in Table 57, the addition of the random slope of ADN3 on MD to the model containing MD, Rank, and ANO did not cause any change to the Within variance, although it did increase the Between variance (Pseudo  $R^2 = -.500$ ). The ICC stayed the same at .001. This indicated that the addition of the random slope actually decreased the ability of the model to explain variance between departments.

The intention of adding the random slope to the model was to determine how much the relationship between ADN3 and MD varied across clusters. The mean for the



random slope of s1 (ADN3 on MD) was .31, with CR= 3.09, p = .002. This indicated that the average effect for moral disengagement on ADN3 was positive and significant. However, the variance estimate for the slope was not significant (Est. = .00, CR = .01, p = .995), indicating that the effect of moral disengagement on ADN3 did not vary significantly across departments. As such, there was not enough variance to try to explain with the use of a predictor. However, since Hypothesis 4 required the regression of s1 on ANO, this was still attempted.

The results of the model including the random slope of ADN3 on MD as the outcome, regressed onto ANO, are presented in Table 57 as the final MLM model for ADN3. The LLHO was -3326.31. The resulting ICC was .10% with a non-significant Level 2 residual variance. The Within Pseudo  $R^2$  as compared to the model containing no random slope was .00, and the Between Pseudo  $R^2$  was -.50. This indicated that the inclusion of the random slope as outcome to the model accounted for none of either the Within or Between variance. Since there was no Between variance left to be explained, the addition of the random slope as outcome seemed to create more variance between departments to be explained than had previously existed. Thus, it was not a good fit to the model. And again, as expected, the regression of s1 on ANO was not significant (b = .06, CR = .06, p = .952) indicating that ANO did not have a significant effect on the relationship between MD and ADN3 across departments, leading to a rejection of Hypothesis 4 for ADN3. The relevant ADN3 base multilevel models can be viewed together in Table 58.



# Table 57

Acceptance of Deviant Norms Scenario 3, MLM Final Model: MD, L1 cov, Anomie, Random Slope as Outcome (s1=ADN3 on MD). Fixed Effects and Random Effects, ICC, Pseudo  $R^2$  and Model Fit Indices (Valid N=901, 8 clusters)

Fixed Effect	Est.	s.e.	Critical Ratio				
ADN3 on Officer	0.379	0.604	0.63				
on ANO	2.486	4.479	0.56				
s1 on ANO	0.062	1.042	0.06				
Random Effect	Est.	s.e.	Critical Ratio				
ADN3 Level 2 Effect	0.003	1.288	0.00				
ADN3 Level 1 Effect	2.991	0.052	57.11*				
Interclass Correlation	0.001 (.10%)						
Within Pseudo $R^2$	0.001 (.07%)						
Between Pseudo $R^2$	-0.500 (-50.00%)						

\*p < .05

Model Fit: LLHO = -3326.31



	, L1 cov., andom	al	s.e			0.604	4.479	1.042	al	s.e	1.288	0.052*				
	ttes), D (MD Iffects and R	Fine	Est.			0.379	4.479	1.042	Fina	Est.	0.003	2.991	0.001	0.001	-0.500	
	), L1 covaric me): Fixed E		s.e.		0.102		2.133			s.e	0.182	0.069*				
	nly), C (MI D as Outcoi	D	Est.		0.298		2.506		D	Est.	0.002	2.993	0.001		0.998	
	els B (MD o 1DNI on M	0	s.e		$0.038^{*}$	0.123*				s.e.	0.556*	$0.142^{*}$				
	terim Mode Nope s1 = A		Est.		0.306	0.376				Est.	0.948	2.992	0.241	0.011	0.007	
	ll Model, In d Random S		s.e.		0.030*					s.e	$0.341^{*}$	$0.741^{*}$				
	MLMs. Nu 4nomie, an id N = 901	B	Est.		0.317				B	Est.	0.941	3.024	0.237	0.070	0.138	
	Scenario 3, ), L1 cov., z ido R <sup>2</sup> (Vali	1	s.e.						llr	s.e.	0.645*	$0.154^{*}$				
	ant Norms ' Model (MI C, and Pseu	Inul	Est.						Ń	Est.	1.092	3.253	0.251			
Table 58	Acceptance of Devi Anomie), and Final Effects (L1, L2), IC		Fixed Effect	ADN3	on MD	on Officer	on Anomie	s1 on Anomie		Random Effect	ADN3 L2 Effect	ADN3 L1 Effect	Interclass Corr.	Within Ps. $R^2$	Between Ps. $R^2$	*p < .05
المن للاستشارات	i	2									15	9				

*Summary*. The results from the two modeling methods for ADN3 were similar to those for ADN1 and ADN2. Hypothesis 1 was not supported (anomie and decoupling not correlated), and Hypothesis 2 was only partially supported, indicating the usefulness of anomie but not decoupling in the model. Hypothesis 3 was not fully supported. In the more complex MSE model, MD did not have a significant relationship with ADN3, although in the MLM post hoc test the regression coefficient retained significance even after the inclusion of a covariate. These results indicated that moral disengagement may have a significant relationship with ADN3 with in a model that does not have a measurement component. MD seems to have had similar problems in all three MSE models, lacking enough variance within departments to make a successful contribution. Finally, Hypothesis 4 was not supported in the MLM, similar to the results for the ADN1 and ADN2 models; there was no significant relationship between Level 2 predictors and the slope for ADN3 on MD.

#### Summary of Multilevel Structural Equation Model and Multilevel Post-Hoc Test Results

The results of the MSE modeling and the MLM post hoc tests were consistent for all three acceptance of deviant norms scenarios. Decoupling did not perform as hypothesized. Decoupling was not significantly correlated with anomie (Hypothesis 1) or a consistently significant predictor of acceptance of deviant norms (Hypothesis 2). Decoupling did have the best results in the ADN1 MLM, where it showed strong predictive ability and contribution to the model, but this positive showing was the exception.

Anomie was a strong construct, and consistently performed as expected, acting as a significant and positive predictor of acceptance of deviant norms (Hypothesis 2) even



after the inclusion of certain Level 2 covariates in the MSE modeling. In the MLMs, it also either served as a significant predictor of ADN or accounted for a large proportion of Level 2 variance. Also in the MLMs, moral disengagement had a positive and significant relationship with acceptance of deviant norms, even after the inclusion of Level 1 covariates (Hypothesis 3). This relationship did not, however, function as expected in the full MSE model, indicating the possibility that there was not enough variability in the moral disengagement scale when the measurement model was included to account for enough Within variance. It is likely that the moral disengagement scale was too limited in size and scope to account for differences within departments as evaluated by the more complex model. Lastly, Hypothesis 4 could be tested in the MLMs but not the MSE models. Based on the MLM results, this hypothesis was rejected. The slope of acceptance of deviant norms on moral disengagement did not vary significantly between departments for any of the scenarios, and was not significantly impacted by either decoupling or anomie. The best model for the data for Scenario 3, based on the MLM results, is presented in Figure 4. This includes the coefficients for the final multilevel relationships and the random slope.



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Acceptance of Deviant Norms Scenario 3. Final Multilevel Relationships from Base MLM plus Random Slope as Outcome \*p < .05



#### Sublevel Analysis Results

#### Overview

Within department analyses were run on the data from the departments of Los Angeles and Chicago to determine if there were significant differences between demographic groups within the departments on the outcome variables. The groups, or "sublevels," evaluated were defined by the type of shift respondents worked (e.g., rotating, fixed) (SHIFT), the crime rate in the neighborhoods respondents worked (NBCRIME), what shift respondents primarily worked (e.g., nights, evenings/afternoons, or days) (WORKDAY), respondents' rank (RANK), their occupational role (e.g., patrol, detective) (JOBROLE), and whether they were supervisors (SUPER). These were selected because they were found to be most relevant in the complex models. Reported here will be the significant results for Los Angeles and Chicago on each of the outcome variables (ADN1, ADN2, ADN3) for each of these demographic and job-related variables based on ANOVAs and post hoc Dunnet's C tests. Interaction effects were assessed for SHIFT combined with NBCRIME but none were significant. Significant results for SUPER and RANK as distinguishing sublevels in the total sample were also explored.

### Los Angeles

In the Los Angeles sample, there were significant differences by SHIFT on ADN1 (F(2, 363) = 5.85, p = .003) [this OK??] and ADN3 (F(2, 363) = 6.34, p = .002) such that respondents on rotating shifts had significantly higher ADN1 and ADN3 scores than did those on fixed or other shifts. This effect was not significant for ADN2.



NBCRIME, reflecting the crime rate in the neighborhood in which respondents worked, was recoded into low, medium, and high crime rates for this test. There were only significant differences between officers with different neighborhood crime rates for ADN2 (F(3, 361) = 3.67, p = .013). Respondents patrolling neighborhoods that they considered to be low in crime scored significantly lower on ADN2 than did those with high or average rates.

Similarly, for WORKDAY, there were only significant differences between groups on ADN2 (F(2, 358) = 3.59, p = .029). The post hoc analyses indicated that officers working nights had significantly higher scores on ADN2 than did those working mostly days.

Rank was recoded into the categories of police officer, sergeant to lieutenant, and captain and higher for the purposes of this analysis based on distribution in the sample. There were significant differences between ranks on both ADN1 and ADN3. For ADN1 there was a significantly higher score on ADN1 for each level lower in rank compared to that above (F(2, 368) = 9.43, p < .001),, such that the lower the rank, the higher the score. For ADN3, officers had significantly higher scores than sergeants through lieutenants, indicating again that individuals of lower ranks tended to score higher in acceptance of deviant norms than those in the ranks above them (F(2, 368) = 3.79, p = .023).

There were no significant differences by JOBROLE for any of the scenarios. Significant differences again emerged in the final sublevel of supervisory status. Both ADN1 (F(1, 364) = 13.67, p < .001) and ADN3 (F(1, 364) = 4.63, p = .032) were



significantly different based on SUPER categories, such that those without a supervisory role had significantly higher scores on acceptance of deviant norms.

Interestingly, and consistently, scores on ADN2 were much higher than for ADN1 or ADN2, indicating much greater acceptance of a scenario in which an officer is covering for another officer's misconduct. On the variables that had significant results for ADN1 and ADN3 but not ADN2 (SHIFT, RANK, SUPER), there were no differences because scores on this scenario were uniformly high for all categories, and much higher than for the other two scenarios.

Overall, those with the highest scores on acceptance of deviant norms in the Los Angeles sample included respondents on rotating shifts, those in neighborhoods with high or average crime rates, those working night shifts, those of lower rank, and those in nonsupervisory positions.

### Chicago

In the Chicago sample, there were considerably fewer significant distinctions between subgroups than in the Los Angeles sample. There were no significant differences for any of the three scenarios on shift type (SHIFT), neighborhood crime (NBCRIME), work schedule (WORKDAY), or job role (JOBROLE).

RANK in this sample was recoded into officer, sergeant, and lieutenant through captain and higher. There were significant differences by RANK on ADN1 only (F (3, 2000) = 3.15, p = .026), such that officers had significantly higher scores than sergeants, indicating that lower ranking respondents tended to have a higher acceptance of deviant norms.



There were also significant differences by supervisory role for ADN1 (F (1, 191) = 6.69, p = .010), such that those with no supervisory status had higher scores than those with supervisory status on ADN1.

While there were few significant results in this sample, those that were found mirrored those found in the Los Angeles sample, indicating that respondents of lower rank and lower supervisory responsibilities tended to be more accepting of deviant norms.

#### Supervisory Status in Total Sample

Since significant differences on acceptance of deviant norms were found between officers based on supervisory roles for both Chicago and Los Angeles, this variable was explored for significance in the total sample. It was deemed appropriate to aggregate departments to evaluate differences on acceptance of deviant norms scenarios by supervisory role because, unlike for levels of rank, most departments in the sample had a similar ratio of supervisors to non-supervisors (1:2 or 1:1).

ANOVAs were run for the total sample. Supervisors were found to have lower ADN scores than non-supervisors on all scenarios. This difference, however, was only significant for ADN1, the kickbacks scenario (F(1, 913) = 25.48, p < .001). For ADN2, the covering for fellow officer scenario, results were not significant with F(1, 910) =2.24, p = .140. Similarly, for ADN3, the false reporting scenario, results were nonsignificant with F(1, 911) = 1.97, p = .161. Means and standard deviations are presented in Table 59. The results provide some support for the impact of supervisory status, and hence, standing in the department, on an officer's willingness to accept deviant norms in the department. The implications of this are explored further in the discussion section.


#### Table 59

Scale	Supervisory Status	М	SD	Ν
ADN1	Yes	5.94*	2.32	345
	No	6.77*	2.50	570
ADN2	Yes	9.01	3.34	341
	No	9.36	3.45	571
ADN3	Yes	4.83	4.83	345
	No	5.03	2.08	568

Means and Standard Deviations for ADN1, ADN2, and ADN3 by Supervisory Status

\**p* < .001

# Rank in Total Sample

Since significant differences on acceptance of deviant norms were found between officers based on rank for both Chicago and Los Angeles, this variable was also explored within the total sample. When combining rank categories to create a dichotomous variable of "officers" and "sergeants and higher" most departments had ratios of either 1:1 or 2:1. Only one of the small departments, Catasauqua, had no respondents ranked higher than officer. Since Catasauqua had been similar on general levels of acceptance of deviant norms as compared to others in the sample, and due to the similar distribution of officer and higher ranking officers in the other departments, it was still deemed appropriate to include it in the total aggregation of departments when evaluating differences by rank.

ANOVAs were run for the total sample. Respondents with ranks of sergeant or higher were found to have lower ADN scores than those of officer rank on all scenarios. This difference was significant for ADN1, the kickbacks scenario (F(1, 926) = 29.79, p < .001), and ADN3, the false reporting scenario (F(1, 923) = 4.60, p = .032). For ADN2, the covering for fellow officer scenario, results were not significant with F(1, 923) = .69, p = .407. Means and standard deviations are presented in Table 60. The results provide



support for the impact of rank on an officer's willingness to accept deviant norms in the department throughout the entire sample. The implications of this are explored further in the discussion section.

Table 60

Means and Standard Deviations for ADN1, ADN2, and ADN3 by Ra	ınk
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Scale	Rank	М	SD	Ν
ADN1	Officer	6.78*	2.50	609
	Sgt or higher	5.87*	2.27	319
ADN2	Officer	9.30	3.47	610
	Sgt or higher	9.10	3.32	315
ADN3	Officer	5.06*	2.11	606
	Sgt or higher	4.76*	2.00	319

\**p* < .001



# Chapter Five

# Discussion

## **Overview**

This discussion section will provide an overview of the results of the current study, a reflection on the study approach and limitations, and a discussion of the relevance and implications of the contained research.

First, it reviews the hypotheses and discusses the results directly linked to hypothesized relationships. It notes support or lack of support for hypotheses, how these results relate to previous research, and makes an initial assessment of the reasons for the found outcomes (in their similarity to or variance from expected outcomes) and the possible relevance of these results.

Second, it presents a summary and discussion of results unrelated to the study hypotheses. These results include the principal components analyses, descriptives for latent variables, scale variance across departments, potential outliers, demographic covariates and their functionality in the complex models, and sublevel analyses.

Third, it evaluates the study approach and design, evaluating strengths and weaknesses. This includes an overview of the study approach based on central research questions and a justification for the methodology that was chosen to evaluate the theoretical concepts. The methodology itself is examined in detail for limitations related to sampling, survey design, survey dissemination, and survey content. Also, the



statistical analyses are discussed in terms of justification for the chosen approach, alternate approaches, and potential weaknesses.

Fourth, the relevance and implications of the study results are discussed. There are two main sections to this portion of the discussion, including coverage of the: (a) potential practical/policy implications of results for policing (hypotheses, demographics, scale results, sublevel evaluations, department variation) in terms of training, screening, recruiting, prevention, and/or response (related to deviance/corruption); and (b) implications for future research.

# Discussion of Results Related to Hypothesized Relationships Review of Hypotheses

Four hypotheses were set forth. First, anomie and decoupling were hypothesized to be strongly and positively correlated. Second, both anomie and decoupling were hypothesized to be significant and positive predictors of acceptance of deviant norms between departments. Third, moral disengagement was hypothesized to be a significant and positive predictor of acceptance of deviant norms within departments. Fourth, both anomie and decoupling were hypothesized to moderate the relationship between moral disengagement and acceptance of deviant norms such that the higher the anomie and decoupling in a department, the lower the expected impact of moral disengagement on acceptance of deviant norms.

