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EXECUTIVE SUMMARY

Public trust in the police is a central element of democratic policing. Law enforcement agencies across the country must recognize that police *integrity* and *accountability* – two interrelated terms that are often used without much regard for their meaning – hinge on public perceptions of the police. Police integrity is a product of both actual police behavior and public perception of that behavior, and police accountability depends on whether public perceptions of police behavior are officially recognized and acted upon.

In recent years, these topics have captured the attention of police researchers and practitioners alike. In particular, police agencies have been collaborating with academic and private research groups to develop, collect, and analyze departmental data resources, and to develop practical strategies for supporting integrity and accountability. In many cases, this involves the enhancement of internal capacities to monitor and respond to police behavior before it becomes problematic.

Collaboration between Temple University's Center for Public Policy and the Philadelphia Police Department was initiated for the purpose of helping to develop an information system to assist the Department's integrity oversight process. A specific need was identified for the development of baseline information regarding possible indicators of negative police behavior.

The project was guided by an Advisory Committee composed of members of the Internal Affairs Division, Labor Relations Unit, Fraternal Order of Police, Integrity and Accountability Office, as well as representative members of the Department of various ranks and assignments, such as Patrol and Investigations. The Advisory Group met

regularly to discuss the project, sharpen data collection, analysis and interpretation, and to represent the interests of all the “stakeholders” in integrity improvement within the Philadelphia Police Department.

Data and Methods

Our project was granted access to background files and academy records to collect and record information for nearly 2,000 officers representing 17 recent academy classes. Our aim was to determine if available data would allow us to identify differences in background and academy experiences associated with future behavioral or disciplinary problems as a police officer.

We were also granted access to various databases maintained by the PPD Internal Affairs Division (IAD), Police Board of Inquiry (PBI), as well as departmental personnel files. Specifically, IAD granted access to their files concerning Complaints Against Police (CAPS), Internal Investigations (other than for CAPS), and Use of Force Complaints (UOF). In addition to analyzing departmental data, we also collected attitudinal data using a survey instrument administered to a random sample of officers selected from the population of nearly 4,000 patrol officers within the Philadelphia Police Department. Finally, we considered the context of police behavior by including Census data aggregated to the work environments where officers were assigned.

Our key dependent variables were indicators of potential problem behavior: the generation of citizen complaints (physical and verbal), internal investigations, and departmental discipline, a general category of misconduct, incidents occurring while off-duty, and police shooting incidents. Using a risk-factor approach, we began by

identifying individual correlates of these indicators (while controlling for officer exposure – i.e., length of service). We then created indices that combined the identified correlates to explore whether the accumulation of risk factors led to increased probabilities of potentially problem behavior. This method appropriately recognizes that it will not be possible to identify any one factor or combination of factors that will perfectly predict the outcomes. Rather, the goal was to identify factors that may indicate groups of officers that may be deserving of additional monitoring and assistance.

We also explored information on police officer attitudes and beliefs about police work, the department, and toward negative or inappropriate officer behavior. This information provides a better understanding of how officers “believe” things work, their attachment to their jobs, and their commitment to the department. Moreover, these data provide a glimpse into the working culture of Philadelphia police officers at the time of the study.

Selected Findings

The most frequent indicator was departmental discipline (30.6% of the sample), followed by physical abuse complaints (16.6% of the sample). Internal investigations (for other than complaints against police) were initiated for 15.4% of the sample. Ten percent had off-duty incidents, 9.8% generated verbal abuse complaints, 8.5% engaged in what the department classified as “other” misconduct, and the least frequent category was police shootings, involving 5.4% of the sample. It is important to note that these categories are not necessarily mutually exclusive.

Background and academy performance

Departmental discipline. Our analysis suggests that, while controlling for officers' exposure, a total of 15 of the more than 70 background and academy characteristics investigated were significantly related to whether an officer became the subject of official departmental discipline. These correlates are summarized in detail in the text of the complete final report. Some selected background correlates include: officers who were younger (less than 26 years old) at the time of application, those previously rejected and therefore not hired by the City of Philadelphia, and those who served in the military but were the subject of military discipline. Academy correlates include officers who scored relatively low on the law enforcement orientation section of academy training, the human relations section, and in the section relating to the handling of violent and/or dangerous people. In addition, officers who were the subject of academy discipline were more likely to be the subject of departmental discipline.

To assess the effect of multiple factors on the likelihood of departmental discipline, we created an index of significant background and/or academy characteristics. Officers having six or more risk factors had a little more than two-and-a-half times greater chances of becoming the subject of departmental discipline, as compared to the group having zero to three risk factors.

Physical abuse complaints. We also looked at those who had generated physical abuse complaints. In sum, while controlling for exposure, 22 of the more than 70 background and academy characteristics were significant predictors of whether an officer had generated one or more physical abuse complaints. Some selected background correlates include: officers who were young at the time of application, officers with

military experience but who had been the subject of military discipline, officers whose driver's license had ever been suspended or revoked, officers who had ever been placed under arrest, and officers who had one or more deceptive polygraph results in their application history.

An index of significant background and/or academy characteristics revealed that officers having six or more risk factors had more than four times greater chances of generating physical abuse complaints, as compared to the group having zero to three risk factors.

Police shooting incidents. As another example, the study also looked at police shooting incidents. In sum, while controlling for exposure, 12 of the more than 70 background and academy characteristics were significant predictors of whether an officer had been involved in a police shooting incident. Selected background and academy correlates include: officers with military experience but who had been the subject of military discipline, officers who had a parent who is/was employed as a law enforcement officer, officers whose driver's license had ever been suspended or revoked, officers who had ever been placed under arrest, or had ever been the subject of a private criminal complaint.

An index of significant background and/or academy characteristics revealed that officers having four or more risk factors had a little more than five-and-a-half times greater chances of becoming involved in shooting incidents, as compared to the group having zero to one risk factors.

Contextual variables

To assess the impact of work context, we used the same procedure described above to identify correlates, and then we re-considered the indices by splitting the samples into two groups; those having and those not having the identified contextual factors. Our analyses, summarized here, indicate that the contextual variables were most useful in predicting physical abuse complaints and police shootings.

With regard to physical abuse complaints, officers working in districts where there is a higher proportion of residents without a high school education, and in districts with a higher number of annual total offenses and arrests, were more likely to generate physical abuse complaints. District problems with crime and order maintenance (that is, higher amounts of them) are associated with higher numbers of physical abuse complaints. Simply put, high activity districts yield more complaints of physical abuse. But, to the extent that proportion of residents with high school education is one dimension of socio-economic class, these data suggest in a preliminary way, that more complaints of physical abuse come from lower socio-economic areas. Such a finding, of course, has several interpretations. One is that these areas have higher crime and disorder problems, call for more police attention, and result in more aggressive policing. Another interpretation is that the police are more aggressive with people residing in areas characterized by low socio-economic status. With respect to the people who may be residing in these districts, the data suggest that minority group membership; a high proportion of youth and a high proportion of renters produce fewer complaints. Of course it is unknown if the aggressive policing that these areas may experience is seen as

“normal” and a part of social life, thereby somewhat suppressing individuals’ desire or willingness to file a complaint.

The findings with respect to contextual influences on shooting complaints reveals a pattern that could be characterized as increased violence (shooting) in areas with high social disorganization. Officers working in districts where residents are predominately black, where the proportion of female heads of households with children is higher, where there is a higher proportion of unemployed males, and where there is a higher proportion of children living in poverty as compared to other districts, were more likely to become involved in shooting incidents.

The group of officers having the highest percentage of shooting incidents (13.5%) has 4 or more background and academy factors and one or more of the geographic factors. Officers having the smallest percentage of shooting incidents (0.6%) have zero to one background and academy factors and no geographic factors.

In similar fashion, although to a lesser degree, the group having the highest percentage (26.2%) of physical abuse complaints is the group having 6 or more background/academy factors and one or more geographic factors. The groups having the smallest percentage of physical abuse complaints (7.1% and 7.2%) are the groups having zero to three background factors (geographic factors seem to make no difference here). Interestingly, the effects of geographic factors are most pronounced among the groups having 4 to 5 background academy factors (12.6% versus 22.9%, respectively).

These findings suggest that contextual factors (community characteristics) generally increase the odds for having complaints *in addition* to individual background

and academy factors. That is to say, officer risk factors are most always exacerbated by the places where high-risk officers might be assigned.

Police attitudes

The survey (discussed in detail within the full report) collected attitudinal information relating to cynicism, attitudes toward ethics, evaluations of the appropriateness of various police behaviors, and other measures. Overall, the survey data produced mixed results. For example, more often than not respondents sought a neutral position on many of the cynicism items. It is not clear what this suggests. On the one hand it could portray a police workforce that was seeking center rather than polar positions relative to concerns about work, discipline, the department and external others. On the other hand this pattern might suggest that “neutral” was a “safe” response for many officers, thereby not calling attention to them or the department. The data did suggest, however, that in the aggregate officers do not hold favorable opinions of the public and the press. And, a larger proportion of officers perceive the courts in a hostile way, as compared to officers who may be more favorably disposed to the court system.

At the descriptive level, responses suggest that while there is a high proportion and significant agreement with positive ethical statements in this sample, there is also a sizable number of officers reporting ethical values of concern. Moreover, as many of the respondents selected a “middle ground” or “neutral” value for their responses, it might also be concluded that ethical ambiguity is considerable within this group of respondents. Given that these officers were selected randomly, such ethical ambiguity appears rather pervasive within the Philadelphia Police Department, at least in the patrol ranks.

The cynicism and attitudes toward ethics measures were aggregated to the district-level, and these scores were then applied to the larger sample of officers comprising the background/academy study. The data suggest that officers working in districts exhibiting higher levels of cynicism were more likely to have been the subject of departmental discipline. These same officers were also more likely to be involved in shooting incidents. Officers working in districts exhibiting weaker attitudes toward ethics were more likely to be involved in shooting incidents. These findings suggest that indeed “district cultures” exist, and that they too exert influence on negative police behaviors and on subsequent complaints. Police supervisors and managers must constantly address the erosion of values and increases in cynicism in their respective commands.

A valuable approach to the question of ethical values is to have respondents read a series of short scenarios involving ethical dilemmas, and then respond to a series of questions. The contexts of the scenarios can be changed, and the often-subtle differences in ethical choices thereby highlighted. Respondents are asked to make assessments about their own behavior, what the department expects of them, and what the work group thinks of such behaviors. Collectively, these responses tell us much about the dynamics of police management and police culture.

The survey included six scenarios, borrowed from recent work by Klockars and colleagues. The first two scenarios represented fairly minor behaviors, the next two represented acts of medium-seriousness, and the last two scenarios represent very serious forms of police misbehavior. In general, the Philadelphia police officers that responded to these scenarios followed patterns of response similar to officers in other departments

studied by Klockars et al. Lower-level deviations from written policies and procedures were generally acceptable to the officers studied, while more serious acts were seen as warranting official departmental attention. Several of the scenarios exhibited a split opinion among officers as to what constitutes negative behavior, and a persistent minority of officers who either didn't take the survey seriously or who embrace potentially negative values. Finally, for some small percentage of officers, departmental policy and procedures relative to ethical accountability appears to be ambiguous.

Collectively, the patterns of responses across all respondents compare quite favorably with national samples of police officers that have completed a similar scenario-based assessment. Of particular interest is district-level variability in the scenario measures. Previous research by Klockars and his colleagues revealed strong correlations between the seriousness of behaviors portrayed, the level of discipline warranted, and the likelihood of reporting behavior at the officer level, and used aggregate, agency-level data to characterize the agencies' culture of integrity. We aggregated the scenario variables to the district-level and found considerable variation in responses to the scenarios across Philadelphia's Police Districts. Taken with the other attitudinal data, this suggests that police districts are likely to have very different cultures (on the ethical dimensions explored), and hence differing tolerances for the various behaviors described in the scenarios. This, in turn suggests that multiple police cultures are operating at the district level with Philadelphia.

Conclusions

The study found that several background, academy performance, contextual, and attitudinal variables are useful in predicting outcomes indicative of possible problem behavior. The risk factor approach, which recognizes that no one factor or collection of factors will perfectly predict such outcomes, was shown to be useful in identifying groups of officers that are more likely to exhibit problem behavior and who may be more deserving of monitoring and assistance efforts. In a larger sense, the study demonstrates the utility of the linked-data approach, whereby available information about officers and officer performance is linked together such that available measures can quickly and easily receive consideration by agency monitoring processes.

One consistent finding of this and other research is that past indicators of behavior are excellent predictors of future behavior. This is evidenced by the utility of background and academy variables such as prior arrests, military discipline, and academy discipline. These kinds of risk factors can be directly addressed by police agencies concerned with minimizing future problems. By increasing the sensitivity of screening and selection processes, and by closely monitoring academy behavior, it may be possible to minimize future problem behavior. As another example, the finding that officer background and academy characteristics interact with work context variables implies that some adjustments in work context (i.e., by carefully assigning officers exhibiting a combination of certain factors) may result in a reduced probability of problem behavior.

Some factors may not be as amenable to intervention. For example, a finding that male officers are more likely to evidence certain outcomes is, by itself, of limited utility (agencies cannot easily instruct officers to be “less male”). Such indicators may be

serving as proxy measures of some underlying element. Insofar as one is concerned with the constellation of factors, however, these types of indicators are still important to the overall risk approach.

In sum, a risk factor model may be useful but care must be exercised in its use and application. The possession of certain characteristics should not be viewed in a deterministic fashion, and interventions should not be designed at the individual level. Rather, it is best to think in terms of groups of officers exhibiting a collection of risk factors that might suggest additional attention. In terms of resource allocation, a risk model would direct a proportionately larger amount of available resources at groups exhibiting a greater likelihood of problems. Agencies concerned with the enhancement of existing monitoring processes may benefit from such an approach.

Police Integrity and Accountability in Philadelphia: Predicting and Assessing Police Misconduct

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Chapter 1 INTRODUCTION

In recent years, the topics of police integrity and accountability have captured the attention of both police agencies and police researchers (Walker, 2000). In particular, police agencies have been collaborating with academic and private research groups to study the relationship between police behavior on one hand, and public trust on the other. In many cases, these groups have been collecting and analyzing departmental data resources, and trying to develop practical strategies for supporting integrity and accountability in police agencies across the nation, while at the same time creating an internal capacity to predict police misbehavior.

The terms “integrity” and “accountability” are often used without much consideration of their meaning. *Police integrity* can be thought of as the product of both actual police behavior and the public perception of that behavior. Police behavior within particular neighborhoods, throughout cities, and across the states is interpreted and reacted to by those served, community residents and business people. The public can view police behavior as being respectful of the awesome and necessary power entrusted to them, or as a violation of that trust. Police integrity at any place and time is said to be strong when both actual and perceived behavior are trustworthy in nature, and weak when either actual or perceived behavior is viewed as not deserving of public trust. Assuring for congruence between the preachment and practice of trustworthy police behavior is influenced by the actions of the police and public assessment and interpretation of those actions.

Related to police integrity, *police accountability* can be thought of in terms of two

issues; whether the behavior that the public views as a trust violation is acknowledged by the police agency and/or governing bodies, and whether something is being done to correct the acknowledged problem. Police accountability at any place and time is said to be strong when the answers to these two questions are in the affirmative and weak when they are not. Therefore, public concerns with police accountability are addressed to the extent that the police or the executive branch of government to which they report concurs with public assessments of negative or unwarranted police behavior and official attempts to address those concerns.

One key ingredient in assuring police integrity and accountability is monitoring of police behavior. Strong public demand for police services that are free of brutality and misconduct is an important determinant of the priority assigned to the monitoring of officer behavior. This is not meant to imply that police agencies are generally uncommitted to the monitoring of their personnel; to the contrary, police agencies around the country are actively seeking new ways to organize and analyze information, monitor personnel, and respond to the public demand for integrity and accountability. Nonetheless, public pressure on the police for ethical and accountable behavior places considerable weight on police agencies to proactively monitor police officer activities and actions.

Today there are two important trends in policing that have strong potential to inform police agencies committed to supporting and maintaining integrity and accountability. Both of these trends provide the foundation for the present study. First, there is a growing trend in policing to develop and use “Early Warning Systems” (EWS)

to identify negative behavior patterns before they develop into more serious problems. The use of EWS across police departments throughout the county has become so widespread that it has prompted efforts to catalogue and evaluate the different methods currently in use (e.g., Walker, 2000).

In essence, an EWS is a tool for data management. The general idea behind EWS is that by continuously collecting and analyzing information about officers potential problems can be identified early and in the long-term averted. In general many agencies have adopted a kind of “three-strikes” approach to EWS. For example, the generation of three citizen complaints in a short period of time may trigger an internal management flag that suggests that an officer may be having problems and may be in need of assistance. This assistance may take the form of counseling, training, or in the words of an anonymous police manager, a “swift kick in the ass.” Such proactive monitoring and correction of behavior approaches clearly put police managers in charge of defining and addressing police misconduct. Such approaches also assure the public that “someone is watching” the police in their community.

In addition to the proactive EWS approach, it is a generally accepted idea that a small proportion of the officers in any agency are responsible for a large proportion of the problems, which also lends support to the EWS approach. This approach mirrors the “career criminal “ notion in criminology, where it is argued that a small number of persistent offenders produce a disproportionately high number of offenses. Identifying and dealing with this small number of offenders is seen as a clear policy intervention with potential maximum payoff – that is reducing large numbers of offenses through the

selective discipline of that small number of offenders.

In any predictive police monitoring system, including a EWS, agencies collect information on all types of officer behavior, including information on officer use of force, complaints, disciplinary action, internal investigations, and the like. Many agencies, including Philadelphia (our study site), currently collect this information. Such information provides a basis for constructing an integrated information system capable of identifying problem patterns of behavior among officers.

After preliminary data sets are identified and/or created, agencies then seek to link this data such that any measure for any one officer is easily accessible and can be related to all other measures. Such linkage forms the basis for the EWS.

In addition to information that is often centered on “complaints against officers”, police agencies typically have a significant amount of additional information about their officers that may help in the monitoring process. This includes background records, personnel records, academy records, and the like. Such information creates a “context” for understanding officer development issues, while at the same time identifying potential points of intervention. A system that links all of this information together has the potential to be a powerful management and analysis tool.

A second trend coming from criminological research may aid police departments in their quest to better monitor and predict police behavior. This trend involves the use of adopting a “risk factor prevention paradigm” (Farrington, 2000). The idea of risk factor prevention is fairly straightforward having been modeled in areas like public health, where risk factors for heart attack have been associated with genetic history, poor diet,

lack of exercise, excessive alcohol use and smoking. Typically physicians will estimate patients' likelihood for developing heart disease based on these risk factors and then prescribe preventative treatment (e.g., stop smoking, exercise and lose weight, switch to a less fatty/salty diet).

A physician's knowledge of risk factors for the development of heart disease is based on accumulated medical research demonstrating that heart disease tends to be more prevalent among patients who exhibit certain factors, as compared to patients who do not exhibit those factors. Thus, the presence of each factor, both alone and in combination, increases a patient's likelihood of developing heart disease.

The increased risk associated with a given risk factor is expressed in terms of an "odds ratio," or the probability (odds) of the outcome in a group having a given risk factor divided by the probability of the outcome in a group that does not have the risk factor. Odds ratios simply tell us about the increased or decreased likelihood of being at-risk based on the individual's having certain characteristics and/or membership in certain groups with higher (or lower) identified risks. The use of odds ratios can provide police administrators with a sense of the cluster of background and other characteristics that would predict membership in higher or lower risk-groups.

In this research we take a similar approach in our study of police integrity and accountability in the Philadelphia Police Department (PPD). In this study, we have attempted to isolate risk factors for various police behaviors and outcomes using information readily available to the department. The goal is to explore the utility of such an approach in the monitoring of police officer behavior. We have also collected

additional information not readily available to the department (via surveys and interviews) that may help explain the behaviors of interest, thus broadening the discussion of risk, prediction and intervention.

Further, consistent with a goal of helping officers and saving careers rather than punishing officers and ending careers, we discuss (where possible) some potential preventative strategies. Finally, we amass this data and attempt to develop a baseline of information that could serve as the foundation for a more complete EWS; one that tries to go beyond the “three strikes” approach adopted by many agencies. The project is designed to be a prototype as a practical resource for police agencies and police researchers alike.

It is important to point out that the risk factor prevention approach is a familiar concept to the PPD. In fact, as part of the PPD’s eight-hour “Corruption Detection and Prevention for Police Supervisors” in-service training curriculum (1995), police supervisors are introduced to “Signs and Symptoms of Corruption” and “Proactive Measures for Prevention of Police Corruption”. As an example, among the listed signs and symptoms of corruption are “officers getting an inordinate amount of record checks or NCIC checks on license plates or on persons not in custody” and “officers consistently making arrests in districts where they are not assigned”. Relevant proactive measures to prevent corruption proscribed by the PPD are to “... prevent subordinates from remaining inside longer than necessary” and to conduct “random personal observations of field operations.” The underlying assumption is that officers are more likely to engage in corrupt activities when they work in environments that permit or facilitate such activity.

