FINAL REPORT

IMPROVING EVIDENCE COLLECTION THROUGH POLICE-PROSECUTOR COORDINATION

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December 31, 1987

Submitted to the National Institute of Justice in partial fulfillment of Contract 84-IJ-CX-0075.

ABSTRACT

This experimental study examined the effectiveness of an intervention designed to reduce felony case attrition due to evidentiary and probable cause problems in Baltimore County, Maryland. It was hypothesized that an increase in the organizational value placed on convictions and improved evidence collection skills would lead to fewer case dismissals at initial prosecutorial review and fewer non-convictions due to evidentiary problems. These changes were to result from several interventions: increased supervisory review of felony investigation reports, use of felony investigation and post-arrest guides, and monthly written feedback reports that indicated charging decisions and final dispositions and the prosecutor's reasons for them. Although the first two interventions were implemented as planned, only interim feedback reports in an unplanned format were produced and distributed. Data were collected on the evidence available, prosecutorial charging decision and case disposition in all felony arrests involving patrol officers on two experimental and two control shifts in five precincts during an eight-month pretest and an eight-month experimental period.

No experimental effect was found, but the availability of several types of evidence increased for both experimental and control cases during the experimental period. There was also a decrease in the proportion of both experimental and control felony cases reduced from felonies to misdemeanors at initial prosecutorial review but no significant change in early dismissal rates during the experimental period. At final disposition, however, there was an increase in convictions on reduced charges for both experimental and control cases. These offsetting changes led to no net change in conviction rates for either group nor any difference between their attrition rates during the experimental period. There was no significant difference between Experimental and Control cases in the reasons for non-convictions.

The largely negative findings are attributable to a variety of factors: shortcomings in the implementation of feedback reports; limited room for change in the study site, where the police already conducted good investigations, police-prosecutor communication was already satisfactory, and where only a small proportion of the non-convictions attributable to evidentiary weaknesses could be rectified by the police; and a change model that failed to anticipate the criminal justice system's adaptive responses to an increased caseload.

ACKNOWLEDGEMENTS

This project was supported by Grant Number 84-IJ-CX-0075, awarded to the Police Foundation by the National Institute of Justice, U.S. Department of Justice under the Justice System Improvement Act of 1979 as amended. Points of view and opinions stated in this document are those of the Project Director and do not necessarily represent the official position of the U.S. Department of Justice or the Police Foundation.

Many persons worked on various phases of this study. The contributions of Police Foundation data collectors and coders Gwen Rones, P. Robert Thompson, Cynthia Boiter, Terry Lewis, Lore Jean Rutz, Angel Hernandez, and David Monahan are gratefully acknowledged, as are those of Lita Kirschbrown and Wanda Roberts who were in charge of report production.

The study was initiated under the direction of Lawrence W. Sherman, former Vice President for Research of the Police Foundation, and completed under the direction of Brian Forst, Director of Research. Their contributions are greatly appreciated.

Joan Jacoby, Bill Spelman, and Wes Skogan each provided collegial encouragement and good advice at various stages of the study.

The project also has benefitted from the advice and encouragement of Bernard Auchter, the study's grant monitor, and Professors Floyd Feeney of the University of California, Davis and Albert J. Reiss, Jr. of Yale Universsity who reviewed an earlier draft and provided useful comments.

The study could not have been carried out without the support of the Baltimore County Police Department, State's Attorney's Office, and Criminal Justice Coordinator and her staff. In particular we wish to thank Chief Cornelius Behan and staff members Major Michael Gambrill, Captain Thomas Burke, Captain William Kalista, Detective Richard Walton, Officer Michael Lynch, the experimental lieutenants and acting lieutenants, and the department's Records Division for tirelessly photocopying thousands of pages of reports; State's Attorney Sandra O'Connor, Assistant State's Attorney Thomas Basham and the secretarial staff of that office; and former Criminal Justice Coordinator Constance Caplan and staff members Donna Sharp and Greg Harrer.

TABLE OF CONTENTS

Table of Contents continued

LIST OF TABLES AND FIGURES

List of Tables and Figures (cont.)

RESEARCH IN BRIEF

IMPROVING EVIDENCE COLLECTION THROUGH POLICE-PROSECUTOR COORDINATION

Many studies have found that about half of all felony arrests do not result in conviction. It has been suggested that this high attrition rate can be reduced by improved communication between police and prosecutors, particularly about what evidence is needed to win cases. This report details a field experiment designed to improve such communication and the evidence collected by police in order to reduce case attrition in Baltimore County, Maryland.

Research Site

The 1400-officer Baltimore County police make virtually all arrests in that jurisdiction. Department policy mandates that patrol officers are responsible for follow-up of initial investigations in which there are substantial leads or a named suspect. Detectives become involved in serious felony investigations only at the invitation of the investigating officer (except for homicides and sex crime investigations) or after an investigation is suspended in the precinct.

When the police make an arrest, the arrestee is taken within 24 hours before a commissioner of the District Court who sets bail, reviews the charges for probable cause, issues a charging document, and informs the arrestee of his or her right to a

preliminary hearing. Thus all arrest charges are filed in the District Court by the police without prior prosecutorial screening.

Within a few days the legal office of the police department makes copies of the investigation and arrest reports and the arrestee's criminal history for the State's Attorney's office and selects a principal investigating officer (PIO) who subsequently meets with a prosecutor to discuss the case.

The State's Attorney's office employs 35 assistants, most of whom are assigned to either the District Court or Circuit Court divisions. There is also a three-person felony complaint unit whose task is to review the police charges and evidence available in all serious felony cases and weed out the weak cases.

According to Maryland law, all persons charged with a felony are entitled to a probable cause (or preliminary) hearing which may be before a grand jury or a judge. In that state District Courts are responsible for disposition of both misdemeanors[1] and less serious felonies[2] as well as initial filings and preliminary hearings for serious felonies. The Circuit Court is responsible for the disposition of serious felony cases transferred to it by a grand jury indictment or a criminal information issued by a

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[1] Many offenses considered felonies in other states are misdemeanors in Maryland. These include attempted robbery, breaking and entering with the intent to steal, fraud, and most firearms offenses.

[2] District and Circuit Courts have concurrent jurisdiction over grand larceny and auto theft cases. District Court usually handles these unless they involve unusually large thefts or a career criminal.

judge. The felonies disposed by it, therefore, are a more serious subset of all crimes typically handled by the upper courts in other jurisdictions.

The felony complaint prosecutor may seek to prosecute on the same or lesser charges in Circuit Court, reduce the charges to misdemeanor offenses and prosecute in the District Court, or recommend an outright dismissal. The felony complaint unit's initial screening decision is based, in part, on discussion at a face-to-face meeting between the designated PIO and one of the unit's prosecutors. At this meeting the police officer adds details about the offense and offender and the prosecutor seeks to assess the strength of the evidence available.

Both observation and discussions with police and prosecutors in Baltimore County indicated that at the time the study was initiated both formal and informal relations between the two were quite good. The Chief and State's Attorney meet regularly, and for at least six years the felony complaint unit's procedures have involved police officers in the discussion of cases with prosecutors prior to the latter's making their charging decision. Prosecutors consult with and inform police officers about plea bargains and case dispositions although this occurs less routinely than discussion at felony complaint.

The Research Model

To reduce felony case attrition we adopted a change model based on previous studies of case attrition (Boland, 1986; Brosi, 1979; Feeney et al., 1983; Forst et al., 1977; Forst et al.,

1982; McElroy et al., 1981; Myers and Hagan, 1979; Vera, 1977), police-prosecutor relations (Feeney et al., 1983; Jacoby, 1979; McDonald et al., 1982), and organizational change (Deal and Kennedy, 1982; Ilgen et al., 1979; Kanter, 1983; Nadler et al., 1981), as well as the Police Foundation's experience in modifying police behavior in a variety of experiments. These studies found that the basic determinant of case filing and conviction is the quality of evidence the police provide the prosecutor. That depends, in large part, on the quality of the police investigation. When police collect physical evidence, identify two or more witnesses, and make an arrest shortly after the occurrence of a crime the chances of a conviction increase (Forst et al., 1977). Often, however, the police are not aware of the evidentiary needs of prosecutors or lack incentives to collect data once an arrest is made. The evidentiary sources of attrition can be reduced, therefore, by improved communication between police and prosecutors about the latter's evidentiary needs and through organizational incentives to motivate police to make arrests that result in convictions. At the same time prosecutors must be willing to provide feedback to police and take more risks in screening cases.

This change model suggested that to reduce case attrition, three elements needed to be addressed: officers' knowledge about what is needed to win cases, their skills in collecting better evidence, and their incentives for doing so. Evidence collection skills were to be improved by written feedback from

prosecutors and closer supervisory guidance; incentives were to be provided by the police organization's increased emphasis on and rewards for gaining felony convictions. These mutually reinforcing changes were expected to lead to more evidence available to prosecutors which would mean stronger cases and, consequently, more felony convictions.

Intervention and Experimental Design

To test the effectiveness of written feedback reports, closer supervision of felony investigations, and an increased emphasis on for gaining convictions, an experimental intervention was designed jointly by police supervisors, assistant state's attorneys, the criminal justice coordinator's staff and Police Foundation staff. The experiment was carried out in the five precincts of the Eastern and Western (but not the Central) Divisions. Across the department patrol officers are assigned to one of four shifts that rotate their tour of duty every six days to provide around the clock service. Two shifts were randomly selected as the experimentals; the remaining two became the controls.