The hypotheses were tested with bivariate correlations and within the complex models. The results will be covered for each hypothesis, presenting outcomes sequentially and separately on each of the three acceptance of deviant norms scenarios. The discussion will address why each hypothesis was or was not supported, how the



results might be attributable to or impacted by methodology or scaling concerns (to be addressed also in later sections), how the results compare with expected results based on the literature, and initial assessments of the possible significance or relevance of the findings.

## Hypothesis 1: Anomie and Decoupling Correlated

*Results.* The summed scales for decoupling and anomie did not have a significant bivariate correlation, providing the first indication of a problem with this hypothesized relationship. In fact, decoupling was not correlated with any of the other scales in the model except for ADN3 (the false reporting scenario), suggesting that it may not be a proper fit to the model. Based on this finding alone, it was determined that Hypothesis 1 could be rejected; this result was nonetheless confirmed in the complex models.

For ADN1–the acceptance of deviant norms scenario related to accepting kickbacks–anomie and decoupling would not function in the full multilevel structural equation model (MSEM); in the base level multilevel model (MLM), they were not significantly correlated (b = -.01) and the model still would not terminate properly. For ADN2, the acceptance of deviant norms scenario related to covering for a fellow officer, anomie and decoupling would not identify together in a model for either the MSEM or the MLM, indicating that this correlative relationship was not a proper fit to the model. Finally, for ADN3, the acceptance of deviant norms scenario related to false reporting, the results were similar to those for ADN2. Anomie and decoupling would not identify together in either the MSEM or the MLM, indicating again a lack of a proper fit to the model. Overall, based on these results, Hypothesis 1 can be rejected. The constructs



used in the current study to measure anomie and decoupling were not compatible as correlated scales and would not function properly in any of the complex models together.

*Comparisons to literature*. Decoupling and anomie have not been previously tested together in the literature. However, they were expected to be correlated due to the similarities in their operational definitions. Anomie, understood as an unequal emphasis on ethical guidelines and goals was thought to be created by an environment characterized by organizational decoupling, in which an organization has structurally sheared formal statements reflecting ethical principles or goals from actual employee activities, including pragmatic job requirements (Monahan & Quinn, 2006). In fact, the concepts of anomie and decoupling were similar enough to pose the potential for tautological concerns.

A prime example of this similarity is that one of the key tests of anomic conditions is the required existence of a "universally prescribed success goal" (Menard, 1995, p. 137), for which legitimate means of accomplishment do not exist or are near unattainable. The anomie scale was designed to represent this dissociation. Similarly, the operationalization of decoupling placed universally accepted goals of a police department in opposition to formal law enforcement ethical guidelines. Due to this and other similarities, the operationalizations of anomie and decoupling were purposely designed to run parallel to represent their complementary theoretical concepts.

It is possible that there may be flaws in the theory integration. In this case, the concepts of anomie and decoupling would not be as complementary as would seem apparent from the literature. Perhaps in a decoupled department, while ethics and goals are separated on the lower ranks, the guidelines in practice are clear enough to the



employees at those ranks that anomie does not result. This possibility would run counter to the existing literature. In fact, with such striking similarities between the two concepts, combined with literary support for their likely relationship, it is considerably more likely that the lack of support for this hypothesis is due to methodological flaws.

*Results related to methodology concerns*. Methodological concerns, in this case, would relate to the structure and composition of the scales for anomie and decoupling. As will be discussed further when examining the results of the principal components analyses and methodological limitations, both scales had a limited in the number of representative items. While the limited number of items created a compact and uniform scale for anomie, with specific topics paralleling those in the decoupling measure, the scope of the items was severely restricted. More in-depth coverage of the anomic condition through additional items may have created a more valid measurement of the construct, and may have also resulted in more valid results when correlated with the decoupling scale.

That said, it is likely that the lack correlation between the two scales was due in large part to flaws in the decoupling construct. This supposition is based on the overall poor performance of the decoupling scale in the complex models and as a predictor of acceptance of deviant norms (to be discussed next in relation to Hypothesis 2). There are many possible reasons for the poor performance of the decoupling scale, and these reasons may have also contributed to a lack of correlation with anomie. For instance, the ethical guidelines placed opposite the chosen pragmatic goals were in conflict, but were not opposites. Perhaps, as a result, the scale acted more as an assessment of which ethical guidelines carried more weight rather than as a representation of the actual



decoupling of formal and informal norms. This possibility and others are explored further in the discussion of the decoupling component results.

Another possible methodological cause of the lack of correlation may have been the way the two scales were constructed. Specifically, the anomie items presented a statement that implied that illegitimate means would be necessary to reach a prescribed goal. The illegitimate means were specified, as was the goal. The decoupling construct presented two goal options, pragmatic and ethical. The implication was that illegitimate means that violated the stated ethical goal could be used to reach the pragmatic goal, and as such, valuing the pragmatic goal above the ethical goal would indicate a willingness to pursue illegitimate means; those means, however, were not stated, only implied. As such, the anomie items function as ethical means vs. pragmatic goals, such that by agreeing with the statements one is rejecting the ethical means in pursuit of the pragmatic goals. The decoupling items are instead ethical *goal* vs. pragmatic goal, making it considerably less clear whether the pragmatic goal is being chosen over the ethical means. This difference between the two scales may thus be responsible for the lack of cohesion between the two constructs. Again, possible changes to the decoupling scale, some which might relate to this problem, are explored in the future research section.

*Initial assessment of relevance.* The immediate and practical significance of the lack of correlation between anomie and decoupling is that the two measures could not be used in models together. With the exception of one of the MLMs, the models failed to converge or identify when both scales were included. In some cases this was due to anomie accounting for such a large proportion of the remaining variance on acceptance of deviant norms between departments that there was no place in the model for another



Level 2 predictor. In other cases decoupling alone seemed to be ill-fitted to the model. This may have been due to low variance in the decoupling scale across the departments, which again relates to item structure and scoring, to be discussed further in the section on variance.

In sum, the two concepts *as currently operationalized* do not work as parallel predictors of susceptibility to corruption. It is possible that in future research, decoupling will have to be measured differently, perhaps directly as an organizational variable. This possibility is explored further in the discussion of scale composition. However, the strength of the theoretical correlation between the two constructs still supports the value of both in combination for the prediction of departmental susceptibility to corruption, regardless of the model results with these specific scales.

#### Hypothesis 2: Decoupling and Anomie as Predictors of ADN

Decoupling and anomie are discussed here as separate components because they were not significantly correlated and were not used together in the complex models.

*Decoupling*. Decoupling was tested as a possible predictor of the acceptance of deviant norms (as measured using the scenarios) within both the MSEM and the MLM. In the MSEMs, decoupling was not a significant predictor of ADN1 (b = -.58, CR = -.71, p = .476), while accounting for 96.15% of the variance to be explained in ADN1 between departments. It could not be added to the MSEM for ADN2 or ADN3 (models failed to identify) indicating that decoupling was a poor fit to both models.

In the MLMs, decoupling was not a significant predictor of ADN1 (b = -11.31, CR = -1.66, p = .096), though it accounted for 69.43% of the variance in ADN1 to be explained between departments. It was also not a significant predictor of ADN2 (b = -



11.97, CR = -.28, p = .782) or ADN3 (b = -14.50, CR = -.60, p = .550) in the MLMs, and accounted for only 7.69% and 27.82% of the variance to be explained between departments for ADN2 and ADN3 respectively.

Overall, while accounting for a large portion of the variance to be explained in acceptance of deviant norms for the kickbacks and false reporting scenarios, decoupling never functioned as a significant predictor of any of the outcome scores. Thus, Hypothesis 2 was not supported for decoupling. This outcome was heralded by the lack of significant variance in decoupling scores between departments, indicating that it would not function as a significant predictor of differences between departments. There are, however, several possible reasons for these results.

Existing decoupling research has never measured decoupling with the use of survey items such as those used here, aggregating them up to the organizational level for interpretation. As such, the scales created for the current study was truly a pilot attempt at using individual perceptions (versus departmental indicators) to make decoupling evaluations. The fact that decoupling did, even with the methodological concerns and low variance, account for a substantial portion of variance in acceptance of deviant norms across departments suggests some value in the construct, just potentially poor execution in measurement.

This attribution of problems with the decoupling scale to item measurement or composition is confirmed by the better performance of the scale in the MLMs as compared to the MSEMs. Problems in the MSEMs are likely due to their inclusion of confirmatory factor analysis which means they accounted for the measurement model. These models are more sensitive to problems with low variance, and, as mentioned,



decoupling had the lowest between-department variance of all the scales. Additionally, as a pilot version, the decoupling scale may not have been suited to confirmatory factor evaluation.

If lack of adequate variance for the scale within this model was a main reason for the poor performance of decoupling, it is possible that the results do not rule out the potential value of the decoupling concept. When evaluating the continued value of the decoupling concept for use in a law enforcement context, it is important to review what is already supported in the literature. Policing research does support the existence of informal norms created by the police culture within departments. These informal norms promote behaviors that conflict with departmental policies and official ethical guidelines while remaining reasonably unsanctioned (Punch, 2000). Further, the literature suggests that the structure of the police organization itself, including working groups, bureaucracy, and goal incentives, may foster a culture of acceptable corruption which should be countered with official departmental policies that mandate discipline and eradication (Marche, 2009; Punch, 2000).

This scenario of conflicting informal and formal norms, combined with a lack of enforcement of official policy, parallels what can be considered purposeful or negligent decoupling—the "decrease [of] internal coordination and control in order to maintain legitimacy" (Meyer & Rowan, 1977, p. 340). Decoupling–an imbalance between formal and informal norms–can be considered a precedent for acceptance of deviant norms based directly on the policing literature. In sum, this conceptual support from the policing literature suggests that the poor performance of the decoupling scale, as discussed previously, perhaps should not reflect so much on the theoretical model as on the



operationalization of the decoupling construct. These possibilities are explored further below.

Anomie. Overall, anomie was a better fit to the models than decoupling. In the MSEMs, the coefficient for ADN1 regressed on anomie was positive and significant (b = 1.75, CR = 4.02, p < .001) and accounted for 100% of the residual variance to be explained in ADN1 between departments, indicating that it was an incredibly strong predictor of officer acceptance of kickbacks as a deviant norm. Anomie was also a positive and significant predictor of ADN2 in the MSEM (b = 2.92, CR = 4.10, p < .001), accounting for 69.19% of the variance in ADN2 to be explained between departments. Conversely, and similar to decoupling, in the MSEM for ADN3 the model would not converge with the addition of anomie, indicating poor model fit.

Anomie was a significant predictor of both ADN1 (b = 1.56, CR = 2.81, p = .005) and ADN2 (b = 3.29, CR = 2.67, p = .008) in the respective MLMs, accounting for 68.39% of variance to be explained in ADN1 and 59.26% of variance to be explained in ADN2 between departments. While it was not a significant predictor of ADN3 in the MLM (b = 2.51, CR = 1.18, p = .240), its addition accounted for 99.79% of the variance to be explained in ADN3—nearly all of the difference in scores for false reporting between departments.

Overall, anomie was a strong predictor in most of the models, accounting for a very large amount of the variance in acceptance of deviant norms between departments. Also, its influence was in the expected direction (positive) indicating that the higher the anomie in a department, the higher the acceptance of deviant norms. Hypothesis 2 was therefore supported for anomie.



The results for anomie were consistent with the literature, in which anomic conditions in an environment or organization have been confirmed as precedents for greater acceptance of and adoption of deviant behaviors (Aultman, 1976; Hickman et al., 2001). While the anomie scale was limited, including only three items directly related to police occupational concerns, it functioned not only as a significant predictor of acceptance of deviant norms, but also accounted for a very large portion of variance in acceptance of deviant norms between departments. This suggests that anomie may be a very robust explanation, functionally as well as theoretically, for why the officers in certain departments have a greater acceptance of certain deviant or corrupt behaviors than those in other departments.

There was some concern related to the similarity of the topics addressed in both the anomie scale and the ADN scenarios.<sup>3</sup> Both addressed the issues of covering for a fellow officer and falsifying reports (an example of noble cause corruption). Also, the perceptions of these behaviors addressed in the anomie items seem similar to what is asked by the ADN items on seriousness and discipline. However, there are aspects to the consideration of the deviant behaviors that are being addressed separately by anomie and acceptance of deviant norms. For instance, while reasons for accepting the deviant behaviors may be implied in ADN items on seriousness and discipline, the anomie items specifically ask if these behaviors are necessary for the accomplishment of accepted departmental goals. Bivariate correlation results suggested that this concern did not manifest.

<sup>&</sup>lt;sup>3</sup> Anomie scale includes the items "It is sometimes necessary to break department rules in order to advance up the ranks," "One must keep fellow officers' misconduct a secret to accepted by colleagues," and "To get criminals off the street, it is sometimes necessary to change the details of what happened when writing a report." The last two items can relate to acceptance of deviant norms scenarios Covering for Fellow Officer and False Reporting, respectively.



As previously suggested, one solution to eliminate any undue tautological concerns would be to increase the number of anomie items, covering a broader range of conditions, some relating to less serious deviant behaviors. Another option would be to attempt (as may be relevant for decoupling as well) to measure anomie directly through organizational evaluations rather than individual officer evaluations. This option will be explored further in the section on future research.

In conclusion, the support for anomie as a significant predictor is consistent with the literature, falling in line with the classic model of anomie and deviance set forth by Aultman (1976) that predicts how the organizational environment may necessitate corrupt behavior to achieve material or occupational goals (p. 327). Anomie's predictive strength, as compared to the individual level predictor of moral disengagement (discussed next), is consistent with past research findings that organizational environments are stronger predictors of deviance than the individual characteristics officers may exhibit upon entering the policing profession (Barker, 1977; Marche, 2009). As such, the anomie construct shows great promise for future research on police corruption as derived from the organizational structure.

#### Hypothesis 3: Moral Disengagement as Predictor of ADN

*Results.* The results for Hypothesis 3 will be covered separately for each ADN scenario, and broken down by type of model.

In the MSEM for ADN1 (kickbacks), moral disengagement (MD) was not a significant predictor when first added to the model (b = -.02, CR = -.46, p = .643) and remained non-significant after the addition of the Level 1 covariates. Its initial addition to the model also did not account for any of the variance to be explained in ADN1 within



departments. In the MLM for ADN1, moral disengagement was a significant predictor of ADN1 when first added to the model (b = .36, CR = 5.88, p < .001) but accounted for only 5.12% of the within-department variance in ADN1. After the addition of the Level 1 covariate of Officer, MD was still a significant predictor of ADN1 (b = .33, CR = 6.53, p < .001).

In the MSEM for ADN2 (covering for fellow officer), moral disengagement was not a significant predictor of ADN2 when initially added to the model (b = -.05, CR = -.42, p = .673) and it only accounted for .10% of the variance left to be explained in ADN2 within departments. There was little change with the addition of the Level 1 covariates. However, in the MLM for ADN2, MD did function as a significant predictor of ADN2 when first added to the model (b = .46, CR = 7.32, p < .001), accounting for 5.08% of the variance in ADN2 to be explained within departments. It also remained significant with the addition of the Level 1 covariates (b = .45, CR = 6.85, p < .001).

In the MSEM for ADN3 (false reporting), similar to the other two scenarios, moral disengagement was not a significant predictor of ADN3 when first added to the model (b = .03, CR = .69, p = .493) or after the addition of covariates, and did not account for any of the variance in ADN3 to be explained within departments. However, also similar to the other two scenarios, in the MLM for ADN3, MD did function as a significant predictor of ADN3 (b = .32, CR = 10.71, p < .001) when first added to the model and accounted for 7.04% of the variance to be explained in ADN3 within departments. When a covariate was added, MD remained significant (b = .31, CR = 8.01, p < .001).



The significance of moral disengagement as a predictor in the MLMs, even after controlling for Level 1 covariates, leads to cautious and partial support for Hypothesis 3 across all three scenarios. However, Hypothesis 3 was not consistently nor strongly supported in the MSEM, meaning that moral disengagement was no longer significant with the inclusion of the measurement model (the CFA portion of the structural equation model), and thus performed more poorly when allowing for measurement error.