The preventative response is to create a work environment that does not permit or facilitate such activity.

Our effort has several important added dimensions. First, our focus includes a detailed consideration of individual officer characteristics, such as background history and academy performance. We anticipated that this information could help inform the recruitment, screening, selection, and monitoring processes within the department. Here our research question was “Of the information readily available to the department, what kinds of information are useful in understanding the likelihood of different behaviors, most particularly negative behaviors?”

Second, in this research we focus on standardized information concerning all officers that is readily available to the department. Typical of large police agencies, Philadelphia collects much information on officers, both before their appointment and in their work assignments. Identifying sources of existing information readily available to police agencies and then linking this information was seen as a way of improving monitoring and response issues without a large burden in data collection. Here our aim was to work within the generally available data systems of the Philadelphia Police Department.

Third, we wanted the study to be as general and practical as possible, such that the key findings can be informative to other settings. Here our concern was to create a “user friendly” approach to gathering and analyzing data that could be replicated elsewhere.

While the risk-factor approach may indeed be an important advance in thinking about police department monitoring of officer actions and behaviors, we want to

emphasize an element of caution throughout our study of risk factors for negative behavior. Such cautions will appear throughout this report.

Simply put, it is unrealistic to think that any one factor or series of factors will perfectly predict who is or isn't, or who will or won't be, a problem officer. Even in the medical example above, it is recognized that not every overweight smoker with a poor diet will develop heart disease. Perhaps the most feared type of prediction error occurs when a person is identified as a problem when in fact they are not (i.e., a "false-positive"). The opposite kind of prediction error, when a person is identified as not a problem when in fact they are (i.e., a "false-negative"), is also of concern. For these reasons, risk factors should always be used as indicators or "pointers" suggesting the need for additional attention or investigation not as measures of absolute certainty of a problem employee, not as conclusive evidence.

Importantly, the cautions associated with a risk factor approach that we identified are also familiar to the PPD. Perhaps the single most important piece of information presented in the departmental training material is the statement that "the important thing to remember is that these signs and symptoms must be kept in the supervisor's mind as a sort of reasonable suspicion on which to examine a subordinate a little more closely".

In the chapters that follow, we report on the methods, data, and results of our study in Philadelphia. First, however, we discuss below some of the background to this project. Our collaborative approach to defining the scope of the project, and the subsequent broad level of access to departmental resources granted us by the Philadelphia Police Department, is uncommon and also deserves elaboration.

Chapter 2

COLLABORATION WITH THE PHILADELPHIA POLICE DEPARTMENT

In July of 1996, the National Institute of Justice and the Office of Community Oriented Policing Services jointly held the first National Symposium on Police Integrity. A primary purpose of this conference was to call attention to the need for policy-oriented research addressing the problems of police officer misconduct and corruption, during a time when police agencies were beginning to recognize the need for increased public accountability. Indeed, as police departments continue to embrace organizational shifts toward a more expansive role (i.e., from traditional methods of policing to community or problem-oriented policing), “new forms of old problems” (NIJ, 1997:1) become a focal concern.

A secondary goal of this meeting was to help foster relationships between police agencies and research organizations by providing a forum for open communication. The conference attendees, including a broad range of law enforcement personnel, labor representatives, community and political figures, and researchers, had a unique opportunity to collectively identify and discuss potential issues, concerns, and solutions to negative police behavior and diminishing public trust in the police. The present research is one example of the types of collaborative relationships that grew out of these early discussions.

Ethics and Accountability in the Context of Community Policing

One of the core components of community and problem-oriented policing, the formation of partnerships, depends on the existence of mutual trust between the police

and the community. For agencies that want to move toward these community models of policing, the relationship between police integrity and community acceptance of the police as partners becomes readily apparent. Agencies seeking community partnerships and collaborations for problem-solving need to overcome any perceptions among the public that the police are misbehaving, or that the police do not “police” themselves.

This idea is a problem in many American communities, where there is a general public perception of police misbehavior, often fueled by a sensational scandal. Such scandals in recent years have occurred in Los Angeles, Miami, New York, and New Orleans among other cities –including Philadelphia. Often despite evidence of an eroding public trust in the police in many communities (Vicchio, 1997), police agencies continue to implement various programs, strategies, organizational “philosophies,” or other changes fueled by the rhetoric of community policing. Moreover, while many of these agencies might not see the connection between these two ideas (integrity-community acceptance of community policing), the public clearly does (Vicchio, 1997). Unless steps are taken to improve police behavior and the public’s perception of police behavior, departmental efforts guided at the development of community or problem-oriented policing may be difficult to sustain.

Currently many departments rely upon a “code of ethics” linked with existing internal systems of discipline as a means of addressing problems of integrity. This reactive approach, building on the officer’s fear of departmental sanction, is inadequate under a community model of policing. Police officers operating in the context of a community or problem-oriented policing role must be *a priori* individuals of strong

character and integrity, and officer integrity oversight must be proactive if community partnerships built on mutual trust are to be successful.

One proactive step in furthering increased integrity and community confidence in the police is the development of EWS and training designed to help officers before severe sanctions become necessary. When police officers are fearful of departmental sanctions rather than confident in the support of their agency, and when public trust in the police wanes due to actual or perceived police integrity problems, community and problem-oriented policing is rendered ineffectual. As Vicchio (1997:13) suggests,

If we believe that community policing is the most effective way to protect and to serve the public, and then we put officers who operate from the fear of punishment in more direct contact with the community, then the community will not find officers of integrity but, rather, people who know the rules and regulations and keep them simply because they are afraid of getting caught.

In recent years, the PPD had been taking steps toward developing a generalized community policing approach while facing both internal and external scrutiny over officer misconduct and corruption. One of the most “public” examples of recent times involved charges of brutality, robbery, and various procedural violations committed by certain officers of Philadelphia’s 39th Police District. Such allegations and the subsequent revelations of deep-seated corruption on the part of these officers led to public outcry for police management systems capable of “rooting out” such behavior. This scandal and others before it continued to undermine public confidence in the police in Philadelphia, thereby hindering community and problem oriented policing programs, and creating a “climate of mistrust”.

Although not as recent, Philadelphia’s experience with the “MOVE” incident in

the mid-1980s is often raised in connection with continuing public perceptions of police aggressiveness toward the community. Such events also suggest that historic problems are often difficult to completely overcome – “the dead hand of the past” inevitably continues to shape public perceptions of the police.

As a result of these and other highly publicized incidents, the PPD has been characterized, perhaps unfairly, as having considerable integrity and accountability problems. Whether fair or not, perceived or actual, several special-interest groups have reacted to the PPD’s history of conflict with the community. This reaction is most noticeably evident in discussions of recent litigation (Jordan and Ciesler, 1997:1-2):

In September of 1996, the City of Philadelphia entered into a wide-ranging agreement settling reform litigation instituted by the National Association for the Advancement of Colored People, the American Civil Liberties Union, and the Police-Barrio Relations Project. This litigation followed, and was prompted by, the joint federal-city investigation into corruption and misconduct in the 39th District of the PPD prior to 1992, which resulted in the conviction of six corrupt former members of the Department, and led to the overturning of more than 150 criminal convictions and the expenditure of millions of dollars to settle lawsuits brought by individuals whose civil rights were violated. In the Settlement Agreement, the City committed to undertake numerous reforms designed to improve police accountability, reduce the potential for police corruption and misconduct, and enhance the confidence of the people of Philadelphia in the integrity and fairness of their Police Department.

This collaboration between Temple University’s Center for Public Policy and the Philadelphia Police Department was initiated for the purpose of helping to develop and information system to assist the Department’s integrity oversight process in furtherance of its commitment to the Settlement Agreement. Specifically, there was a clear need for the development of baseline information regarding possible indicators of negative police behavior.

Over the course of a series of discussions with police executives in the Department's Internal Affairs Division, we mapped out a research agenda focused on developing the foundation for a more complete early warning system (EWS). In particular, the project was to focus on linking available data resources and identifying predictors of negative police behavior that could potentially inform the screening, selection, and monitoring processes within the Philadelphia Police Department. In a larger sense this project was also to help think about ways to identify officers who may be having problems and that may need help.

In order to address these kinds of research questions, it was clear that research staff would need to have access to a great deal of sensitive information about active police officers. Somewhat surprisingly, and probably due in part to the immediate need for such a study, we were provided with broad access to departmental resources. Of course, the Internal Affairs Division (and other departmental bodies) maintained oversight of our activities. We held regular committee meetings to report on our progress and activities, as well as to communicate preliminary findings. More importantly, we used these committee meetings to get the kind of help in definition, interpretation and context that come with the experiences, special knowledge and insight of Philadelphia police officers.

Our advisory committee was composed of members of the Internal Affairs Division, Labor Relations Unit, Fraternal Order of Police, Integrity and Accountability Office, as well as representative members of the Department of various ranks and assignments, such as Patrol and Investigations. The Advisory Group met regularly to

discuss the project, sharpen data collection, analysis and interpretation, and to represent the interests of all the “stakeholders” in integrity improvement within the Philadelphia Police Department. As such the Advisory Group proved to be a forum for discussing the often complex and value-laden issues of police integrity and accountability. This was an important outgrowth of this effort.

Chapter 3

METHODS AND DATA

As briefly discussed, one of our primary goals was to construct a picture of an officer's career using readily available departmental data, and then compare it to other officers' careers, always seeking to separate those who offended from those who did not. We started by examining the beginning of officer careers, and then moving through several departmental stages up through (and after) assignment on the street. We briefly review this linked process below.

When individuals apply to be a Philadelphia Police Officer they begin by filling out the necessary application forms and then taking the entrance examination. From those who pass the entrance examination a list of eligible applicants is then provided to the Background Unit of the police department. Qualified applicants are given a Personal Data Questionnaire (PDQ) and an interview date. The PDQ collects self-reported background information, including among other things the applicant's identifying information, family background, residence history, educational history, employment history, credit history, military record, motor vehicle history, adult and juvenile criminal history, and drug use history.

The applicant is then interviewed with regard to the information provided in the PDQ by a member of the Background Unit. A polygraph exam is then administered, and each applicant is allowed two chances to pass the polygraph. If successful, a thorough background investigation is conducted, and, if deemed acceptable, a final acceptance committee reviews the applicant's file. The candidate is then subjected to a medical exam, followed by a psychological exam. Provided all goes well, the applicant completes

forms for city employment, and is assigned to an incoming Police Academy class.

In the academy, recruits go through several training and evaluation phases. Numerous exams are taken and scores recorded. Recruits are also subject to a disciplinary code specific to the academy. Demerits and/or extra duty are issued when a recruit commits an infraction and an excessive number of demerits ultimately result in expulsion from the academy.

All of the personnel and training stages discussed can provide valuable data of interest to our study because it provided a rich source of information about individuals. Such information created the opportunity to better understand the “life paths” of people applying for and accepted into the Philadelphia Police Department for approximately 6 years.

For purposes of our project, we were granted access to these background files and academy records to collect and record information for 2,094 officers representing 17 recent academy classes. We were able to obtain academy records for 2,062 of these individuals, and background information for 2,020. In sum, we obtained combined background and academy data for 1,988 officers. However, some of these officers did not complete their academy training for a variety of reasons. As a consequence, the final sample for analysis consists of 1,935 officers. Demographic statistics for these officers appear in Table 1, below.

As can be seen, the sample is two-thirds male. With regard to race, 44.5% of the sample is White, 45.9% is Black, 7.4% is Hispanic, and 2.1% is classified as "other." The majority of the recruits were single (68.7%) at the time of sampling, and 21.0% were

married. The average age in the sample is 26.7 years old, with a range of 18 to 55 years.

Table 1. Demographic Statistics, Academy Sample (n=1,935)

	n	%
Sex		
Male	1,293	66.8
Female	642	33.2
Race		
White	862	44.5
Black	888	45.9
Hispanic	144	7.4
Other	41	2.1
Marital Status¹		
Single	1,330	68.7
Married	407	21.0
Separated	84	4.3
Widowed	5	0.3
Divorced	103	5.3
Age²		
Mean (SD)	26.7 (6.2)	
Min - Max	18 - 55	

1. 6 cases had missing data for marital status.

2. Some readers may express concern over the presence of a 55-year-old recruit in our data. In fact, the PPD had no upper age limit on police recruits until only recently.

After successfully completing academy training individuals are assigned throughout the department to begin their work as officers on the street. Subsequently, some of these officers will generate citizen complaints; some will become the targets of internal investigations, and possibly departmental discipline. Still others will generate no problems whatsoever. Our aim was to determine if available data would allow us to identify differences in background and academy experiences associated with future behavioral or disciplinary problems as a police officer.

For purposes of our study we were also granted access to various databases

maintained by the PPD Internal Affairs Division (IAD), Police Board of Inquiry (PBI), as well as departmental personnel files. Specifically, IAD granted access to their files concerning Complaints Against Police (CAPS), Internal Investigations (other than for CAPS), and Uses of Force Complaints (UOF). The Police Board of Inquiry database contains information regarding charges and subsequent disciplinary actions for violations of the Department's Disciplinary Code.

In addition to analyzing departmental data sources, we also collected attitudinal data using a survey instrument (See Appendix A). A simple random sample of 504 officers was selected from the January 2000, population of 3,810 patrol officers. Only five officers refused to participate, leaving a sample of 499 available for analysis. The descriptive statistics for the population of 3,810 officers and the final sample of 499 officers are presented in Table 2. As can be seen, there are no substantive differences between the two groups.

Table 2. Demographic Statistics, Survey Sample (n=499)

	<i>Population</i> (N = 3,810)	<i>Final Sample</i> (n = 499)
<i>Sex</i>		
Male	2,720 (71.4)	341 (68.3)
Female	1,090 (28.6)	158 (31.7)
<i>Race</i>		
White	1,915 (50.3)	232 (46.5)
Black	1,614 (42.4)	228 (45.7)
Latino	238 (6.2)	31 (6.2)
Asian	31 (0.8)	7 (1.4)
American Indian	8 (0.2)	1 (0.2)
Other	4 (0.1)	0 (0.0)
<i>Age</i>¹		
Mean (SD)	35.22 (8.37)	35.14 (8.24)
Min – Max	20 - 75	20 - 61
<i>Years Svc.</i>¹		
Mean (SD)	8.04 (7.14)	7.46 (6.93)
Min – Max	0 - 48	0 - 37
<i>Rank</i>		
P/O	3,418 (89.7)	455 (91.2)
Sgt	302 (7.9)	35 (7.0)
Lt	90 (2.4)	9 (1.8)

¹ Age and years of service are reported here as measured at the time of sampling. A year of service equal to zero indicates an officer with less than one year of service.

Researchers attended roll calls in all 23 Philadelphia police districts. A master list of the officers randomly selected to participate from a target district was faxed to the districts before the researchers arrived at these roll calls. The department provided a copy of the rotation schedule so that research staff could determine which officers would be at a given roll call. When research staff arrived at the target district, they brought a list of the officers who were selected to participate in the survey and would be expected at roll

call. A copy of the list was shown or provided to the individual(s) in charge of roll call, the Captain, or to a ranking officer who would facilitate the survey administration. The survey was administered to officers immediately following their roll call, prior to going out on the street. On average, it took about 15 minutes for an officer to complete the survey.

Finally, recognizing that behavior does not occur outside of a physical context, our last data source includes geographic data relating to the 23 Philadelphia police districts. This information was collected using Census overlays and aggregated information compiled through a geographic information system (GIS), and then linked to the other data previously mentioned. Of the 1,935 officers for whom academy and background data was available, 181 had missing or conflicting district assignment information. For these cases, we replaced the missing contextual data with the mean values.

An additional problem is that officers do occasionally move to different districts. Unfortunately, given the available departmental data, we are unable to account for these moves. This is a clear limitation in assessing the effect of the contextual variables. However, based on our interviews with district Captains and other departmental personnel, we learned that these moves are surprisingly rare in Philadelphia due in no small part to the extensive paperwork and justifications necessary (often referred to by interviewees as a “headache” to be avoided if possible). We were also informed that officer requests for transfers are almost always denied unless there are special circumstances. As such, we feel comfortable that our data represent a relatively reliable

“snapshot” of context for the vast majority of the officers contained in the study.

Table 3 presents the descriptive data for all contextual variables for the 23 police districts. As can be seen, many of the values have fairly extreme ranges. For example, the total land area encompassed by police districts varies from a low of 1.29 square miles to a high of 16.33 square miles, with a mean of 5.81 square miles. Percent Black ranges from a low of 1% to a high of 96%, with the mean value equal to 41%. There is great variation in the socio-geographic context of policing in Philadelphia, and this data is critical to understanding officer behavior throughout the city.

Table 3. Contextual Data, Police Districts (N=23)

<i>Variable</i>	<i>Mean</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Area (sq. miles)	5.81	4.04	1.29	16.33
Population	70,990.87	31,174.43	28,255	146,484
Households	27,247.70	11,393.98	10,517	49,588
% Black	.41	.34	.01	.96
% Age 18-24	.12	.03	.08	.21
% Welfare	.33	.08	.20	.56
% Vacant	.12	.06	.03	.26
% Renting	.16	.08	.08	.41
% Female Head w/ Children	.11	.06	.02	.21
% No H.S. Degree	.24	.06	.12	.33
% Unemployed Males	.02	.01	.01	.04
% Child Poverty	.08	.05	.01	.18
% Adult Poverty	.14	.07	.04	.25
Offenses, 1998	10,239.87	4,013.96	4,315	17,058
Arrests, 1998	2,486.78	1,458.10	459	6,275

Chapter 4 ANALYSIS

In this section, we begin by reviewing all of the data available as a result of the linkage between background and academy data sources. This represents information that is readily available to the department. Then we review the dependent variables, also linked to the academy and background data on a case-by-case basis. We then proceed with a two-step analytic approach for identifying correlates and risk factor indices. The purpose is to explore all available data to identify potentially useful data sources and elements.

Background and Academy Data. Descriptive statistics for all of the independent variables, organized by the different categories, appear in Table 4. As can be seen, there is data relating to demographics, employment history, financial background, military experience, family background, home residence, motor vehicle history, application history, drug use and sales history, firearm ownership, criminal history and contact with the criminal justice system, and academy performance.