Supervisors on the experimental shifts and assistant states' attorneys developed one-page felony investigation and post-arrest guides that experimental shift officers had to complete and which were reviewed, along with the standard reports, by squad supervisors.[3] They designed a set of codes for use by

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[3] The guides listed activities related to processing the crime scene, locating witnesses, eliciting information about a suspect, collecting physical evidence, and obtaining additional

prosecutors to indicate the reason for a decision to charge on less than the most serious arrest charge and a disposition other than a guilty finding or plea on the most serious prosecution charge. These reasons were to be included in monthly feedback reports that indicated the arrest and prosecution charges, disposition, and "reason" for any outcome other than charge or conviction on the most serious charge. These reports were to be prepared by the criminal justice coordinator's office, sent to experimental supervisors for review, and given to the officers in their squads.

Final plans for these experimental instruments and their implementation were adopted at a weekend conference attended by experimental shift supervisors, assistant prosecutors, and the Chief and State's Attorney who made clear their commitment to reducing case attrition. Experimental shift supervisors subsequently trained their squad members and the State's Attorney's office liaison briefed other prosecutors on the study and reason codes.

The experiment began with use of the guides on April 1, 1985, and continued for eight months. Preparation and distribution of monthly feedback reports, however, was delayed due to problems in reprogramming the county computer. "Interim" individual reports but not the cumulative squad reports that had

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sources of information. Officers had to indicate whether each activity had been done or was not appropriate for the situation.

been planned became available in late June and were produced monthly thereafter.

A standard pre-test/post-test random allocation research design was used to assess the impact of these changes. Data were collected on all felony arrests involving the officers on the experimental and control shifts, arrests made between April 1 and November 30, 1984 (pretest period), and April 1 and November 30, 1985 (experimental period). Additional data were collected from (1) 382 burglary and robbery investigation reports completed by E and C shift officers during May and June, in 1984 and 1985 regardless of whether they resulted in an arrest; (2) surveys of both experimental and control shift officers and supervisors at the initiation of the experiment and from experimentals after the end of the experiment; and (3) observation of police-prosecutor interaction in the state's attorney's office.

Data items coded from police investigation and arrest reports included characteristics of the offense, offender, and available evidence of various types. Information also was obtained on each arrestee's criminal history; on the initial prosecutorial charging decision, case disposition, and sentence in each case; and on the primary reason for a reduction or dismissal by the felony complaint prosecutorial and a case disposition other than guilty on the most serious prosecution charge. The pre-experimental and follow-up surveys of officers and supervisors documented attitudes toward various aspects of

the study, implementation in the precincts, and perceptions of changes in officers' and supervisors' actual behavior.

Although the primary unit of analysis was the shift, because differences between the two experimental shifts and the two control shifts were quite small, the E and C shifts were combined for presentational clarity and are described in the findings simply as "experimentals" and "controls."

The case, as defined by the court, was the principal unit of measure and the arrest was a secondary measure. Because our interest was in improving investigations and because a number of arrestees were tried at the same time on several cases (each of which had been investigated separately), the case rather than the arrest appeared to more accurately reflect changes in evidence collection the experiment was designed to produce. Since most studies count arrests rather than cases, however, a separate arrest data base was developed and all analyses were done twice. There were 1,622 cases and 1,440 arrests in these data bases.

"Attrition" was defined in two ways: (1) cases (or arrests) that did not result in a conviction on any charge or lead to a sentence of probation before judgment[4] and (2) cases that did not result on convictions on the original most serious arrest charge. All cases where the prosecutor identified a constitutional or evidentiary problem as the reason for reduction or non-conviction were counted as involving potentially "avoidable attrition."

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[4] Probation before judgment is technically not a conviction, but it involves the defendant's admission of guilt.

Findings

The analyses of burglary and robbery investigation reports showed that both experimental and control officers conducted thorough investigations prior to initiation of the experiment. After three months using the guides, however, experimental officers conducted significantly more witness interviews and obtained significantly more victim statements than did the controls. Consequently, 26 percent of their reports but only 17 percent of the controls' reports were rated "outstanding."

The examination of all felony cases showed that after controlling statistically for differences in arrest offense types, both the experimental and control officer groups significantly increased the availability of three types of evidence during the experimental period: (1) the number of witnesses interviewed; (2) the identification of one or more positive eyewitnesses; and (3) "other" physical evidence including miscellaneous items such as a bloodstained shirt or bullet shells.[5]

This contamination of an experimental effect among control officers may be related to at least four factors: informal use of the guides and pressures by control supervisors who were aware of the experiment, to increase evidence collection, thereby creating informal competition between experimental and control

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[5] There was no change in the percentage of E or C cases with written statements, confessions or admissions, photos, recovered weapons or matched fingerprints. Both groups significantly decreased the percentage of cases with recovered property.

officers; inclusion of four hours of training related to report writing, fingerprints, and handling recovered weapons in the 40 hours of in-service training all officers in Baltimore County got during 1985; unavoidable overlap between experimental and control officers in conducting some felony investigations when a control shift relieved an experimental shift and continued work its officers had initiated; and the delayed effect of a department-wide "Accountability Awareness" program adopted in 1984 that emphasized improving investigations.

The increase in the evidence available in both experimental and control felony cases was paralleled by an increase in the proportion of the cases of both groups that were accepted for prosecution on the most serious arrest charge in 1985 and a decrease in the proportion of cases prosecuted on reduced charges. As indicated in Figure R-1, the proportion of control cases prosecuted on the most serious charge increased from 46 percent in 1984 to 54 percent in 1985. Experimental cases prosecuted on the most serious charge increased from 50 to 56 percent. Control cases that were reduced went from 37 to 25 percent, while experimental case reductions fell from 31 percent in 1984 to 26 percent in 1985. Control cases dismissed at initial screening also increased from 17 percent in 1984 to 22 percent in 1985, while the proportion of experimental dismissals was 19 percent in both years.

At the disposition stage, however, in 1985 there was an increase in the percentage of both experimental and control case

reductions and a decrease only in control non-convictions. As Figure R-2 indicates control case convictions on the most serious charge fell slightly, from 44 to 42 percent of prosecuted cases, while experimental cases convicted on the most serious charge dropped from 50 to 43 percent of prosecuted cases. Conversely, guilty convictions on lesser charges rose from 21 to 28 percent of prosecuted control cases and 10 to 18 percent of experimental cases. Both groups also had small decreases in non-conviction rates: controls went from 35 to 31 percent and experimentals from 40 to 38 percent of prosecuted cases.

As a result of the offsetting changes shown in Figures R-1 and R-2, there was no change in the attrition rates of either experimental or control cases from 1984 to 1985, and no difference between them in 1985 in either non-conviction or reduction rates. Figure R-3 shows that in both 1984 and 1985 30 percent of all control cases were convicted on the most serious arrest charge; experimental cases convicted on the most serious charge decreased slightly from 32 to 29 percent of all cases. The control case non-conviction rate was 43 percent in 1984 and 44 percent in 1985, while 48 percent of experimental cases ended without convictions in both years.

Reasons data provided by prosecutors for 1985 cases suggest that evidentiary weakness problems played the primary role in both experimental and control dismissals at felony complaint screening. Seventy-eight percent of the control and 57 percent of the experimental early case dismissals were attributed to

these reasons categories. However, the difference between experimental and control evidentiary dismissals is not statistically significant; an examination of the cases suggests that only a few might have been salvaged by alternative action taken by patrol officers. Most were the result of charges brought on the basis of uncorroborated statements of codefendants or on the basis of a similar modus operandi for two defendants who were prosecuted on other charges. After felony complaint screening, evidence and constitutional problems accounted for less than 20 percent of both experimental and control case non-convictions.

Discussion

The failure of the experimental intervention to result in reduced felony attrition may be explained by several factors that are described in more detail below: the choice of a jurisdiction in which there was little or no room for improved coordination; inadequate implementation of the intervention; and a theoretically faulty multi-step change model.

In Baltimore County police-prosecutor relations were good prior to the study. Police investigations were conscientiously carried out and complete. Prosecutors were satisfied with police cases, communicated regularly with officers about them, sought their input in making charging decisions, and provided the principal investigating officer with feedback at the felony complaint meeting. The high standards of police work and routinized informal communication between police and prosecutor

already in existence meant that the margin for improving evidence collection through the closer supervision and a written feedback report was more limited than it might have been had such not been the case. Nevertheless, throughout Baltimore County between April and November of 1985 there was an 11 percent increase in felony arrests (in the absence of an increase in reported crime) over the same period in 1984. This increase, which may be due to the Accountability Awareness program, suggests that police behavior can be changed if the department seeks to do so, but that internal processes rather than feedback from prosecutors may be the key to change.