Problems with moral disengagement when accounting for the measurement model may be due to insufficient variance across departments and/or within departments (to be discussed next in more detail). To explore why the MD scale did not function strongly in the MSEMs, it is necessary to take a closer look at the construct—the theory behind its usage, the choice of its construction and item composition, and the statistical problems with the scale.

*Comparisons to literature*. The literature shows that personality measures predict susceptibility to corruption (Arrigo & Claussen, 2003). The literature also supports the importance of considering both environmental and individual factors in explaining propensity for deviance. For instance, Girodo's (1991) work strongly supported the need for consideration of an interaction between personality and situational causes when considering who may be prone to corruption. Even though moral disengagement had a poorer performance compared to anomie, this result still fits within research suggesting that environmental or organizational predictors may be comparatively stronger predictors of deviance than individual characteristics (Barker, 1977; Marche, 2009).

*Results related to methodological/construct concerns.* The grounding in the literature, and the significance of moral disengagement as a predictor and as an



explanation for some of the variance in acceptance of deviant norms within departments in the MLMs, supports at least the continued exploration of how the moral disengagement construct may be better utilized in the future. However, both poor performance in the context of the measurement model (in part due to lack of variance across the sample), and a low proportion of variance accounted for within and between departments, indicate a need for change in the scale item number or complexity. This option will be examined further in the discussions of scale composition in the context of PCA results and limitations on scale length.

The results may also indicate a need for supplementary or alternative measures of individual characteristics. It is possible that other individual measures of susceptibility may perform better in the multilevel model than moral disengagement, regardless of any changes to the existing scale. For instance, it is possible that some of the personality features utilized in previous studies of police deviance, such as neuroticism, disinhibition (Girodo, 1991), antisocial behavior, conscientiousness (Arrigo & Claussen, 2003), and impulsivity (Pogarsky & Piquero, 2004) may account for more of the variance in acceptance of deviant norms to be explained within departments than does moral disengagement. As can be seen in a review of the complex models, there was significant residual variance at the within level in all the models, and it remained significant even after the addition of moral disengagement and other Level 1 covariates. This implies that much of the reason for differences on acceptance between officers in the same department was unaccounted for. One other option—as would relate to exploring whether moral disengagement is a formative trait and would, as Moore (2008) proposed, ease initiation into an existing corrupt environment—is to measure moral disengagement



in recruits before occupational exposure to the police culture. This early data could then be used in a model including predictive and outcome data taken subsequently after these same recruits had been ensconced in the occupational culture for a few years. Some of these and other options for measuring individual level characteristics will be discussed in the section on future research.

#### *Hypothesis 4: Anomie/Decoupling Moderating ADN/MD Relationship*

This hypothesis predicted that the influence of moral disengagement on acceptance of deviant norms within departments would be moderated by anomie and decoupling. This was first assessed by looking at changes in the regression coefficients between MD and ADN with the addition of anomie and decoupling in both the MSEMs and MLMs. Next the random slope for ADN regressed on MD was added to the MLMs for each scenario to determine if the slope did indeed vary across departments; that is, to see if there was anything variance in this relationship that could be attributed to anomie or decoupling. Then anomie and/or decoupling (depending on the model) were regressed onto the slope to see if the regression coefficient would be negative and significant. Such a result would indicate that the strength of the relationship between moral disengagement and acceptance of deviant norms within a department decreased as anomie and/or decoupling scores for that department increased. Results are presented separately for decoupling and anomie, and then by scenario and model type.

*Decoupling.* The addition of decoupling to the MSEM model for ADN1 did not create any change in the regression coefficient between moral disengagement and ADN1. Also, a random slope could not be computed in the MSEM for ADN1. In the MLM for ADN1, while the addition of decoupling made no appreciable change in the regression



coefficient between MD and ADN1, the random slope as outcome could be directly tested. When the slope was first added to the model, its variance estimate was not significant, indicating that it did not vary significantly across departments. Also, the regression of the slope onto decoupling was not significant (b = -1.57, CR = -.03, p = .975) indicating a lack of moderation.

When decoupling was added to the MSEM for ADN2, the model would not identify, so the effect of decoupling on the relationship between MD and ADN2 could not be tested in this model. In the MLM for ADN2, decoupling's addition did not appreciably change the relationship between MD and ADN2. Further, the variance of the random slope in this model was not significant. Since decoupling was not a good fit to the model, it was not tested with the random slope. However, given the other results, it is estimated that the coefficient would have been non-significant, similar to that found in the MLM for ADN1.

When decoupling was added to the MSEM for ADN3, the model would not converge, so the effect of decoupling on the relationship between moral disengagement and ADN3 could not be assessed in this model. In the MLM for ADN3, the addition of decoupling to the model did not substantially alter the regression coefficient of ADN3 on MD. Decoupling was considered weaker than anomie in the model, and as both could not be used in combination, decoupling was eliminated from further model iterations and was not tested as a predictor of the random slope. However, similar to the results of the MLMs for the other two scenarios, the variance for the random slope of ADN1 on MD was not significant, and in fact approached zero. This implied that there was no variance



for decoupling to explain, and hence the regression coefficient of decoupling onto the random slope would have been non-significant.

Overall, the results did not support Hypothesis 4 for decoupling. The addition of decoupling did not create any appreciable difference in the regression coefficients between moral disengagement and ADN for any of the three scenarios, regardless of model. Further, in all scenarios, the random slope did not have significant variance across departments and decoupling did not perform as a significant predictor of the existing variance.

Anomie. In the MSEM for ADN1, anomie's addition to the model did not substantially alter the relationship between moral disengagement and ADN1, and the random slope could not be added to the model. In the MLM, anomie's addition to the model did not cause an appreciable difference in the relationship between MD and ADN1. While the inclusion of the random slope of ADN1 on MD as an outcome to the model accounted for 3.40% of the variance within departments, the variance estimate for the slope was not significant. Also, the slope did not significantly regress onto anomie (b = .25, CR = .03, p < .978).

In the MSEM for ADN2, anomie's addition to the model did not perceptibly impact the relationship between MD and ADN2, and the random slope could not be added to the model. Anomie's addition to the MLM for ADN2 caused the regression coefficient for ADN2 on MD to drop slightly. However, the variance estimate of the random slope when added to the MLM was not significant, nor was the regression of the slope onto anomie (b = -.04, CR = -.00, p = 1.00).



In the MSEM for ADN3, the model would not converge with the addition of anomie, so the hypothesis could not be tested in this model. Anomie's addition to the MLM caused hardly any change in the relationship between MD and ADN3. The variance estimate of the random slope of ADN3 on MD when added to the model was not significant, and anomie was not a significant predictor of the slope (b = .06, CR = .06, p = .952).

Overall, the results do not support Hypothesis 4 for anomie—anomie did not sufficiently moderate the relationship between moral disengagement and acceptance of deviant norms in the models for any of the three ADN scenarios. While there was some slight change in the relationship between MD and ADN1 with the addition of anomie in some of the models, this was very minor. Also, the random slope did not have sufficient variance across departments, and anomie did not perform as a significant predictor of the slope of ADN regressed on MD for any scenario.

*Summary of results.* In summary, Hypothesis 4 was not supported for the Level 2 predictors of anomie and decoupling. For both predictors, the slope of acceptance of deviant norms on moral disengagement did not vary significantly between departments, and none of the regressions that were attempted were significant.

The lack of support for this hypothesis could implicate the theoretical model or the methods used to test it. The literature provides strong support for the overall hypothesized model dynamic of environmental effects acting as moderators of individual effects. Environmental predictors have been suggested as stronger overall influences on the susceptibility of individuals to corruption as compared to pre-existing individual traits. The value of using them together in a model has also been supported (Barker,



1977; Marche, 2009). Notwithstanding this support in the literature, it is possible that the findings reflect on the theoretical model.

*Possible implications of results for the theoretical model.* One possibility is that moral disengagement is such a strong trait that its relationship to acceptance of deviant norms is not altered perceptibly by environmental influences. In this case, regardless of departmental characteristics, scores on any moral disengagement construct could vary to about the same degree, with a similar range, within all departments. Or scores could vary between departments based on an external factor like hiring practices, but be unrelated to internal organizational characteristics such as anomie or decoupling. These options could explain the lack of variance in the slope across departments and/or why neither anomie nor decoupling could significantly predict the slope.

There is a second possibility. While the literature supporting this hypothesis presumes that individual predictors of deviance, such as personality or cognitive traits, are pre-existing (stable and fixed), this has not been empirically established for moral disengagement. If MD is not stable and fixed, this could explain the lack of support for Hypothesis 4.

There are two possible scenarios: (1) the individual trait IS pre-existing and fixed, or (2) the individual trait is NOT pre-existing or fixed. For the first scenario, when an individual trait IS pre-existing and fixed, as was presumed for the creation of the theoretical model, then the trait is not unduly influenced by organizational characteristics. In this scenario, an organizational predictor would impact the outcome variable, and the individual predictor would also impact the outcome variable, but the organizational predictor could increase/decrease the outcome variable with no impact on the individual



predictor. The following is an example of this first scenario. In this example, the organizational predictor starts at 1, the individual predictor starts at 1, and the outcome variable starts at 1. When the organizational predictor increases to 2, the outcome variable increases to 2, while the individual predictor stays at 1. With an increase in the organizational predictor, the slope between the individual predictor and the outcome variable thus decreases from 1:1 to 1:2. Hence, in this scenario, the organizational predictor moderates the effect of the individual predictor on the outcome variable insofar as it decreases the value of the slope.

The premise of the second scenario is counter to Hypothesis 4, and could explain why it was not supported. For this second scenario, when the personality trait is NOT preexisting, then one can assume that it can change proportionately as the organizational characteristics change. In this scenario, the organizational predictor would impact the outcome variable, the individual predictor would impact the outcome variable, and the organizational predictor would also impact the individual predictor. The following is an example of this second scenario. In this example, the organizational predictor starts at 1, the individual predictor starts at 1, and the outcome variable starts at 1. When the organizational predictor increases to 2, the outcome variable increases to 2, and the individual predictor also increases to 2 (rather than remaining at 1, as in the first scenario). In this case, with any increase in the organizational predictor, the slope between the individual predictor and the outcome variable would maintain the same ratio value (1:1 versus 2:2), and thus the organizational predictor would NOT be moderating the effect of the individual predictor on the outcome variable.



In sum, with this possibility, a department's organizational characteristics may moderate the effect of certain individual traits on acceptance of deviant norms only if the individual trait is not directly influenced by the departmental characteristics. Applying this possibility to the scales in the current model, it may be that anomie and decoupling did not moderate the effect of moral disengagement on acceptance of deviant norms because moral disengagement is not a preexisting cognitive trait and increases when anomie and decoupling increase. For instance, if anomie directly impacted moral disengagement, this would imply a scenario in which a police department that emphasizes prescribed goals over the ethical means to achieve those goals would actually influence individual assessments of whether unethical behavior can be justified given certain parameters. A situation in which strain is being produced by the inability to achieve goals through proper channels would encourage an individual to create justifications for unethical decision-making that they might have otherwise rejected. If this were the case, the assumptions of the theoretical model would be at fault for the results and correction might require the substitution of moral disengagement with a more stable individual trait.

A third and final possibility related to the theoretical model is that while environmental predictors of susceptibility to deviance may function more strongly than individual predictors, this may not result in a statistical moderation of the individual effects. The multilevel model assumes that if the effect of anomie and decoupling is stronger than the effect of moral disengagement, the effect of the individual predictor will be proportionally less in departments with higher scores on these environmental predictors. It hypothesizes that the one will be stronger enough comparatively to



subsume the other. It may instead be that the effect of the individual trait remains the same despite the stronger effect of the environmental trait because the effect of anomie and decoupling is not comparatively stronger than the effect of moral disengagement to the degree required for moderation to occur.

*Possible implications of results for study methodology.* The lack of support for Hypothesis 4 may be due to methodological problems and not weaknesses in the theoretical model. For instance, while Hypothesis 4 was not supported with the use of the slope as outcome, the addition of anomie did somewhat diminish value of the regression coefficient of ADN on moral disengagement in some of the models. It is also possible that the results are due to the previously discussed problems with the composition and operationalization of the various scales.

Possible methodological causes of the lack of support for this hypothesis relate to results showing a lack of sufficient variance in the slope across departments. First, the relationship between moral disengagement and acceptance of deviant norms may have been the same in every department in the study regardless of other departmental features due to problems with the moral disengagement scale itself (too few items, lack of complexity), requiring merely its adjustment. In this case, using a more complex version of the individual level predictor (in lieu of a completely different individual level predictor) would account for more within-department variance. This option might create a more construct that distinguishes more clearly between officers, and thus may vary in impact on acceptance of deviant norms more perceptibly between departments than any version of a moral disengagement scale.



Second, the main problem may lie in the limited number of departments, such that a larger number of departments might provide more between-department variance on acceptance of deviant norms. (Note that the initial MSEM estimates showed that variance to be explained between departments ranged from only 6.55% to 14.87% of total model variance. This is less than half of that to be explained within departments). Limitations related to sampling will be discussed further in the section on model approach, as well as in the discussion of future research.

The immediate and practical relevance of the rejection of the fourth hypothesis is that, at least within the bounds of the current study, inter-level effects, showing true interaction between the individual factors and the environmental/organizational factors, either could not be assessed or were too small to be notable. Path models that were explored prior to conducting the complex models suggested that the interaction could be valid, but adjustments to both the sampling and the scales seem necessary to flush out the true significance of such an interaction.

### Discussion of Results Unrelated to Hypotheses

This section covers results that are not linked directly to the hypotheses, but rather provide interesting insights into the constructs, scale composition, and variation within and between departments in the sample. These results convey how the constructs functioned within the sample and provide a basis for some of the recommendations made in the section on future research.

#### *Explanation of Deviance in Sample*

The amount of deviance to be explained in this sample was discussed in the results section on scale descriptives. As was noted, the amount of deviance varied by



ADN scenario, ranging from 31% to 51% of greatest possible amount of deviance acceptance. The model results can then be interpreted to indicate the proportion of deviance (acceptance of deviant norms), out of the amount existing in the sample, that could be explained by the predictors of anomie, decoupling and moral disengagement. This can be determined by 1) looking at the strength of the coefficients between ADN and the predictors; and 2) looking at the Pseudo  $R^2$  values for each predictor as it was added to the models, determining how well each explained the outcome variable. This data cannot identify a precise amount of ADN that was explained, but instead indicates the magnitude of ADN that can be explained by each predictor, The MLMs are best to use for this evaluation, since they were determined to be the best fit to the data for all variables.

First, moral disengagement had coefficients on the 3 scenarios ranging from .32 to .46, all significant. Anomie had coefficients ranging from 1.60 to 3.29, all but one significant. Decoupling had coefficients ranging from -14.50 to -11.31, none significant. The coefficients imply that anomie did the best job at explaining acceptance of deviant norms and decoupling did the poorest job. The Pseudo  $R^2$  values support this interpretation of the coefficients. Table 61 presents the Pseudo  $R^2$  values for each predictor by ADN scenario on both the within and between levels. Moral disengagement, which is a predictor on the within level, accounts for the largest amount of within variance, though the least amount of between variance. And, of the two predictors on the between level, anomie explains much more between variance than decoupling.

Overall, the results do support the value of the predictors in explaining a substantial amount of the acceptance of deviant norms in the sample, although



differences on ADN between departments are much more strongly explained than are differences on ADN within departments. Also, the moderate to high amount of variance explained between all three predictors suggests possible improvements or additions to the model that might allow for the explanation of more total deviance acceptance. Such possibilities for changes are discussed in the section on future research.

Table 61

Between Levels.						
Moral Disengagement	Anomie	Decoupling				
5.12%	-0.04%	0.04%				
14.58%	68.39%	69.43%				
5.08%	0.23%	0.00%				
11.46%	59.26%	7.69%				
7.04%	-0.03%	0.04%				
13.83%	99.79%	27.82%				
	Moral Disengagement 5.12% 14.58% 5.08% 11.46% 7.04% 13.83%	Moral Disengagement Anomie   5.12% -0.04%   14.58% 68.39%   5.08% 0.23%   11.46% 59.26%   7.04% -0.03%   13.83% 99.79%				

Pseudo  $R^2$  values for Predictors by Acceptance of Deviant Norms Scenarios. Within and Between Levels.