Table 4. Independent Variables, Background and Academy Data

	<i>Mean</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
<i>1. Demographic</i>				
Age at Application	26.70	6.19	18	55
Race (Nonwhite=1)	.55	.50	0	1
Sex (Female=1)	.33	.47	0	1
Years of Schooling	13.24	1.78	7	22
Marital Status, Married=1	.21	.41	0	1

2. Employment History

Number of Jobs Held	5.23	2.71	0	32
Any Length of Unemployment (Yes=1)	.68	.47	0	1
Ever Been Dismissed, Fired (Yes=1)	.28	.45	0	1
Ever Applied to PPD/Other LE Job (Yes=1)	.51	.50	0	1
Number of Times Not Hired by LE	.91	1.50	0	29
Ever Been Member of PPD/Other LE (Yes=1)	.09	.29	0	1
Ever Applied to City of Phila. (Yes=1)	.45	.50	0	1
Number of Times Not Hired by Phila.	.53	.85	0	6

3. Financial Background

Presently Behind on Bills (Yes=1)	.28	.45	0	1
Loans/Debts >\$1,000 (Yes=1)	.66	.47	0	1
Consumer Debt, Total Amount Owed	5992.75	8457.79	0	75332
Mortgages, Total Monthly Payments	89.54	225.93	0	3500
Ever Filed Bankruptcy (Yes=1)	.03	.16	0	1
Under Order to Pay Judgements (Yes=1)	.07	.26	0	1

4. Military Experience

Ever a Member of Military (Yes=1)	.17	.38	0	1
Ever Disciplinary Offense (Yes=1)	.03	.17	0	1

5. Family Background

Number of Children	.94	1.28	0	12
Adoptive Parents (Yes=1)	.18	.39	0	1
Parent in LE Occupation (Yes=1)	.11	.31	0	1
Number of Brothers/Sisters	3.19	2.29	0	15
Number of Family Members Ever Arrested	.60	.97	0	7

6. Home Residence

Number of Addresses, Past 10 Years	3.42	2.28	1	15
Own or Rent (Rent=1)	.78	.41	0	1

7. Motor Vehicle History

PA License Ever Susp./Revoked (Yes=1)	.20	.40	0	1
Other License Susp./Revoked (Yes=1)	.02	.14	0	1
Ever Been in Accident (Yes=1)	.67	.47	0	1

Traffic Tickets Past 5 Years (Yes=1)	.39	.49	0	1
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8. *Application History*

Number of Applications	1.16	.49	1	8
Rank on Eligibility List	1556.80	1112.41	1	7744
Number of Deceptive Polygraphs	.43	.88	0	9

9. *Drug Use and Sales History*

Used Solvents/Inhalants (Yes=1)	.05	.22	0	1
Sold/Given Solvents/Inhalants (Yes=1)	.04	.19	0	1
Sold/Given Prescription Drugs (Yes=1)	.21	.41	0	1
Poss. Marij. Last 6 Mo. (Yes=1)	.02	.14	0	1
Bought Any Narcotic (Yes=1)	.14	.35	0	1
Chipped-in to Buy Narcotic (Yes=1)	.04	.20	0	1
Used any Narcotic (Yes=1)	.48	.50	0	1
Present When Other Used Narcotic (Yes=1)	.86	.35	0	1
Sold/Given Narcotic (Yes=1)	.20	.40	0	1

10. *Firearm Ownership*

Owned/Bought Firearms (Yes=1)	.25	.43	0	1
Obtained/Applied for Gun Permit (Yes=1)	.12	.32	0	1

11. Criminal History / CJ Contact

Interviewed/Questioned by LE (Yes=1)	.53	.50	0	1
Placed Under Arrest (Yes=1)	.16	.36	0	1
Convicted of any Crime (Yes=1)	.04	.20	0	1
Probation/Parole of any Kind (Yes=1)	.03	.16	0	1
Had to Pay any Fine (Yes=1)	.37	.48	0	1
Had to Pay any Court Cost (Yes=1)	.10	.30	0	1
Had to Post any Bail (Yes=1)	.02	.15	0	1
Defendant in a Criminal Case (Yes=1)	.06	.23	0	1
Questioned/Interr. re: Crime (Yes=1)	.25	.43	0	1
Subpoenaed to Appear (Yes=1)	.26	.44	0	1
Police at Residence to Invest. (Yes=1)	.21	.41	0	1
Subject of PFA Order (Yes=1)	.03	.17	0	1
Subject of Private Crim. Comp. (Yes=1)	.02	.15	0	1
Character Witness in Crim. Proc. (Yes=1)	.04	.20	0	1
Invest. for Child Abuse/Neglect (Yes=1)	.03	.16	0	1

12. Academy Performance

Law Enforcement Orientation [MPO]	91.39	7.21	0	100
Emotional Health	91.62	7.67	10	100
Human Relations	92.92	7.81	10	100
Law, Part 1	94.36	5.48	0	100
Law, Part 2	91.55	5.71	75	100
Law, Part 3	89.23	6.88	70	100
Law, Part 4	90.49	6.41	67.5	100
Motor Vehicle Code	94.50	5.17	10	100
Patrol Procedures and Operations	93.61	4.43	72	100
Investigations	92.63	5.31	62	100
Communications	91.27	6.88	0	100
Handling Violent/Dangerous People	92.50	7.60	0	100
Custody	90.58	6.52	72	100
First Aid	95.99	4.45	0	100
Final Exam, Firearms	95.50	4.08	76	100
Number of Disciplinary Actions	1.71	1.82	0	13
<i>Exposure (Time on Job in Months)</i>	35.99	12.65	3	58

All independent variables that were not already dichotomized were re-coded to

dichotomies, based on analyses of the distributions of the variables. For example, on continuous measures the mean and standard deviation or median values were used to determine the categorization. On count variables, re-codes were often to zero and one-plus. These re-codes are described in detail next to the variable lists in Appendix B. The purpose of the re-codes was to make interpretation of risk factors as straightforward as possible: either the presence or absence of a given factor.

Dependent Variables

Table 5 provides descriptive statistics for the dependent variables of interest for this research. As can be seen, only a very small proportion of the sample has generated more than one count within any particular variable. This distribution is consistent with the idea that a small number of individuals are behavioral or disciplinary problems, while the vast majority of officers have little or no contact with complaints and/or the disciplinary system.

For analytic purposes, the variables are coded dichotomously as either zero or one-plus; that is, those with no complaints/disciplinary actions and those with one or more. The most frequent specific category is departmental discipline (30.6% of the sample), followed by physical abuse complaints (16.6% of the sample). Internal investigations (for other than complaints against police) were initiated for 15.4% of the sample. Ten percent had off-duty incidents, 9.8% generated verbal abuse complaints, 8.5% engaged in what the department classified as “other” misconduct, and the least frequent category was police shootings, involving 5.4% of the sample. These categories are not mutually exclusive. That is to say officers in the sample can and do appear in

more than one of these outcome categories.

Table 5. Descriptive Statistics, Dependent Variables

<i>Variable</i>	One or more f (%)	Two or more f (%)	Three or more f (%)
Departmental Discipline	592 (30.6)	190 (9.8)	63 (3.3)
Physical Abuse Complaints	322 (16.6)	68 (3.5)	12 (0.6)
Internal Investigations	298 (15.4)	42 (2.2)	7 (0.4)
Off Duty Complaints/Actions	194 (10.0)	33 (1.7)	6 (0.3)
Verbal Abuse Complaints	190 (9.8)	19 (1.0)	2 (0.1)
Other Misconduct	165 (8.5)	13 (0.7)	0 (0.0)
Police Shootings	104 (5.4)	13 (0.7)	1 (0.1)

Background and Academy Factors

Here we use a two-step approach in identifying risk factors. First, we identify individual correlates by running a series of logistic regressions for each of the independent variables, while controlling for exposure, and report the odds ratios and 95% confidence intervals (CI). The significance of the odds ratio is determined by the bounds of the 95% CI; if the CI includes the value 1.00, the odds ratio is not significantly different from zero at the conventional .05 level. Second, we examine the effect of multiple risk factors by creating indices from the correlates identified in the first step, and report the odds ratios and 95% confidence intervals.

Appendix C presents the individual correlates identified as the first step in our procedure. The first column of the table lists each of the 77 background and academy variables. The second column provides a description of each variable. Each row corresponds to the effect of the variable listed in the left-most column on the dependent variables listed across the top of the remaining columns. Significant predictors are summarized and discussed in the text that follows.

Correlates of Departmental Discipline

We began by examining departmental discipline (30.6% of the sample had been the recipient of departmental discipline). Our analysis suggests that 15 of the 77 background and academy variables were significant predictors of whether an officer became the subject of official departmental discipline. Remember that these predictors apply to group characteristics rather than specific individuals.

Among the demographic variables, officers who were less than 26 years old at the time of application (OR=1.48), non-white (OR=1.31), and not married at the time of application (OR=1.35) were more likely to become the subject of departmental discipline. Officers previously rejected and therefore not hired by the City of Philadelphia (OR=1.29) were also more likely to become the subject of departmental discipline.

These predictors suggest that relative youth at the time of employment, those with minority status, and those without families were slightly more likely to become the target of departmental discipline. Such findings provide modest support for hiring “more mature” applicants, as well as sustaining initial decisions not to hire certain officers. The findings with regard to minority status suggest that the department may need to review its policies and practices relative to whether there is any bias in the complaint initiation system.

One longstanding assumption often stated in police circles relative to hiring is the assessment of individuals as to their financial indebtedness; specifically that persons having excessive debts present a risk. The general notion behind this thinking is that those with large or even sufficient debt may be candidates for future disciplinary

problems. Interestingly our analysis suggests that officers with loans or debts exceeding \$1000 (a departmentally coded variable; OR=0.74), total consumer debt exceeding \$8,750 (OR=0.75), and those having a mortgage (OR=0.67) were less likely to become the subject of departmental discipline than those with less debt or financial stress.

Another persistent idea in police hiring is associated with applicants' military experience. Typically the argument suggests that those with military experience are more socialized to the rigor of police command and control. With regard to military experience our findings suggest a different idea, that officers who were the subject of military discipline (OR=1.79) were more likely to be the subject of departmental discipline. Military experience should be qualified during the application process to ensure that those having disciplinary problems are identified.

Other background predictors included the finding that officers who were adopted (OR=1.28) and officers renting their home at the time of application (OR=1.58) were more likely to become the subject of discipline. Somewhat counter-intuitively, if the officer had ever sold or given any narcotic substance at the time of application (OR=0.71), they were less likely to become the subject of departmental discipline.

With respect to academy predictors several findings were revealed. Officers who scored relatively poorly on the law enforcement orientation section of academy training (OR=1.42), the human relations section (OR=1.31), and in the section relating to the handling of violent and/or dangerous people (OR=1.44) were more likely to become the subject of departmental discipline. Finally, officers who were the subject of academy discipline (OR=1.68) were more likely to be the subject of departmental discipline. Both

of these findings suggest that performance in the police academy has some predictive value for sorting out officers potentially at risk for future disciplinary problems.

To assess the effect of multiple factors on the likelihood of departmental discipline, we created an index using 11 of the 15 variables. Variables with odds ratios less than 1.00 were excluded. These variables were excluded as they actually may serve as “protective factors”, thereby reducing risk of disciplinary action. That is to say, just as some variables serve to increase risk, others actually reduce it. By separating out those variables with odds ratios less than 1.00 we are actually removing those variables that decrease the likelihood of disciplinary action. Such a procedure ensures that the multiple factors that produce “risk” are more clearly highlighted in any subsequent analysis.

A correlation matrix revealed strong correlations between the renting and mortgage variables and the loans and debts variables (as would be expected). The renting variable was retained and the other variables were not included in the index. Scores could thus range from 0 to 11, although actual scores ranged from 0 to 9. Categories were created based on approximate quartiles, and odds ratios calculated in comparison to the lowest category. The final categorization was 0 to 3 risk factors, 4 risk factors, 5 risk factors, and 6 or more risk factors.

Table 6 presents the corresponding odds ratios and confidence intervals. As can be seen, the group having six or more risk factors had a little more than two and a half times greater odds (OR=2.77) of becoming the subject of departmental discipline, as compared to the group having zero to three risk factors. About forty-three percent of the six or more risk factor group had been the subject of departmental discipline, as

compared to about 21 percent of the 0 to 3 risk factor group, and the sample baseline of about 31 percent. Such findings lend confidence to the idea that identifying the number of risk factors presented by an individual significantly increases that person’s likelihood of being the subject of disciplinary action.

Table 6. Multiple Background/Academy Factors, Departmental Discipline

<i>Number of Risk Factors</i>	<i>N</i>	<i>Departmental Discipline (%)</i>	<i>OR</i>	<i>95% CI</i>
0 to 3	622	20.9		
4	479	29.0	1.64	1.23, 2.17
5	396	34.1	2.00	1.50, 2.67
6 or more	434	43.1	2.77	2.10, 3.66

Note: 4 cases had missing data

As can be seen in Table 6, the accumulation of risk factors can be used to identify those potentially at risk, or at least in need of further monitoring. This is not an insubstantial finding as it provides a statistical basis for examining both the screening and academy criteria for success, as well as the manner in which disciplinary cases are brought forward in the department.

Predicting Physical Abuse Complaints

Next, we looked at those who had generated physical abuse complaints (16.6% of the sample). In sum, 22 of the 77 background or academy variables were significant predictors of whether an officer had generated one or more physical abuse complaints. With regard to officer demographics, officers who were younger than 26 years old at the time of application (OR =1.43) and males (OR[female]=0.29) were more likely to

generate physical abuse complaints.

In contrast, non-white officers (OR=0.70), those who had any length of unemployment prior to application (OR=0.76), who had previously applied for jobs with the City of Philadelphia (OR=0.75), and those who had previously not been hired by the City of Philadelphia (OR=0.76) were less likely to generate physical abuse complaints. Officers who were behind on their bills at the time of application (OR=0.76) were less likely to generate physical abuse complaints, as were those having a mortgage (OR=0.68).

With regard to military experience, those who had ever been in the military (OR=1.61) and those who had ever been the subject of military discipline (OR=2.32) were more likely to generate physical abuse complaints. Officers who have children (OR=0.73) were less likely to generate physical abuse complaints. Officers renting their homes at the time of application (OR=1.67) were more likely to generate physical abuse complaints.

Officers whose Pennsylvania driver's license had ever been suspended or revoked (OR=1.38) were more likely to generate physical abuse complaints, as were those who had received traffic tickets within the past five years (OR=1.38). Officers whose rank on the eligibility list fell in the lowest quartile for the group (OR=0.66) were less likely to generate physical abuse complaints. Officers who had one or more deceptive polygraph results in their application history (OR=1.36) were more likely to generate physical abuse complaints. Officers who have ever owned or purchased firearms (OR=1.63) and those who have ever obtained or applied for a gun permit (OR=2.05) were more likely to generate physical abuse complaints.

Officers who have ever been placed under arrest (OR=1.38) were more likely to

generate physical abuse complaints. Finally, officers who scored relatively lower on sections of academy training relating to orientation (OR=0.72), law (OR=0.57), and patrol procedures and operations (OR=0.55) were less likely to generate physical abuse complaints.

These findings suggest patterns for investigation within the Philadelphia Police Department. Clearly, several background and academy variables may identify officers potentially at risk. Some of these same variables were identified with respect to officers becoming the subject of departmental discipline. What is suggested is that existing departmental data may indeed be useful to monitor persons who belong to categories of employees seen as potentially at risk. Of course, this does not mean that an individual will become the subject of discipline or be involved in a physical abuse complaint. Nonetheless, these data can point us in the direction of being sensitive to risks; particularly those at risk for physical abuse complaints.

In order to assess the effect of multiple factors on the likelihood of generating physical abuse complaints, we created an index using 13 of the 22 variables. Again, variables with odds ratios less than 1.00 were excluded, except for the race, sex, and children variables, which were reverse-coded. High correlation was noted between the renting and mortgage variables and between the prior applications for jobs with City of Philadelphia and prior not hired by City of Philadelphia variables. Scores could thus range from 0 to 13, and actual scores ranged from 0 to 11. Categories were created based on approximate thirds, and odds ratios calculated in comparison to the lowest category. The final categorization was 0 to 3 risk factors, 4 to 5 risk factors, and 6 or more risk

factors.

Table 7 presents the corresponding odds ratios and confidence intervals. As can be seen, the group having six or more risk factors had more than four times greater odds (OR=4.29) of generating physical abuse complaints, as compared to the group having zero to three risk factors. About 24 percent of the six or more risk factor group had generated physical abuse complaints, as compared to about seven percent of the zero to three risk factor groups, and the sample baseline of about 17 percent.

Table 7. Multiple Background/Academy Factors, Physical Abuse Complaints

<i>Number of Risk Factors</i>	<i>n</i>	<i>Physical Abuse Complaints (%)</i>	<i>OR</i>	<i>95% CI</i>
0 to 3	613	7.2		
4 to 5	649	18.3	2.83	1.95, 4.10
6 or more	655	23.5	4.29	2.98, 6.17

Note: 18 cases had missing data

Again, the data presented in Table 7 suggest the additive effects of multiple risk factors, where 23% of those with 6 or more were the subjects of physical abuse complaints, as opposed to approximately 7 percent of those with from 0 to 3 risk factors. And, while these data cannot predict an individual's ultimate propensity toward physical abuse, they do suggest that those in the high-risk category are worth monitoring, particularly given the nature of these types of complaints.

Predicting Verbal Abuse Complaints

Next, we examined officers who generated verbal abuse complaints (9.8% of the sample). In sum, 11 of the 77 background and academy variables were significant

predictors. Officers who were behind on bills at the time of application (OR=1.39) were more likely to generate verbal abuse complaints. With regard to motor vehicle history, officers whose Pennsylvania that's license (OR=1.88) or license from another state (OR=2.77) was ever suspended or revoked, and those who had received traffic tickets within the past 5 years (OR=1.76), were more likely to generate verbal abuse complaints. With regard to drug use and sales, officers who had ever used solvents or inhalants (OR=1.79) and those who had possessed marijuana within the last 6 months prior to application (OR=2.65) were more likely to generate verbal abuse complaints. Officers who had ever obtained or applied for a gun permit (OR=1.93) were more likely to generate verbal abuse complaints. Officers who had ever been placed under arrest (OR=1.66) were more likely to generate verbal abuse complaints. Officers who scored relatively lower on sections of academy training dealing with law (OR=0.36) and investigations (OR=0.49) were less likely to generate verbal abuse complaints. Finally, those who had been the subject of academy discipline (OR=1.64) were more likely to generate verbal abuse complaints.

Individually, the data suggest that several officer background variables and a few academy variables are useful in predicting officers who are more likely to be the subject of verbal abuse complaints. Looking at the effects of multiple factors on the likelihood of generating verbal abuse complaints, we created an index using 9 of the 11 variables (variables with OR's less than 1.00 were excluded). None of the variables exhibited strong correlations with each other. Scores could thus range from 0 to 9, and actual scores ranged from 0 to 6. Categories were created based on approximate quartiles, and

odds ratios calculated in comparison to the lowest category. The final categorization was 0 risk factors, 1 risk factor, 2 risk factors, and 3 or more risk factors. Table 8 presents the corresponding odds ratios and confidence intervals. As can be seen, the group having three or more risk factors had roughly five times greater odds (OR=5.02) of generating verbal abuse complaints, as compared to the group having zero risk factors. About 16 percent of the three or more risk factor group had generated verbal abuse complaints, as compared to about four percent of the zero risk factor group, and the sample baseline of about ten percent.

Table 8. Multiple Background/Academy Factors, Verbal Abuse Complaints

<i>Number of Risk Factors</i>	<i>n</i>	<i>Verbal Abuse Complaints (%)</i>	<i>OR</i>	<i>95% CI</i>
0	365	4.4		
1	602	7.1	1.79 (n.s.)	0.99, 3.24
2	493	11.2	3.02	1.69, 5.39
3 or more	465	15.7	5.02	2.83, 8.91

Note: 10 cases had missing data

Predicting Internal Investigations

Next, we looked at those officers who had become the subject of internal investigations for reasons other than investigations stemming from external complaints (15.4% of the sample). In sum, eight variables were significant predictors. With regard to demographics, officers younger than 26 years old at the time of application (OR=1.54) were more likely to become the subject of internal investigations. Female officers

(OR=0.64) were less likely to become the subject of internal investigations. As with previous analyses, officers who had a mortgage (OR=0.63) were less likely to become the subject of internal investigations. Officers coming from larger families (OR=0.73) were less likely to become the subject of internal investigations. Officers renting their homes (OR=1.51) were more likely to become the subject of internal investigations. With regard to motor vehicle history, officers whose Pennsylvania driver's license had ever been suspended or revoked (OR=1.49) and those who had received traffic tickets within the past 5 years (OR=1.45) were more likely to become the subject of internal investigations. Finally, officers who were the subject of academy discipline (OR=1.30) were more likely to become the subject of internal investigations.

These assessments, while interesting, are a bit more problematic in their interpretation. Younger officers might be more likely assigned to drug and/or street crime units, and their activities of necessity might be more under the scrutiny of the police department. Interpretation of these and the multiple factor data presented below should therefore be approached with caution. A key set of variables missing from this analysis is the extent to which officer assignments affect the odds of becoming the subject of an internal investigation. Younger, male officers may indeed be placed in assignments that call for more agency scrutiny. Our analysis of the background and academy information precludes assessment of subsequent assignment in this analysis, except we do know that all of the officers for all the academy classes included in the sample were first most likely to be assigned to general patrol duties. Assuming the majority were indeed assigned to patrol, then background and academy predictors may indeed be relevant in establishing

monitoring systems for at risk officers (again, with the caveat that at risk does not mean the officer will misbehave with certainty).

To assess the impact of multiple factors on the likelihood of becoming the subject of an internal investigation, we created an index using 6 of the 8 variables, excluding those variables with OR's less than 1.00 (except sex, which was reverse-coded). As previously noted, high correlations exist between the renting and mortgage variables (the renting variable was retained). Scores could thus range from 0 to 6, and actual scores ranged from 0 to 6. Categories were created based on 0 to 1 risk factors, 2 to 3 risk factors, and 4 or more risk factors. Table 9 presents the corresponding odds ratios and confidence intervals.

As can be seen, the group having four or more risk factors had roughly three times greater odds (OR=3.37) of becoming the subject of an internal investigation, as compared to the group having zero to one risk factor. About 20 percent of the four or more risk factor group had been the subject of internal investigations, as compared to about eight percent of the zero to one risk factor group, and the sample baseline of about 15 percent.

Table 9. Multiple Background/Academy Factors, Internal Investigations

<i>Number of Risk Factors</i>	<i>n</i>	<i>Internal Investigations (%)</i>	<i>OR</i>	<i>95% CI</i>
0 to 1	281	7.5		
2 to 3	946	14.1	2.09	1.29, 3.39
4 or more	703	20.2	3.37	2.07, 5.47

Note: 5 cases had missing data

Predicting Officer Shooting Incidents

Next, we looked at those officers who had been involved in any shooting incidents (5.4% of the sample). As police shooting incidents are indeed “flash points” between the police and the community, assessing the likelihood of officer involvement in shootings is an important goal for any police department. Monitoring officers who fall into the high risk category, or assuring they have some additional supervision in the early stages of their career, through a field training officer or other direct mentoring system, may go a long way to actually mitigating patterns of officer risk presented by this analysis.