The problems in implementing the feedback reports limited their impact. Due to the failure to complete retailoring of the county criminal justice system computer system, the initial distribution of the reports was delayed, and only individual--not cumulative--reports were provided, and even those were not in the desired format. In addition, many reports did not include the reason for a final disposition where it was needed, because it was not provided by a prosecutor.[6]

Our change model involved a three-step process: (1) increased conviction consciousness, supervision, and information about evidentiary needs in cases would lead to improved evidence

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[6] Virtually all reasons for felony complaint decisions were obtained and included in feedback reports. A reason was obtained for only 75 percent of all dispositions for which they were required and many of these were only obtained after the experiment ended and not included in feedback reports. Most of the missing reasons were related to cases disposed in District Court.

collection skills; (2) better skills and greater motivation would result in the collection of more and better evidence; and (3) better evidence would lead to more felony prosecutions and convictions. The model, however, ignored the possibility of a variety of adaptive responses such as higher charging standards, a Hawthorne effect resulting in an increase in Circuit Court prosecutions, and an increase in case reductions stemming from heavier caseload pressures. It also put excessive responsibility for a non-conviction on the police. What happens to a case after it is accepted for prosecution, depends more on the skills and case preparation of the prosecutor than the police. In measuring police effectiveness, it may not be appropriate to place heavy reliance on an outcome over which the police have limited control.

In Baltimore County there <u>was</u> a substantial increase in both evidence collection and the proportion of cases accepted for Circuit Court prosecution. The fact that these changes were observed in both experimental and control cases, however, suggests some "contamination" or another factor affecting both groups. Although the source of the contamination is unclear, what is clear is that there was a subsequent unanticipated outcome--more case reductions--rather than the desired increase in the felony conviction rate. This suggests that even where good communication between police and prosecutor already exists that police can be motivated and trained to produce more evidence that leads to acceptance of a greater proportion of cases on the

original arrest charges. How to change case outcomes, however, requires further investigation of court processes and of the interaction of evidence with other factors that affect dispositions.

FIGURE 1

PROSECUTORIAL CASE SCREENING

BY GROUP AND YEAR

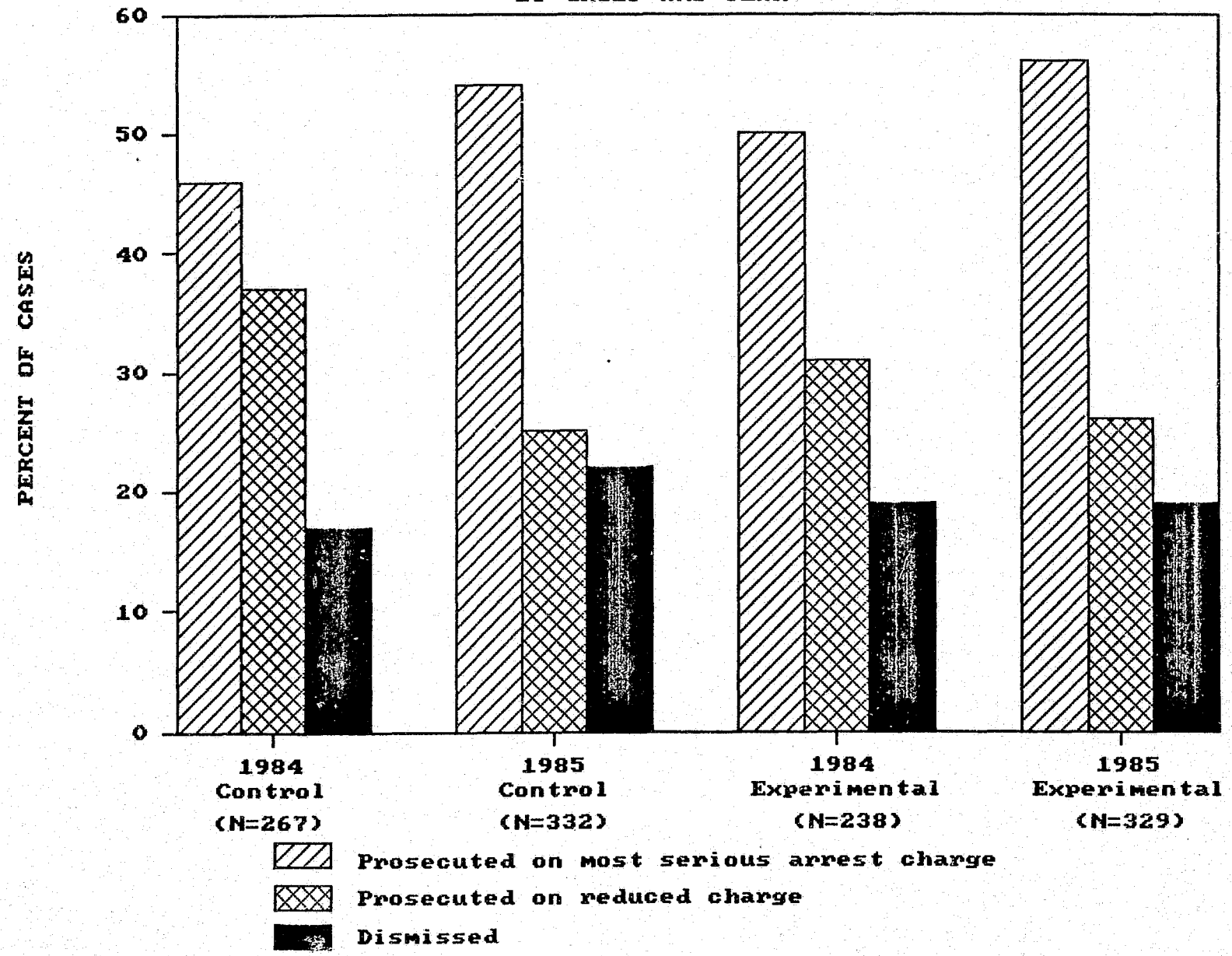


FIGURE 2

DISPOSITION OF PROSECUTED CASES

BY GROUP AND YEAR

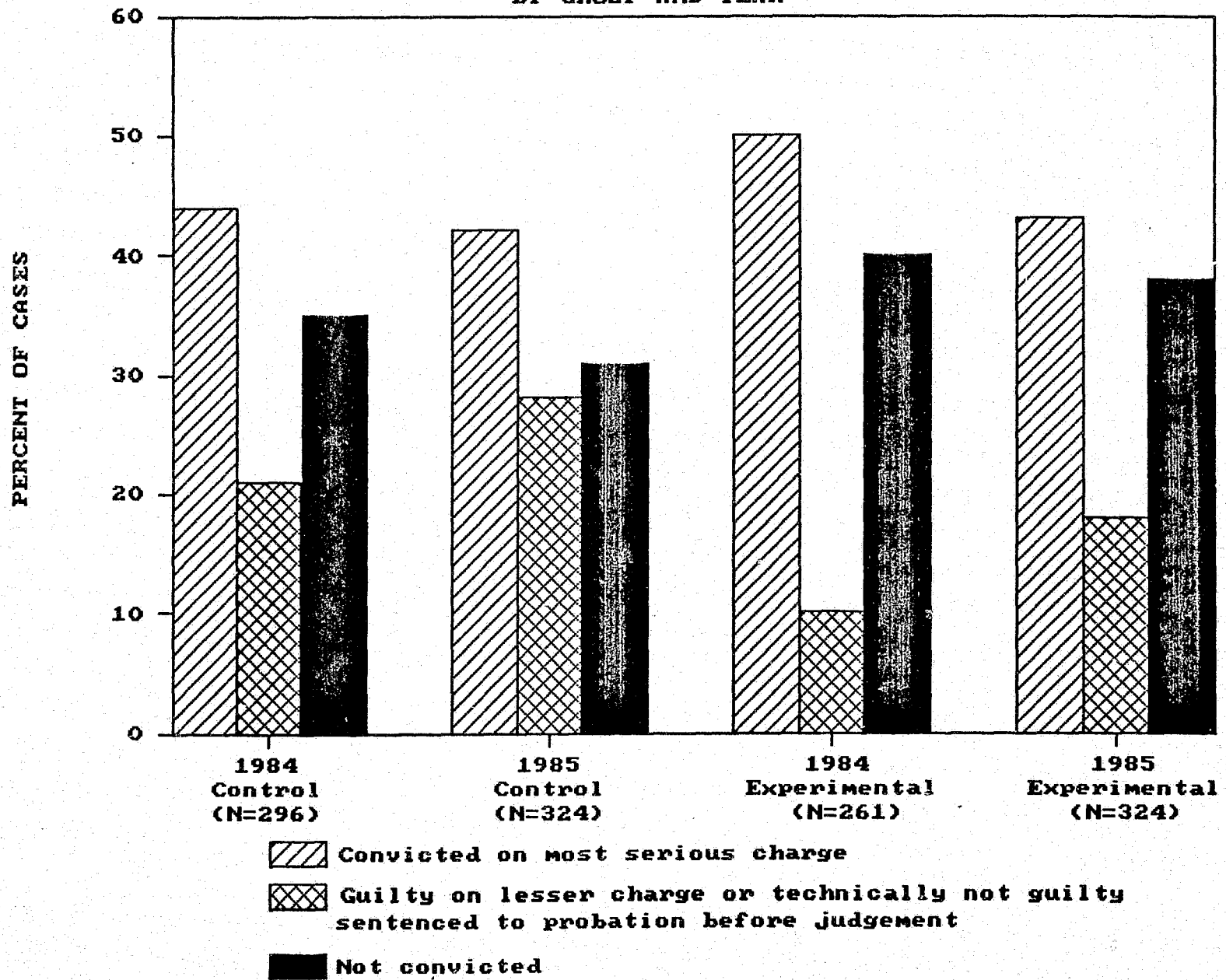
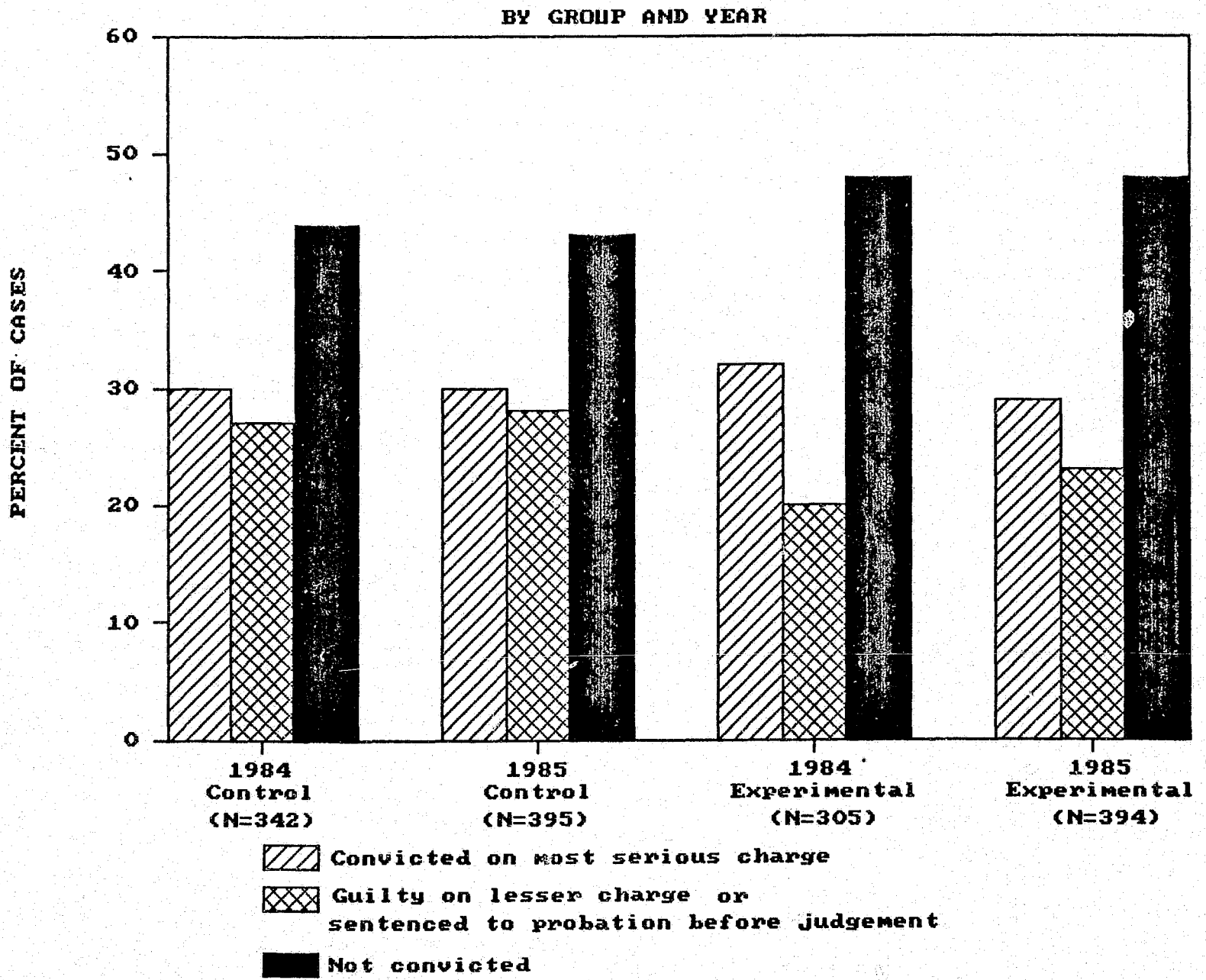