# Scales: Results from Principal Components Analysis

Acceptance of deviant norms. The scales for all three acceptance of deviant norms scenarios gave a strong performance, with the scales consisting of items 1, 2, and 4. These items were determined to be representative of individual officer acceptance of deviant norms; they asked a respondent about the seriousness of the behavior in the scenario, what discipline should follow the behavior in the scenario, and whether most officers in their agency would report the behavior in the scenario. Of the three scenarios, items for ADN2 accounted for the largest portion of variance to be explained (72.77%), suggesting that this was the strongest of the three ADN constructs. The strength of this scenario–covering for a fellow officer–suggested that the items explained more of the



essence of the construct than the items of the other two ADN scales. Interestingly, this scenario was also distinct in the uniformity of responses across departments, as will be discussed in the section on descriptives.

These scales for acceptance of deviant norms were based on the scenarios created by Klockars et al. (2000). For inclusion in the survey, they were pared down from six questions that covered both officer opinions (e.g. "How serious do YOU consider this behavior to be?") and officer perceptions of departmental behavior (e.g. "How serious do MOST POLICE OFFICERS IN YOUR AGENCY consider this behavior to be?") to four questions, and of those only three were used to create the components used in the complex models. These three items represented the individual opinion of the respondent, and then were aggregated to represent departmental acceptance of deviant norms. While both the topics of the scenarios and the items representing them were limited, their strong component structures and modeling outcomes suggested support for the current scale composition.

Regardless of the apparent strength of the current scales, knowing that what would be used in the complex models would be an assessment of individual inclinations alone, it may have been preferable to replace Item 4 (Do you think MOST POLICE OFFICERS in your agency would report a fellow police officer who engaged in this behavior?) with a third original item representing personal inclination to report: "Do you think YOU would report a fellow officer who engaged in this behavior?" (Klockars et al., 2000, p. 5). The current Item 4 was chosen in order to include two personal opinion and two department behavior items, but due to the complex models utilized, the departmental behavior items were not able to be used (same items had to represent acceptance of



deviant norms on both the individual and departmental levels). While Item 4 was determined to be closely enough correlated to Items 1 and 2 to be representative (by proxy) of personal opinions, for future research the item representing personal inclination to report the deviant behavior would be a more straightforward alternative.

Anomie. Anomie was a strong measure, and the final scale included all three survey items. This strong result was expected because it was based on the scale from Menard (1995) that also had high reliability, strong loadings, and had successfully explained "17%-23% of the variance in the frequency of minor delinquency" (p. 169). The large amount of explained variance in the anomie measure suggested that all three items, while representing differing topics related to illegitimate means, were representative of the same concept. The only adjustments that might strengthen future research would be the addition of a few more items to lend validity to the use of confirmatory factor analysis, provided that they contributed as much to the single component as the current items.

*Decoupling.* The results of the decoupling principal components analysis indicated two components, one for items 1 and 3, and one for items 2 and 4. The subscale for items 2 and 4 was stronger, and thus these two items comprised the measurement of decoupling in the complex models. Interestingly, while these were the two items for which the departments manifested less decoupling, they created a much stronger scale, accounting for more explained variance. The two retained items were "Hold criminals accountable vs. Uphold suspect's rights" and "Reduce criminal activities vs. discourage and prevent racially biased policing." As previously mentioned, problems using all four items in a single scale (items would not load together on a single



component) suggests that there may be a more concise and cohesive way of measuring the decoupling construct.

One way to strengthen the measurement of decoupling may be to choose new topics for the items. Another may require constructing measurement differently, to find a way to keep the item scale continuous rather than the dichotomous. It is also possible that decoupling could be measured directly on an organizational level. There are a few different options for accomplishing this last possibility.

One option for measuring decoupling on the organizational level is through a direct review of department policies and practices. One of the primary articles explaining decoupling in the context of occupational deviance was written by Monahan and Quinn (2004). They emphasized the role of informal structure and its connection to formal structure in an organization, stating that "neo-institutional theory suggests organizational mechanisms by which informal structure may be systematically linked to formal structure" (p. 364). Neo-institutional theory would suggest that "the unofficial relationships and patterns of behavior that exist alongside formal policies and structures may be more than accidental or incidental: they may be the product of decoupling as a formal organizational strategy" (p. 364). This implies that the leadership of an organization such as a policing agency may be knowingly turning a blind eye to deviant or corrupt activities in the lower ranks for the sake of cultural unity, expediency, or occupational morale. This type of situation might be detected in a police agency through the inspection of internal policies of conduct review, policy implementation, supervisory practices, and officer accountability procedures.



A second option for measuring decoupling on the organizational level would involve sending surveys to a sample of individuals at different ranks of an agency to ask about norms instituted in the department and the adherence to those norms. Comparison between ranks on the same questions could expose potential decoupling, determining whether there is a shearing of formal norms instituted on higher management levels from the informal norms accepted and followed without opposition on the lower ranks. This could create a score of decoupling for each agency.

To investigate the potential of this alternative with the current decoupling scale, ANOVAs were run to see if there were significant differences on decoupled perceptions (ranking pragmatic goal over ethical guidelines) by ranks (officers vs. sergeants and higher) and supervisory status across departments.

The findings supported this proposed difference. Police officers (M = .50, SD = .70, N = 606) represented their departments as significantly more decoupled than did those ranked at sergeant or higher (M = .39, SD = .64, N = 318, F(1, 922) = 5.72, p = .017). Also, non-supervisors (M = .52, SD = .71, N = 568) represented their departments as significantly more decoupled than did supervisors (M = .38, SD = .63, N = 344, F(1, 910) = 915, p = .003). This suggests that the relative importance of ethical guidelines vis a vis pragmatic goals varied within each department, and may be best investigated by targeting differences in perspectives by rank, perhaps in conjunction with a direct inspection of internal department policies. These proposals will be integrated into the discussion of future research.

*Moral disengagement.* The version of the moral disengagement scale that was composed of only Items 1, 2, and 3 created the strongest single component model,



accounting for 72.81% of total variance. This was more than the 52.28% accounted for by the component that included all four items. This three-item component had strong item loadings and included only items that shared a similar context; the item that was eliminated related to theft of personal property, while the three retained items had a work environment context and dealt with the attribution of blame or diffusion of responsibility to others.

The strong performance of the moral disengagement scale in the PCA was consistent with prior results for the complete scale (of 24 items and 8 subscales) in the study originating the scale (Detert et al., 2008). Since the items retained were closely related to a police occupational environment, the only possibility for improvement of the scale would be to add additional items of similar emphasis (diffusion of responsibility and attribution of blame) with a slightly broader subject matter, or one more specific to police officers. As previously suggested, it would also be interesting to test this scale, or a more complete version of it, on police recruits and verify over time the stability of this personality trait after exposure to the police occupational culture. This possibility is explored further in the section on future research.

## Variance in Scales across Departments and Potential Outliers

*Variance*. Due to concerns in the models, which could be explained by lack of sufficient variance in the scales across departments or within departments, variance for each scale across departments was evaluated. ANOVAs were run to determine if there were significant differences on the variables across the departments, and means and standard deviations were run for each summed scale within each department.



The evaluation of the summed scales across departments determined that the scales with the lowest variance were decoupling and moral disengagement. These were also the scales that had the most difficulty fitting within the multilevel structural equation model. This would tend to suggest that the problems with fitting these variables into the MSEMs, including nonidentification and nonconvergence for decoupling, and lack of significance for moral disengagement, may be due at least in part to the lack of variance. The third lowest scale for variance was anomie, which performed well in the complex models on the whole, but would not converge in the MSEM for ADN3. So variance for anomie may still have been low enough to cause problems in the MSEMs. The difference in variance estimates between the scales is also evident from looking at the means and standard deviations across departments.

When ANOVAs were run on the summed scales across departments, the results confirmed the variance estimates. The ANOVAs for ADN1, ADN2, ADN3, and anomie were all highly significant. The ANOVA for moral disengagement was also significant, but at a lower level, and decoupling did not vary significantly across departments.

In sum, low variance on decoupling and moral disengagement signified that there was not enough difference on the scales across the entire sample, and the ANOVAs confirmed lower variance for these two scales between individual departments. These findings support the likelihood that low variance was a factor in the problems experienced with model identification. As has been previously discussed in relation to these two scales, these problems may be reduced by making changes to the construct operationalizations (e.g., changing item inclusion on the scales, using a different method for measuring the constructs, bringing in alternative scales), or increasing the number and



variety of departments in the sample. Given the information that already exists on these two scales, and the continued support for the constructs in the literature, it may be advisable to attempt a combination of both approaches in future research—both an adjustment to the scales and increase in the number and variety of departments. Other issues related to the number of departments and how they were selected are addressed further in the section on study approaches.

*Outliers.* Looking more closely at the means and standard deviations for summed scales for each department, it became apparent that Ft. McDowell was a potential outlier. It consistently had the lowest or near to the lowest scores on the variables, indicating that its officers were reporting less acceptance of deviant norms, less anomie, less decoupling, and less moral disengagement than officers in the other departments. Also, the standard deviation tended to be lower for Ft. McDowell, indicating more homogeneity in the responses given by the officers in that department. To confirm these results, post hoc tests were run on the ANOVAs for scales between departments to see if Ft. McDowell was substantially lower on the scales than all the other departments, which would make it a statistically important outlier. These tests showed that officers in the Ft. McDowell department responded with substantially less acceptance of the false reporting scenario (ADN3) than all other departments, but that for all other scales it did not perform as a statistically relevant outlier.

The existence of this outlier, even on one outcome variable, emphasized the need for a more carefully stratified sampling effort in future research. Ft. McDowell retained in the group of departments used for the complex analyses because of the need for more departments, particularly small ones for the analyses. Given a larger sample of



departments with more small departments represented, such an outlier would be removed. It is likely that the results of low standard deviations were due to the more homogeneous nature of the police officers policing an American Indian Reservation. They are all of the same ethnic background, from similar walks of life, and are thus likely to share similar ethical guidelines. Moreover, it is possible that the reservation has lower rates and/or less diverse forms of crime, and a completely different environment for enforcement as compared to a similarly sized small town. These differences in occupational culture and pressures might account for the lower overall means found for anomie, decoupling, moral disengagement, and acceptance of deviant norms.

# Descriptives for Latent Variables

Acceptance of deviant norms. When comparing the acceptance of deviant norms scenarios, the items for ADN2, the covering for fellow officer scenario, had the lowest means, indicating that officers in the sample considered this to be the least serious of the offenses and the least deserving of reporting or discipline. The item means were the highest for ADN3, the false reporting scenario, indicating that officers considered it to be the most serious offense, deserving of the most punishment, and the most necessary to report.

The results for the scenario on covering for a fellow officer were distinctive. This form of misbehavior was the most likely to be accepted by officers in all departments. Even an arguably minor offense such as accepting kickbacks was deemed more serious than this. This result is consistent with past research indicating that a considerable number of police officers are likely to turn a blind eye to the misconduct of fellow officers (Rothwell & Baldwin, 2007; Weisburd, Greenspan, Hamilton, Williams, &


Bryant, 2000). Many officers have been found to be reluctant to report on even serious forms of corruption or deviance (Crank, 1998; Skolnick, 2000). As will be seen in the discussion on sublevel findings, this tendency is consistent regardless of rank and supervisory status. The implications of the higher ADN2 scores are that departments need more policies and/or training that serve to promote the reporting of deviance on the part of fellow officers. Specific organizational differences between departments on this particular issue may be discovered and could prove useful for policymakers. These possibilities will be covered in more detail in the discussion of sublevel findings, future research, and practical implications.

Anomie. On the anomie scale, Item 3 scored lower than the other two items, indicating that changing the details of a police report was a more serious offense than keeping fellow officer misconduct secret or breaking departmental rules. This is consistent with the results for the ADN scenarios in that a noble cause form of corruption (changing report details) is considered more serious and less likely to be excused than covering for the misconduct of a fellow officer.

*Decoupling*. On the decoupling scale, as mentioned in the discussion of the principal component analyses, the ethical guidelines of most import (indicating least decoupling) were "upholding suspect's rights" and "discouraging racially biased policing." The ethical guidelines of less import (indicating most decoupling) were "uncovering, reporting, and disciplining the unethical/illegal behavior of fellow officers" and "reporting crime statistics accurately." This latter finding is somewhat in line with the results on the ADN scenarios—that covering for a fellow officer was more acceptable (and reporting on a fellow officer less acceptable) than other forms of



deviance/corruption. It is possible that to make decoupling a more homogenous measure, there should be less of a distinction in perceived seriousness between the represented ethical guidelines. Alternately, the items may have loaded on different components due to the way that the scale was constructed, using distinct policing topics of ethics and goals. Certain of the chosen topics may have inadvertently correlated more strongly with others, regardless of perceived seriousness. As previously mentioned, alternatives to the current construction of the decoupling scale will be explored for future research.

*Moral disengagement.* There was not much distinction on item loadings between moral disengagement items, although Item 1, "You can't blame a person who plays only a small part in the harm caused by a group," had a slightly higher mean. This result suggested that this item may be the most representative of the core construct. *Demographic Covariates in Complex Models and Sublevel Results for Covariates* 

Certain individual level (Level 1) and departmental level (Level 2) demographic variables were used as covariates in the complex models to control for their influences. The categorical and ordinal covariates were, as noted in the measurement section, revised into dummy variables for proper interpretation in the models. Those tested included Rank (dummy coded as Officer, Lieutenant and up, and Captain and up), Neighborhood Crime (Low Crime, Moderately High Crime, Very High Crime), Workday (Night Shifts, Mostly Day Shifts, Afternoon/Evening Shifts), Race (White, Black, Hispanic), Gender (Female), and Shift (Fixed Shift, Rotating Shift).

Only those that substantially contributed to the models were retained and, of these, some were significant predictors of acceptance of deviant norms for each scenario. The same Level 1 covariates that were considered for inclusion in the complex models



were examined more closely within the two largest departments of Los Angeles and Chicago with the use of ANOVAs (examining original and non dummy coded variables). These results mirrored much of what had already been found in the MSEMs and MLMs. The most consistent of these results were then explored in the entire sample. Both the significant predictor covariates from the complex models and the individual level covariates used for the sublevel evaluations are included together in this section. They are presented here by each scenario and by model level or departmental context. This format was chosen to clearly demonstrate how acceptance of deviant norms for each scenario varied by these demographic categories in both the complex models and the ANOVAs.

*ADN1: Kickbacks scenario*. The individual level demographic variables significantly associated with ADN1, the kickbacks scenario, were respondent rank, respondent supervisory status, respondent workday, and respondent shift type.

(a) Rank—In the MSEM for ADN1, the coefficient for Officer was positive and significant. This indicated that respondents ranked as officers had higher ADN scores related to kickbacks, thus a greater acceptance of the deviant behavior, than respondents of higher ranks. Also in the MSEM for ADN1, the coefficient for Captain and up was negative and significant, indicating that those respondents ranked Captain and higher had lower ADN scores related to kickbacks than respondents of lower rank, and were thus less accepting of this deviant behavior. The result for Officer was confirmed in the MLM. In the sublevel ANOVAs, there was significant variation on the ADN1 (kickbacks) scenario based on respondent rank in both the Los Angeles and Chicago police departments. In Los



Angeles, respondents with lower ranks had uniformly higher acceptance of kickbacks than respondents ranked higher. In Chicago, this distinction was made between the ranks of officer and sergeant, where the lower ranking officers had higher acceptance of kickbacks than the higher ranking sergeants. These results were confirmed with an ANOVA in the total sample. Thus, across all departments, lower ranking officers were more accepting of kickbacks (ADN1) than were respondents with the rank of sergeant or higher.

- (b) Supervisory status—In the sublevel ANOVAs, there was significant variation on the ADN1 (kickbacks) scenario based on respondent supervisory status in both the Los Angeles and Chicago police departments. In both departments, respondents without supervisory status were more accepting of kickbacks than those with supervisory status. These results were explored and partially confirmed in the total sample. While for all scenarios the tendency was for non-supervisors to have higher ADN scores than non-supervisors, this was significant only for the kickbacks scenario. This indicated that across all departments, non-supervisors were more accepting of kickbacks (ADN1) than were supervisors; this effect was not significant for either covering for fellow officers (ADN2) or for false reporting (ADN3).
- (c) Workday—"Workday" references the time of the person's shift. In the MSEM for ADN1, Dayshift was negative and significant, such that those working mainly day shifts tended to score lower on the ADN1 kickbacks scenario than officers working either afternoon/evening or night shifts. This indicated that officers working day shifts were the least accepting of the deviant behavior.