In sum, 12 variables were significant predictors. With regard to demographics, non-white officers (OR=1.51) were more likely to be involved in police shootings. Female officers (OR=0.19) were less likely to be involved in police shootings. Officers under court order to pay judgements against them at the time of application (OR=2.57) were more likely to be involved in shooting incidents. With regard to military experience, those who were ever a member of the military (OR=2.07) and those who were the subject of military discipline (OR=2.45) were more likely to be involved in shooting incidents. Officers who had a parent who is/was employed as a law enforcement officer (OR=1.79) were more likely to be involved in shooting incidents. Officers who had family members who had ever been arrested (OR=0.62) were less likely to be involved in shooting incidents.

With regard to motor vehicle history, officer whose Pennsylvania driver’s license had ever been suspended or revoked (OR=1.79) and those who had received traffic tickets within the past 5 years (OR=1.84) were more likely to be involved in shooting incidents.

Finally, in terms of contact with the criminal justice system, officers who had ever been placed under arrest (OR=1.71), ever had to pay any fine (OR=1.52), or had ever been the subject of a private criminal complaint (OR=3.21) were more likely to be involved in shooting incidents.

Looking at the effects of multiple risk factors on the likelihood of becoming involved in shooting incidents, we created an index using 11 of the 12 variables, excluding the variable relating to family members being arrested. Sex was reverse-coded. A correlation matrix revealed no high correlations between the variables. Scores could thus range from 0 to 11, and actual scores ranged from 0 to 9. Categories were created based on approximate thirds, and odds ratios calculated in comparison to the lowest category. The final categorization was 0 to 1 risk factors, 2 to 3 risk factors, and 4 or more risk factors. Table 10 presents the corresponding odds ratios and confidence intervals.

As can be seen, the group having four or more risk factors had a little more than five and a half times greater odds (OR=5.78) of becoming involved in shooting incidents, as compared to the group having zero to one risk factors. About ten percent of the four or more risk factor group had been involved in shooting incidents, as compared to about two percent of the zero to one risk factor group, and the sample baseline of about five percent.

Table 10. Multiple Background/Academy Factors, Shooting Incidents

<i>Number of Risk Factors</i>	<i>n</i>	<i>Shooting Incidents (%)</i>	<i>OR</i>	<i>95% CI</i>
0 to 1	552	1.8		
2 to 3	758	4.7	2.64	1.30, 5.38
4 or more	604	9.6	5.78	2.92, 11.42

Note: 21 cases had missing data

Off-Duty Actions

Next, we looked at those officers who were involved in off-duty actions requiring investigation or who generated complaints arising from off-duty actions (10.0% of the sample). In sum, 11 of the 77 background and academy variables were significant predictors. With regard to demographics, officers who were younger than 26 years old at the time of application (OR=1.46) were more likely to be involved in off-duty incidents, and female officers (OR=0.45) were less likely to be involved in off-duty incidents. Officers who were under a court order to pay judgements against them at the time of application (OR=1.92) were more likely to be involved in off-duty incidents. With regard to military experience, officers who had been a member of the military (OR=1.66) and those who had been the subject of military discipline (OR=2.05) were more likely to be involved in off-duty incidents.

Officers who had received traffic tickets in the past five years (OR=1.70) were more likely to be involved in off-duty incidents. Officers who had ever owned or purchased firearms (OR=1.49) were more likely to be involved in off-duty incidents. Officers who had ever been placed under arrest (OR=1.75) were more likely to be

involved in off-duty incidents. Finally, with regard to academy performance, officers who scored relatively low in sections dealing with emotional health (OR=1.41) and investigation (OR=1.54), and those who had been the subject of academy discipline (OR=1.41) were more likely to be involved in off-duty incidents.

The predictors identified for off duty actions speak to issues of maturity and/or impulsive response. That is to say, the pattern of variables that predict off-duty incidents can be seen as reflecting some either historical or current turmoil in the officer's life. Such "stress" may indeed contribute to off-duty incidents. By contrast, officers exhibiting low self-control may indeed be more likely to engage in negative off-duty behavior.

Looking at the effects of multiple risk factors on the likelihood of becoming involved in off-duty incidents, we created an index using all 11 variables (sex was reverse-coded). No high correlations were found between the variables. Scores could thus range from 0 to 11, and actual scores ranged from 0 to 8. Three categories were created, and odds ratios calculated in comparison to the lowest category. The final categorization was 0 to 1 risk factors, 2 to 3 risk factors, and 4 or more risk factors. Table 11 presents the corresponding odds ratios and confidence intervals.

As can be seen, the group having four or more risk factors had a little more than five and a half times greater odds (OR=5.79) of becoming involved in off-duty incidents, as compared to the group having zero to one risk factors. About sixteen percent of the four or more risk factor group had been involved in an off-duty incident, as compared to about three percent of the zero to one risk factor group, and the sample baseline of ten

percent.

Table 11. Multiple Background/Academy Factors, Off-Duty Incidents

<i>Number of Risk Factors</i>	<i>n</i>	<i>Off-duty Incidents (%)</i>	<i>OR</i>	<i>95% CI</i>
0 to 1	318	3.1		
2 to 3	899	7.8	2.65	1.34, 5.21
4 or more	710	15.8	5.79	2.99, 11.21

Note: 8 cases had missing data

Predicting “Other” Misconduct

Lastly, we looked at those officers who were involved in what was classified by the department as “other” misconduct (8.5% of the sample). We are unable to disentangle the specific incidents leading to categorization in this group, so the analysis for this outcome should be interpreted with caution. In sum, 11 of the 77 background and academy variables were significant predictors.

With regard to demographics, female officers (OR=0.62) were less likely to be involved in misconduct. Officers having a mortgage payment (OR=0.58) were less likely to be involved in misconduct, while those renting (OR=1.56) were more likely to be involved in misconduct. Officers who were the subject of military discipline (OR=2.25) were more likely to be involved in misconduct.

Officers whose Pennsylvania drivers license had ever been suspended or revoked (OR=1.59) were more likely to be involved in misconduct. With regard to CJ contact, officers who had ever been interviewed or questioned by law enforcement (OR=1.58), arrested (OR=1.76), had to pay a fine (OR=1.52), been a defendant in a criminal case

(OR=2.24), or been questioned or interrogated with regard to a crime (OR=1.96) were more likely to be involved in misconduct. Finally, officers who score relatively low on the academy section related to law (OR=0.59) were less likely to become involved in misconduct.

Looking at the effects of multiple risk factors on the likelihood of misconduct, an index was created with nine of the variables. Scores could thus range from 0 to 9, and actual scores ranged from 0 to 9. Four categories were created, including 0 to 1 risk factors, 2 risk factors, 3 risk factors, and 4 or more risk factors. Table 12 presents the corresponding odds ratios and confidence intervals.

As can be seen, the group having four or more risk factors had a little more than three and a half times greater odds (OR=3.75) of becoming involved in incidents of misconduct, as compared to the group having zero to one risk factors. About 12 percent of the four or more risk factors group had been involved in a misconduct incident, as compared to about four percent of the zero to one risk factor group, and the sample baseline of eight and a half percent.

Table 12. Multiple Background/Academy Factors, Misconduct

<i>Number of Risk Factors</i>	<i>n</i>	<i>Misconduct Incidents (%)</i>	<i>OR</i>	<i>95% CI</i>
0 to 1	348	3.7		
2	448	7.6	2.35	1.21, 4.56
3	432	8.3	2.50	1.30, 4.83
4 or more	676	11.8	3.75	2.05, 6.88

Note: 31 cases had missing data

A Contextual Analysis of Police Misconduct in Philadelphia

In this section, we look at the contextual data, most particularly geographic and demographic information tied to the work environments of the officers under study. Appendix 2 lists the individual contextual correlates, and significant predictors are summarized and discussed in the text that follows.

The contextual variables appear to be most useful in predicting physical abuse complaints (six predictors) and police shootings (five predictors). None of the contextual variables are related to internal investigations, off-duty actions, or “other” misconduct. Only one contextual variable was related to departmental discipline and verbal abuse complaints (area in square miles, OR=1.26 and 1.39, respectively).

With regard to physical abuse complaints, six of the 14 contextual variables were significant predictors. Officers working in districts where residents are predominately black (OR=0.74), where there is a higher proportion of individuals aged 18 to 24 years (OR=0.69), and where there is a higher proportion of renters (OR=0.71) as compared to other districts, were less likely to generate physical abuse complaints. Officers working in districts where there is a higher proportion of residents without a high school education (OR=1.71), and in districts with a higher number of total annual offenses (OR=1.97) and arrests (OR=1.88) as compared to other districts, were more likely to generate physical abuse complaints.

The general pattern suggests that district problems with crime and order maintenance (that is, higher amounts of them) are associated with higher numbers of physical abuse complaints. Simply put, high activity districts yield more complaints of

physical abuse. But, to the extent that the proportion of residents with high school education is one dimension of socio-economic class, these data suggest in a preliminary way, that more complaints of physical abuse come from lower socio-economic areas. Such a finding, of course, has several interpretations. One is that these areas have higher crime and disorder problems, call for more police attention and result in more aggressive policing. Another interpretation is that the police are more aggressive with people residing in areas characterized by low socio-economic status.

With respect to the people who may be residing in these districts, the data suggest that minority group membership, a high proportion of youth, and a high proportion of renters, produce less complaints. Of course it is unknown if the aggressive policing that these areas may experience is seen as “normal” and a part of social life, thereby somewhat suppressing individuals’ desire or willingness to file a complaint.

Interestingly, the findings with respect to contextual influences on shooting complaints reveals a pattern that could be characterized as increased violence (shooting) in areas with high social disorganization. For example, with regard to shooting incidents, five of the 14 contextual variables were significant predictors. Officers working in districts where residents are predominately black (OR=2.32), where the proportion of female heads of households with children (OR=1.95) is higher, where there is a higher proportion of unemployed males (OR=1.89), and where there is a higher proportion of children living in poverty (OR=1.51) as compared to other districts, were more likely to become involved in shooting incidents. Somewhat counter-intuitively, districts where there is a higher proportion of residents receiving public assistance (OR=0.26) were less

likely associated with officers becoming involved in shooting incidents.

As might be expected, a correlation matrix revealed high correlations among some of the geographic variables. The data were dichotomized such that the presence of any of the factors with odds ratios greater than 1.00 were re-coded to one and used to define groups. In examining the overall impact of multiple geographic factors, split-sample descriptive analyses were performed for the physical abuse complaints and shooting incident outcomes.

Tables 13 and 14 present the results of these comparisons. As can be seen, the group having the highest percentage of shooting incidents (13.5%) is the group having 4 or more background/academy factors and one or more of the geographic factors. The group having the smallest percentage of shooting incidents (0.6%) is the group having zero to one background/academy factors and none of the geographic factors.

Table 13. Geographic Factors, Shooting Incidents

<i>Number of Risk Factors</i>	<i>Total n</i>	<i>Zero Geo. Factors</i>		<i>One or More Geo. Factors</i>	
		<i>n</i>	<i>% Shooting Incident</i>	<i>n</i>	<i>% Shooting Incident</i>
0 to 1	552	315	0.6	237	3.4
2 to 3	758	435	2.3	323	8.0
4 or more	604	330	6.4	274	13.5

Note: 21 cases had missing data

In similar fashion, although to a lesser degree, the group having the highest

percentage (26.2%) of physical abuse complaints is the group having 6 or more background/academy factors and one or more geographic factors. The groups having the smallest percentage of physical abuse complaints (7.1% and 7.2%) are the groups having zero to three background factors (geographic factors seem to make no difference here). Interestingly, the effect of geographic factors is most pronounced among the groups having 4 to 5 background academy factors (12.6% versus 22.9% respectively).

Table 14. Geographic Factors, Physical Abuse Complaints

<i>Number of Risk Factors</i>	<i>Total n</i>	<i>Zero Geo. Factors</i>		<i>One or More Geo. Factors</i>	
		<i>n</i>	<i>% PA Complaints</i>	<i>n</i>	<i>% PA Complaints</i>
0 to 3	613	257	7.2	312	7.1
4 to 5	649	250	12.6	280	22.9
6 or more	655	236	20.3	265	26.2

Note: 18 cases had missing data

These findings suggest that contextual factors (community characteristics) generally increase the odds for having complaints in *addition to* individual background and academy factors. That is to say, officer risk factors are most always exacerbated by the places where high-risk officers might be assigned. In combination (background, academy and community), these factors increase the likelihood of officer involvement in behaviors that result in shootings and physical abuse complaints.

The importance of these finding cannot be overstated. Generally speaking, these

data suggest that high-risk officers placed in high-risk communities invariably result in increase shooting and complaints against officers about physical abuse. The intersection of police *assessment* and *assignment* systems affords police managers to at least lessen the likelihood of negative behavior on the part of high-risk officers by actively monitoring police work assignments.

Chapter 5

POLICE ATTITUDES TOWARD POLICEWORK, DEPARTMENTAL FAIRNESS AND DISCIPLINE AND THE ETHICS OF POLICE BEHAVIOR

As part of this research project, survey data were collected from a sample of Philadelphia police officers. This survey sought to collect information on police officer attitudes and beliefs toward work, the police department and disciplinary system, and toward what the “police culture” might define as negative or inappropriate officer behavior. This information provides a better understanding about how officers “believe” things work, their attachment to their jobs, and their belief in their department. Moreover, these data provide a glimpse into the working culture of police officers in Philadelphia, at least at the time of this study.

Survey Data. The survey instrument included two scaled measures. Twenty items on the survey comprised Regoli’s (1976) modification of Niederhoffer’s (1967) cynicism scale, a measure of police officer cynicism and distance from police supervisors, the police department, and the public at large. High scores on these scales generally suggest a high degree of police officer alienation from both the police department and the community.

Another fifteen items comprised a modified version of Krejei et al.’s (1996) attitudes toward ethics scale. In this scale, measurement is concerned with identifying officer value-sets; that is, agreement with statements that test a range of behaviors that might be considered inappropriate for the police. High scores on this measure typically suggest real value struggles within the police department. Such struggles are often characterized as stemming from the internal “police culture.”

In both cases, respondents were instructed to indicate their level of agreement with each survey item on a 5-point Likert scale (1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree). Each of the items and the descriptive statistics are discussed below, first for the cynicism scale, followed by the ethics scale.

Police Cynicism

The first item in the cynicism scale was the statement “Police supervisors are very interested in their subordinates.” Disagreement with this item is considered to indicate cynicism. Most officers (47.5%) indicated some level of agreement with this item as compared to those who indicated disagreement (15%). Interestingly, however, a substantial proportion (36.7%) chose “neutral.” The average response for this item was 3.39 (SD=.91), falling between the neutral and slight agreement categories. The overall responses suggest some “coolness” to the idea that police supervisors in Philadelphia have concern for the “troops,” although this idea is not significantly rejected by those responding.

Second was the statement “Disciplinary action is a result of pressure on supervisors from command staff to give out discipline.” Agreement with this item is considered to indicate cynicism. Roughly equivalent proportions indicated some level of agreement or disagreement (38.5% and 35.5%, respectively). About one-quarter of the respondents indicated a neutral position. The average response for this was 2.93 (SD=1.16), falling in the neutral category. Again the pattern is “cool” but not outright rejection.

Item three was the statement “Arrests are made because the police officer is

dedicated to performing his/her duty.” Disagreement with this item is considered to indicate cynicism. The majority of officers indicated some level of agreement (74.2%) as compared to disagreement (8.4%). The neutral response was chosen by 17.2% of the respondents. The average response for this item was 3.91 (SD=.93), indicating agreement. While officers overwhelmingly choose to identify with this statement, remember that they are describing themselves.

The fourth item was “The best arrests are made as a result of hard work and dedication to duty.” Disagreement with this item is considered to indicate cynicism. The majority of officers indicated some level of agreement (67.8%) as compared to disagreement (13.0%). The neutral response was chosen by 19.0% of the respondents. The average response for this item was 3.82 (SD=1.05), indicating agreement.

Item five was the statement “A college degree requirement to the police department would result in a much more efficient and effective police department.” Disagreement with this item is considered to indicate cynicism. The majority of officers indicated some level of disagreement (42.9%) as compared to agreement (32.8%), with 24% of the respondents choosing the neutral option. The average response was 2.94 (SD=1.24), falling in the neutral category.

The sixth item was “When you get to know the department from the inside, you begin to think that it is a wonder that it does one-half as well as it does.” Agreement with this item is considered to indicate cynicism. 42.1% of the respondents indicated some level of agreement, as compared to 27.4% indicating disagreement. 29.5% selected the neutral option. The average response to this item was 2.78 (SD=1.08), falling between

the neutral and disagreement categories.

Item seven was the statement “Police academy recruit training should be cut in half.” Agreement with this item is considered to indicate cynicism. The vast majority of respondents indicated disagreement (83.6%) as compared to agreement (6.2%). 10% selected the neutral response. The average response on this item was 4.26 (SD=.96), indicating agreement. This is an important descriptive, in that it suggests a general awareness of the complexity of police work and the need for adequate preparation of police recruits.

The eighth statement was “Professionalization of police work is already here for some groups of officers.” Disagreement with this item is considered to indicate cynicism. The majority of respondents indicated some level of agreement (61.7%) as compared to disagreement (8.8%). 28.5% chose the neutral option. The average response on this item was 3.61 (SD=.88), falling between the neutral and agreement categories.

Item nine was “When a police officer appears before the Police Board of Inquiry, the officer will probably be found guilty even when he/she has a good defense.” Agreement with this item is considered to indicate cynicism. The majority of respondents indicated some level of agreement (44.3%) as compared to disagreement (21.8%). 33.1% selected the neutral option. The average response for this item was 2.63 (SD=1.06), falling between the neutral and disagreement categories.

The tenth item was the statement “Police officers are dedicated to the high ideals of police service and would not hesitate to perform police duty even though he/she may have to work overtime without extra pay.” Disagreement with this item is considered to

indicate cynicism. The majority of respondents indicated some level of disagreement (46.9%) as compared to agreement (24.4%). 28.3% selected the neutral option. The average response for this item was 2.67 (SD=1.11), falling between the neutral and disagreement categories.

Item eleven read “The rules and regulations dealing with officer conduct off duty are fair and sensible.” Disagreement with this item is considered to indicate cynicism. Most respondents indicated agreement (43.7%) as compared to disagreement (31.4%). 24.2% chose the neutral option. The average response for this item was 3.12 (SD=1.11), falling in the neutral category.

The twelfth item in the cynicism scale was the statement “The public is more likely to obstruct police work than cooperate.” Cynicism is indicated by agreement with this item. Most respondents agreed (40.3%) with the statement, as compared to those who disagreed (29.1%), and 30.1% chose the neutral category. The average response score for this item was 2.82 (SD=1.04), falling near the neutral category.

The next item was “Getting special assignments in the police department depends on who you know, not on merit.” Cynicism is indicated by agreement with this item. A large proportion of respondents (65%) indicated agreement as compared to disagreement (13%). 21.6% chose the neutral category. The average score on this item was 2.14 (SD=1.13), indicating agreement.

The fourteenth item was the statement “When testifying in court, police officers are treated like criminals when they take the witness stand.” Agreement with this item is indicative of cynicism. 37% of the respondents agreed with this item, and 31.1%

indicated disagreement. 31.7% chose the neutral category. The average response on this item was 2.83 (SD=1.07), falling near the neutral category.

The next item was “Police department citations for summary offenses are issued by police officers as part of a sensible pattern of law enforcement.” Cynicism is indicated by disagreement with this statement. Most officers indicated agreement (66.7%) with this item as compared to disagreement (10%). 22.8% chose the neutral category. The average response on this item was 3.66 (SD=0.85), falling between the neutral and agreement categories.

Item number sixteen was the statement “The public shows a lot of respect for the police.” Disagreement with this item is considered to indicate cynicism. Most officers indicated disagreement (59.5%) with this item, as compared to agreement (13.6%). 26.5% chose the neutral category. The average response for this item was 2.34 (SD=1.01), falling between the neutral and disagreement categories.

The next item was “Youth problems are best handled by officers who are trained as juvenile officers.” Disagreement with this item indicates cynicism. Most officers indicated disagreement (50.9%) with this item, as compared to agreement (27.2%). 21.2% chose the neutral category. The average response on this item was 2.73 (SD=1.03), falling between the neutral and disagreement categories.

Item eighteen was “Police officers have a different view of human nature because of the misery and cruelty of life which they see everyday.” Cynicism is indicated by agreement with this item. Most respondents indicated agreement (51.9%) as compared to disagreement (25.2%). 22.2% chose the neutral category. The average response on this

item was 2.65 (SD=1.07), falling between the neutral and agreement categories.

Item nineteen was “The newspapers generally try to help police departments by giving prominent coverage to items favorable to the police.” Cynicism is indicated by disagreement with this item. A strong majority indicated disagreement (78%) as compared to agreement (4.6%). 16.8% chose the neutral category. The average response on this item was 1.90 (SD=0.89), indicating disagreement.

The final item in the cynicism scale was the statement “Detectives have special qualifications and are superior to patrol officers.” Cynicism is indicated by disagreement with this item. The majority of officers indicated disagreement (76.6%) with this item, as compared to agreement (7.8%). 14.2% chose the neutral category. The average response on this item was 1.98 (SD=0.94), indicating disagreement.