FIGURE 3

FINAL DISPOSITION OF ALL CASES



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EXECUTIVE SUMMARY

Many studies have found that about half of all felony arrests result in non-conviction. Others have suggested that this high non-conviction or attrition rate could be reduced by improved communication between police and prosecutors, particularly about what evidence is needed to win cases. This report details a field experiment designed to improve police-prosecutor communication and the quality and quantity of evidence collected by police in order to reduce case attrition. It was carried out in Baltimore County, Maryland, in cooperation with the Baltimore County Police Department, State's Attorney's office and the Criminal Justice Coordinator's office.

This report first outlines the theoretical model on which the experimental interventions were based; discusses the way cases are processed in Baltimore County; and describes the experimental interventions, their implementation, and the research design used to measure their impact. It next summarizes the key findings regarding the effect of the experimental changes on the evidence collected by police, the initial prosecutorial screening decision, and final case dispositions. It concludes by exploring the apparent failure of the effort to produce the expected changes and the implications for policy and research.

Studies of Case Attrition and Organizational Change

The impetus for this and five other projects funded by the National Institute of Justice grew from the findings of many

studies that only about half of all felony arrests result in convictions (Boland, 1986; Brosi, 1979; Eisenstein and Jacob, 1976; Feeney et al., 1983; Forst et al., 1977; McElroy et al., 1981; Vera, 1977). Most cases are rejected at initial prosecutorial screening, or are nolle prossed or dismissed at an early stage in the disposition process. Patterns of attrition vary widely, however, depending on legal and technical arrangements in early stages of case processing (Boland, 1986) and on prosecutorial policies (Jacoby et al., 1982; McDonald et al., 1981).

Boland (1986) identified three dominant attrition patterns related to legal arrangements for case review. In many large cities, within 24 hours police present arrests to the prosecutor for a charging decision, before any charges have been filed with the court. Prosecutors may also share the screening function with the police, who may pre-screen cases, then dismiss or refer for misdemeanor prosecution a sizable proportion of the less serious arrests. A third pattern, found in the current study site, is for the police to file initial charges in the lower court prior to prosecutorial review. Because this pattern does not permit prosecutorial pre-filing "screening," it tends to result in higher rates of attrition at the indictment stage than the others.

Prosecutorial policies also affect patterns of attrition. Where the prosecutor emphasizes "legal sufficiency," initial screening tends to be cursory, any case that meets minimal legal

criteria is charged, and attrition occurs at subsequent stages. Where prosecutors emphasize "system efficiency," and "trial sufficiency" many more cases are screened out at early stages (Jacoby, 1979).

Studies of the factors that contribute to convictions and conversely to attrition rates overwhelmingly have found that the seriousness of the offense and the availability of physical evidence and witnesses are the primary determinants of case dispositions (Forst et al., 1977; Forst et al., 1982; Feeney et al, 1983; McDonald et al., 1982; Myers and Hagan, 1979; Vera, 1977). Two studies (Forst et al., 1977; Vera, 1977) observed that there is a much higher dismissal rate in cases in which there is a prior relationship between the defendant and the victim than in cases where the victim and defendant are strangers. Feeney et al. (1983) and Stanko (1981) also noted the importance of victim cooperation and credibility on case outcomes.

Police practices also have an important effect on case outcomes. Forst et al. (1977) found that when police recovered tangible evidence, made an arrest shortly after the crime occurred, or produced two or more cooperative witnesses, the likelihood of conviction was significantly greater than in the absence of those factors.

Police failure to provide prosecutors with the evidence necessary to gain felony convictions is primarily a result of insufficient case follow up, training, and organizational incentives and inadequate police-prosecutor communication.

Patrol officers generally are the first to arrive at a crime scene, question witnesses, and seek evidence. But patrol officers generally have less training and experience in conducting thorough preliminary investigations and tend to focus too heavily on victims, ignoring other sources of information (Eck, 1983). If there is no immediate arrest, investigations usually are turned over to a detective who gets a "cold" case in which witnesses have disappeared and crucial evidence may have become unobtainable. In addition, information obtained by the patrol officer may be lost in the passage of the case to a detective.

Poor police-prosecutor communication also contributes to case attrition. Communication problems arise in part because of differences in the goals and perspectives of each organization. Police provide the "raw material" with which prosecutors must work. They make arrests for a variety of reasons based on probable cause. Prosecutors are concerned with gaining convictions. Sometimes, however, the police fail to provide the needed evidence. The result is prosecutors' criticism of the evidence produced by the police and police officers' anger at dismissal of cases they feel should be prosecuted, with little communication about their different perspectives, the prosecutor's evidentiary needs, or case outcomes.

Several studies of case processing concluded that felony attrition can be reduced by improved police-prosecutor communication and changes in each organization (Forst et al.,

1977; Feeney et al., 1983; McDonald et al., 1981). To do so they suggested that (1) the police concentrate on making "good arrests" (i.e., those that result in convictions); (2) prosecutors put more emphasis on cooperation with the police, early case review, and greater risk taking; and (3) prosecutors provide formalized feedback to the police about evidentiary problems and case outcomes.

To increase the police officers' concern with gaining convictions, however, requires departments to alter their organizational values and reward system. The police tend to view their role as ending with arrest and police organizations do not reward officers for preparing a case beyond what is needed for filing (McDonald et al., 1982). To make formalized feedback on performance relevant, therefore, officers must understand and believe the information and be motivated to change by associated extrinsic rewards either in the present or future. Belief in turn, is related to the source, timing, frequency, specificity, and valence (positive or negative) of the information (Ilgen et al., 1979). More explicit information about performance has greater motivating potential, but only if the feedback adds to what the recipient already knows. If it adds little knowledge, it may create officer resistance to feeling controlled.