(d) Shift—"Shift" refers to the type of shift—either fixed or rotating. While shift was not a significant predictor of ADN1 in the complex models, in the sublevel ANOVA for Los Angeles, there was significant variation on shift worked by respondents for ADN1 (kickbacks). This indicated that officers working rotating shifts had significantly higher acceptance of kickbacks than officers working fixed or other shifts.

*ADN2: Covering for fellow officer scenario.* The individual level demographic variables significantly associated with ADN2 (the covering for a fellow officer scenario) were crime rates of the neighborhood worked by respondent, respondent workday, and respondent rank (only found in the complex model). The department level variable of percentage of African Americans in a jurisdiction was also a significant predictor of ADN2.

(a) Neighborhood crime rates—In the MSEM for ADN2, Low Crime rates in the neighborhoods where respondents worked was a negative and significant predictor of ADN2 within departments.<sup>4</sup> This indicated that officers working in neighborhoods with low crime rates had lower ADN scores related to covering for a fellow officer as compared to those working in higher crime areas. In the sublevel ANOVAs, there was significant variation on the ADN2 scenario based on crime levels in neighborhoods worked by respondents in the Los Angeles Police Department. Similar to the complex model, respondents who worked in neighborhoods with low crime rates were significantly less accepting of covering

<sup>&</sup>lt;sup>4</sup> Neighborhood crime rates were coded in such as way that crime rates from low to high were scored from 1 to 5, and non-assigned officers were scored as 0.



for a fellow officer than were respondents working in average or high crime rate neighborhoods.

- (b) Workday—In the MSEM for ADN2, Nightshift was a positive and significant predictor of ADN2 within departments, such that those working night shifts tended to have higher ADN scores related to covering for a fellow officer as compared to those working day or afternoon/evening shifts. The result for Nightshift was confirmed in the MLM model for ADN2. In the sublevel ANOVAs, there was significant variation on the ADN2 scenario based on workdays of respondents in the Los Angeles Police Department. Similar to the complex models, respondents who worked night shifts were significantly more accepting of covering for a fellow officer than were respondents working mostly day shifts.
- (c) Rank—In the MSEM for ADN2, Captain and up was negative and significant, indicating that those with ranks for Captain or higher had significantly lower scores on ADN as related to covering for a fellow officer than did respondents of lower ranks. However, this result was not supported in either the MLM or the sublevel evaluations.
- (d) Percentage African Americans in jurisdiction—In the MSEM for ADN2,
  percentage of African Americans in the departmental jurisdiction was a
  significant and negative predictor of departmental ADN scores related to covering
  for a fellow officer. This indicated that the higher the percentage of African
  Americans in the jurisdiction, the less that agency's officers were accepting of



covering for a fellow officer. No Level 2 covariates were used in the MLM so this result was not confirmed.

*ADN3: False reporting scenario.* The individual level demographic variables significantly associated with ADN3 (the false reporting scenario) were respondent rank, respondent gender, respondent shift type, and respondent supervisory status.

- (a) *Rank* In the MSEM for ADN3, Officer was a positive and significant predictor of ADN3 within departments, such that within departments, respondents with the rank of officer had higher scores on ADN related to false reporting than did officers of higher ranks. These results for Officer were confirmed in the MLM. Also, in the sublevel ANOVA for Los Angeles, there was a significant difference between ranks on ADN3, such that lower ranking officers had significantly greater acceptance of false reporting than the higher ranking sergeants and lieutenants. These results were confirmed in the total sample. Thus, across all departments, lower ranking officers were more accepting of false reporting (ADN2) than were respondents with the rank of sergeant or higher.
- (b) Gender—In the MSEM for ADN3, Female was a positive and significant predictor of ADN3 within departments. This indicated that females had higher ADN scores related to false reporting than did males, and hence were more accepting of the behavior.
- (c) *Shift*—While not a significant predictor in the complex models, in the sublevel ANOVAs for the Los Angeles Police Department, there was a significant variation on shift worked by respondents for ADN3. Officers working rotating



shifts had significantly higher acceptance of kickbacks and false reporting than officers working fixed or other shifts.

(d) Supervisory status—While there were no significant results in the MSEM for ADN3, in the sublevel analyses for Los Angeles, there was a significant variation by supervisory status on ADN3 (false reporting scenario), such that nonsupervisors were more accepting of false reporting than supervisors.

*Summary of findings*. In summary, the individual level covariates that significantly determined responses on any of the acceptance of deviant norms scenarios were rank, supervisory status, workday, shift, neighborhood crime rates, and gender. The only department level covariate to significantly determine acceptance of deviant norms responses between departments was percentage of African Americans in the jurisdiction. See summary of significant results by covariate and scenario in Table 62.

Table 62

Summary of Significant Covariates by Receptance of Deviant Romas Section tos				
Covariates	ADN1	ADN2	ADN3	
Rank	sig	sig	sig	
Super. Status	sig	—	sig	
Workday	sig	sig		
Shift	sig	—	sig	
Neighb. Crime		sig		
Gender		—	sig	
Jurisd. % AA		sig		

Summary of Significant Covariates by Acceptance of Deviant Norms Scenarios

There were differences in the primary predictors between scenarios. Of note were the differences between the predictors for ADN1 and ADN3 as compared to those for ADN2. As discussed previously for other findings such as mean values, the ADN2 scenario for covering for a fellow officer stood apart in its wide acceptance within the sample, and stands out again here for the sublevels on which it varies.



Two aspects of these results merit discussion: (1) the relationships between specific individual and department characteristics and susceptibility to deviance, and (2) the unique character of covering for a fellow officer as compared to the other deviant behaviors exhibited in the scenarios (accepting kickbacks and false reporting). To address both issues, discussions of the covariates will be separated into those that were predictors of ADN1 and ADN3 only (rank, supervisory status, gender, shift), and those that were predictors of ADN2 (workday, neighborhood crime, percentage African American). These discussions will include comparisons to past research when such information is available, and evaluations of relevance. (As a note, there is not much research in the literature that looks at individual demographic or situational correlates of police deviance or likelihood for deviance. As such, much of the results cannot be compared to previous findings.)

*Evaluations of significant covariates of ADN1 and ADN3.* The covariates of rank, supervisory status, gender, and shift type were significant predictors of a minor form of corruption (accepting kickbacks) and a more serious form of noble cause corruption (falsifying reports to make an arrest). The results indicated that respondents agreed that false reporting was the most serious of the scenarios. Both can be considered deviant occupational behaviors and abuses of authority.

In this sample, respondents of lower rank and non-supervisory status were found to be more accepting of deviant norms. This result finds support in the literature. Higher rank has been linked to higher assessments of seriousness (McConkey, Huon, & Frank, 1996) and supervisors have been found to be more likely to perceive low level corruption as serious as compared to line officers (Ivkovic, 2005).



Females and people working rotating shifts were also more likely to accept deviant norms than males and those working fixed shifts. There is some past research linking poor psychological well being in police officers with rotating shifts (Phillips, Magan, Gerhardstein, & Cecil, 1991). Also, women have been found to still be facing gender bias and discrimination in the law enforcement occupational environment (IACP, 1998). Thus, while there is not research directly linking gender or shift type to likelihood for corruption or deviance, there is support for how stressors are linked to deviance (Violanti & Marshall, 1983). Police stress has been found to be caused by a variety of factors, not the least of which are shift work (Violanti & Aron, 1994) and other functional features, social isolation, and organizational structure (Carter, 1994). One could argue that the strain of being a female police officer comes from organizational features and isolation within the subculture. This may increase pressure for conformity, including accepting serious deviant norms such as the adjustment of crime reports in order to make an arrest or impress fellow officers. Also, shift work as a stressor may lead to greater acceptance of deviance as a stress outlet. At least, these are possible explanations of the results.

*Evaluations of significant covariates of ADN2*. The individual level covariates of workday and neighborhood crime were significant predictors of acceptance of covering for a fellow officer (ADN2), as was the department level covariate of percentage of African Americans in the jurisdiction. The scenario of covering for a fellow officer was more generally accepted by the respondents, and, except for one positive result for Captain and up, was found in the MSEM, the scenario was not impacted by rank or



supervisory status in the sublevel analyses as were the other two forms of deviance. In fact, regardless of respondent role, acceptance was generally uniformly high.

There has been considerable prior research examining likelihood for whistleblowing (the converse of covering for an officer), both in police departments and in other organizations. The results in the current study suggest that certain subcultures or work groups within a police department may be more likely to perpetuate a "blue wall of silence" than others. Specifically, this was true of officers who worked night shifts and patrolled medium or high crime rate neighborhoods as compared to low crime rate neighborhoods.

Individual correlates of increased whistleblowing in past research have included supervisory status (Rothwell & Baldwin, 2007; Wenger, Korenman, Berk, & Liu, 1999) and longer tenure (Miceli & Near, 1992) with some mixed findings. Greater hesitancy to report has been found in specific types of police work groups, such as street patrols or investigative work. In these subcultures, occupational situations might involve more danger and require more immediate, complex, and controversial decision-making. These characteristics of a subculture may make solidarity more important. In these types of contexts, whistleblowing may threaten group trust and cohesiveness and may therefore be less tolerated (Rothwell & Baldwin, 2007).

While rank and supervisory status were not consistent significant predictors of covering for a fellow officer in this sample–in contrast with prior research–the results for night shift work and high crime patrols do fit with work group findings. Arguably, officers who work night shifts and in higher crime areas are more likely to be part of a work group culture that requires more police discretion and that may be less accepting of



external review. Also, as found in the previously discussed literature on stress and deviance, it is possible that these work groups experience increased occupational stress due to environmental hazards. They may then be more prone to deviant behavior and covering for such behavior within the work group.

The last result for this scenario, the department level finding, indicated that officers in police departments whose jurisdictions had higher percentages of African Americans were less accepting of covering for a fellow officer. No correlates to this finding were found in the literature. Instead, based on the literature linking stress and deviance, one might expect that officers in such jurisdictions would be *more* prone to internal corruption. Percentage of African Americans was most highly correlated to the jurisdiction's property crime rate, which would indicate the potential that such jurisdictions were more socially disorganized and hence, arguably, more stressful to police than others. Thus the result does not correspond to expectations.

The only finding in the literature that may have some relevance to this result is that of increased whistleblowing in larger organizations. This finding has been attributed to the fact that larger organizations tend to have more organized systems for encouraging and protecting whistleblowers, and greater likelihood of having mandatory reporting policies (Miceli & Near, 1992; Rothwell & Baldwin, 2007). Examining the department descriptive statistics, the four largest departments *did* have the highest percentage of African Americans (although this was not a perfect correlation). However, noting that department population was *not* a significant predictor of ADN2, it is likely that a mediating and unobserved variable is the explanation for the significant relationship between percentage of African Americans and ADN2. Jurisdictional variables, other



than those attempted in the current models, could be explored to examine the practical significance of this finding.

### Evaluation of Study Approach

This section focuses on evaluating the methodological approach that was taken to test the theoretical hypotheses. First, it summarizes the approach by restating the reasons for the multilevel design, the chosen scales, the sampling and survey methodology, and the data analysis techniques. As part of the summary, the strengths of each aspect of the approach are presented. Second, this section details the study limitations, referencing issues introduced in the discussion of the results, and commenting on how limitations may have impacted the results. Third, it summarizes the major weaknesses and presents possible options for rectifying these problems in future research. This leads into the final portion of the discussion with summary conclusions, possible practical and policy implications of findings, and implications for future research.

### Study Approach and Strengths

Previous studies attempting to identify predictors of police deviance demonstrated the difficult task of adapting any one criminological theory to the study of police corruption. While some researchers attempted theory integration, the methodology including both organizational and individual units of analysis, with both organizational and individual/environmental predictors, is unique to the current study.

The current study took a multilevel approach, looking at both departments and individual officers. It sought to measure corruption at the level of the police department, acknowledging how organizational factors and demographic features may predict a culture more accepting of deviance. It also looked at how cognitive traits and other



individual-level characteristics may make certain officers more susceptible to deviance than others in the same department, and how the environmental influence of a corrupt organizational structure might interact with individual susceptibility. Being a blend of past research efforts, the current study was a pilot attempt to examine all these facets simultaneously.

To do so, it utilized the resources of the National Police Research Platform Project, constructing survey scales of both organizational and individual variables through personal perceptions and individual evaluations of departmental environment and departmental behavior. Organizational variables were aggregated up from the individual survey responses to be interpreted as department-level constructs. This allowed for a data collection process that was shorter and less complex than a direct evaluation of organizational features. This study involved surveys of officers in multiple departments, departments from a range of locations, sizes, and demographic compositions.

The on-line survey methods that were used provided ease of communication and flexibility, and ensured respondent anonymity. Collaborating with other researchers on a large project also allowed for constructive feedback and the nesting of measures for the current study within more complex surveys.

The scales constructed for the current study, while limited in scope and size, were precisely tuned to police respondents on topics of relevance, measuring broad concepts without alienating the respondents. The decoupling measure was a unique attempt to evaluate departmental structural problems through the evaluations of individual employees. While flaws in design and scaling emerged, the attempt produced insight into



the theoretical construct of decoupling, and provided new ideas for similarly unique measurement approaches.

The data analysis approach of using the complex models—the multilevel structural equation model (MSEM) and the base multilevel model (MLM)—allowed for integrated evaluations of the individual and organizational predictors, and allowed for separate evaluations of the contributions of each variable on the "between departments" and "within departments" levels. While predictive relationships between variables could have been accomplished with other approaches, they would not have been as thorough, and would not have provided as much information on the total theoretical model. For instance, neither path analysis nor structural equation modeling would have distinguished individual and cluster effects. The MSEMs had the added benefit of allowing for an inclusion of the measurement models for each latent variable, while still evaluating effects on two levels.

While problems emerged indicating that certain variables, and perhaps the sample, needed improvement for a proper fit to the MSEMs (prompting the MLM evaluations), the information gathered with the MSEMs was incredibly valuable for assessing what these improvements should be. For instance, concerns over scale variance across departments were brought to light due to problems encountered in the MSEM process. Further, problems with certain of the hypotheses were highlighted by the greater constraints posed by the MSEMs. It thus seems evident that these models were the preferred analytical approach, and should be used in future research, provided that the necessary adjustments to scales and to sample composition can be made.



Overall, despite the limitations to be next addressed, there were many strengths in the chosen study approach. Problems that were encountered in the process offer valuable suggestions for improvements for future research. Comparing the strengths in the theoretical, methodological, and analytical approaches to the limitations and problems actually highlights the value of further attempts to improve on the operationalization of the theoretical model.

#### Study Limitations

This study's methodological approach had limitations in several areas including (1) sampling of agencies, and its impact on population representativeness and robustness of statistical analyses; (2) survey design, and its impact on construct validity and robustness of statistical analyses; (3) survey methodology, and its impact on response bias; and (4) survey content, and its impact on response bias and theoretical robustness. For these reasons, this study must be considered a pilot study with future research addressing these limitations.

*Sampling limitations*. There were limitations related to the small number of agencies and the manner of their selection. Respondents came from a convenience sample of departments, chosen for national visibility, convenience of location to participating researchers, and willingness to participate. Only eight departments received the survey, and since not all police departments had an equal chance of being chosen, these eight departments, while varying in size, racial composition, and geographic location, were not representative of the population of interest, namely U.S. police departments. This is a biased sample, given that "the distribution of characteristics in the



sample is systematically different from the target population" (Shaughnessy, Zechmeister, & Zechmeister, 2003).

These sampling limitations caused a few specific problems. First, the limited number of departments was likely at least partly responsible, along with lack of stratified random sampling, for the low amount of variance across departments for both acceptance of deviant norms (ADN) as an outcome, and for the slope of ADN on moral disengagement (as predicted for use in Hypothesis 4). And, as was found for both the outcome variable and some of the predictors, these low variance estimates contributed to problems with the complex modeling.