The descriptive responses presented above are rather mixed. More often than not, respondents sought a neutral position on many of the cynicism items. It is not clear what this suggests. On one hand, it could portray a police workforce that was seeking center rather than polar positions relative to concerns about work, discipline, the department and external others. On the other hand, this pattern might suggest that “neutral” was a “safe” response for many officers, thereby not calling attention to them or the department.

Nonetheless, there are some important implications of these simple frequencies. For example, these data suggest that in the aggregate officers do not hold favorable opinions of the public and the press. And, a larger proportion of officers perceive the courts in a hostile way, as compared to officers who may be more favorably disposed to the court system.

In an effort to more fully explore these attitudes, scales were created to reduce the number of items into a smaller grouping of ideas. These scales have been created in other research as well.

Consistent with previous research Cronbach's Alpha for all 20 items is moderate, equal to .67 (n=474), and a principal components analysis revealed a multi-dimensional structure. This is typical in use of the Niederhoffer scale, and to remain consistent with prior research, we use the scale as a general measure of cynicism. The average scale score was 59.17 (SD=7.68). The lowest actual score was 30, and the highest was 85. Given the coding scheme, higher scores on this scale equate to lower levels of cynicism. Consequently, the average scale score suggests that collectively cynicism is not high among the responding officers.

Police Attitudes Toward Ethics

Fifteen items in the survey were selected from an "attitudes toward ethics" scale developed by Krejci et al. (1996). As previously indicated, these items and the resulting scale measure officer attitudes toward a range of ethical and unethical behaviors. Understanding aggregate and individual officer adherence to particular ethical precepts can provide insight into the cultural values of the organization as a whole. As this inquiry is focused on better understanding and predicting negative police behavior, an assessment of the underlying values that either support or detract from positive police behavior is warranted.

Respondents were instructed to select their level of agreement with each ethical statement on a 5-point Likert scale (1=Strongly Disagree, 2=Disagree, 3=Neutral,

4=Agree, 5=Strongly Agree). Each of the items and the descriptive statistics are discussed below.

The first item was the statement “It is not really wrong for an officer to accept small gifts from the public.” Disagreement with this item indicates stronger attitudes toward ethics. Most officers indicated some level of disagreement (43.6%) as compared to agreement (20.2%). A substantial proportion (33.9%) chose the neutral category. The average response on this item was 2.58 (SD=1.13), falling between the neutral and disagreement categories.

The next item was “Sometimes, an officer has to use methods prohibited by Directives to enforce the law or make an arrest.” Disagreement with this item indicates stronger attitudes toward ethics. Most officers indicated disagreement (46.5%) as compared to agreement (22.4%). 29.3% chose the neutral category. The average response on this item was 2.61 (SD=1.07), falling between the neutral and disagreement categories.

Item three was the statement “Most officers would take action if they knew of misconduct, even if it was a friend.” Agreement with this item indicates stronger attitudes toward ethics. Most officers indicated agreement (39.9%) as compared to disagreement (23.2%). 34.7% chose the neutral category. The average response on this item was 3.18 (SD=0.93), falling close to the neutral category.

The next item was “An officer cannot be consistently productive unless he/she bends or breaks the rules from time to time.” Disagreement with this item indicates stronger attitudes toward ethics. Most officers indicated some level of disagreement

(68.5%) as compared to agreement (11.2%). 17.6% chose the neutral category. The average response on this item was 2.18 (SD=0.97), indicating disagreement.

Item number five was the statement “Sometimes officers use methods prohibited by Directives to achieve arrest of a criminal, if it’s the only way that it can be done.” Disagreement with this item indicates stronger attitudes toward ethics. Most officers indicated some level of disagreement (52.3%) as compared to agreement (20.4%). 25.7% chose the neutral response. The average response on this item was 2.53 (SD=1.05), falling between the neutral and disagreement categories.

Next was the statement “Unless it is an extremely serious matter, officers should protect each other when misconduct is alleged.” Disagreement with this item indicates stronger attitudes toward ethics. Most officers indicated disagreement (60.7%) as compared to agreement (12.8%). 24.2% chose the neutral category. The average response on this item was 2.34 (SD=1.04), falling between the neutral and disagreement categories.

Item seven was the statement “It is sometimes necessary to be verbally disrespectful or abusive to a person because that is the only way they will understand or comply.” Disagreement with this item indicates stronger attitudes toward ethics. Most officers disagreed (56.5%) with this statement, as compared to agreement (24.8%). 17% chose the neutral option. The average response on this item was equal to 2.51 (SD=1.14), falling between the neutral and disagreement categories.

The next item was “‘Professional courtesy’ (excusing a fellow officer for minor violations of the law) is generally O.K.” Disagreement with this item indicates stronger

attitudes toward ethics. Nearly equal proportions indicated disagreement (29.8%) and agreement (27.2%), with a large proportion (40.7%) choosing the neutral option. The average response on this item is equal to 2.91 (SD=1.00), falling near the neutral category.

Item nine was the statement “Most supervisors agree that rules must be broken or bent to get the job done, but wouldn’t admit it.” Disagreement indicates stronger attitudes toward ethics. Most officers indicated some level of disagreement (47.9%) as compared to agreement (24%). 25.7% chose the neutral response. The average response on this item was 2.65 (SD=1.08), falling between the neutral and disagreement categories.

Next was the statement “Sometimes officers have to exaggerate probable cause to get a crook off the street.” Disagreement with this item indicates stronger attitudes toward ethics. Most officers indicated disagreement (63.3%) as compared to agreement (15%). 19.2% chose the neutral category. The average response on this item was 2.32 (SD=1.02), falling between the neutral and agreement categories.

Item number eleven was the statement “An officer occasionally has to bend the facts a little in court or in a report in order to get a criminal convicted.” Disagreement with this item indicates stronger attitudes toward ethics. Most officers indicated disagreement (74.4%) as compared to agreement (8%). 15.4% chose the neutral category. The average response on this item was equal to 2.05 (SD=0.92), indicating disagreement.

The next item was “An officer’s personal life is his/her business, and the department shouldn’t care what we do as long as we do our jobs.” Disagreement indicates stronger attitudes toward ethics. Most officers indicated disagreement (41.5%)

as compared to agreement (29.2%). 27.1% chose the neutral category. The average response on this item was 2.92 (SD=1.15), falling at the neutral category.

Item thirteen was “Taking care of errands while working (like picking-up dry cleaning) is generally O.K.” Disagreement indicates stronger attitudes toward ethics. Most officers indicated disagreement (39.3%) as compared to agreement (22.8%). 35.5% chose the neutral option. The average response for this item was 2.76 (SD=0.95), falling close to between the neutral and disagreement categories.

Next was the statement “Some people should get ‘street justice’ after hurting a police officer because that is the only real punishment they will get.” Disagreement indicates stronger attitudes toward ethics. Most officers disagreed (65.1%) as compared to those who agreed (9.8%). 22.6% chose the neutral response. The average response on this item was equal to 2.25 (SD=0.96), indicating disagreement.

The final item in the ethics scale was the statement “Officers should never go on strike no matter how unfair the working conditions or wages.” Disagreement with this item indicates stronger attitudes toward ethics. More officers indicated disagreement (41.8%) as compared to agreement (33.4%). 22.2% chose the neutral option. The average response on this item was equal to 2.84 (SD=1.27), falling near the neutral category.

At the descriptive level, these responses suggest that while there is a high proportion and significant agreement with positive ethical statements in this sample, there is also a sizable number of officers reporting ethical values of concern. Moreover, as many of the respondents selected a “middle ground” or “neutral” value for their

responses, it might also be concluded that ethical ambiguity is considerable within this group of respondents. Given that these officers were selected randomly, such ethical ambiguity appears rather pervasive within the Philadelphia Police Department, at least in the patrol ranks.

These data, like those regarding police cynicism were also subjected to more complex analysis. A principal components analysis revealed that item three (“Most officers would take action if they knew of misconduct, even if it was a friend”) and item 15 (“Officers should never go on strike no matter how unfair the working conditions or wages”) did not load well with the other items. Cronbach’s Alpha for all 15 items is equal to .80 (n=467). When items 3 and 15 are removed, Alpha increases to .85 (n=471).

The Principal Component Analysis results suggest the presence of a single underlying factor. The descriptive statistics for the summary attitudes toward ethics scale (without items 3 and 15) are as follows: the average score on this scale is equal to 32.65, and the standard deviation is equal to 8.17. The lowest actual score is 13, and the highest actual score is 57. Lower scores on this scale indicate stronger attitudes toward ethics.

The cynicism and attitudes toward ethics scores were aggregated to the district-level, and these scores were then applied to the larger sample of 1,935 officers. The resulting contextual, attitudinal variables are summarized in Table 15, below.

Table 15. District-level Cynicism and Ethics (N=23)

	<i>Mean</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Cynicism	32.88	2.54	27.92	38.72
Attitudes Toward Ethics	59.10	2.28	53.88	63.00

For ease of interpretation, the values were dichotomized using the value at the 25th percentile as a cutoff for cynicism (lower scores indicate greater cynicism) and the value at the 75th percentile as a cutoff for ethics (higher scores indicate weaker attitudes toward ethics). As discussed earlier with regard to geographic data, cases with missing or conflicting district information received the mean value for each measure.

The data suggest that officers working in districts exhibiting higher levels of cynicism were more likely to have been the subject of departmental discipline (OR=1.35; 95% CI=1.08, 1.69). These same officers were also more likely to be involved in shooting incidents (marginal significance) (OR=1.52; 95% CI=1.00, 2.33), and more likely to be involved in misconduct (marginal significance) (OR=1.41, 95% CI=1.00, 2.01). Officers working in districts exhibiting weaker attitudes toward ethics were more likely to be involved in shooting incidents (OR=1.86; 95% CI=1.23, 2.82).

These findings suggest that indeed “district cultures” exist, and that they too exert influence on negative police behaviors and on subsequent complaints. Police supervisors and managers must constantly address the erosion of values and increases in cynicism in their respective commands. Often this is broadly referred to as “morale.” Here, we see the idea of a link between the existence of a cynical or ethically ambiguous culture as supporting and nurturing negative police behaviors.

Chapter 6

A QUALITATIVE ASSESSMENT OF POLICE ETHICS

An informative way to approach the question of ethical values is to have respondents read a series of short scenarios involving ethical dilemmas, and then respond to a series of questions. The contexts of the scenarios can be changed, and the often-subtle differences in ethical choices thereby highlighted. Respondents then are asked to make assessments about their own behavior, what the department expects of them, and what the work group thinks of such behaviors. Collectively, these responses tell us much about the dynamics of police management and police culture.

In the last section of the survey, we asked respondents to read and respond to six brief scenarios. These scenarios and the response options were adopted from Klockars and colleagues, and were chosen based on their representation of three levels of ethical seriousness. The first two represent fairly minor behaviors, the next two represent acts of intermediate-seriousness, and the last two scenarios represent very serious forms of police misbehavior.

Before administering the scenarios to the randomly selected sample of police officers used in this study, our Advisory Group first reviewed and commented on the scenarios. This assured that unnecessary jargon was removed from the scenarios and that at least the group of advisors saw these scenarios as accurately reflecting a range of ethical choices/decisions that a Philadelphia police officer might have to make. Below are each of the scenarios, the related questions, and descriptive statistics.

SCENARIO #1

A police officer routinely accepts free meals, cigarettes, and other items of small value from merchants on his beat. The officer does not solicit these gifts and is careful not to abuse the generosity of those who gave the gifts to him.

Officers were first asked “How serious do YOU consider this behavior to be?” with responses indicated on a five point, Likert-style response set ranging from “Not at all serious” (1) to “Very serious” (5). The majority of respondents indicated that the behavior was not serious (51.3%) as compared to serious (21.6%). Twenty-four percent chose the middle-option, indicating an intermediate-level of seriousness. The average response to this question for this scenario was 2.47 (SD=1.35), indicating intermediate seriousness. This compares with Klockars et al’s national (but non-representative) sample mean of 2.60.

Next, officers were asked, “How serious do MOST police officers in the PPD consider this behavior to be?” with responses indicated on the same scale as in the previous question. The majority of respondents indicated that most other officers would find that the behavior was not serious (61.1%) as compared to serious (14.6%). About twenty percent chose the middle-option, indicating an intermediate-level of seriousness. The average response to this question shifted downward slightly from the previous question, equal to 2.17 (SD=1.25), indicating that most officers would find this behavior not serious. This compares with Klockars et al’s national sample mean of 2.31.

The third question was “Would this behavior be regarded as a violation of official PPD policy?” with responses indicated as “Yes” (1), “No” (2), or “Not Sure” (3). The majority of the respondents (73.7%) indicated that the behavior in the scenario would be

regarded as a violation of PPD policy. Four percent indicated that it would not be regarded as a violation. Interestingly, nearly one-quarter of the respondents (22.3%) indicated that they were not sure of whether the behavior in the scenario would be regarded as a violation of policy.

Next, officers were asked “If another officer engaged in this behavior and was discovered doing so, what if any discipline do YOU think SHOULD follow, and what if any discipline do YOU think WOULD follow?” Responses were indicated on two separate but identical scales (one for “Should” and one for “Would”), including “None” (1), “Verbal Reprimand” (2), “Written Reprimand” (3), “Suspension Without Pay” (4), “Demotion in Rank” (5), and “Dismissal” (6).

Most respondents indicated that an officer who engaged in the behavior portrayed in the scenario SHOULD receive no discipline (26.7%) or a verbal reprimand (41.3%). Ten percent indicated that the officer should get a written reprimand, and 2.8% indicated suspension without pay. One officer indicated demotion in rank and five officers indicated dismissal. The average response was 1.92 (SD=.89), indicating verbal reprimand. This compares with Klockars et al.’s national sample mean of 2.13.

With regard to what an officer WOULD receive, the mean score shifted upward slightly, to 2.43 (SD=1.17) (the Klockars’ sample mean also shifted slightly upward to 2.37). Most officers indicated that an officer who engaged in this behavior would receive no punishment (16.4%) or a verbal reprimand (34.1%). About 16 percent indicated written reprimand and about 12 percent indicated suspension without pay. No respondents indicated that an officer would receive a demotion in rank, and 2.8%

indicated dismissal.

The fifth question was “Do you think YOU would report a fellow officer who engaged in this behavior?” with responses indicated on a five point, Likert-style response set ranging from “Definitely Not” (1) to “Definitely Yes” (5). The majority of respondents (58.5%) indicated they would not report a fellow officer as compared to those who indicated that they would (11.6%). Almost one-quarter of the respondents (22.8%) chose the middle category, indicating a mid-range likelihood that they would report a fellow officer who engaged in this behavior. The average response for this item was 2.14 (SD=1.20), indicating that most respondents would not report a fellow officer. This compares to Klockars et al.’s national mean of 1.94.

The last question was “Do you think MOST police officers in the PPD would report a fellow officer who engaged in this behavior?” with responses indicated on the same scale as in the previous question. The majority of respondents (67.5%) indicated that most other officers would not report a fellow officer as compared to those who indicated that other officers would report fellow officers (10.8%). Nineteen percent chose the middle category, indicating an intermediate likelihood that other officers would report fellow officers. The average response on this item was 1.92 (SD=1.05), indicating that most respondents thought other officers in the PPD wouldn’t report a fellow officer who engaged in the behavior portrayed in the scenario. This compares to Klockars’ national mean of 1.82.

The second scenario was,

SCENARIO #2

A police officer is widely liked in the community, and on holidays local merchants and restaurant and bar owners show their appreciation for the officer's attention by giving the officer gifts of food and liquor.

With regard to the first question, "How serious do YOU consider this behavior to be?" the majority of respondents indicated that the behavior was not serious (44.5%) as compared to serious (27.0%). About twenty-four percent chose the middle-option, indicating an intermediate-level of seriousness. The average response to this question for this scenario was 2.70 (SD=1.39), indicating intermediate seriousness. This compares with Klockars et al's national sample mean of 2.84.

In response to the next question "How serious do MOST police officers in the PPD consider this behavior to be?" most respondents indicated that most other officers would find that the behavior was not serious (55.3%) as compared to serious (19.0%). Twenty percent chose the middle-option, indicating an intermediate-level of seriousness. The average response to this question shifted downward slightly from the previous question, equal to 2.33 (SD=1.29), indicating that most officers would find this behavior not serious. This compares with Klockars et al's national sample mean of 2.64.

The third question was "Would this behavior be regarded as a violation of official PPD policy?" The majority of the respondents (67.9%) indicated that the behavior in the scenario would be regarded as a violation of PPD policy. 7.8% indicated that it would not be regarded as a violation. About one-fifth of the respondents (19.0%) indicated that

they were not sure of whether the behavior in the scenario would be regarded as a violation of policy.

Next, officers were asked “If another officer engaged in this behavior and was discovered doing so, what if any discipline do YOU think SHOULD follow, and what if any discipline do YOU think WOULD follow?” Most respondents indicated that an officer who engaged in the behavior portrayed in the scenario SHOULD receive no discipline (27.1%) or a verbal reprimand (31.1%). 17.4% indicated that the officer should get a written reprimand, and 4.6% indicated suspension without pay. Two officers indicated demotion in rank and five officers indicated dismissal. The average response was 2.06 (SD=1.01), indicating verbal reprimand. This compares with Klockars et al.’s national sample mean of 2.53.

With regard to what an officer WOULD receive, the average score shifted upward slightly, to 2.57 (SD=1.19) (the Klockars sample mean also shifted slightly to 2.82). Fifteen percent indicated no punishment. Most officers indicated that an officer who engaged in this behavior would receive a verbal reprimand (26.1%) or a written reprimand (20.0%). None of the respondents indicated that an officer would receive a demotion in rank. 2.8% indicated dismissal.

Next was “Do you think YOU would report a fellow officer who engaged in this behavior?” The majority of respondents (56.9%) indicated they would not report a fellow officer as compared to those who indicated that they would (15.8%). About twenty percent of the respondents (20.4%) chose the middle category, indicating an intermediate likelihood that they would report a fellow officer who engaged in this behavior. The

average response for this item was 2.24 (SD=1.27), indicating that most respondents would not report a fellow officer. This compares to Klockars et al.'s national mean of 2.36.

The last question was "Do you think MOST police officers in the PPD would report a fellow officer who engaged in this behavior?" The majority of respondents (64.7%) indicated that most other officers would not report a fellow officer as compared to those who indicated that other officers would report fellow officers (10.0%). 18.6% chose the middle category, indicating an intermediate likelihood that other officers would report fellow officers. The average response on this item was 2.02 (SD=1.14), indicating that most respondents thought other officers in the PPD wouldn't report a fellow officer who engaged in the behavior portrayed in the scenario. This compares to Klockars' national mean of 2.28.

The third scenario was,

SCENARIO #3

At 2 A.M. a police officer, who is on duty, is driving his patrol car on a deserted road. The officer sees a vehicle that has been driven off the road and is stuck in a ditch. The officer approaches the vehicle and observes that the driver is not hurt but is obviously intoxicated. The officer also finds that the driver is a police officer. Instead of reporting this accident and offense the officer transports the driver to his home.

With regard to the first question, "How serious do YOU consider this behavior to be?" the majority of respondents indicated that the behavior was serious (48.7%) as compared to not serious (20.2%). 25.7% chose the middle-option, indicating an intermediate-level of seriousness. The average response to this question for this scenario

was 3.58 (SD=1.29), indicating serious. This compares with Klockars et al's national sample mean of 3.03.

In response to the next question "How serious do MOST police officers in the PPD consider this behavior to be?" most respondents indicated that other officers would find the behavior to be in the mid-range of seriousness (30.7%). Thirty seven percent indicated that other officers would consider the behavior serious, and 26% indicated not serious. The average response to this question shifted downward slightly from the previous question, equal to 3.25 (SD=1.26), indicating that most officers would find this behavior to be of medium to upper level seriousness. This compares with Klockars et al's national sample mean of 2.86.

The third question was "Would this behavior be regarded as a violation of official PPD policy?" The majority of the respondents (79.2%) indicated that the behavior in the scenario would be regarded as a violation of PPD policy. 4.8% indicated that it would not be regarded as a violation. 8.8% indicated that they were not sure of whether the behavior in the scenario would be regarded as a violation of policy.

Next, officers were asked "If another officer engaged in this behavior and was discovered doing so, what if any discipline do YOU think SHOULD follow, and what if any discipline do YOU think WOULD follow?" Most respondents indicated that an officer who engaged in the behavior portrayed in the scenario SHOULD receive either a written reprimand (21.2%) or suspension without pay (20.0%). 19.0% indicated that the officer should get a verbal reprimand, and 11.4% indicated no punishment. Five officers (1.0%) indicated demotion in rank and 6.8% indicated dismissal. The average response

was 3.01 (SD=1.38), indicating written reprimand. This compares with Klockars et al.'s national sample mean of 2.81.