Altering occupational cultures has been termed a "black art" (Deal and Kennedy, 1982), yet several general principles appear to be useful guides for reshaping police culture. "Transition rituals" celebrating the new values help heighten their

visibility. Training is necessary so that participants not only acquire new values but the skills to support them. New performance measures and rewards such as public recognition for meeting the new standards help reinforce change. Participation by persons to be affected by the change in shaping change mechanisms, implementation policies, and new evaluation measures increases the likelihood that they will support it. And changes that are incorporated into the rest of the organizational structure are more likely to succeed (Deal and Kennedy, 1982; Kanter, 1983; Nadler et al., 1980).

Research Site; Baltimore County, Maryland

The Police Handling of Arrests

Baltimore County, with a population of some 655,000 people distributed over an area surrounding (but not including) Baltimore city and reaching to the Pennsylvania border, is served by the Baltimore County Police Department. Virtually all arrests in the county are made by officers of that department.

The department is organized into three divisions, each supervised by an area commander. The Eastern Division includes three precincts; the Central (covering the rural areas) consists of four precincts; and the Western, two precincts. Patrol officers across the department are assigned to four shifts that rotate their tours of duty every six days. Thus during each 24-day period, all officers work day, evening, and midnight tours and have two days off between each change of working hours.

The department is both innovative and management-oriented. The Chief, Cornelius Behan, has taken a lead in the national accreditation movement and has initiated a variety of new programs including community-oriented patrol and a repeat offender unit. Prior to initiation of the study (but unknown to the researchers at the time), the department initiated an "Accountability Awareness" program designed to "improve our documentation and investigations" (Standard Operating Procedure #84-7) by clarifying expectations and responsibilities at each rank.

The department's case screening policy mandates that patrol officers are responsible for follow-up of initial investigations in which there are substantial leads or a named suspect. Detectives may become involved in serious felony investigations at the invitation of the investigating officer (except for homicides and sex crimes, which they automatically assume responsibility for) or after an investigation is suspended by a precinct supervisor.

When the police make an arrest, the arrestee is taken to the station for questioning and booking. At the end of each shift, all arrestees are taken to a hearing before a commissioner of one of the five District (lower) Courts in the county. The commissioner sets bail, reviews the charges for probable cause, issues a charging document with a warrant or summons, and informs the arrestee of his or her right to a preliminary hearing. Thus all arrest charges are filed in the District Court by the police

without any prior prosecutorial review or police-initiated screening.

Within a few days of the arrest the legal office of the police department sends copies of the investigation and arrest reports and the arrestee's local criminal history to the State's Attorney's office and selects a principal investigating officer (PIO). This officer subsequently meets with a prosecutor from the felony complaint unit to review the case and provides additional information prior to the state's charging decision.

Prosecutorial Handling of Cases

The State's Attorney's office employs 35 assistants. Eight assistants are assigned to the District Court division, ten to the Circuit Court division, and the rest work in juvenile, domestic relations, special investigations, and the felony complaint units. The three-person felony complaint unit (FCU) consists of experienced prosecutors who are responsible for reviewing the police charges and evidence available in all serious felony cases and weeding out the weak cases.

All persons charged with a felony in Maryland are entitled to a probable cause review of charges in court. The state has the option of producing evidence at a grand jury or preliminary hearing before a District Court judge (unless the defendant waives this right). Unlike many other jurisdictions, if this review does not occur within 40 days of arrest, the charges filed with the commissioner in the District Court are dismissed.

Maryland District Courts are responsible for the disposition of misdemeanors, criminal traffic offenses, and less serious felonies, and for the initial filing, bond review, and preliminary hearings for serious felonies. These courts have jurisdiction over a number of crimes that in other states are considered felonies, such as attempted robbery, breaking and entering with intent to steal, fraud, and most firearms offenses. In addition, they have concurrent jurisdiction with the Circuit (upper) Court over less serious felonies such as grand larceny and auto theft, and generally handle these cases unless they are unusually large or involve a career criminal.

The Circuit Court is responsible for the disposition of serious felony cases transferred to it by a grand jury indictment or a criminal information in addition to the shared jurisdiction with the District Court over less serious felonies. The felonies disposed in Circuit Court, therefore, are a more serious subset of all crimes typically considered felonies in other jurisdictions.

A face-to-face meeting between an assistant state's attorney (ASA) from the felony complaint unit and the principal investigating officer (PIO) designated by the police department occurs for all felonies except larceny and bad check cases, which are reviewed solely by the ASA and routinely sent for trial to District Court. At the meeting the ASA reviews the evidence and decides whether to file charges or dismiss, which charges to file, and whether the preliminary review should be before a grand

jury or a judge. The latter decision is based largely on scheduling convenience.

The felony complaint prosecutor's charging decision often is influenced by discussion with the PIO. At the felony complaint meeting, which lasts about half an hour, the ASA elicits from the officer further details about the offense, the relationship between the offender and victim, and the character of the defendant, the strength and nature of the available physical evidence, and the credibility and availability of witnesses. If it appears necessary, the ASA will ask the police officer to obtain additional information (e.g., have a witness identify the defendant in a lineup or get in touch with a witness to obtain further information) and will proceed with the case in the meantime. Occasionally, the ASA will inform the officer that unless certain additional evidence is produced, no preliminary hearing will be scheduled and the case will be dismissed automatically 40 days after the arrest. If the evidence is obtained, the officer informs the ASA and the case proceeds.

At the felony complaint meeting a date for the preliminary hearing or grand jury is set and, if the prosecutor decides to reduce the case, the trial date also is set. To do this the ASA checks the police officer's assigned District Court dates and calls the District court clerk to put the case on the calendar.

Observation of felony complaint meetings as well as surveys of the officers indicated that the police take an active role in the decision making process, understand the prosecutor's

decisions, and generally are satisfied with them. They share with ASAs the view that most offenses involving acquaintances should be handled in District Court, saving the limited Circuit Court resources for "real crimes" (i.e., serious offenses against strangers).

The Baltimore County case screening and review system has advantages and disadvantages. One disadvantage is that the police file the initial charge with the court, taking the initial intake decision out of the hands of the prosecutor. Another is that at least a week passes between the arrest and prosecutorial review, which makes it more difficult to obtain certain types of perishable evidence. When the initial prosecutorial review does occur, however, the police have had time to complete supplementary reports, obtain a copy of the arrestee's criminal history, and get lab and other reports into the prosecutor's hands--all distinct advantages. The system of having a police-designated PIO assures that the officer most knowledgeable about the case presents information that is not in the official report to the prosecutor in a meeting that generally is unhurried.

For cases to be tried in Circuit Court, the prosecutor files a criminal information at the preliminary hearing formally transferring the case from the District Court. For cases that are to be reduced, the ASA files an amended charging document in District Court.

After arraignment, a trial date is set. Most Circuit Court cases are assigned to ASAs on the basis of a rotation schedule.

They handle whatever trials are scheduled for a particular courtroom on their "trial" day. Homicides, sex crimes, repeat offenders, and complex cases requiring particular attention are specially assigned to one ASA to assure consistent handling regardless of changes in the trial date.

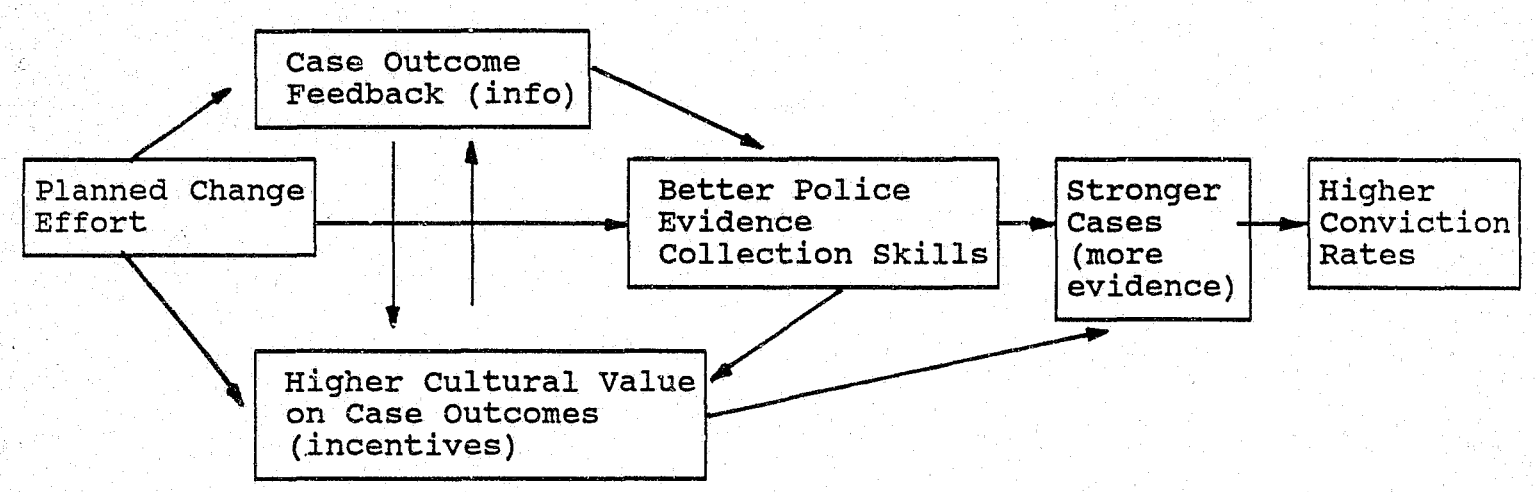
Shortly before trial the Circuit Court ASA reviews the case and discusses a possible plea arrangement with the defense counsel. "Going rates" are generally known, and ASAs act independently but within broad office guidelines. The usual practice is to seek a guilty plea on the most serious charge in exchange for dismissal of other charges or cases. This pattern helps the defendant by diminishing his conviction record. It helps the state by conserving resources without giving up time served, since sentences generally are concurrent, and a conviction in a second case or additional charges rarely adds to the amount of time served.