Second, also as relates to the complex models, there were too few agencies to allow for a proper identification of the multilevel structural equation models. The MSEMs had the ability to analyze differences both between and within levels of the analysis, including between Level 2 clusters (in this case police departments) and across the Level 1 units (individual police officers). Since there was a consideration of differences between Level 2 clusters, there should have been more Level 2 clusters than total model parameters in order to properly identify the model. The complexity of the model meant that even in its most scaled down form it still had more than the eight parameters, more than the number of clusters. The number of Level 2 clusters would thus need to be larger in future studies to provide greater confidence in the results. Due to the limited cluster number, the between-department results in the current study have to be considered preliminary estimates.



In summary, a greater number of departments would have not only improved model identification and strengthened validity of results, but also had the potential to strengthen hypothesized relationships.

One other set of concerns related to sampling has to do with establishing validity. Both the self-selection of the departments and the self-selection of the officers within each department posed threats to external and internal validity. External validity refers to the generalizability of results, or the extent to which the findings of a study are relevant to subjects and settings beyond those in the study. External validity concerns relate to the between-agency comparisons, since not all agencies are willing to participate in a study of corruption, accountability and other internal department matters. The departments that are willing to participate may have traits and characteristics that distinguish them from other departments. Participating agencies, for instance, may have more accountability or a stronger culture of integrity.

External validity is also relevant to the within-agency comparisons, as there were limitations related to the self-selection of the responding officers in each department. Officers who chose to participate may not have been representative of the department as a whole on traits such as personality, years on the job, personal integrity, opinions of their occupation or agency, or other variables of interest.

Self-selection, and the resulting lack of representativeness, may also impact internal validity. Internal validity is the degree to which one can draw valid conclusions about the causal effects of one variable on another. It depends on how well extraneous variables have been controlled. With regard to internal validity in between-agency analyses, the agencies that participate may have characteristics that differ from non-



participating departments. In this case, there may be between-department variables that contribute to model relationships for which the model does not control. Such variables may account for residual between-department variance that the model attributes to current predictor variables. With regard to the internal validity of within-agency analyses, respondent self-selection may increase the likelihood that respondents and nonrespondents differ in un-controlled for personal characteristics that may impact relationships between variables in the model. For instance, if officers who choose to respond are also more likely to be those officers within their department who are most influenced by internal politics, they may be more likely to give socially desirable answers. They may be responding how they believe that their superiors would like them to respond. If this were the case, without controlling for social desirability, identified associations between variables could be invalid.

The demographics for respondents as compared to agency population exist for a few variables, namely gender, race, and patrol status, and these are presented in Table 2 in the methodology section. The table presents a few exceptions to population representativeness in the samples. For instance, in Arlington, there was a larger percentage of non-patrol officers participating in the survey than the departmental percentage. For all agencies to some degree Black officers were under represented as participants. Similar results were found for Hispanics in Framingham, Chicago and Los Angeles. Also, a much larger percentage of participants from Framingham were female as compared to the total department percentages. No data was available to compare respondents on the other sublevels that were used in the analyses, namely supervisory



status, shift type, work schedule, and rank. As such, it is unknown how representative the sublevel analyses were for the Los Angeles and Chicago police departments.

*Survey design limitations.* There were limitations related to the survey design. As previously mentioned, restrictions on survey length required scaling back all measures of constructs to a small number of items. This had an impact on construct validity, the robustness and identification of the multilevel structural equation model (given the problems of having a small number of items when conducting factor analysis), scale variance, and possibly on hypothesized relationships as well. When designing the instruments for anomie, moral disengagement, and acceptance of deviant norms, it was important to attempt to stick as close to the original structures as possible. For each of these instruments, previous research had ascertained convergent validity and predictive ability. This included past correlations with other constructs and the ability to predict what the scale was expected to predict. However, changes to the original constructs and limitations regarding item number for each construct, raised concerns about face validity, construct validity, and factor loadings. Further concerns about model identification and a valid representation of the theoretical model also arose in the course of the analyses.

Since there was no way in the context of the current study to compare the reduced set of items for each construct to the full set, it was not possible to know if the new versions of the instruments were still measuring the same constructs as the originals. The decoupling instrument, which did not exist prior to its original formation for this study, was relegated to the same restrictions–also being in a more abbreviated form than originally conceived. What could be assessed about the limited instruments to be used here, including the decoupling measure, were three things: (a) face validity, comparing



the items retained to what the original instrument was trying to represent (in the case of decoupling, comparing to the fuller version); (b) predictive validity and concurrent validity, the ability of each instrument to form the predicted relationships with the others based on what was known about each construct from the literature and how it behaved; and (c), whether the items in each instrument all loaded strongly on the same factors, implying a cohesion in terms of representing constructs.

Assessing face validity, although arguably the weakest form of validity, was important in this case because of the major revisions to the instruments. Did the few items still remaining represent conceptually the construct as a whole? It was also important to determine predictive validity and concurrent validity, representing whether the abbreviated instruments still performed as expected based on their original forms in past research. Related to this performance is the assessment of the extent to which items loaded together. Comparison to the previous versions and original concepts is presented below for each construct.

For anomie, the original construct was based on Merton's definition of social anomie and the individual perception of anomie, called anomia. For anomie to be perceived by the individual, there needs to be a "universally prescribed success goal," acceptance of the institutionalized means of achieving those goals, and belief that these culturally approved means "will not be effective in attaining the culturally prescribed goal of success" (Menard, 1995, p. 137). The individual then has a choice of modes of adaptation, either accepting or rejecting the goals and then acting accordingly. The intent in developing the original instrument was to pose statements to which agreement or



disagreement would imply a level of "expectancy that socially unapproved behaviors are required to achieve given goals" (Menard, 1995, p. 143).

The version for police officers posed statements to which agreement or disagreement would imply a level of belief that departmentally unapproved behaviors were required to reach occupational or social goals within the realm of work in their police department. While the items remaining only pose a few examples of this dynamic, they all were still consistent with this construct and loaded strongly on a single factor. However, the weaker results in the complex model that included measurement error indicated that a more complex scale, perhaps including more items of less specific situational context, may improve the validity of the scale. Doing so might increase variance accounted for in the component analysis, and improve the strength of the variable as a predictor and as a correlate.

For moral disengagement, the revisions had a more dramatic effect on the construct, since the original measure was 24 items and 8 subscales and was reduced to 4 items covering 3 subscales. Each of the subscales of moral disengagement was expected to measure different elements of the same concept. They were each "cognitive mechanisms that deactivate moral self-regulatory processes," explaining how individuals who would otherwise manifest generally high morals could engage in unethical decision-making made "without guilt or self-censure" (Detert et al., 2008, p. 374). Removing several of the subscales meant that there was less complexity left in the measure; not all of the possible cognitive mechanisms that could fit under the banner of moral disengagement were accounted for.



Each of the items retained, however, was easily understandable by the population of interest, and each represented an example of a cognitive mechanism that could be used to excuse unethical decision-making. The three items all related to situations that officers could encounter in the workplace or on the job, and all were examples of justifying behavior so that unethical choices could be made without self censure. While not as complex, they still represented the underlying construct and loaded significantly on a single factor. However, similarly to anomie, limitations on the number of moral disengagement items restricted the breadth of the measure, decreasing variance in scale scores within and across departments, and perhaps impacting predictive ability in the complex model that included measurement error. As such, it would be preferable in the future to include a broader and more comprehensive version of this scale.

For acceptance of deviant norms, the retained scenarios represented a range of corrupt behaviors, and the questions posed about each scenario represented officer perspectives. The three chosen scenarios represented common forms of corruption at the middle range of seriousness. The intention of the Klockars items (Klockars et al., 1997; 2000) was to obtain information about (a) how corruption was perceived by the individual officers in a department and (b) how those officers viewed the culture of their department as a whole.

Although not all the categories of perceived seriousness, punishment, and reporting were retained for these two perspectives, those that remained were balanced between the two, and all three categories were still represented. Factor analysis revealed a similarity between responses to the three scenarios, and individual scenario items loaded strongly on single components. The only necessary change would be the



exclusive inclusion of the three items that address individual opinions and likely behaviors, due to the need for a cohesive individual evaluation of acceptance of deviant norms to be used on both model levels. As previously discussed, this would mean substituting the individual opinion version of the reporting item ("Do you think YOU would report a fellow police officer who engaged in this behavior?") for the departmental version ("Do you think MOST POLICE OFFICERS IN YOUR AGENCY would report a fellow police officer who engaged in this behavior?").

The revised decoupling scale can only be compared to the original concept upon which the longer (pre-cut) measure was constructed, since the scale was created for the current study. Decoupling occurs when organizations separate or "decouple" policy from practice, such that what is promoted within official rules or public statements of goals is not actually upheld in practice, and is sometimes purposefully undermined to increase expediency in achieving pragmatic goals. Another way of stating this phenomenon is to say that, over the course of an organization's development, "institutional rules are distinguished sharply from prevailing social behaviors" with differences building between the "formal structure of an organization and its actual day-to-day activities" (Meyer & Rowan, 1977, p. 341).

Within the decoupling instrument, two potentially conflicting goals, pragmatic and ethical, were presented to the respondents. Through their responses to the two options, the objective was to see whether officers believed that their department cared more about practical results than codes of conduct. Options for validating this measure could have included qualitatively comparing departments on core values, intent and content of their mission statements, thoroughness and enforcement of ethics manuals and



professional standards, the content of other publicly disseminated statements of departmental codes of conduct, and the verbal directives made directly by their chief or other superiors to the line officers (Beekun & Glick, 2001; Westphal & Zajac, 2001). While qualitative comparisons would have value, this approach was deemed too unwieldy for incorporation into the current study.

Although the decoupling instrument was reduced to only four items from the original seven that were conceived, each remaining item was relevant to issues of current political and practical concern for police departments. These issues were evident in the ethical goals or "formal guidelines" options: the reporting and punishment of deviance within the police ranks, respect for suspect rights, the accurate reporting of crime data, and racially biased police behavior. For each of these four issues, the decoupling of policy from practice could have serious repercussions within the police organization and for the public. However, against expectations, these items did not load onto a single factor, and the scale was thus limited to two items. Further, decoupling was not a significant correlate of anomie or a significant predictor of acceptance of deviant norms. While this scale had moderate face validity, it did not have construct or predictive validity. The scale also had very low variance across departments, contributing to lack of model identification in certain of the complex models.

In the case of each of the study scales, due to the low number of items, there was limited robustness in the statistical analysis. The issue of lack of sufficient items to support a given construct in the principal components analysis was covered briefly above when discussing the item loadings. Of concern is not just whether the items loaded together on a single component, or on the expected components, but whether the



combination of items explained a large enough proportion of the variance within the component analysis to be considered a valid representation of the construct.

When running both principal components analysis and confirmatory factor analysis, explaining a large proportion of the variance was the main goal. Exploratory principal components analysis allows for data reduction based on the magnitude of the eigenvalues, which is the amount of variance explained by each component. Data reduction is useful to remove items that are not as strongly correlated with the others, since "as the intercorrelation among the variables increases, the proportion explained by the first few components will increase" (Kim & Mueller, 1978, p. 8). It is preferable to start with a large number of items that can be reduced if necessary during the exploratory process so that the remaining items, out of the possible items to measure the construct, are the most strongly correlated and explain the largest variation in the sample. For confirmatory factor analysis, data reduction is not the primary goal, but it may be considered if doing so can increase the eigenvalues of the main components. So having a more robust measure to start with is still preferable.

Additionally, a component with less than three items is generally considered weak and unstable (Costello & Osborne, 2005). Thus, starting with a very small number of untested items is risky because no more than the most limited data reduction is possible. The scale cannot be further refined, and the only refining process has been undertaken without the benefit of analysis. In the case of the current scales, the option for data reduction would have been helpful to determine if the preferred items were truly the best representatives of the constructs. It was not possible to determine whether items that



were already eliminated were better suited for the measures in place of or in addition to the current items.

*Survey methodology limitations*. A third area of limitations is a function of the survey methodology. One problem associated with any form of survey methodology is self-selection bias; people who decide to complete the survey may be different from those who choose not to participate, differing on a trait that is unknown and/or cannot be controlled (Wright, 2005). In the current case, police officers who chose to participate may differ from those who did not on a variable that may also impact their responses on the survey. As presented earlier, it was possible to assess representativeness by analyzing non-responsiveness. This assessment, however, had limitations. It was limited to only the few variables for which data were available for both groups. As a result, variation in decisions to respond to the survey may still have been due to variables for which there were no data either from the survey or for the total department population.

The other potential problem–subject misrepresentation–is particularly relevant to on-line surveying. Online respondents can easily lie about demographic variables. It is also not possible to guarantee that the person who is supposed to take the survey is actually the person filling it out, and one person could take the survey numerous times. When a survey is completed in person, the researcher can control for external influences and can verify the identity of survey-takers. This is not possible in the online format, as is also the case with mail-in surveys or even surveys by phone (Wright, 2005). Thus, while there were many advantages to the online surveying used in the current study, including low cost and accessibility, it was difficult to control the surveying environment or guard against misrepresentation.



Additional limitations. There were some additional limitations of the current research related to survey content. The larger accountability survey, of which the items for the current study were a part, included a very detailed list of demographic questions that were included on all of the Platform organizational surveys. These items included such identifiers as race, time on the job, gender, rank, shift, and occupational role. Given the small size of some of the participating agencies, it may have been problematic that these items were so detailed. In a small agency with fewer than fifty employees, for instance, detailed demographic questions may produce the perception that anonymity may be compromised. This perception could impact accurate responses to survey items of a "controversial" nature, produce socially desirable responses, and hence limit the validity of responses. Reducing this level of detail in the demographic items would be a valid consideration for future research.

Due to the interest in organizational-level measurement of department characteristics, the inclusion of measures of anomie or decoupling that were based on the organizational features of the department rather than on aggregated individual responses may have increased theoretical robustness. Since this type of macro measurement is preferable for the multilevel model, several macro measurement approaches were considered when first conceptualizing this project; however, these methods were not deemed feasible for implementation. Reasons for the lack of feasibility included space limitations on the survey, time limitations for the completion of the study as a whole, and the need for a standardized format for all agencies receiving the survey.



### Summary

This study approach had a number of weaknesses, including limitations in survey design, survey content, external measurement validation, and implementation. A number of these limitations stemmed from constraints associated with conducting this research within the Platform Project. However, using the Platform also had many advantages including a large sample size of officer respondents, easy access to police departments, ease of conducting the surveying process, and the possibility for further research within the same framework but with an extended population. The advantages seem to outweigh the disadvantages presented by the methodology. Many of the limitations discussed present opportunities for future adjustment and revisions that may be applied to a larger and more in-depth study design, and should be explored in the next phase of the Platform Project. The information gained from the current approach, and the sound theoretical foundation of the approach, represent the key value of this study despite opportunities for improvement.

### Relevance and Implications of Results

This final section of the discussion reviews the main findings and then discusses them in terms of their implications for the policing profession. This discussion addresses interventions for both the prevention of and response to corruption. Preventative interventions include recruiting, screening, training, changes to organizational structure, and increased support structures for whistleblowing. Interventions to address existing deviance and corruption in a department include intensive investigation of and harsh penalties for transgressions and modifying a subculture that provides peer support for such behaviors.



# Summary of Conclusions from Overview of Results

There were a few major findings in the current study that could have practical relevance for policy and for future research. First are the results related to the hypotheses. Hypothesis 1 was not supported, which meant that decoupling and anomie were not significant correlates and did not function well together in the complex models. This perhaps implies the need for longer or alternative scales. Hypothesis 2 was not supported for decoupling, such that decoupling was not a significant predictor of acceptance of deviant norms and did not work well in the models, again perhaps implying a need for better scaling or operationalization. Hypothesis 2 was, however, supported for anomie, such that anomie was a significant predictor of acceptance of deviant norms in most of the complex models and accounted for a great deal of variance in acceptance of deviant norms between departments. While it was a strong predictor, there still may be a need for a more complex and longer scale.

Hypothesis 3 was partially supported, such that moral disengagement was a significant predictor of acceptance of deviant norms in the base multilevel models but not in the multilevel structural equation models. This may imply the need for additional items or supplementary individual level predictors. Lastly, Hypothesis 4 was not supported, such that the random slope for acceptance of deviant norms on moral disengagement did not vary significantly across departments, and neither anomie nor decoupling were significant predictors of the slope. This may imply the need for more departments involved in future research to provide more between-department variance on acceptance of deviant norms, or may support the need for adjustments to the moral disengagement scale.