With regard to what an officer WOULD receive, the mean score shifted upward slightly, to 3.56 (SD=1.52) (the Klockars sample mean also shifted slightly to 3.21). Most officers indicated that an officer who engaged in this behavior would receive a suspension without pay (30.1%). Dismissal (14.6%) and written reprimand (14.4%) were the next most frequent responses. 12.4% indicated verbal reprimand and 8.6% indicated no punishment. One respondent indicated that an officer would receive a demotion in rank.

Next was, "Do you think YOU would report a fellow officer who engaged in this behavior?" The majority of respondents (38.6%) indicated they would not report a fellow officer as compared to those who indicated that they would (28.8%). About one-quarter of the respondents (24.4%) chose the middle category, indicating an intermediate likelihood that they would report a fellow officer who engaged in this behavior. The mean response for this item was equal to 2.87 (SD=1.36), indicating that most respondents indicated they would not report a fellow officer. This compares to Klockars et al.'s national mean of 2.34.

The last question was, "Do you think MOST police officers in the PPD would report a fellow officer who engaged in this behavior?" The majority of respondents (43.9%) indicated that most other officers would not report a fellow officer as compared to those who indicated that other officers would report fellow officers (18.8%). 28.9% chose the middle category, indicating an intermediate likelihood that other officers would

report fellow officers. The average response on this item was 2.62 (1.19), indicating that most respondents thought other officers in the PPD wouldn't report a fellow officer who engaged in the behavior portrayed in the scenario. This compares to Klockars' national mean of 2.28.

The fourth scenario was,

SCENARIO #4

A police officer on foot patrol surprises a man who is attempting to break into an automobile. The man flees. The officer chases him for about two blocks before apprehending him by tackling him and wrestling him to the ground. After he is under control the officer punches him a couple of times in the stomach as punishment for fleeing.

With regard to the first question, "How serious do YOU consider this behavior to be?" the majority of respondents indicated that the behavior was serious (65.5%), with 42.5% indicating "very serious." 13.4% considered this behavior to be not serious. 16.4% chose the middle-option, indicating an intermediate-level of seriousness. The average response to this question for this scenario was 3.94 (SD=1.20), indicating that most officers considered this behavior to be serious. This compares with Klockars et al's national sample mean of 4.05.

In response to the next question "How serious do MOST police officers in the PPD consider this behavior to be?" most respondents indicated that other officers would find the behavior to be serious (46.8%). 22.8% indicated that other officers would consider the behavior to be less serious, and 16.4% chose the middle category, indicating an intermediate-level of seriousness. The average response to this question shifted downward slightly from the previous question, equal to 3.43 (SD=1.27), indicating that most officers would find this behavior to be of intermediate to upper level seriousness.

This compares with Klockars et al's national sample mean of 3.70.

The third question was "Would this behavior be regarded as a violation of official PPD policy?" The majority of the respondents (84.8%) indicated that the behavior in the scenario would be regarded as a violation of PPD policy. 4.8% indicated that it would not be regarded as a violation. 4.4% indicated that they were not sure of whether the behavior in the scenario would be regarded as a violation of policy.

Next, officers were asked "If another officer engaged in this behavior and was discovered doing so, what if any discipline do YOU think SHOULD follow, and what if any discipline do YOU think WOULD follow?" Most respondents indicated that an officer who engaged in the behavior portrayed in the scenario SHOULD receive either a suspension without pay (27.9%) or a written reprimand (22.4%). 17.2% indicated that the officer should get a verbal reprimand, and 6.8% indicated no punishment. Three officers (0.6%) indicated demotion in rank and 5.4% indicated dismissal. The average response was 3.18 (SD=1.23), indicating written reprimand. This compares with Klockars et al.'s national sample mean of 3.76.

With regard to what an officer WOULD receive, the mean score shifted upward slightly, to 3.61 (SD=1.34) (the Klockars sample mean also shifted slightly upward to 4.00). Most officers indicated that an officer who engaged in this behavior would receive a suspension without pay (37.9%). Dismissal (11.4%) and written reprimand (17.4%) were the next most frequent responses. 8.4% indicated verbal reprimand and 7.0% indicated no punishment. One respondent indicated that an officer would receive a demotion in rank.

Next was “Do you think YOU would report a fellow officer who engaged in this behavior?” The majority of respondents (38.2%) indicated they would report a fellow officer as compared to those who indicated that they would not (29.2%). About one-quarter of the respondents (25.7%) chose the middle category, indicating an intermediate likelihood that they would report a fellow officer who engaged in this behavior. The average response for this item was 3.16 (SD=1.37), indicating that most respondents indicated an intermediate likelihood that they would not report a fellow officer. This compares to Klockars et al.’s national mean of 3.39.

The last question was “Do you think MOST police officers in the PPD would report a fellow officer who engaged in this behavior?” The majority of respondents (40.2%) indicated that most other officers would not report a fellow officer as compared to those who indicated that other officers would report fellow officers (26.0%). 27.1% chose the middle category, indicating an intermediate likelihood that other officers would report fellow officers. The average response on this item was 2.77 (SD=1.28), indicating that most respondents thought other officers in the PPD wouldn’t report a fellow officer who engaged in the behavior portrayed in the scenario. This compares to Klockars’ national mean of 3.07.

The fifth scenario was,

SCENARIO #5

A police officer discovers a burglary of a jewelry shop. The display cases are smashed and it is obvious that many items have been taken. While searching the shop, the officer takes a watch; worth about two days pay for that officer. The officer reports the watch had been stolen during the burglary.

With regard to the first question, “How serious do YOU consider this behavior to be?” the majority of respondents indicated that the behavior was “very serious” (88.6%), with 5.0% indicating “serious.” 1.0% considered this behavior to be not serious. 1.8% chose the middle-option, indicating an intermediate-level of seriousness. The average response to this question for this scenario was 4.87 (SD=.50), indicating that most officers considered this behavior to be very serious. This compares with Klockars et al’s national sample mean of 4.95.

In response to the next question “How serious do MOST police officers in the PPD consider this behavior to be?” most respondents indicated that other officers would also find the behavior to be “very serious” (73.1%) or “serious” (15.2%). 2.2% indicated that other officers would consider the behavior to be less serious, and 5.0% chose the middle category, indicating an intermediate level of seriousness. The average response to this question shifted downward slightly from the previous question, equal to 4.46 (SD=.70), indicating that most officers would find this behavior to be very serious. This compares with Klockars et al’s national sample mean of 4.88.

The third question was “Would this behavior be regarded as a violation of official PPD policy?” The majority of the respondents (93.6%) indicated that the behavior in the scenario would be regarded as a violation of PPD policy. 0.6% indicated that it would not be regarded as a violation. 1.4% indicated that they were not sure of whether the behavior in the scenario would be regarded as a violation of policy.

Next, officers were asked “If another officer engaged in this behavior and was discovered doing so, what if any discipline do YOU think SHOULD follow, and what if

any discipline do YOU think WOULD follow?" Most respondents indicated that an officer who engaged in the behavior portrayed in the scenario SHOULD receive either a dismissal (54.5%) or a suspension without pay (20.6%). 0.6% indicated that the officer should get a verbal reprimand, and 1.8% indicated no punishment. 1.4% indicated demotion in rank and 2.4% indicated written reprimand. The average response was 5.25 (SD=1.19), indicating dismissal. This compares with Klockars et al.'s national sample mean of 5.66.

With regard to what an officer WOULD receive, the average score shifted upward slightly, to 5.39 (SD=1.16) (the Klockars sample mean shifted downward slightly to 5.57). Most officers indicated that an officer who engaged in this behavior would receive dismissal (62.1%) or suspension without pay (15.0%). 1.8% indicated written reprimand, 1.6% verbal reprimand, 1.6% no punishment, and 0.6% demotion in rank.

Next was "Do you think YOU would report a fellow officer who engaged in this behavior?" The majority of respondents (68.9%) indicated they would report a fellow officer as compared to those who indicated that they would not (7.2%). About one-fifth of the respondents (17.8%) chose the middle category, indicating an intermediate likelihood that they would report a fellow officer who engaged in this behavior. The average response for this item was 4.12 (SD=1.11), indicating that most respondents indicated that they would report a fellow officer. This compares to Klockars et al.'s national mean of 4.54.

The last question was "Do you think MOST police officers in the PPD would report a fellow officer who engaged in this behavior?" The majority of respondents

(53.5%) indicated that most other officers would report a fellow officer as compared to those who indicated that other officers would not report fellow officers (14.0%). 26.5% chose the middle category, indicating an intermediate likelihood that other officers would report fellow officers. The average response on this item was 3.69 (SD=1.20), indicating that most respondents thought other officers in the PPD would report a fellow officer who engaged in the behavior portrayed in the scenario. This compares to Klockars' national mean of 4.34.

The final scenario was,

SCENARIO #6

While on-duty, a police officer finds a wallet in a parking lot. It contains the amount of money equivalent to a full-day's pay for that officer. The officer reports the wallet as lost property, but keeps the money.

With regard to the first question, "How serious do YOU consider this behavior to be?" the majority of respondents indicated that the behavior was "very serious" (82.6%), with 10.2% indicating "serious." 0.8% considered this behavior to be not serious. 2.8% chose the middle-option, indicating an intermediate-level of seriousness. The average response to this question for this scenario was 4.80 (SD=.55), indicating that most officers considered this behavior to be very serious. This compares with Klockars et al's national sample mean of 4.85.

In response to the next question "How serious do MOST police officers in the PPD consider this behavior to be?" most respondents indicated that other officers would also find the behavior to be "very serious" (63.5%) or "serious" (17.6%). 3.2% indicated that other officers would consider the behavior to be less serious, and 10.8% chose the middle category, indicating an intermediate level of seriousness. The average response to

this question shifted downward slightly from the previous question, equal to 4.47 (SD=.87), indicating that most officers would find this behavior to be very serious. This compares with Klockars et al.'s national sample mean of 4.69.

The third question was "Would this behavior be regarded as a violation of official PPD policy?" The majority of the respondents (92.6%) indicated that the behavior in the scenario would be regarded as a violation of PPD policy. 1.2% indicated that it would not be regarded as a violation. 1.6% indicated that they were not sure of whether the behavior in the scenario would be regarded as a violation of policy.

Next, officers were asked "If another officer engaged in this behavior and was discovered doing so, what if any discipline do YOU think SHOULD follow, and what if any discipline do YOU think WOULD follow?" Most respondents indicated that an officer who engaged in the behavior portrayed in the scenario SHOULD receive either a dismissal (45.7%) or a suspension without pay (25.1%). 5.8% indicated that the officer should get a written reprimand, and 1.6% indicated verbal reprimand. 1.6% indicated demotion in rank and 2.0% indicated no punishment. The average response was 4.95 (SD=1.31), indicating a mid-point between suspension and dismissal. This compares with Klockars et al.'s national sample mean of 5.09.

With regard to what an officer WOULD receive, the mean score shifted upward slightly, to 5.12 (SD=1.29) (the Klockars sample mean shifted downward slightly to 5.03). Most officers indicated that an officer who engaged in this behavior would receive dismissal (52.7%) or suspension without pay (22.0%). 3.4% indicated written reprimand, 2.0% verbal reprimand, 2.0% no punishment, and 0.6% demotion in rank.

Next was “Do you think YOU would report a fellow officer who engaged in this behavior?” The majority of respondents (64.9%) indicated they would report a fellow officer as compared to those who indicated that they would not (8.4%). About one-fifth of the respondents (20.4%) chose the middle category, indicating an intermediate likelihood that they would report a fellow officer who engaged in this behavior. The average response for this item was 4.02 (SD=1.16), indicating that most respondents indicated that they would report a fellow officer. This compares to Klockars et al.’s national mean of 4.23.

The last question was “Do you think MOST police officers in the PPD would report a fellow officer who engaged in this behavior?” The majority of respondents (51.9%) indicated that most other officers would report a fellow officer as compared to those who indicated that other officers would not report fellow officers (15.0%). 27.1% chose the middle category, indicating an intermediate likelihood that other officers would report fellow officers. The average response on this item was 3.62 (SD=1.19), indicating that most respondents thought other officers in the PPD would report a fellow officer who engaged in the behavior portrayed in the scenario. This compares to Klockars’ national mean of 3.96.

Collectively, the patterns of responses from across all respondents compare quite favorably with national (but non-representative) samples of police officers that have completed a similar scenario-based assessment. Philadelphia’s respondents mirror the response patterns found nationally. Given such patterns we next investigated any district-level variations in the interpretation of these scenarios, and the resulting value sets that

are derived from officer responses.

Of particular interest is district-level variability in the scenario measures.

Previous research by Klockars et al. revealed strong correlation between seriousness, level of discipline, and likelihood of reporting at the officer level, and used aggregate, agency-level data to characterize the agencies' culture of integrity. We aggregated the scenario variables to the district-level. The resulting contextual variables are summarized in Table 16, below.

Table 16. District-level Scenario Variables (N=23)

	<i>Mean</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Reporting 1 (self)	2.13	.31	1.61	3.00
Reporting 1 (others)	1.92	.24	1.47	2.42
Reporting 2 (self)	2.21	.34	1.78	3.00
Reporting 2 (others)	2.00	.26	1.59	2.50
Reporting 3 (self)	2.87	.39	2.28	3.67
Reporting 3 (others)	2.62	.31	2.00	3.21
Reporting 4 (self)	3.16	.42	2.48	3.82
Reporting 4 (others)	2.75	.37	2.07	3.67
Reporting 5 (self)	4.11	.30	3.44	4.54
Reporting 5 (others)	3.67	.27	3.20	4.24
Reporting 6 (self)	4.01	.29	3.28	4.46
Reporting 6 (others)	3.61	.28	3.27	4.29

As can be seen in the Table 16, there is considerable variation in responses to the scenarios across Philadelphia's Police Districts. This suggests that police districts are likely to have different cultures (on the ethical dimensions explored), and hence differing tolerances for the various behaviors described in the scenarios. This, in turn suggests that multiple police cultures are operating at the district level with Philadelphia.

It will be remembered that we previously uncovered variation in police officer complaints and disciplinary action when examining police districts. Moreover, we suggested that officers with several individual risk factors and assignment to police districts with particular social and population characteristics increased the likelihood of both complaints and disciplinary action. Given the variation in culture, as measured by these scenarios, we might also suggest that culture is likely intermediately related to officer complaints and discipline to the extent that cultures develop in districts, partly in response to the conditions within which the police may have to work.

Paying attention to the “ethical culture” of the district then may serve as a way of preventively monitoring for negative officer behaviors, and hence the need for discipline. Conversely, having some measurement of the ethical culture of a particular police district can provide a clearer understanding of social and peer support for negative (and positive) police behaviors.

Chapter 7

SUMMARY AND DISCUSSION

Linked with the growing trend toward use of EWS as a strategy for monitoring and responding to officer behavior, an important trend in criminological research may aid police departments in their quest to better monitor and predict police behavior. This trend involves the adoption of a risk factor prevention model. The use of risk factors can provide police administrators with a sense of the constellation of background and other characteristics that would predict membership in higher or lower risk groups.

In this research we took a linked-data, risk factor approach to the study of police integrity and accountability in the Philadelphia Police Department (PPD). We attempted to isolate risk factors for various police behaviors and outcomes using information readily available to the department. The goal was to explore the utility of such an approach in the monitoring of police officer behavior.

The study found that several background, academy performance, contextual, and attitudinal variables are useful in predicting outcomes indicative of possible problem behavior. The risk factor approach, which recognizes that no one factor or collection of factors will perfectly predict such outcomes, was shown to be useful in identifying groups of officers that are more likely to exhibit problem behavior and who may be more deserving of monitoring and assistance efforts. In a larger sense, the study demonstrates the utility of the linked-data approach, whereby available information about officers and officer performance is linked together such that available measures can quickly and easily receive consideration by agency monitoring processes.

Figure 1 presents a summary of those factors that predict the range of negative

outcomes previously discussed. An examination of Figure 1 reveals several interesting patterns of “failure”. First, it is clear that officer age impacts the likelihood of involvement in discipline and/or complaints, but not in all types of complaints. Youthful officers need oversight and direction, and programs designed to build “experience” into these officers while monitoring their behavior are clearly warranted given the pattern of the data. Perhaps a more interesting pattern revealed in Figure 1 is associated with past behavior of the applicant (prior to joining the PPD). Having traffic offenses, a suspended or revoked license, or prior contact with the criminal justice system are clearly predictors of subsequent problems among these groups of officers. And, as the number of these correlates increase, so to does the risk among those in these groups. Finally, the data summarized in Figure 1 suggest that paying attention to those in the police academy who perform poorly, either in classes or as the objects of academy discipline, also has some predictive value affording the chance for early intervention.

Figure 1: Summary of Predictors for EWS

Predictor Variable	Departmental Discipline	Physical Abuse Complaint	Verbal Abuse Complaint	Internal Investigation	Shooting Incidents	“Off” Duty Actions	Other Mis-conduct
<u>Demographics</u>							
> 26 years old	+	+		+		+	
Non-White	+	+			+		
Not Married	+						
Previously Rejected	+						
Behind on bills			+				
Under Court \$ Judgment					+	+	
Subject of Military Discipline	+	+			+	+	
Ever in Military		+			+	+	
Adopted	+						
Renter	+	+		+			+
Parent was a police officer					+		
Ever used drugs			+				
Suspended DR License		+	+	+	+		+
Traffic Tickets		+	+	+	+	+	
Ever arrested		+	+			+	+
Ever pay fine					+		+
Subject of private criminal complaint					+		+
Purchased firearms		+				+	
Applied for gun permit		+	+				
Polygraph 2 nd time		+					
<u>Academy Scores:</u>							
Poor LE Orientation	+	+					
Poor Human Relations	+						
Poor Handling Dangerous People	+						
Poor Emotional Health						+	
Poor Law		+	+				
Poor LE procedures		+					
Poor Investigations			+			+	
Academy Discipline	+			+		+	

Figure 2 presents the results for contextual variables as they influence or predict physical abuse and shooting incidents.

Figure 2: Contextual Predictors

Contextual Predictors	Physical Abuse Complaints	Shooting Incidents
High % residents Less than High School	+	
High # total Annual offenses	+	
High # total Annual arrests	+	
Predominantly Black	-	+
High % 18-24 yrs old	-	
High % renters	-	
High % female Head of household with children		+
High % unemployed Males		+
High % children In poverty		+
High % receiving Public assistance		-

Interestingly, the findings with respect to contextual influences on shooting complaints reveals a pattern that could be characterized as increased violence (shooting) in areas with high social disorganization. Officers working in districts where residents are predominately black, where the proportion of female heads of households with children is higher, where there is a higher proportion of unemployed males, and where there is a

higher proportion of children living in poverty as compared to other districts, were more likely to become involved in shooting incidents. Somewhat counter-intuitively, districts where there are a higher proportion of residents receiving public assistance were less likely associated with officers becoming involved in shooting incidents.

To the extent that contextual factors contribute to the prediction of police officer “failures”, the data suggest an additive effect of context taken together with demographic and/or academy performance. The group having the highest percentage of shooting incidents (13.5%) is the group having 4 or more background/academy factors and one or more of the geographic factors. The group having the smallest percentage of shooting incidents (0.6%) is the group having zero to one background/academy factors and none of the geographic factors.

In similar fashion the group having the highest percentage (26.2%) of physical abuse complaints is the group having 6 or more background/academy factors and one or more geographic factors. The groups having the smallest percentage of physical abuse complaints (7.1% and 7.2%) are the groups having zero to three background factors (geographic factors seem to make no difference here). Interestingly, the effect of geographic factors is most pronounced among the groups having 4 to 5 background academy factors (12.6% versus 22.9% respectively).

These findings suggest that contextual factors (community characteristics) generally increase the odds for having complaints in *addition to* individual background and academy factors. That is to say, officer risk factors are most always exacerbated by the places where high-risk officers might be assigned. In combination (background,

academy and community) these factors increase the likelihood of officer involvement in behaviors that result in shootings and physical abuse complaints.

The importance of these finding cannot be overstated. Generally speaking, these data suggest that high-risk officers placed in high-risk communities invariably result in increase shooting and complaints against officers about physical abuse. The intersection of police *assessment* and *assignment* systems affords police managers to at least lessen the likelihood of negative behavior on the part of high-risk officers by actively monitoring police work assignments.

As part of this research project, survey data were collected from a sample of Philadelphia police officers. Findings from the survey data suggest that indeed “district cultures” exist, and that they too exert influence on negative police behaviors and on subsequent complaints. Police supervisors and managers must constantly address the erosion of values and increases in cynicism in their respective commands. Often this is broadly referred to as “morale”. Here we see the idea of a link between the existence of a cynical or ethically ambiguous culture as supporting and nurturing negative police behaviors.

Paying attention to the “ethical culture” of the district then may serve as a way of preventively monitoring for negative officer behaviors, and hence the need for discipline. Conversely, having some measurement of the ethical culture of a particular police district can provide a clearer understanding of social and peer support for negative (and positive) police behaviors.