Police-Prosecutor Relations

Both observation and discussions with police and prosecutors in Baltimore County indicated that at the time of the study was initiated both formal and informal relations between the two organizations were quite good. The Chief and State's Attorney met regularly. Police officers routinely discussed cases with felony complaint unit prosecutors before the latter's charging decision. Prosecutors consulted with and informed police officers about plea bargains and case dispositions, although this occurred routinely than discussion at felony complaint.

The Research Model

The foregoing literature on felony attrition and organizational change suggested the following model for reducing case attrition in Baltimore County:



This model suggests that to reduce case attrition, it is necessary to address and alter three elements: officers' information about what evidence is needed to win cases; their skills in collecting such evidence; and their incentives for doing so. Feedback, rather than leading directly to better cases, is treated as an intervening variable that leads to new values and better evidence-collecting skills. These skills are to be improved by prosecutorial feedback and more effective supervisory guidance, and, in turn, increased emphasis on felony convictions in the police culture. These mutually reinforcing changes will lead to presentation of more evidence to prosecutors, which means stronger cases and, consequently, more felony convictions. The change model may be stated as several hypotheses:

1. Feedback to police officers, increased supervisory attention to felony investigations, and greater departmental emphasis on convictions lead to increased efforts and improved skills in evidence collection.
2. Better skills and greater efforts result in collection of more and more corroborative evidence.
3. More evidence leads to:
   a) more prosecutions of felony arrests as felonies,
   b) more convictions on felony charges, and
   c) more convictions on any charge.

Intervention and Experimental Design

To test the effectiveness of this change model, we adopted two experimental interventions: (1) formalized feedback reports for review by supervisors and delivery to officers; and (2) investigative and post-arrest guides. These guides were to be used by police officers, completed with each felony investigation and arrest, and reviewed by supervisors.

The experimental interventions were designed jointly by police supervisors, assistant state's attorneys, the criminal justice coordinator's staff, and the research staff to reinforce participants' mutual goals and commitment to change. Two of the four shifts of patrol officers that rotate hours of duty every six days were randomly selected as the experimentals. The remaining two shifts became the controls. Randomization by shift was employed to permit training and supervision in larger work units, which would have been impossible with randomization of

individual officers. Because each patrol shift rotates through the day, evening, and midnight tours of duty, it was unnecessary to control for differences among them in time of the day and days of the week worked.

Experimental police supervisors and assistant state's attorneys developed one-page felony investigation and post-arrest guides that experimental officers had to complete for each felony they investigated and each felony arrest they made. The guides listed activities related to processing the crime scene, locating witnesses, eliciting information about suspects, collecting physical evidence, and obtaining additional sources of information (See Appendix A). Experimental officers had to indicate for each item whether it had been done (by circling "yes") or was "not applicable" in the case. All items were to be completed and comments regarding additional investigative activities were written on the back. The guides were turned in to squad supervisors who reviewed them along with the standard reports and suggested additional investigative activities, then were submitted to the shift commander for review.

The participants in the study also designed a set of codes for prosecutors to indicate the reason for a decision to charge on less than the most serious arrest charge or a disposition other than a guilty finding or plea on the most serious prosecution charge. The approximately 60 reasons were an expansion of those found in the prosecution management information system (PROMIS) and were grouped by problem type.

They included problems related to evidence (e.g., missing scientific report, insufficient physical evidence), constitutional weaknesses (e.g., no probable cause to arrest), victims and witnesses (e.g., witness cannot be located), jurisdictional considerations (e.g., transferred to juvenile court), defendant characteristics (e.g., no prior record) and considerations of prosecutive merit (e.g., defendant made restitution; dismiss in favor of other case). (For a full list of reason codes see Appendix B.)

These reasons were to be included in monthly individual feedback reports prepared for each officer. For each case in which the officer was involved the report was to indicate the arrest charge, prosecution charge, disposition, sentence, and the reason for any charge reduction or disposition other than conviction on the most serious charge that occurred during the four-week period covered by the report. A cumulative all-squad report prepared for supervisors that listed the above information about all cases involving the officers in the squad was also planned. Those reports were to be prepared by the criminal justice coordinator's office and distributed in the precincts.

Implementing the Interventions

Final plans for these experimental instruments were adopted as a result of a weekend conference attended by experimental shift commanders, several assistant state's attorneys, and the Chief and State's Attorney, who made clear their commitment to reducing case attrition. Experimental supervisors then trained

the officers in their squads either at a roll call to which they reported an hour early or at a special meeting held while the squad was working midnight duty. The supervisors explained the purpose of the experiment, reviewed guides and procedures for completing them, and informed officers about the feedback reports they would be getting. In all the training sessions observed supervisors made clear the commitment of the department to the study and to improving felony investigations. The assistant state's attorney that served as liaison to the study briefed other prosecutors on the goals of the study, the meanings of the various codes, and the procedures for completing the two forms (one for the charging decision, the other indicating the disposition) that were to be included in the jacket of all felony cases.

Implementing the interventions proved to be more complex than designing them. The experiment began with use of the guides on April 1, 1985, and continued for eight months. Periodic checks in the precincts indicated that officers consistently completed the guides. The three felony complaint prosecutors also reliably completed the forms indicating the initial charging decision and provided reasons for reductions and dismissals. There were problems, however, in getting completed disposition forms, particularly for cases handled in District Court. Initially the forms were not inserted in the case jacket. Subsequently, ASAs simply ignored the forms. Out of a total of 378 prosecuted cases for which a reason form should have been

completed, 95 (25 percent) were missing and many more were not completed in timely enough fashion to be incorporated in the monthly feedback reports. In addition, many ASAs avoided using codes that indicated a police error when it occurred. They rely on police to provide them with information and were reluctant to provide a reason that might sour existing relations.

The major implementation problem, however, arose in providing feedback reports. To prepare the reports as planned required reprogramming the county computer to link two separate data bases (one including arrests, the other showing case dispositions) and add new screens for entering the "reason" data and the name and badge number of the PIO. Despite assurances that this would be a simple task, the retailoring job, in fact, never was completed. After two months it was decided to proceed with "interim" individual feedback reports (but not the cumulative squad reports) that consisted of two separate printouts that were collated manually and onto which reasons were hand written. The first report became available in late June and monthly reports were produced thereafter. These reports looked sloppy, however, and took a great deal of time to prepare.

An additional problem arose with the timing of the reports. In Baltimore County as much as a month may elapse between a felony arrest and preliminary hearing and, therefore, the completion of the preliminary charging decision and reasons form. It became necessary, therefore, to wait at least four weeks to prepare a report. This meant a similar delay of several weeks in

providing case disposition data.

Data Collection and Research Methodology

A standard pre-test-post-test random allocation research design was used to assess the impact of the two treatments on the quality of officers' investigations, the initial prosecutorial screening decision, and the final dispositions of the cases presented by patrol officers assigned to the two experimental and two control shifts. Data were collected on cases resulting from all felony arrests made between April 1 and November 30, 1984 (pretest period), and April 1 and November 30, 1985 (experimental period), involving the officers on the experimental and control shifts.

Data items were coded from police investigation and arrest reports for 1,622 felony arrest cases. The data elements included characteristics of the offense, offender, and available evidence of various types. Information also was obtained on each arrestee's criminal history; on the initial prosecutorial charging decision, case disposition, and sentence in each case; and on the primary reasons for reductions and dismissals at case screening and for case dispositions other than guilty on the most serious prosecution charge.

Additional information was collected from (1) departmental data on the officers assigned to the experimental and control shifts in the study precincts; (2) 382 burglary and robbery investigation reports completed by the patrol officers in the study precincts during May and June of 1984 and 1985, regardless

of whether they resulted in an arrest; (3) surveys of both experimental and control officers and supervisors at the initiation of the experiment and from experimentals just after the end of the experiment; and (4) observation of police-prosecutor communication in the state's attorney's office.

The officer data indicated no differences among the officers on the four shifts with respect to age, race, or years of experience at the end of either the pretest or the experimental period. It also suggested that there was some turnover among the officers assigned to experimental and control shifts. Sixty-two of the officers on shift one at any time during the 20-month study period were on that shift the entire 20 months, while 18 percent of the officers left and 22 percent joined the shift during the period. The proportion of non-changers for shifts 2, 3, and 4 was 58 percent, 64 percent, and 61 percent respectively, with each shift having slightly more officers join than leave (due to the assignment of members of a large recruit class that completed academy training in late 1984).