Second, based on results related to the scales (principal components analyses, descriptives), a few adjustments are necessary. Although the usage of the decoupling scale has theoretical support, its operationalization had flaws, not allowing for loading on a single component nor accountability for a large enough proportion of variance to be explained. Alternative scale composition, scoring, or type of operationalization may be necessary. The anomie scale was strong but might benefit from greater item number for the purposes of confirmatory factor analysis and general performance in the complex models. The moral disengagement scale was also strong but may benefit from more items or complementary measure of individual susceptibility. Lastly, the acceptance of deviant norms scales were strong, but would be benefited from a substitution of Item 4 on departmental reporting with the item for individual likelihood of reporting to make the scales stronger and more consistent.

From an evaluation of departmental descriptives, Ft. McDowell was found to be a potential outlier, indicating the need for a larger and randomly stratified sample. When looking at scale descriptives, the false reporting scenario stood out as garnering the most overall acceptance across the sample, suggesting that the topic of whistleblowing may require more directed attention in future research.

In the evaluation of the covariate and sublevel results, the false reporting scenario was again unique, having distinct predictors as compared to the other scenarios. In relation to the behaviors of accepting kickbacks and making false reports, lower rank, non-supervisory status, being female, working night shifts, and working rotating shifts were individual characteristics that increased likely acceptance of the deviant norms. In relation to covering for a fellow officer, those working night shifts and in neighborhoods



with higher crime rates were more likely to be accepting of this behavior. Also, jurisdictional percentage of African Americans indicated less acceptance of covering for a fellow officer between departments. This may be related to the size of department, such that larger departments had more safeguards in place for whistleblowers or stricter accountability measures.

## Possible Policy Implications of Results

A primary policy implication of these results is that the "bad apple" approach to addressing likelihood for police deviance or corruption is not effective in and of itself. Much of the variance in acceptance of deviant norms between and within departments could be accounted for by departmental characteristics or the characteristics associated with occupational subgroups. This implies that while departments may work on weeding out individuals who may be more susceptible to accepting deviant norms through screening, recruiting, and training, equal and perhaps greater effort should be given to changing organizational characteristics, including leadership operations and departmental communications. That is, departments must address the organizational and environmental correlates of susceptibility to deviance.

The findings of the current study have practical significance for several arenas of intervention, including training, recruiting and screening, leadership and communications, whistleblowing, and responses to existing deviance. Each of these arenas for reform is discussed below with reference to the relevant study findings.

*Training*. There are a couple of findings relevant to police training. First, anomie was seen as a significant predictor of acceptance of deviant norms. Anomie in a department is manifest in the anomia of its employees (Aultman, 1976; Merton, 1968).



In other words, in an anomic department, there is an expectation that the goals that are accepted as being the most valuable cannot be reached through accepted or ethical means. Anomia can come through a disillusionment with the occupational culture, leading to a sense of futility and then to deviance (Hickman et al., 2001).

The manifestation of anomie in police departments seems closely aligned with the outcomes associated with cynicism. Both anomie and cynicism in the police occupational environment arguably have similar roots; they manifest when the importance of goals and the official guideline of how goals may be achieved are not in line with the reality faced by police officers in the field, and not aligned with each other in actual departmental practice and accountability. Practical implications of this correlation for training can hence be found most clearly in the literature on cynicism prevention.

Cynicism can be defined as a belief in the worst in others and the worst in one's environment, resulting often as "a reaction to and a defense against dashed hopes" (Graves, 1996, p. 18). Cynicism is often found in officers who come out of the academy with idealism and a strong belief in ethical codes only to find that these ideals are not reflective of reality. Cynicism has been found to lead to a wide range of police problem behaviors, including corruption (Hickman, 2008). Similar to what was found for acceptance of deviant norms, suggesting a link, cynicism has been found more in larger departments and in the lower ranks (Graves, 1996).

The means of training that can prevent cynicism are relevant to the prevention of anomia. Officers can be taught the realities of the police occupation from the beginning, with no idealistic overtures. In the vein of "inoculation," they can be trained to



understand the roots of cynicism, anomia, burnout and stress and their link to misbehavior. This training can be emphasized with the careful selection of mentors (e.g., Field Training Officers) for these officers entering the police organization. These mentors, too, can make sure that the realities, stresses, and difficulties to which the new officer will be introduced are not distinct from what they have been trained to expect. Not only would officers trained in this manner be less likely to experience anomia, but having such training available could decrease actual anomie within a department by linking expectations and reality more closely together.

Second, the potential impact of stress on acceptance of deviant norms, through the sublevel and covariate findings, is another study finding with implications for training. The finding that there are differences in acceptance of deviant norms across sublevels and work groups may relate closely to the finding in the literature that stress—such as that which might be produced through rotating shifts, night shifts, high neighborhood crime, or gender bias—may lead to deviant behaviors (see additional support in Violanti & Aron, 1994). This finding relates to training in that recruits can be trained to cope with the stress that would be specific to certain work assignments, departmental politics, or peer pressures. Training can also help officers identify warning signs of stress in themselves and others and let them know where to go for help.

*Recruiting and screening*. There are a couple of findings relevant to recruiting and screening policies. First, the finding that anomie is a significant predictor of acceptance of deviant norms, and the relationship between this finding and cynicism research (as discussed previously for training), has implications for recruiting and screening. In relation to the topic of cynicism, and to prevent against the development of anomie once



within the training cycle, potential recruits can be given a realistic job preview that directly addresses the realities of the policing profession when going through the screening/recruiting process (Graves, 1996).

Second, the individual-level finding that moral disengagement is a significant predictor of acceptance of deviant norms may support the agency administration of instruments that attempt to measure moral disengagement during applicant screening. The value of this type of screening–for personality or behavioral tendencies predictive of deviance–has been supported in the literature. Arrigo and Claussen (2003), for instance, suggested the use of the Inwald Personality Inventory, the Revised NEO Personality Inventory, antisocial behavioral tendencies, and conscientiousness as possible screening indicators of susceptibility to corruption. Also, Girodo (1991) suggested extraversion, neuroticism, and disinhibition, and Pogarsky and Piquero (2004) found support for impulsivity as a predictor.

While there have been concerns as to the reliability of personality screening tools due to the potential for faking and coaching (Miller & Barret, 2008), there still may be merit in the exploration of the use of an applicable version of the Detert et al. (2008) moral disengagement scale. In order to confirm the usefulness of such a screening tool, however, it might be appropriate to first conduct research to determine whether moral disengagement is a fixed trait that functions as a stable mental tendency.

*Leadership and communication.* The findings of the current study also have relevance for departmental leadership and communication policies. First, anomie was a strong predictor of acceptance of deviant norms, and decoupling showed promise as a possible predictor as well. Anomie and decoupling both stem from departmental policies



and ethical ideals conflicting with the reality of the pragmatic goals and informal methods utilized and tolerated within an organization.

The implication of this for prevention is that strong leadership is needed that promotes ethical means to achieve goals. The leadership in a department would need to actively communicate the connection between ethical behavior and goals to personnel at all levels of the department (Punch, 2000). For instance, clarifying that accurate reporting of incidents, crimes, and suspect demeanor is as important as booking a suspect for a crime. The leadership would also have to clearly communicate expectations regarding alternative and deviant means to achieve goals. It would, for instance, have to make clear that falsely reporting incidents or exaggerating charges is not an acceptable means of getting criminals off the streets.

Discipline for such behavior would have to be expected and inevitable, and covering for this behavior in fellow officers would have to also lead consistently to disciplinary action. Hence, communication, investigation, and discipline are all necessary in order for the leadership to promote adherence to ethical guidelines down through the ranks of the agency. As Monahan and Quinn (2006) noted, "[The] central dynamic of organizational decoupling [is that] deviance is normalized as long as it is invisible, and disavowed when it comes to light" (p. 380). Clear communication of expectations and disciplinary outcomes of deviant behavior would decrease opportunities for deviance to breed in a department.

Second, the finding that there are differences in acceptance of deviant norms across sublevels and work groups (specifically those working rotating shifts, night shifts, in places with high neighborhood crime) also relates to leadership and communication.


These work groups may have the highest environmental susceptibility, based on the findings, for deviant behavior to thrive. They require more careful attention and directed protocols as a means of prevention. Similar to the implications for the total department, prevention of acceptance of deviant norms in specific work groups and lower in the ranks (problem areas as suggested by the current study), requires that leadership on all levels be consistent (including leadership for these subgroups). Expectations of behavior and punishment for offenses must be clearly communicated by commanding officers, pragmatic options that reflect policy clearly available, contradictions preempted, and accountability and external review (from outside the specific unit or work group) constant and ongoing (Punch, 2000). Leadership must also be prepared to take preventative measures within the work groups to stop deviance from becoming the norm, including regularly rotating officers on and off groups most susceptible to deviant norms.

*Whistle-blowing*. There were a couple of findings related to whistle-blowing. First, there was a much greater acceptance of the deviant norm of covering for the deviance of a fellow officer than there was for other behaviors. This suggests the need for departments to have policies that encourage such reporting and punish nonreporting. Departments could increase support for whistle-blowing within the peer culture, protecting officers who report, and clearly delineating acceptable boundaries of behavior on all levels of the department. Clear and public policies related to deviant behavior, reporting this behavior, and how ethical guidelines can be maintained and enforced on all management levels and in all work groups could also increase willingness of officers to come forward and maintain integrity in the ranks.



Second, while covering for a fellow officer was highly acceptable across the entire sample, the greatest acceptance was found in work groups that were more stressed and isolated (see support from Rothwell & Baldwin, 2007). These results suggest that preventative measures could be taken to relieve strain in and prevent the isolation of these work groups, which might increase likelihood of willingness to report fellow officer deviance. The prior suggestion of rotating officers between the more stressful assignments would be one way to decrease both the stress and isolation of those roles and subsequently decrease tolerance of deviant behavior in susceptible work groups.

*Responses to existing deviance.* The findings of the current research suggest a few arenas for improved departmental response to deviance or corruption. First, leadership within the departments that were included in the current study should be made aware of the specific level to which officers in their departments view certain deviant behaviors as serious, deserving of discipline, and likely to be reported. They could then make adjustments to policy and communication within the department to remedy deficiencies. Similar evaluations could be made of the results of the anomie and decoupling measures to see what expectations are held by officers in the department. If the findings are not in line with what is desired or officially promoted by the administration, then steps should be taken to open lines of communication and correct the disconnect between official norms and officer perceptions. In fact, it would be informative for all police departments to do a similar internal evaluation of officer perceptions of deviant behaviors, ethical guidelines, pragmatic goals, and expectations of departmental responses.

Second, findings of greater acceptance of deviant norms in certain subgroups could assist departmental administrations in targeting groups for more careful



monitoring, directed restructuring, and more stringent approaches for eradicating corruption when found. Departments should individually confirm the subgroups that seem more tolerant of informal deviant norms and make changes in their leadership, review process, and incentives for reporting. Departments could also provide outlets and counseling for those officers who may be most impacted by stress due to membership in these subgroups to decrease reliance on deviant outlets.

Third, those departments that were higher on acceptance of deviant norms relative to the other departments may interpret this as an indication that more stringent eradication of deviant norms is necessary department-wide. Past literature has suggested that successful means of accomplishing this on the agency level may include more organized and hard line internal affairs units, integrity testing of officers, clear discipline outcomes for specific behaviors, and increased inspection on all levels of the department (Punch, 2000).

Fourth, based on findings supporting the potential importance of anomie and decoupling to departmental acceptance of deviant norms, departments with higher rates of anomie and decoupling may see this is a sign that it is necessary to revise policies that are not adhered to, and by doing so create a clearer chain of information and expectations down through the ranks. Part of this process would necessitate rooting out mentors who promote deviant norms, and providing incentives for ethical guidelines being promoted and followed.

*Summary*. In summary, much of the import of the study results for policy come from the overall findings that both individual and organizational factors impact acceptance of deviant norms. The general support for the model suggests that the study



scales could be used to inform department administrators of decoupled policies, anomic attitudes, undesirable attitudes toward deviant behaviors, and individual susceptibility for accepting deviant norms. The information could lead to adjustments in leadership, communication, and screening. Support for anomie as a predictor of acceptance of deviant norms suggests that preventing the development of cynicism and anomia, starting with recruitment and training, may be a means of decreasing susceptibility to deviant behaviors. The findings of greater susceptibility in certain subgroups suggest the importance of targeting these groups for reorganization, education, investigation, and stress counseling. Findings of greater acceptance for covering for fellow officers suggest the need for policies to promote whistleblowing. Finally, departments that have higher acceptance of deviant norms than others may see this as an indication that more stringent measures should be taken to eradicate existing deviance.

### Implications for Future Research

The results of the current study suggest some recommendations for future research. Future research should adopt the multilevel structural equation model to test this model, but with certain important changes made to both scales and sampling to guarantee adequate item number for the scales, significant variance across the sample, sufficient number of departments for model parameters, and adequate robustness in the confirmatory factor analysis. Recommendations for future research address this concern in part, including adjustments to the scales in the context of the results of the complex models, sampling changes, measurement of external influences, an increased focus on whistleblowing, investigation of differences between normative corruption and noble cause corruption, and separate evaluations of department-level characteristics.



*Adjustment to scales in context of complex models.* As previously discussed, to increase robustness, variance, and identification in the complex models, each of the scales require certain changes.

For instance, the decoupling measure would not load on a single variable, and the scaling procedure required dichotomizing the scoring. These problems may have led to decreased variance of the scale across departments, poor performance in the complex model, and lack of correlation with anomie or significant prediction of acceptance of deviant norms. Revisions may be possible through a change in the focus of the items, such as comparing ethical guidelines to pragmatic goals on topics that are not as divergent in levels of seriousness. This might also address the differences in construction between the anomie and decoupling scales as noted in the discussion of hypothesis results. Or perhaps instead of asking respondents to mark a place on a chart between both, individual goals and guidelines could be matched on seriousness and assessed separately, comparing responses across the two categories. Another possibility would be to measure perspectives on policies and guidelines as a specific comparison between respondents who are lower and higher in the agency hierarchy, based directly on individual agency ethical guidelines. Such a measure would have the added value of providing information to researchers and agency leaders on where decoupling was taking place (between which ranks) and on which topics.

The anomie scale also manifested some problems. While anomie was a strong predictor of acceptance of deviant norms, its low correlation with decoupling and limited robustness in the measurement models indicated that the scale may require additional items.



The use of the individual level measurement of anomia and decoupling and their aggregation up to the agency level was conducted with the expectation that the general perspective of officers toward official rules, socially desirable outcomes, ethical guidelines, and pragmatic goals would provide proxy measures of anomie and decoupling in the department as a whole. However, based on problems encountered with the complex models, it is possible that for future research a more valid measurement of these constructs could utilize alternate or additional macro measurement approaches, directly measuring them on the organizational level.

As mentioned previously in this discussion, the macro measures that could be considered for decoupling include a direct agency-level evaluation of organizational structures, discipline policies, and/or accountability measures. Possible macro measurement approaches that could be considered for anomie include the comparison of official agency rules to individual officer understandings of the enforcement of these rules, and the comparison of actual discipline outcomes to expected discipline outcomes within departments. Ideal measurement might employ the collection of agency data on official rules and actual implementation of rules over a finite time. This measurement could be used in combination with officer perceptions of agency ability to reward officially sanctioned behavior and punish breaches of policy.

Future research should also include a more comprehensive scale of moral disengagement, perhaps supported by a few other measures of individual-level susceptibility. The existing moral disengagement scale could be expanded to include items that were representative of more of those from the original Detert et al. scale. This would increase robustness of the scale, perhaps improve its performance in the complex



models even when accounting for measurement error, and account for more variance in acceptance of deviant norms within departments. The addition of other possible scales, as previously discussed, may also help to account for a larger portion of the residual within-department variance. Another possible use of the moral disengagement scale in future research would be to test to see if it is a formative individual trait. This could be accomplished by presenting the scale to recruits in the same departments that participated in this study to see if there are differences across the sample as compared to the established officers. Or, providing more strength to the test, a longitudinal study could follow recruits from the academy and over a couple of years to see if their moral disengagement altered through exposure to the occupational culture.

The acceptance of deviant norms scales could be improved by the additional or alternative usage of the individual opinion item for the reporting of deviant behavior. This would allow all items to be individual evaluations of opinion or likely behavior.