One consistent finding of this and other research is that past indicators of behavior

are excellent predictors of future behavior. This is evidenced by the utility of background and academy variables such as prior arrests, military discipline, and academy discipline. These kinds of risk factors can be directly addressed by police agencies concerned with minimizing future problems. By increasing the sensitivity of screening and selection processes, and by closely monitoring academy behavior, it may be possible to minimize future problem behavior. As another example, the finding that officer background and academy characteristics interact with work context variables implies that some adjustments in work context (i.e., by carefully assigning officers exhibiting a combination of certain factors) may result in a reduced probability of problem behavior.

Some factors may not be as amenable to intervention. For example, a finding that male officers are more likely to evidence certain outcomes is, by itself, of limited utility (agencies cannot easily instruct officers to be “less male”). Such indicators may be serving as proxy measures of some underlying element. Insofar as one is concerned with the constellation of factors, however, these types of indicators are still important to the overall risk approach.

In sum, a risk factor model may be useful but care must be exercised in its use and application. The possession of certain characteristics should not be viewed in a deterministic fashion, and interventions should not be designed at the individual level. Rather, it is best to think in terms of groups of officers exhibiting a collection of risk factors that might suggest additional attention. In terms of resource allocation, a risk model would direct a proportionately larger amount of available resources at groups exhibiting a greater likelihood of problems. Agencies concerned with the enhancement of

existing monitoring processes may benefit from such an approach.

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Appendix 1. Background/Academy Correlates (n = 1,935)

Variable	Description	Departmental Discipline		Physical Abuse Complaints		Verbal Abuse Complaints		Internal Investigations		Off Duty Actions	
		OR	95% CI	OR	95% CI	OR	95% CI	OR	95% CI	OR	95% CI
Demographics											
Age (pdq6a)	26 years or older Less than 26 years	1.00 1.48*	1.21, 1.81	1.00 1.43*	1.11, 1.83	1.00 0.96	0.71, 1.29	1.00 1.54*	1.19, 1.98	1.00 1.46*	1.08, 1.97
Race (x9a)	White Non-White	1.00 1.31*	1.07, 1.60	1.00 0.70*	0.55, 0.89	1.00 0.96	0.71, 1.30	1.00 0.98	0.76, 1.25	1.00 1.32	0.97, 1.79
Sex (sex)	Male Female	1.00 0.98	0.79, 1.21	1.00 0.29*	0.21, 0.41	1.00 0.75	0.53, 1.05	1.00 0.64*	0.48, 0.85	1.00 0.45*	0.31, 0.65
Marital Status (pdq52a)	Married Not Married	1.00 1.35*	1.05, 1.74	1.00 1.16	0.85, 1.57	1.00 1.05	0.72, 1.51	1.00 1.32	0.96, 1.82	1.00 0.97	0.68, 1.40
Years of Schooling (pdq31a)	13 years or more Less than 13 years	1.00 0.89	0.73, 1.09	1.00 0.88	0.69, 1.12	1.00 1.32	0.98, 1.79	1.00 0.99	0.77, 1.27	1.00 1.31	0.97, 1.76
Employment History											
Number of Jobs Held (pdq33_1)	Less than six jobs Six or more jobs	1.00 0.93	0.76, 1.14	1.00 0.89	0.69, 1.14	1.00 1.13	0.83, 1.53	1.00 0.91	0.71, 1.17	1.00 0.92	0.68, 1.24
Any Length of Unemployment (pdq33a)	No Yes	1.00 1.05	0.85, 1.30	1.00 0.76*	0.59, 0.98	1.00 0.87	0.64, 1.20	1.00 0.94	0.72, 1.23	1.00 0.98	0.72, 1.35
Ever Fired from Job (pdq34)	No Yes	1.00 1.08	0.87, 1.35	1.00 0.99	0.75, 1.30	1.00 1.05	0.75, 1.46	1.00 0.84	0.63, 1.11	1.00 1.35	0.98, 1.85
Prior Applications to PPD or Other LE Agency (pdq63)	No Yes	1.00 0.95	0.78, 1.15	1.00 0.97	0.76, 1.23	1.00 1.28	0.95, 1.74	1.00 1.10	0.86, 1.41	1.00 1.26	0.94, 1.70
Not Hired by Law Enforcement Agency (pdq64a)	One time or less More than once	1.00 0.90	0.71, 1.15	1.00 1.23	0.93, 1.64	1.00 1.02	0.71, 1.47	1.00 1.14	0.85, 1.54	1.00 1.02	0.71, 1.46
Ever a Member of PPD or Other LE Agency (pdq65)	No Yes	1.00 0.92	0.65, 1.29	1.00 1.03	0.68, 1.56	1.00 1.47	0.92, 2.33	1.00 0.69	0.43, 1.11	1.00 0.72	0.41, 1.27
Ever Applied for Jobs with City of Philadelphia (pdq67)	No Yes	1.00 1.18	0.97, 1.43	1.00 0.75*	0.58, 0.96	1.00 1.15	0.85, 1.55	1.00 0.81	0.63, 1.04	1.00 0.90	0.67, 1.22

Ever Not Hired by City of Philadelphia (pdq68a)	No Yes	1.00 1.29*	1.05, 1.57	1.00 0.76*	0.58, 0.98	1.00 1.13	0.83, 1.54	1.00 0.90	0.69, 1.16	1.00 0.99	0.73, 1.35
Financial Background											
Presently Behind on Bills (pdq42)	No Yes	1.00 1.05	0.85, 1.31	1.00 0.75*	0.56, 1.00	1.00 1.39*	1.00, 1.92	1.00 1.05	0.80, 1.39	1.00 1.14	0.82, 1.58
Loans/Debt > \$1,000 (pdq44)	No Yes	1.00 0.74*	0.60, 0.90	1.00 1.08	0.84, 1.41	1.00 1.07	0.78, 1.48	1.00 0.84	0.65, 1.09	1.00 0.80	0.59, 1.08
Total Consumer Debt > \$8,750 (Debt)	No Yes	1.00 0.75*	0.60, 0.95	1.00 1.15	0.90, 1.47	1.00 1.29	0.95, 1.74	1.00 0.89	0.70, 1.15	1.00 0.89	0.66, 1.20
Mortgage (Mortgage)	No Yes	1.00 0.67*	0.51, 0.89	1.00 0.68*	0.48, 0.97	1.00 1.02	0.69, 1.52	1.00 0.63*	0.44, 0.91	1.00 0.72	0.47, 1.11
Ever Filed for Bankruptcy (pdq46)	No Yes	1.00 1.06	0.57, 1.96	1.00 1.47	0.72, 3.01	1.00 1.14	0.44, 2.92	1.00 1.28	0.61, 2.67	1.00 1.75	0.81, 3.78
Under Court Order to Pay Judgements (pdq48)	No Yes	1.00 1.03	0.70, 1.51	1.00 1.12	0.71, 1.77	1.00 1.23	0.71, 2.12	1.00 0.93	0.57, 1.52	1.00 1.92*	1.20, 3.09
Military Experience											
Ever a Member of the Military (pdq50)	No Yes	1.00 1.25	0.97, 1.62	1.00 1.61*	1.19, 2.17	1.00 1.29	0.88, 1.88	1.00 1.10	0.80, 1.52	1.00 1.66*	1.17, 2.37
Ever a Military Disciplinary Offense (pdq51b)	No Yes	1.00 1.79*	1.05, 3.02	1.00 2.31*	1.29, 4.11	1.00 0.83	0.33, 2.12	1.00 1.24	0.63, 2.41	1.00 2.05*	1.05, 4.01
Family Background											
Has Children (pdq54a)	No Yes	1.00 0.86	.071, 1.05	1.00 0.73*	0.57, 0.93	1.00 1.10	0.81, 1.49	1.00 0.87	0.68, 1.12	1.00 0.89	0.66, 1.20
Has Adoptive Parents (Adopt)	No Yes	1.00 1.28*	1.00, 1.64	1.00 1.15	0.84, 1.57	1.00 0.96	0.64, 1.42	1.00 1.20	0.88, 1.63	1.00 1.26	0.88, 1.82
Has a Parent Who Is/Was in Law Enforcement (Legacy)	No Yes	1.00 1.04	0.76, 1.42	1.00 1.08	0.74, 1.59	1.00 0.79	0.47, 1.33	1.00 0.82	0.54, 1.25	1.00 1.17	0.75, 1.85
Number of Siblings (pdq57a)	Zero to three Four or more	1.00 0.97	0.78, 1.19	1.00 0.84	0.65, 1.09	1.00 0.88	0.63, 1.21	1.00 0.73*	0.56, 0.96	1.00 0.91	0.66, 1.24
Family Members Ever Arrested	No	1.00		1.00		1.00		1.00		1.00	

(pdq58a)	Yes	0.89	0.72, 1.09	1.15	0.89, 1.48	1.12	0.82, 1.53	1.00	0.77, 1.30	0.79	0.57, 1.09
Home Residence											
Number of Addresses, Past 10 Years (pdq7a)	Five or less More than five	1.00 0.99	0.76, 1.28	1.00 1.04	0.75, 1.44	1.00 1.39	0.96, 2.02	1.00 0.75	0.53, 1.07	1.00 1.04	0.71, 1.54
Currently renting (pdq40a)	No Yes	1.00 1.58*	1.23, 2.03	1.00 1.67*	1.21, 2.31	1.00 0.97	0.68, 1.39	1.00 1.51*	1.09, 2.10	1.00 1.43	0.97, 2.12
Motor Vehicle History											
PA License Ever Suspended or Revoked (pdq21a)	No Yes	1.00 0.95	0.74, 1.21	1.00 1.38*	1.03, 1.84	1.00 1.88*	1.34, 2.63	1.00 1.49*	1.11, 1.99	1.00 1.10	0.76, 1.58
License from Other State Suspended/Revoked (pdq21b)	No Yes	1.00 1.13	0.56, 2.31	1.00 1.22	0.52, 2.86	1.00 2.77*	1.23, 6.24	1.00 0.49	0.15, 1.60	1.00 1.78	0.73, 4.34
Ever in Motor Vehicle Accident (pdq27)	No Yes	1.00 0.87	0.70, 1.07	1.00 1.14	0.88, 1.48	1.00 1.39	0.99, 1.94	1.00 1.26	0.96, 1.66	1.00 1.14	0.82, 1.57
Traffic Tickets Past 5 Years (pdq29)	No Yes	1.00 1.02	0.83, 1.24	1.00 1.38*	1.08, 1.77	1.00 1.76*	1.30, 2.38	1.00 1.45*	1.13, 1.86	1.00 1.70*	1.26, 2.29
Application History											
Number of Applications (Files 1)	One application More than one	1.00 1.03	0.77, 1.39	1.00 0.74	0.50, 1.10	1.00 1.24	0.81, 1.91	1.00 1.24	0.87, 1.77	1.00 1.39	0.93, 2.09
Rank on Eligibility List (pdq2a)	Upper 75% Lower 25%	1.00 1.00	.080, 1.25	1.00 0.66*	0.49, 0.89	1.00 0.96	0.68, 1.35	1.00 1.22	0.93, 1.61	1.00 1.02	0.73, 1.44
Deceptive Polygraphs (Poly)	None One or more	1.00 1.00	0.81, 1.25	1.00 1.36*	1.05, 1.78	1.00 1.08	0.77, 1.50	1.00 0.90	0.68, 1.19	1.00 1.08	0.78, 1.49
Drug Use and Sales											
Ever Used Solvents or Inhalants (pdq69)	No Yes	1.00 1.10	0.70, 1.73	1.00 1.35	0.80, 2.28	1.00 1.79*	1.00, 3.20	1.00 1.30	0.76, 2.21	1.00 1.19	0.62, 2.27
Ever Sold/Given Solvents or Inhalants (pdq71)	No Yes	1.00 0.87	0.50, 1.53	1.00 1.09	0.54, 2.17	1.00 1.06	0.45, 2.49	1.00 1.04	0.53, 2.07	1.00 1.25	0.59, 2.66
Ever Sold/Given Prescription Drugs (pdq73)	No Yes	1.00 0.94	0.74, 1.21	1.00 1.06	0.78, 1.44	1.00 1.06	0.72, 1.55	1.00 0.94	0.69, 1.29	1.00 1.16	0.81, 1.66
Possessed Marijuana Last 6	No	1.00		1.00		1.00		1.00		1.00	

Months (pdq75)	Yes	0.70	0.34, 1.45	1.61	0.77, 3.39	2.65*	1.23, 5.69	1.11	0.49, 2.55	1.54	0.64, 3.72
Ever Purchased any Narcotic (pdq85a)	No Yes	1.00 1.03	0.78, 1.38	1.00 1.29	0.91, 1.82	1.00 1.13	0.73, 1.74	1.00 0.87	0.60, 1.27	1.00 0.79	0.49, 1.25
Ever Chipped-in to Purchase any Narcotic (pdq85b)	No Yes	1.00 1.05	0.64, 1.72	1.00 0.70	0.34, 1.42	1.00 1.12	0.53, 2.37	1.00 0.71	0.35, 1.45	1.00 0.99	0.47, 2.08
Ever Used any Narcotic (pdq86)	No Yes	1.00 0.99	0.81, 1.21	1.00 1.05	0.82, 1.34	1.00 1.14	0.84, 1.54	1.00 0.86	0.67, 1.10	1.00 0.88	0.66, 1.19
Ever Present when Other Used Narcotic (pdq88)	No Yes	1.00 0.90	0.68, 1.18	1.00 1.08	0.76, 1.54	1.00 1.28	0.81, 2.03	1.00 0.85	0.60, 1.20	1.00 0.93	0.61, 1.42
Ever Sold/Given any Narcotic (pdq90)	No Yes	1.00 0.71*	0.54, 0.93	1.00 1.06	0.77, 1.47	1.00 1.01	0.68, 1.51	1.00 0.74	0.52, 1.05	1.00 1.08	0.74, 1.57
Firearm Ownership											
Ever Owned or Purchased Firearms (pdq92)	No Yes	1.00 0.90	0.72, 1.14	1.00 1.63*	1.25, 2.12	1.00 1.32	0.94, 1.83	1.00 1.00	0.75, 1.35	1.00 1.49*	1.08, 2.05
Ever Obtained or Applied for Gun Permit (pdq94)	No Yes	1.00 0.74	0.54, 1.03	1.00 2.05*	1.46, 2.88	1.00 1.93*	1.28, 2.90	1.00 1.09	0.75, 1.60	1.00 1.33	0.87, 2.04
Criminal History / CJ Contact											
Ever Interviewed/Questioned by Law Enforcement (pdq61a)	No Yes	1.00 1.00	0.82, 1.22	1.00 1.03	0.80, 1.32	1.00 1.16	0.85, 1.57	1.00 1.14	0.89, 1.47	1.00 1.20	0.89, 1.62
Ever Placed Under Arrest (pdq61b)	No Yes	1.00 1.06	0.81, 1.39	1.00 1.38*	1.00, 1.89	1.00 1.66*	1.15, 2.41	1.00 1.36	0.99, 1.87	1.00 1.75*	1.22, 2.50
Ever Convicted of any Crime (pdq61c)	No Yes	1.00 0.99	0.61, 1.63	1.00 0.82	0.43, 1.59	1.00 1.55	0.80, 3.00	1.00 1.42	0.81, 2.49	1.00 1.14	0.56, 2.32
Ever Placed on Probation/Parole of any Kind (pdq61d)	No Yes	1.00 1.52	0.85, 2.72	1.00 1.44	0.72, 2.88	1.00 1.02	0.40, 2.61	1.00 1.75	0.90, 3.39	1.00 1.45	0.64, 3.27
Ever Had to Pay any Fine (pdq61e)	No Yes	1.00 0.83	0.68, 1.03	1.00 1.26	0.98, 1.63	1.00 0.92	0.67, 1.26	1.00 1.36	1.05, 1.75	1.00 1.26	0.93, 1.70
Ever Had to Pay any Court Cost (pdq61g)	No Yes	1.00 1.04	0.75, 1.45	1.00 1.19	0.80, 1.77	1.00 1.23	0.75, 1.99	1.00 1.58	1.09, 2.30	1.00 1.20	0.75, 1.92
Ever Had to Post any Bail	No	1.00		1.00		1.00		1.00		1.00	

(pdq61h)	Yes	0.92	0.48, 1.76	1.31	0.64, 2.72	1.31	0.54, 3.15	0.63	0.25, 1.61	0.39	0.09, 1.61
Ever a Defendant in a Criminal Case (pdq61j)	No Yes	1.00 1.10	0.73, 1.67	1.00 1.21	0.73, 1.99	1.00 0.91	0.46, 1.78	1.00 1.30	0.79, 2.14	1.00 1.42	0.81, 2.51
Ever Questioned/Interrogated re: Crime (pdq61k)	No Yes	1.00 1.02	0.81, 1.29	1.00 1.17	0.89, 1.55	1.00 1.15	0.82, 1.63	1.00 1.00	0.75, 1.34	1.00 1.14	0.81, 1.59
Ever Subpoenaed to Appear (pdq61l)	No Yes	1.00 0.90	0.72, 1.13	1.00 1.24	0.94, 1.62	1.00 1.18	0.85, 1.65	1.00 1.00	0.75, 1.33	1.00 1.03	0.74, 1.45
Police Ever at Residence to Investigate Crime (pdq61n)	No Yes	1.00 1.06	0.83, 1.35	1.00 0.88	0.64, 1.20	1.00 0.84	0.57, 1.25	1.00 1.02	0.75, 1.38	1.00 0.86	0.59, 1.26
Ever the Subject of a PFA Order (pdq61o)	No Yes	1.00 0.96	0.54, 1.69	1.00 1.13	0.57, 2.22	1.00 0.64	0.23, 1.79	1.00 0.71	0.32, 1.58	1.00 0.99	0.42, 2.33
Ever the Subject of a Private Criminal Complaint (pdq61p)	No Yes	1.00 1.07	0.55, 2.09	1.00 1.97	0.96, 4.03	1.00 1.01	0.35, 2.87	1.00 1.81	0.87, 3.74	1.00 0.70	0.21, 2.28
Ever a Character Witness in a Criminal Proceeding (pdq61q)	No Yes	1.00 1.15	0.72, 1.85	1.00 1.09	0.61, 1.95	1.00 0.82	0.37, 1.82	1.00 0.92	0.49, 1.73	1.00 1.24	0.63, 2.44
Ever Investigated for Child Abuse/Neglect (pdq61r)	No Yes	1.00 0.94	0.50, 1.79	1.00 0.22	0.05, 0.89	1.00 1.94	0.89, 4.24	1.00 0.49	0.18, 1.39	1.00 0.19	0.03, 1.35
Academy Performance											
Law Enforcement Orientation (MPO) (x11a)	Above mean-1SD At or Below mean-1SD	1.00 1.42*	1.11, 1.82	1.00 0.72*	0.51, 0.99	1.00 0.87	0.59, 1.29	1.00 1.14	0.83, 1.56	1.00 1.25	0.87, 1.81
Emotional Health (x13a)	Above mean-1SD At or Below mean-1SD	1.00 1.09	0.86, 1.38	1.00 0.83	0.61, 1.13	1.00 1.07	0.75, 1.54	1.00 1.23	0.92, 1.65	1.00 1.41*	1.00, 1.98
Human Relations (x14a)	Above mean-1SD At or Below mean-1SD	1.00 1.31*	1.02, 1.68	1.00 0.81	0.60, 1.11	1.00 1.04	0.72, 1.51	1.00 1.23	0.90, 1.67	1.00 1.23	0.85, 1.78
Law, Part 1 (x16_1)	Above mean-1SD At or Below mean-1SD	1.00 1.13	0.85, 1.51	1.00 0.76	0.52, 1.12	1.00 0.78	0.48, 1.26	1.00 1.09	0.76, 1.57	1.00 1.05	0.68, 1.62
Law, Part 2 (x17_1)	Above mean-1SD At or Below mean-1SD	1.00 1.00	0.77, 1.30	1.00 0.83	0.60, 1.16	1.00 0.68	0.44, 1.05	1.00 0.79	0.56, 1.12	1.00 0.79	0.52, 1.20
Law, Part 3 (x18a)	Above mean-1SD At or Below mean-1SD	1.00 0.99	0.75, 1.29	1.00 0.57*	0.39, 0.84	1.00 0.36*	0.20, 0.64	1.00 0.85	0.60, 1.22	1.00 1.21	0.82, 1.78
Law, Part 4	Above mean-1SD	1.00		1.00		1.00		1.00		1.00	