The examination of robbery and burglary investigations was designed to examine the impact of the felony investigation guides on the quality of all investigations of two serious felony offenses, since more than 80 percent do not result in an arrest. All robbery reports (N=157) and a random sample of one-sixth of the felony burglary reports (N=225) completed between May 1 and June 30, 1984, and May 1 and June 30, 1985, by officers in the experimental and control groups were coded with respect to the

characteristics of the offense (e.g., number of victims), officer's description of the crime, investigative activities (e.g., number of witness interviews), the relationship between the victim and suspect if one was named, the outcome of the investigation, and the overall rating of the quality of the investigative work and the report.

At the beginning of the experiment both experimental and control officers and supervisors completed surveys to provide comparative data regarding supervisory style and investigation activities. In addition, experimentals were asked about their attitudes toward the components of the experiment. At the end of the experimental period they again were surveyed about their views of the experimental interventions, the extent to which they actually had been implemented, and their perceptions of changes in their and fellow officers' behavior.

Four days were spent systematically observing the assistant state's attorneys handling of more than a dozen face-to-face reviews; several more were spent observing them in court; and several hundred hours were spent in informal observation of the activities of the prosecutors office in collecting data on case dispositions and the reasons for them.

The primary unit of analysis was the shift. However, examination of the data suggested that the differences between the two experimental shifts and the two control shifts were so small that they could be combined to permit clearer presentation without affecting the significance of the findings. In

subsequent discussion, therefore, the groups are referred to simply as the experimentals and controls. The case, as defined by the court system, was the principal outcome measure and the arrest a secondary measure. The reason for relying on the case rather than the arrest was that a number of arrestees were tried at the same time on several cases, each of which had been investigated separately. Thus, the case appeared to be the measure that most accurately reflected the evidence collection activities that the experiment was designed to alter. Since most other studies measure attrition on the basis of the arrest, however, a separate arrest data base was developed and used in the analysis. There were 1,622 cases and 1,440 arrests in these data bases.

To reflect concern with the role of the investigating officer as well as that of the arresting officer, data were analyzed using four different officer group measures: investigating officer; arresting officer; principal investigating officer (PIO); and a composite officer group measure. The latter allowed an officer to get credit for an arrest if he or she was either the investigating or arresting officer. Therefore it provided a more comprehensive measure of the patrol officer's involvement in a case than the usual arrest measure. All analyses were done four times (once using each of the officer group measures). Because the findings were quite similar, the findings presented in the next section are based on the composite measure.

"Attrition" was measured from arrest to two decision points: the prosecutorial charging decision (for serious felonies subject to a felony complaint meeting) and final disposition. At each point two measures were used: charging or conviction (including a sentence of probation before judgment which technically is not a conviction but involves an admission of guilt) on any charge included in a case; and prosecution or conviction on the most serious arrest or prosecution charge. "Avoidable attrition" was defined as any case that involved a constitutional or evidentiary problem.

The Findings

Robbery and Burglary Investigations

The analysis of burglary and robbery investigation reports showed that both experimental and control officers did thorough investigations and prepared complete reports prior to initiation of the experiment. For example, 94 percent of the control and 91 percent of the experimental reports in 1984 had not a single item of victim information missing. Similarly high rates of completeness were found for the descriptions of victim injury, the offense location, time of occurrence, and modus operandi. Nevertheless, in 1985, after using the investigative and post-arrest guides for three months, experimental officers conducted significantly more witness interviews (the average for the experimental mean=2.0, control mean=1.4 per investigation; $p<.02$) and obtained significantly more victim statements than controls (E mean=.40, C mean=.13; $p<.04$). These changes resulted

in substantial improvements in the overall ratings of E but not C reports in 1985. As shown in Figure X-1, the proportion of experimental reports rated as outstanding doubled (from 13 to 26 percent) while the proportion of outstanding control reports dropped slightly (from 21 to 17 percent). Nevertheless, there was no difference between the two groups in the percentage of cases resulting in arrest.

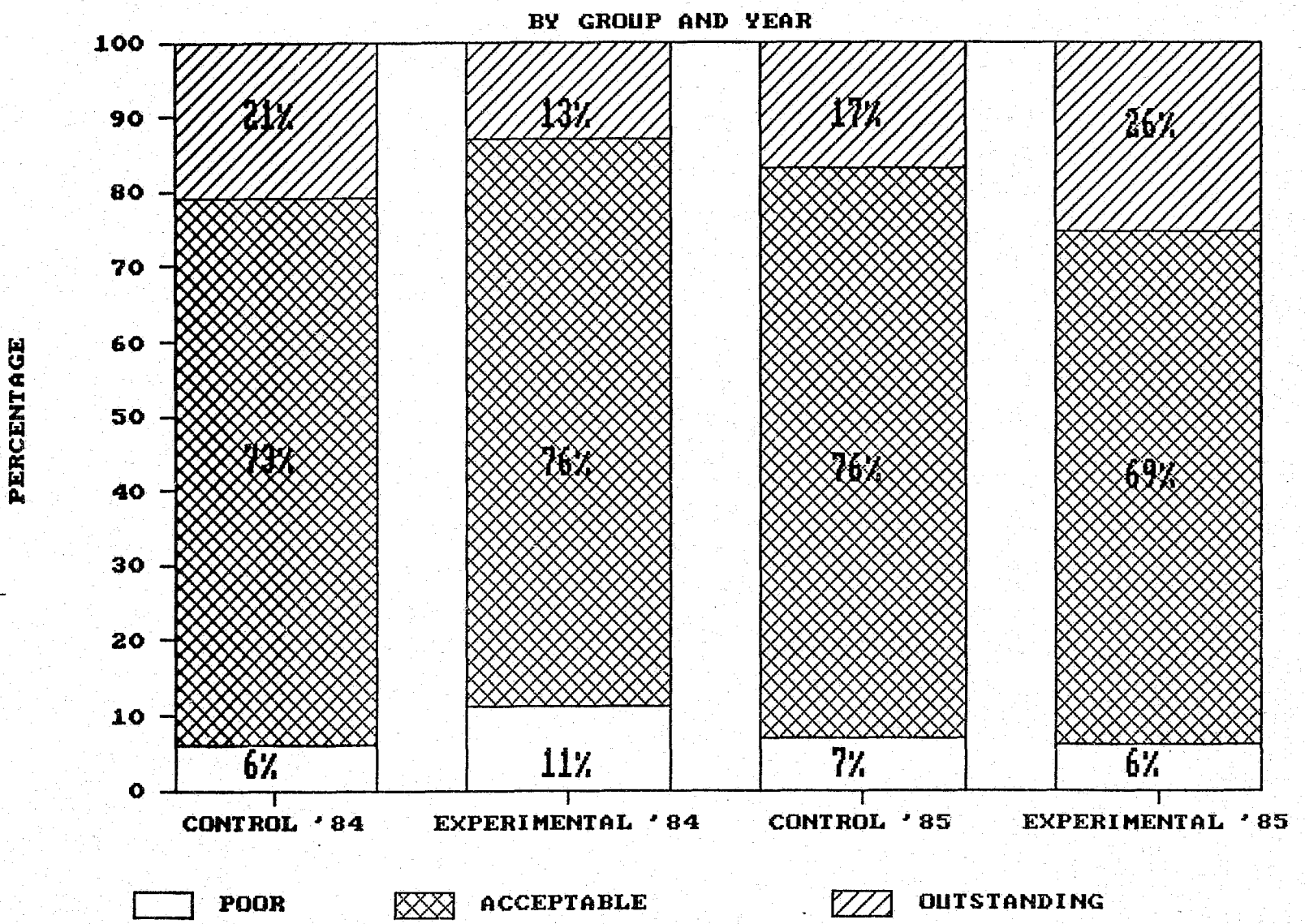
Evidence Collection in Felony Arrest Cases

The examination of all felony investigations resulting in arrests involving experimental officers during the pretest and experimental periods showed substantial increases during the experimental period in the proportion of cases in which two or more witnesses had been interviewed, a positive eyewitness ID was made, fingerprints were obtained, and those where "other" items of physical evidence were collected. The changes, however, cannot be attributed specifically to the experimental intervention because similar changes in evidence collection also were found in control officers' cases. For example, the proportion of experimental cases in which there were two or more witnesses (other than the victim) went from 52 percent in 1984 to 63 percent in 1985. Control cases with two or more witnesses increased from 53 percent in 1984 to 56 percent in 1985.

After controlling statistically for differences in arrest offense types, both the experimental and control officer groups significantly increased the number of witnesses interviewed and the proportion of cases in which there were fingerprints and

FIGURE X-1

RATING OF BURGLARY AND ROBBERY REPORTS



other physical evidence available. Neither group significantly altered the proportion of arrests in which there was a confession, photos, recovered weapon, or recovered property.

The post-experimental surveys of experimental officers and supervisors also indicated some increased effort put into investigations and in collecting different types of evidence. Both groups indicated that some officers' investigations improved substantially and that, overall, investigations and crime reports were better than they had been.

Several factors may be responsible for the appearance of an experimental effect among control officers. First, control officers informally may have used the guides or were pressured by control supervisors who were aware of the experiment, to outperform the experimental units and increase evidence collection. Second, all officers received four hours of training related to report writing, fingerprints, and handling recovered weapons as part of their annual 40 hours of in-service training during 1985. Third, there was an unavoidable overlap between experimental and control officers in conducting some felony investigations when a control shift relieved an experimental shift and continued work experimental officers had initiated. Finally, the increased evidence collection may be viewed as a delayed response by both experimental and control shift officers to the "Accountability Awareness" program instituted by the department in 1984.