*Sampling*. Based on problems with complex model identification, variance across departments, and outliers, future research that tests this or similar models must make use of more departments and select them through stratified random sampling. If this sampling method is not possible, at least the number of clusters must increase to improve the validity of the complex modeling. It is not possible to know for certain if the hypotheses would have been supported or not given the proper number of departments for the modeling method. This change is vital for future attempts.

*Measurement of external influences.* Future research would be enhanced by adding external measures of influences on department-level acceptance of deviant norms. This could allow for a more comprehensive perspective on how the organizational



features of each department function and what may influence departmental culture and policies. For instance, measuring the features of the city or county in which each agency is situated may identify factors that might promote or reduce agency corruption. This would in essence be a measurement of agency environmental factors that could explain differences found between departments. Such a measure could also be used as a verification of the face validity of the agency-level evaluation of acceptance of deviant norms.

This jurisdiction-level contextual information would provide for a more in-depth study. For instance, one could create scales reflecting city integrity based on information from citizen reviews, media outlets, or other sources. Such measurement would produce a more complex model to facilitate the understanding of police corruption.

*Whistle-blowing*. It might be interesting to conduct a more focused evaluation of predictors of whistle-blowing, due to the results for the second scenario. The covariate and sublevel findings suggest that further exploration of work group and departmental size or structure influence could be valuable.

*Normative versus noble cause corruption.* Due to potential differences suggested by theory and moderately supported in the bivariate correlations, it might be valuable to assess causes of noble cause corruption separately from those of normative forms of corruption. Anomic conditions have the potential to impact the two differently and, based on the current study's results, may have a stronger impact on noble cause corruption. This investigation would require a wider range of acceptance of deviant norms scenarios and a more robust measure of anomie, perhaps exploring also the



different forms that anomie might take within the occupational structure of a police agency.

Separate evaluations of department-level characteristics. For the expanded evaluation of all the acceptance of norms scenarios, it may be important to explore more department-level characteristics. Possible variables could include information on organizational structure, recruiting, functional management strategies, workgroup management, stress management, accountability procedures and reviews, whistleblowing procedures and safeguards, internal affairs procedures, and civilian reviews. While these variables could not be evaluated through the complex model, they may be valuable to examine separately as predictors of acceptance of deviant norms and as correlates of anomie and decoupling.

*Summary.* Overall, the current model can be used successfully in future research to expand knowledge of what may impact susceptibility to deviant norms both within and between departments. Such an effort would require scale revisions and expanded sampling. Additional measurement approaches could also add more substance to the analysis, or add complementary evaluations of study constructs.



### Conclusions

Police corruption is a significant problem for law enforcement officials and for the populace that police agencies are sworn to protect. A major goal of police corruption research is to provide departments with the information necessary to make constructive policy changes and to institute programs that can prevent or counteract corrupt behavior (Ivkovic, 2003). Departments must understand the social forces and individual factors that influence the likelihood for officers in a given department to make unethical decisions in the course of their work, and to accept and condone the deviant behaviors of others.

The current study attempted to inform policy using a unique multilevel approach, integrating criminological and organizational theories, to explain likelihood for police corruption on both the departmental level and the individual level. The results of this study support the importance of evaluating susceptibility to corruption on both the departmental and individual levels, and provide guidance for future attempts to integrate organizational theories with traditional criminological theories. The results also highlighted differences in susceptibility to deviance among departmental sublevels.

Despite certain methodological limitations, this study provided insight into organizational/situational factors that may promote deviant subcultures within departments, and individual characteristics that may allow certain sworn personnel to be more susceptible to deviant influences. Future research, using the multilevel model and with improved formulations of constructs and an expanded sample, could contribute further to the knowledge that can assist law enforcement administrators and other policy makers in preventing and responding to corruption within police agencies.



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Appendices



# Appendix A: Sample of Initial Request for Participation Letter

# X PD Employees:

I am pleased to announce that we have the honor of being selected as one of a number of police departments nationwide to participate in the National Police Research Platform. The Platform is supported by the National Institute of Justice, U.S. Department of Justice, and is expected to lead to improvements in police organizations that will directly benefit law enforcement personnel.

What does this mean for us? The research team is asking that members of the X Police Department, sworn and civilian, participate in a few online surveys over the next year to give your opinions about police work. The survey will be on the Internet, and is being conducted by professors at the University of South Florida and the University of Illinois at Chicago. The Internet surveys are completely anonymous (no names or Ids) and voluntary, and I encourage all of you to participate and to be candid. Only members of the research team will have access to the information you provide and they are prohibited by federal law from releasing any information which could identify you.

The first survey is on ------. It is very brief — it might take 8-9 minutes. You can complete the questionnaire by clicking the link below. You will not need any kind of ID or password. Once you start you need to finish in one session, as the software is designed to forget you once it stores your answers.

# http://xxxx

Reports based on surveys from many departments around the country will be presented so that no one person, unit or assignment is discussed in isolation. The results will help the country better understand the issues that police officers and staff face, and may provide feedback which we may use to improve our organization and better serve the community.

If you have questions prior to participating in this survey I encourage you to contact the Project Director, Susan Hartnett, at the University of Illinois at Chicago (shartnet@uic.edu or 312-355-0317). A local contact person is Lorie Fridell at USF at 813-974-6862.

Thank you in advance for helping to improve the department and the profession.

[Chief of Police of Department X]



# Appendix B: Survey Instructions

#### University of South Florida All Employee Non-signed Consent to Participate in Longitudinal Study National Police Research Project

IRB Approval FWA 00001669					
IRB Num	iber: 107791 I				
From	9-23-10				
Thru	3-26-11				

### Survey Instructions

### Instructions

#### Purpose

This is a study prepared by researchers and sworn officers across the nation. It has been approved by management in your department, but is entirely independent.

- ✓ The purpose of this study is to better understand the work of police officers and the agencies they work for, and to identify opportunities to improve the profession, including work conditions.
- You were selected for possible inclusion in this study because you are employed by one of the participating agencies. Virtually all employees in your department will be given an opportunity to participate.
- ✓ If you agree to participate, the task is simple -- we ask that you take a few minutes to complete an on-line survey. We are asking for your opinion about your department and your job.
- ✓ Before making a decision, please read the following information:

#### Your participation is voluntary

- If you start a survey, you may choose to stop at any time.
- If you do not feel comfortable answering a question, you can skip that question.
- Completing the surveys does not involve any foreseeable risks, beyond those encountered in everyday life.

#### Your responses are anonymous and cannot be linked to you

- ✓ Your Department has not released any information that could be used to identify you. Your name or email address is unknown to the researchers.
- Your Internet Service Provider (ISP) address gives only the host name (AOL, for example) and will be deleted from your survey.
- Only summary information from all of the surveys combined will be released.
- Any identifying information will be stripped away before analysis.

#### Participating in this survey will give you an opportunity ...

- to have input about ways to improve law enforcement as a profession.
- to give feedback to your agency that may lead to local improvements.

#### You may contact the researchers if you have any questions or concerns

- ✓ If you have any questions about this research, you may contact Dr. Fridell at 813-974-6862 or University of South Florida's Office for Research Integrity and Compliance at 813-974-5638.
- Feel free to save or print a copy of this form for your personal records.

#### How to Participate

Clicking on the "next" button below indicates that I have read the above information and agree to complete this survey.

Unsigned Consent for Organizational Web Survey



# Appendix C: Sample of Follow-up Request for Participation Letter

# Police Department Employees of Department X:

Last week we announced that both sworn and unsworn personnel of X PD have been asked to complete an Internet survey on *stress in the workplace* as part of a national project. Thank you to those of you who have already taken the survey.

Our response rate to date is only **xx percent** and I hope we can bring that up. Other agencies around the national are achieving as much as **80%** participation and I want us to look good alongside them.

I hope those of you who have not already taken the survey will consider taking it, as everyone's opinion is valued and achieving a high response rate is the only way for the researchers to truly understand current police issues.

As a reminder, the Internet survey is completely anonymous (no names or Ids) and voluntary, and I encourage you to participate and to be candid. Only members of the research team will have access to the data and they are prohibited by federal law from releasing any information which could identify you. You can access the survey through your computer account by clicking the following link:

# http://xxxx

You will not need any kind of ID or password. Once you start you need to finish in one session, as the software is designed to forget you once it stores your answers.

Reports based on surveys from many departments around the country will be presented so that no one person, unit or assignment is discussed in isolation. The results will help the country better understand the issues that police officers face, and may provide feedback which we may use to improve our organization and better serve the community.

If you have questions prior to participating in this survey you can contact Dr. Dennis Rosenbaum at the University of Illinois at Chicago at 312-996-0764 or our local contact at USF, Dr. Lorie Fridell (813-974-6862).

Thank you

[Chief of Police of Department X]



# Appendix D: Decoupling Measure

Each item below reflects two goals that departments may have that can conflict with one another. For each set, please check one of the boxes along the line to indicate whether you believe your department tends to favor the goal on the left side, the right side, or a position in between.

			the second s	Consection and and a section of the	NAME OF TAXABLE PARTY OF TAXAB		
Protect the agency's reputation and image	C	С	С	С	С	C	Uncover, report, and discipline unethical/illegal behavior on the part of employees
Hold criminals accountable for their actions	С	С	$\cap$	C	С	C	Uphold suspects' rights
Report crime accurately	0	C	C	C	С	0	Increase the public's sense of security by showing crime reduction
Reduce criminal activities in hot spots with vigorous crime control methods	С	С	С	С	С	6	Discourage and prevent racially biased policing



Please respond to the following statements							
	Strongly Agree	Agree	Disagree	Strongly Disagree			
It is sometimes necessary to break department rules in order to advance up the ranks.	C	C	C	C			
One must keep fellow officers' misconduct a secret to be accepted by colleagues.	С	C	C	C			
To get criminals off the street, it is sometimes necessary to change the details of what happened when writing a report.	С	С	C	C			

# Appendix E: Individual Measure of Anomie (Menard, 1995)



# Appendix F: Adult Moral Disengagement Scale (Detert et al., 2008)

Please respond to the following statements						
	Strongly Agree	Agree	Disagree	Strongly Disagree		
You can't blame a person who plays only a small part in the harm caused by a group.	С	C	C	C		
People cannot be blamed for misbehaving if their coworkers pressured them to do it.	C	C	C	C		
People are not at fault for misbehaving at work if their supervisors mistreat them.	0	C	C	C		
If someone leaves something lying around, it's his/her own fault if it gets stolen.	0	C	C	С		



# Appendix G: Acceptance of Deviant Norms (Klockars et al., 2000)

On the following pages you will be asked to evaluate three descriptions of police officer behavior that may depart from official department policy. In each instance you should assume that the officer in question - has been a police officer for five years - has not been previously disciplined, and - has a satisfactory work record. Please do not make any other assumptions about the incident or the officer. To make your evaluation please choose a number on the five-point scale that appears beneath each question. Evaluate the responding officer's behavior. Please remember that we are only asking for your PERSONAL OPINION on these matters. Your answers do not in any way imply that you have participated in or are aware of any such behavior in your agency.



### Appendix G (Continued)

1. A police officer has a private arrangement with a local auto body shop to refer the owners of cars damaged in accidents to the shop. In exchange for each referral, he receives a payment of 5% of the repair bill from the shop owner.

How serious do YOU consider this behavior to be?

C 1- Not at all s	serious
-------------------	---------

- C 2 C 3
- 64
- C 5- Very Serious

If an officer in your agency engaged in this behavior and was discovered doing so, what, if any, discipline do YOU think <u>SHOULD</u> follow.

- C None
- C Verbal Reprimand
- C Written Reprimand
- C Fine
- C Period of Suspension
- C Dismissal

If an officer in your agency engaged in this behavior and was discovered doing so, what, if any, discipline do YOU think <u>WOULD</u> follow.

- None
- C Verbal Reprimand
- Written Reprimand
- C Fine
- C Period of Suspension
- Dismissal

Do you think MOST POLICE OFFICERS IN YOUR AGENCY would report a fellow police officer who engaged in this behavior?

C 1- Definitely not

- C 2
- C 3
- C 4
- C 5- Definitely yes



### Appendix G (Continued)

2. At 2:00 A.M. a police officer, who is on duty, is driving his patrol car on a deserted road. He sees a vehicle that has been driven off the road and is stuck in a ditch. He approaches the vehicle and observes that the driver is not hurt but is obviously intoxicated. He also finds that the driver is a police officer. Instead of reporting this accident and offense, he transports the driver home.

How serious do YOU consider this behavior to be?

1- Not at all serious2

- C 3 C 4
- C 5- Very Serious

If an officer in your agency engaged in this behavior and was discovered doing so, what, if any, discipline do YOU think <u>SHOULD</u> follow.

- C None
- C Verbal Reprimand
- Written Reprimand
- Fine
- C Period of Suspension
- C Dismissal

If an officer in your agency engaged in this behavior and was discovered doing so, what, if any, discipline do YOU think <u>WOULD</u> follow.

#### None

- C Verbal Reprimand
- Written Reprimand
- C Fine
- C Period of Suspension
- C Dismissal

Do you think MOST POLICE OFFICERS IN YOUR AGENCY would report a fellow police officer who engaged in this behavior?

C 1- Definitely not

- C 2
- C 3
- C 4
- C 5- Definitely yes



### Appendix G (Continued)

3. A police officer arrests two drug dealers involved in a street fight. One has a large quantity of heroin on his person. In order to charge them both with serious offenses, the officer falsely reports that the heroin was found on both men.

How serious do YOU consider this behavior to be?

C	1-	Not	at	all	serious
		1101	~	<b>u</b> 11	0011040

- C 2 C 3
- 6 4

C 5- Very Serious

If an officer in your agency engaged in this behavior and was discovered doing so, what, if any, discipline do YOU think <u>SHOULD</u> follow.

- None
- C Verbal Reprimand
- O Written Reprimand
- C Fine
- C Period of Suspension
- C Dismissal

If an officer in your agency engaged in this behavior and was discovered doing so, what, if any, discipline do YOU think <u>WOULD</u> follow.

- None
- C Verbal Reprimand
- C Written Reprimand
- C Fine
- C Period of Suspension
- C Dismissal

Do you think MOST POLICE OFFICERS IN YOUR AGENCY would report a fellow police officer who engaged in this behavior?

C 1- Definitely not

- C 2
- C 3
- C 4
- C 5- Definitely yes



### Appendix H: Demographics/Control Variables

The following information is needed to analyze the survey results. Your responses are confidential and anonymous.

What is your civil service rank (or it's equivalent)?

Police Officer

C Sergeant and above

Are you a ...

C full time employee

c part-time (paid) employee

C auxiliary (volunteer) employee

### What is your gender?

C Male

○ Female



# Appendix H (Continued)

In what year were you born?

1900

How old were you when you first came on the job?

What is the highest level of formal education you have completed?

- C High school graduate or G.E.D
- C Some college or technical school but did not graduate
- C Junior college, Associate or technical school graduate
- C College graduate
- C Some graduate courses or graduate degree

Are you currently enrolled in a degree program?

C Yes

No



### Appendix H (Continued)

Have you served in the military?

C Yes

C No

Which of the following best reflects your normal working day?

- C Mostly day shift
- C Mostly late afternoon/evening shift
- ← Mostly night shifts

Is your work schedule ...

- Fixed shift (for 6 months or longer)
- C Specific rotating shifts
- C Some other arrangement

On a regular basis, do you have official responsibility as the primary supervisor of one or more full time employees?

C Yes

C No



### Appendix H (Continued)

#### What is your racial background?

- African American/Black
- White (non-Hispanic)
- Latino/Hispanic
- Asian
- Native American
- Biracial or multiracial
- C Other

### In what role or capacity do you currently mostly serve?

- C Patrol
- Detective
- Youth
- Gang or Tactical
- Narcotics or Vice
- Community Policing
- Central Administration
- Command Staff
- Communication/Call Takers/Dispatchers
- C Technical Support
- Traffic
- Other Non-Field Assignment
- C Other Field Assignment

How would you describe the crime rate in the neighborhoods where you currently work?

- Very high crime rate
- Moderately high crime rate
- Average crime rate
- Moderately low crime rate
- Very low crime rate
- C I do not have a regular geographic assignment

If you have any additional comments about these issues or the survey itself, please include them in the box below.