(x19a)	At or Below mean-1SD	1.18	0.91, 1.53	0.81	0.58, 1.15	0.87	0.57, 1.33	1.15	0.83, 1.60	1.37	0.94, 2.00
Motor Vehicle Code (x20_1)	Above mean-1SD	1.00		1.00		1.00		1.00		1.00	
	At or Below mean-1SD	1.27	0.95, 1.70	0.84	0.57, 1.23	0.82	0.51, 1.33	1.37	0.97, 1.94	1.10	0.71, 1.70
Patrol Procedures and Operations (x21_1)	Above mean-1SD	1.00		1.00		1.00		1.00		1.00	
	At or Below mean-1SD	1.09	0.83, 1.44	0.55*	0.36, 0.82	0.93	0.60, 1.43	0.84	0.58, 1.21	0.78	0.49, 1.22
Investigations (x22_1)	Above mean-1SD	1.00		1.00		1.00		1.00		1.00	
	At or Below mean-1SD	1.25	0.96, 1.63	0.79	0.55, 1.13	0.49*	0.29, 0.83	1.24	0.89, 1.72	1.54*	1.06, 2.24
Communications (x23a)	Above mean-1SD	1.00		1.00		1.00		1.00		1.00	
	At or Below mean-1SD	1.16	0.89, 1.53	0.94	0.67, 1.32	0.78	0.50, 1.21	1.20	0.86, 1.68	1.35	0.91, 1.99
Handling Violent/Dangerous People (x24a)	Above mean-1SD	1.00		1.00		1.00		1.00		1.00	
	At or Below mean-1SD	1.44*	1.14, 1.83	0.91	0.67, 1.23	0.74	0.50, 1.11	0.90	0.66, 1.23	1.19	0.83, 1.71
Custody (x26a)	Above mean-1SD	1.00		1.00		1.00		1.00		1.00	
	At or Below mean-1SD	1.20	0.96, 1.51	1.10	0.83, 1.45	0.95	0.66, 1.35	1.18	0.89, 1.56	0.95	0.67, 1.36
First Aid (x28_1)	Above mean-1SD	1.00		1.00		1.00		1.00		1.00	
	At or Below mean-1SD	1.19	0.87, 1.64	0.71	0.45, 1.12	0.99	0.59, 1.66	1.33	0.91, 1.96	1.29	0.82, 2.03
Firearms (Final Exam) (x33a)	Above mean-1SD	1.00		1.00		1.00		1.00		1.00	
	At or Below mean-1SD	1.18	0.89, 1.56	0.89	0.62, 1.27	0.72	0.44, 1.16	1.15	0.81, 1.64	0.93	0.60, 1.45
Academy Disciplinary Actions (x43a)	No	1.00		1.00		1.00		1.00		1.00	
	Yes	1.68*	1.37, 2.06	1.07	0.83, 1.37	1.64*	1.20, 2.23	1.30*	1.00, 1.67	1.41*	1.04, 1.91

Appendix 1 (Continued)

Variable	Description	Police Shootings		"Other" Misconduct	
		OR	95% CI	OR	95% CI
Demographics					
Age (pdq6a)	26 years or older	1.00		1.00	
	Less than 26 years	1.30	0.87, 1.94	1.25	0.90, 1.73
Race (x9a)	White	1.00		1.00	
	Non-White	1.51*	1.00, 2.28	0.81	0.59, 1.11
Sex	Male	1.00		1.00	

(sex)	Female	0.19*	0.09, 0.37	0.62*	0.43, 0.91
Marital Status (pdq52a)	Married	1.00		1.00	
	Not Married	1.25	0.75, 2.09	1.17	0.78, 1.75
Years of Schooling (pdq31a)	13 years or more	1.00		1.00	
	Less than 13 years	1.03	0.69, 1.53	1.01	0.73, 1.39
Employment History					
Number of Jobs Held (pdq33_1)	Less than six jobs	1.00		1.00	
	Six or more jobs	1.17	0.78, 1.74	1.10	0.79, 1.52
Any Length of Unemployment (pdq33a)	No	1.00		1.00	
	Yes	1.53	0.96, 2.42	0.99	0.70, 1.39
Ever Fired from Job (pdq34)	No	1.00		1.00	
	Yes	1.12	0.73, 1.73	1.19	0.84, 1.69
Prior Applications to PPD or Other LE Agency (pdq63)	No	1.00		1.00	
	Yes	1.40	0.94, 2.10	1.04	0.75, 1.44
Not Hired by Law Enforcement Agency (pdq64a)	One time or less	1.00		1.00	
	More than once	1.22	0.77, 1.93	1.35	0.94, 1.95
Ever a Member of PPD or Other LE Agency (pdq65)	No	1.00		1.00	
	Yes	0.67	0.31, 1.48	1.12	0.66, 1.90
Ever Applied for Jobs with City of Philadelphia (pdq67)	No	1.00		1.00	
	Yes	1.15	0.77, 1.70	1.14	0.83, 1.57
Ever Not Hired by City of Philadelphia (pdq68a)	No	1.00		1.00	
	Yes	1.10	0.73, 1.64	1.07	0.77, 1.48
Financial Background					
Presently Behind on Bills (pdq42)	No	1.00		1.00	
	Yes	0.94	0.60, 1.47	0.76	0.52, 1.11
Loans/Debt > \$1,000 (pdq44)	No	1.00		1.00	
	Yes	0.91	0.60, 1.37	0.79	0.57, 1.10
Total Consumer Debt > \$8,750 (Debt)	No	1.00		1.00	
	Yes	1.12	0.76, 1.67	0.74	0.54, 1.02
Mortgage (Mortgage)	No	1.00		1.00	
	Yes	0.65	0.36, 1.19	0.58*	0.35, 0.96

Ever Filed for Bankruptcy (pdq46)	No Yes	1.00 0.80	0.19, 3.34	1.00 0.75	0.23, 2.44
Under Court Order to Pay Judgements (pdq48)	No Yes	1.00 2.57*	1.46, 4.53	1.00 1.02	0.55, 1.90
Military Experience					
Ever a Member of the Military (pdq50)	No Yes	1.00 2.07*	1.33, 3.23	1.00 1.41	0.95, 2.09
Ever a Military Disciplinary Offense (pdq51b)	No Yes	1.00 2.45*	1.08, 5.54	1.00 2.25*	1.11, 4.55
Family Background					
Has Children (pdq54a)	No Yes	1.00 0.85	0.57, 1.27	1.00 1.03	0.74, 1.41
Has Adoptive Parents (Adopt)	No Yes	1.00 0.82	0.47, 1.42	1.00 1.36	0.92, 2.01
Has a Parent Who Is/Was in Law Enforcement (Legacy)	No Yes	1.00 1.79*	1.05, 3.05	1.00 1.37	0.86, 2.20
Number of Siblings (pdq57a)	Zero to three Four or more	1.00 1.04	0.69, 1.58	1.00 0.91	0.64, 1.27
Family Members Ever Arrested (pdq58a)	No Yes	1.00 0.62*	0.39, 0.97	1.00 0.92	0.66, 1.29
Home Residence					
Number of Addresses, Past 10 Years (pdq7a)	Five or less More than five	1.00 1.09	0.65, 1.82	1.00 1.09	0.72, 1.65
Currently renting (pdq40a)	No Yes	1.00 1.53	0.90, 2.61	1.00 1.56*	1.01, 2.39
Motor Vehicle History					
PA License Ever Suspended or Revoked (pdq21a)	No Yes	1.00 1.79*	1.15, 2.77	1.00 1.59*	1.10, 2.29
License from Other State Suspended/Revoked (pdq21b)	No Yes	1.00 1.03	0.24, 4.36	1.00 2.20	0.89, 5.40

Ever in Motor Vehicle Accident (pdq27)	No Yes	1.00 1.17	0.76, 1.80	1.00 1.33	0.93, 1.90
Traffic Tickets Past 5 Years (pdq29)	No Yes	1.00 1.84*	1.24, 2.74	1.00 1.35	0.98, 1.87
Application History					
Number of Applications (Files1)	One application More than one	1.00 1.29	0.74, 2.25	1.00 0.96	0.59, 1.57
Rank on Eligibility List (pdq2a)	Upper 75% Lower 25%	1.00 1.03	0.65, 1.61	1.00 0.91	0.63, 1.32
Deceptive Polygraphs (Poly)	None One or more	1.00 1.04	0.66, 1.61	1.00 1.26	0.89, 1.79
Drug Use and Sales					
Ever Used Solvents or Inhalants (pdq69)	No Yes	1.00 1.19	0.50, 2.79	1.00 0.71	0.30, 1.65
Ever Sold/Given Solvents or Inhalants (pdq71)	No Yes	1.00 1.28	0.45, 3.62	1.00 0.37	0.09, 1.53
Ever Sold/Given Prescription Drugs (pdq73)	No Yes	1.00 0.74	0.43, 1.29	1.00 1.05	0.70, 1.57
Possessed Marijuana Last 6 Months (pdq75)	No Yes	1.00 1.91	0.66, 5.48	1.00 0.82	0.25, 2.71
Ever Purchased any Narcotic (pdq85a)	No Yes	1.00 1.43	0.84, 2.43	1.00 1.22	0.77, 1.91
Ever Chipped-in to Purchase any Narcotic (pdq85b)	No Yes	1.00 1.88	0.84, 4.23	1.00 0.93	0.40, 2.19
Ever Used any Narcotic (pdq86)	No Yes	1.00 0.94	0.63, 1.39	1.00 1.18	0.86, 1.63
Ever Present when Other Used Narcotic (pdq88)	No Yes	1.00 1.11	0.62, 1.98	1.00 1.35	0.82, 2.23
Ever Sold/Given any Narcotic (pdq90)	No Yes	1.00 1.31	0.79, 2.15	1.00 1.33	0.89, 1.99
Firearm Ownership					

Ever Owned or Purchased Firearms (pdq92)	No Yes	1.00 1.37	0.89, 2.11	1.00 1.21	0.84, 1.72
Ever Obtained or Applied for Gun Permit (pdq94)	No Yes	1.00 1.16	0.63, 2.12	1.00 1.20	0.74, 1.95
Criminal History / CJ Contact					
Ever Interviewed/Questioned by Law Enforcement (pdq61a)	No Yes	1.00 1.03	0.69, 1.54	1.00 1.58*	1.14, 2.21
Ever Placed Under Arrest (pdq61b)	No Yes	1.00 1.71*	1.06, 2.75	1.00 1.76*	1.19, 2.60
Ever Convicted of any Crime (pdq61c)	No Yes	1.00 1.50	0.63, 3.54	1.00 1.43	0.70, 2.92
Ever Placed on Probation/ Parole of any Kind (pdq61d)	No Yes	1.00 0.72	0.17, 3.03	1.00 1.78	0.78, 4.04
Ever Had to Pay any Fine (pdq61e)	No Yes	1.00 1.52*	1.02, 2.26	1.00 1.52*	1.10, 2.10
Ever Had to Pay any Court Cost (pdq61g)	No Yes	1.00 0.79	0.38, 1.66	1.00 1.55	0.96, 2.51
Ever Had to Post any Bail (pdq61h)	No Yes	1.00 0.75	0.18, 3.15	1.00 1.24	0.48, 3.21
Ever a Defendant in a Criminal Case (pdq61j)	No Yes	1.00 1.84	0.92, 3.64	1.00 2.24*	1.31, 3.83
Ever Questioned/Interrogated re: Crime (pdq61k)	No Yes	1.00 1.17	0.75, 1.83	1.00 1.96*	1.40, 2.76
Ever Subpoenaed to Appear (pdq61l)	No Yes	1.00 1.07	0.68, 1.67	1.00 1.28	0.90, 1.82
Police Ever at Residence to Investigate Crime (pdq61n)	No Yes	1.00 0.64	0.37, 1.12	1.00 0.77	0.50, 1.18
Ever the Subject of a PFA Order (pdq61o)	No Yes	1.00 0.29	0.04, 2.11	1.00 0.75	0.27, 2.11
Ever the Subject of a Private	No	1.00		1.00	

Criminal Complaint (pdq61p)	Yes	3.21*	1.31, 7.86	1.54	0.59, 4.01
Ever a Character Witness in a Criminal Proceeding (pdq61g)	No	1.00		1.00	
	Yes	1.95	0.91, 4.17	1.49	0.75, 2.96
Ever Investigated for Child Abuse/Neglect (pdq61r)	No	1.00		1.00	
	Yes	1.66	0.58, 4.74	1.00	0.35, 2.82
Academy Performance					
Law Enforcement Orientation (MPO) (x11a)	Above mean-1SD	1.00		1.00	
	At or Below mean-1SD	1.25	0.78, 2.02	0.78	0.50, 1.20
Emotional Health (x13a)	Above mean-1SD	1.00		1.00	
	At or Below mean-1SD	1.16	0.73, 1.85	1.32	0.91, 1.91
Human Relations (x14a)	Above mean-1SD	1.00		1.00	
	At or Below mean-1SD	1.11	0.69, 1.80	0.97	0.65, 1.45
Law, Part 1 (x16_1)	Above mean-1SD	1.00		1.00	
	At or Below mean-1SD	0.71	0.36, 1.38	0.87	0.53, 1.43
Law, Part 2 (x17_1)	Above mean-1SD	1.00		1.00	
	At or Below mean-1SD	0.57	0.31, 1.05	0.59*	0.36, 0.96
Law, Part 3 (x18a)	Above mean-1SD	1.00		1.00	
	At or Below mean-1SD	0.68	0.37, 1.26	1.05	0.68, 1.62
Law, Part 4 (x19a)	Above mean-1SD	1.00		1.00	
	At or Below mean-1SD	1.08	0.64, 1.83	0.91	0.58, 1.42
Motor Vehicle Code (x20_1)	Above mean-1SD	1.00		1.00	
	At or Below mean-1SD	1.46	0.86, 2.48	0.99	0.61, 1.60
Patrol Procedures and Operations (x21_1)	Above mean-1SD	1.00		1.00	
	At or Below mean-1SD	0.91	0.51, 1.63	0.85	0.52, 1.37
Investigations (x22_1)	Above mean-1SD	1.00		1.00	
	At or Below mean-1SD	1.47	0.89, 2.41	1.29	0.85, 1.96
Communications (x23a)	Above mean-1SD	1.00		1.00	
	At or Below mean-1SD	1.21	0.72, 2.03	0.94	0.60, 1.48
Handling Violent/Dangerous People (x24a)	Above mean-1SD	1.00		1.00	
	At or Below mean-1SD	1.36	0.86, 2.15	1.24	0.85, 1.81
Custody	Above mean-1SD	1.00		1.00	

(x26a)	At or Below mean-1SD	1.09	0.69, 1.71	0.95	0.65, 1.38
First Aid (x28_1)	Above mean-1SD	1.00		1.00	
	At or Below mean-1SD	1.65	0.92, 2.93	1.25	0.75, 2.09
Firearms (Final Exam) (x33a)	Above mean-1SD	1.00		1.00	
	At or Below mean-1SD	1.19	0.69, 2.05	0.66	0.39, 1.12
Academy Disciplinary Actions (x43a)	No	1.00		1.00	
	Yes	1.05	0.70, 1.58	0.98	0.70, 1.37

Appendix 2. Contextual Correlates (n = 1,935)

Variable	Description	Departmental Discipline		Physical Abuse Complaints		Verbal Abuse Complaints		Internal Investigations		Off Duty Actions	
		OR	95% CI	OR	95% CI	OR	95% CI	OR	95% CI	OR	95% CI
Area (square miles) (area1)	Below upper quartile Upper quartile	1.00 1.26*	1.01, 1.58	1.00 0.89	0.67, 1.19	1.00 1.39*	1.00, 1.93	1.00 1.08	0.81, 1.43	1.00 0.92	0.65, 1.30
Population Density (popdens1)	Below upper quartile Upper quartile	1.00 0.97	0.77, 1.20	1.00 0.77	0.58, 1.03	1.00 0.83	0.58, 1.17	1.00 0.80	0.60, 1.07	1.00 1.24	0.90, 1.72
Percent Black (pblack1)	Below upper quartile Upper quartile	1.00 1.16	0.93, 1.44	1.00 0.74*	0.56, 0.98	1.00 1.14	0.82, 1.58	1.00 1.07	0.82, 1.41	1.00 0.89	0.63, 1.25
Percent Age 18-24 (p1824_1)	Below upper quartile Upper quartile	1.00 1.00	0.81, 1.25	1.00 0.69*	0.52, 0.92	1.00 0.84	0.60, 1.19	1.00 0.89	0.67, 1.17	1.00 1.21	0.88, 1.67
Percent Welfare (pwelf_1)	Below upper quartile Upper quartile	1.00 1.03	0.82, 1.29	1.00 0.90	0.67, 1.19	1.00 0.83	0.58, 1.19	1.00 0.80	0.59, 1.07	1.00 1.07	0.76, 1.49
Percent Vacant (pvacant1)	Below upper quartile Upper quartile	1.00 0.89	0.72, 1.11	1.00 0.79	0.60, 1.04	1.00 0.82	0.58, 1.15	1.00 0.80	0.61, 1.07	1.00 1.08	0.78, 1.49
Percent Renting (prent1)	Below upper quartile Upper quartile	1.00 1.14	0.92, 1.41	1.00 0.71*	0.54, 0.94	1.00 1.06	0.76, 1.48	1.00 0.95	0.72, 1.26	1.00 1.20	0.87, 1.65
Percent Fem HH w/Children (pfhh1)	Below upper quartile Upper quartile	1.00 0.94	0.76, 1.17	1.00 1.14	0.88, 1.49	1.00 1.03	0.74, 1.44	1.00 1.13	0.87, 1.48	1.00 1.03	0.74, 1.42
Percent w/o HS Education (pnohs1)	Below upper quartile Upper quartile	1.00 1.02	0.82, 1.27	1.00 1.71*	1.32, 2.21	1.00 1.01	0.73, 1.41	1.00 0.90	0.68, 1.19	1.00 1.16	0.84, 1.59

Percent Unemployed Males (pummf)	Below upper quartile Upper quartile	1.00 0.86	0.69, 1.07	1.00 1.14	0.87, 1.48	1.00 0.91	0.65, 1.27	1.00 1.05	0.80, 1.37	1.00 1.10	0.80, 1.52
Percent Child Poverty (pchpv1)	Below upper quartile Upper quartile	1.00 0.93	0.75, 1.16	1.00 1.12	0.86, 1.46	1.00 0.96	0.69, 1.35	1.00 1.06	0.81, 1.39	1.00 1.13	0.82, 1.55
Percent Adult Poverty (padpv1)	Below upper quartile Upper quartile	1.00 0.84	0.68, 1.03	1.00 1.04	0.81, 1.34	1.00 0.95	0.69, 1.29	1.00 0.90	0.70, 1.16	1.00 1.28	0.94, 1.72
Total Offenses, 1998 (offtot1)	Below upper quartile Upper quartile	1.00 1.11	0.89, 1.38	1.00 1.97*	1.52, 2.56	1.00 1.04	0.74, 1.47	1.00 0.83	0.62, 1.11	1.00 1.37	0.99, 1.88
Total Arrests, 1998 (arrtot1)	Below upper quartile Upper quartile	1.00 1.04	0.83, 1.30	1.00 1.88*	1.45, 2.43	1.00 0.82	0.57, 1.17	1.00 0.84	0.63, 1.12	1.00 1.35	0.98, 1.86

Appendix 2 (Continued)

Variable	Description	Police Shootings		"Other" Misconduct	
		OR	95% CI	OR	95% CI
Area (square miles) (areal)	Below upper quartile Upper quartile	1.00 1.07	0.68, 1.68	1.00 1.19	0.83, 1.71
Population Density (popdens1)	Below upper quartile Upper quartile	1.00 1.00	0.64, 1.55	1.00 0.96	0.67, 1.38
Percent Black (pblack1)	Below upper quartile Upper quartile	1.00 2.32*	1.55, 3.46	1.00 1.12	0.79, 1.59
Percent Age 18-24 (p1824_1)	Below upper quartile Upper quartile	1.00 1.25	0.82, 1.90	1.00 0.89	0.62, 1.28
Percent Welfare (pwelf_1)	Below upper quartile Upper quartile	1.00 0.26*	0.13, 0.52	1.00 0.79	0.54, 1.17
Percent Vacant (pvacant1)	Below upper quartile Upper quartile	1.00 0.95	0.61, 1.47	1.00 0.90	0.63, 1.28
Percent Renting (prent1)	Below upper quartile Upper quartile	1.00 1.18	0.77, 1.81	1.00 0.86	0.60, 1.24
Percent Fem HH w/Children (pfhh1)	Below upper quartile Upper quartile	1.00 1.95*	1.31, 2.91	1.00 1.16	0.82, 1.63

Percent w/o HS Education (pnohs1)	Below upper quartile Upper quartile	1.00 0.96	0.61, 1.49	1.00 1.31	0.93, 1.84
Percent Unemployed Males (punml1)	Below upper quartile Upper quartile	1.00 1.89*	1.26, 2.83	1.00 1.07	0.75, 1.51
Percent Child Poverty (pchpv1)	Below upper quartile Upper quartile	1.00 1.51*	1.00, 2.27	1.00 1.21	0.86, 1.71
Percent Adult Poverty (padpv1)	Below upper quartile Upper quartile	1.00 1.34	0.90, 2.00	1.00 0.93	0.67, 1.30
Total Offenses, 1998 (offtot1)	Below upper quartile Upper quartile	1.00 0.70	0.43, 1.14	1.00 1.26	0.88, 1.79
Total Arrests, 1998 (arrtot1)	Below upper quartile Upper quartile	1.00 0.89	0.56, 1.42	1.00 0.97	0.67, 1.40