Changes in Charging Decisions and Case Dispositions

The increase in evidence available in both the experimental and control felony cases was paralleled by an increase in the proportion of cases in both groups that were accepted for prosecution on the most serious arrest charge in 1985 and a decrease in the proportion of cases prosecuted on reduced charges. As indicated in Figure X-2, the proportion of control cases prosecuted on the most serious charge increased from 46 percent in 1984 to 54 percent in 1985. For experimental cases the change was from 50 percent in 1984 to 56 percent in 1985. At the same time, the proportion of control cases that were reduced declined from 37 percent to 25 percent, while experimental case reductions fell from 31 percent in 1984 to 26 percent in 1985. The proportion of control cases dismissed at prosecutorial screening increased, however, from 17 percent in 1984 to 22 percent in 1985, while the proportion of experimental cases dismissed was 19 percent in both years.

Turning to final case dispositions, the percentage of case reductions increased for both experimental and control cases in 1985; control but not experimental non-convictions decreased. As Figure X-3 indicates, control case convictions on the most serious charge fell slightly, from 44 percent to 42 percent of prosecuted cases, while experimental convictions on the most serious charge dropped from 50 percent to 43 percent of prosecutions. Conversely, guilty convictions on lesser charges in control cases rose from 21 percent to 28 percent of prosecuted

FIGURE X-2

PROSECUTORIAL CASE SCREENING

BY GROUP AND YEAR

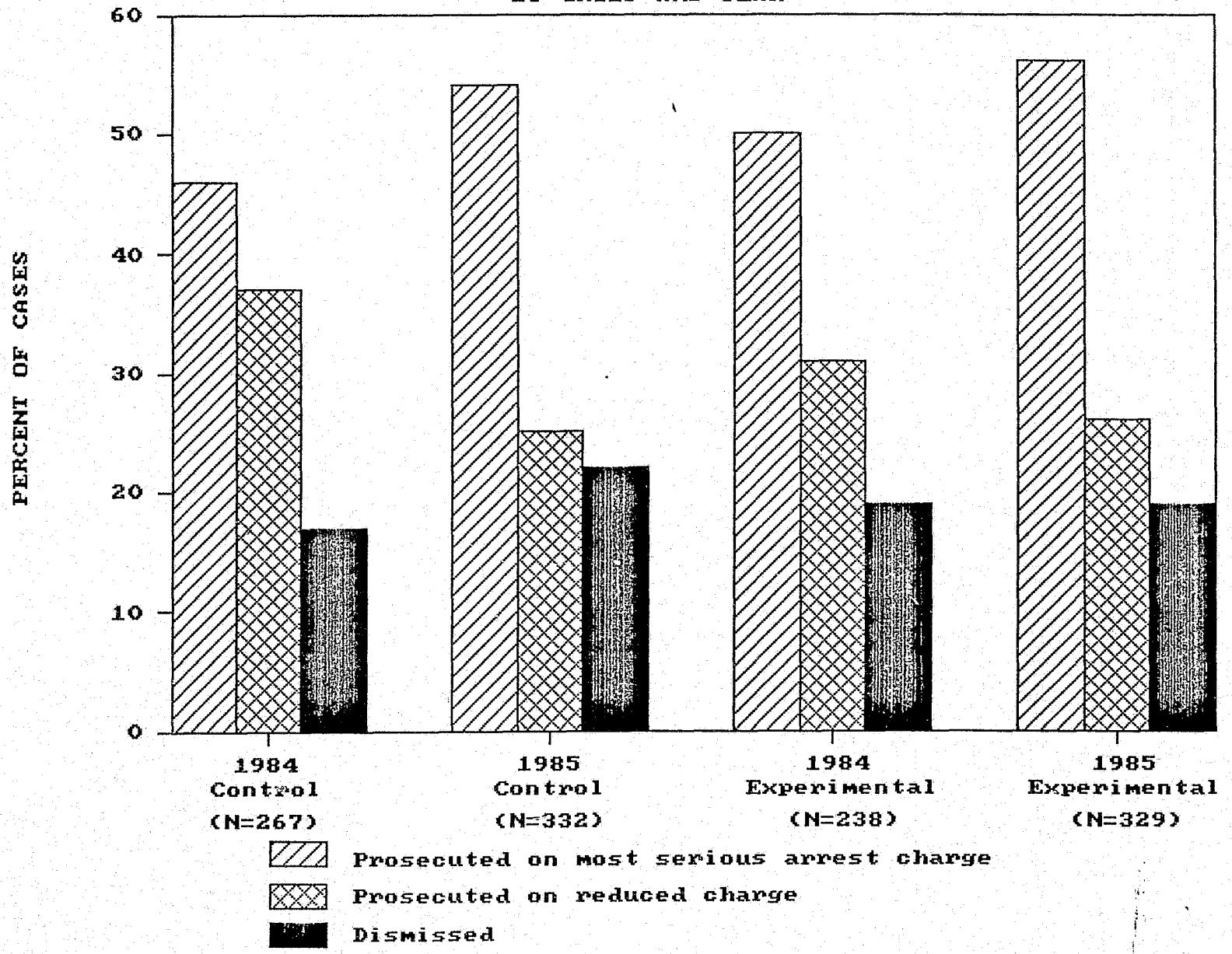
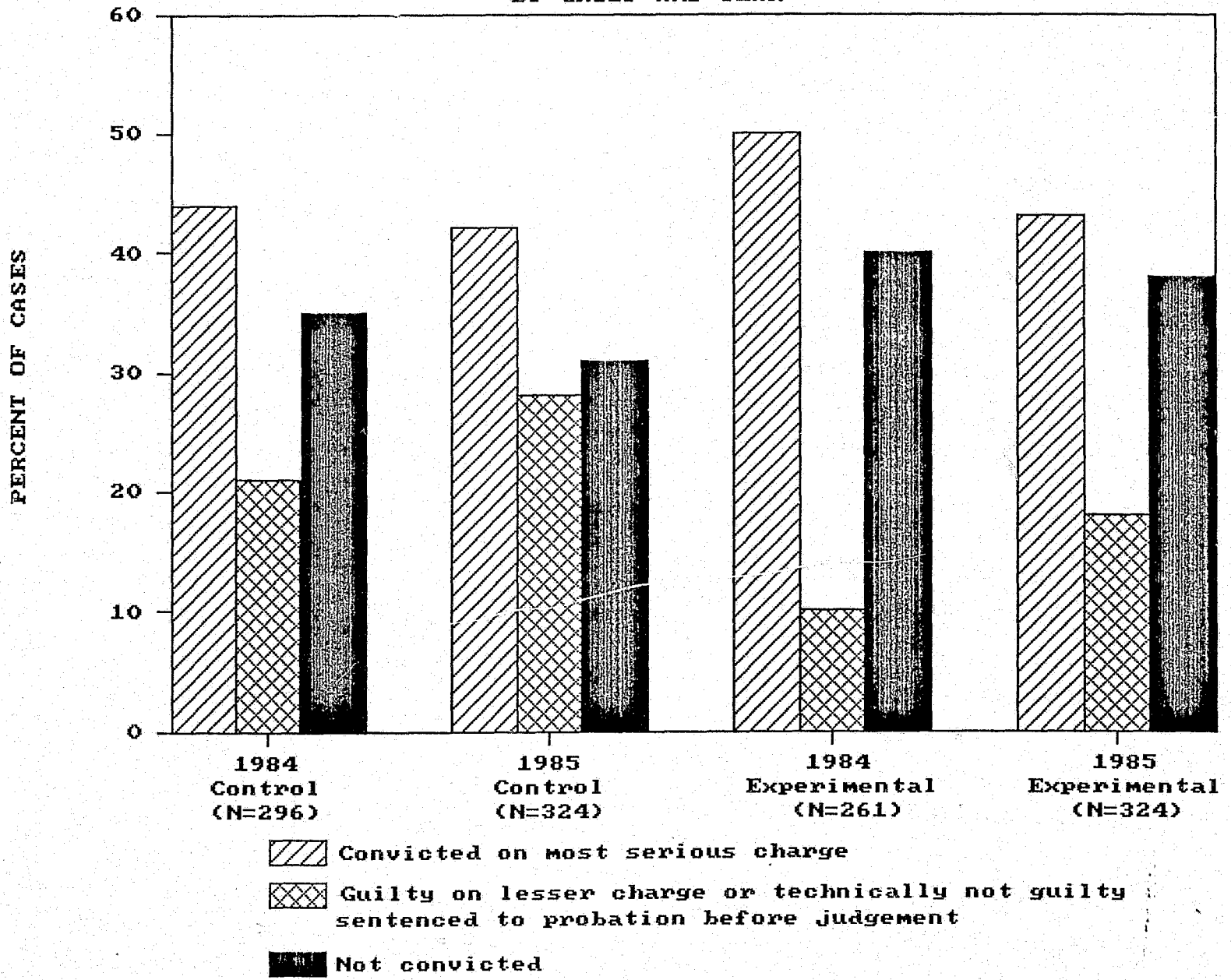


FIGURE X-3

DISPOSITION OF PROSECUTED CASES

BY GROUP AND YEAR



cases, and experimental reductions grew from 10 percent to 18 percent of such cases. Thus measuring attrition as non-convictions, both groups had small decreases: controls went from 35 to 31 percent and experimentals from 40 to 38 percent of prosecuted cases.

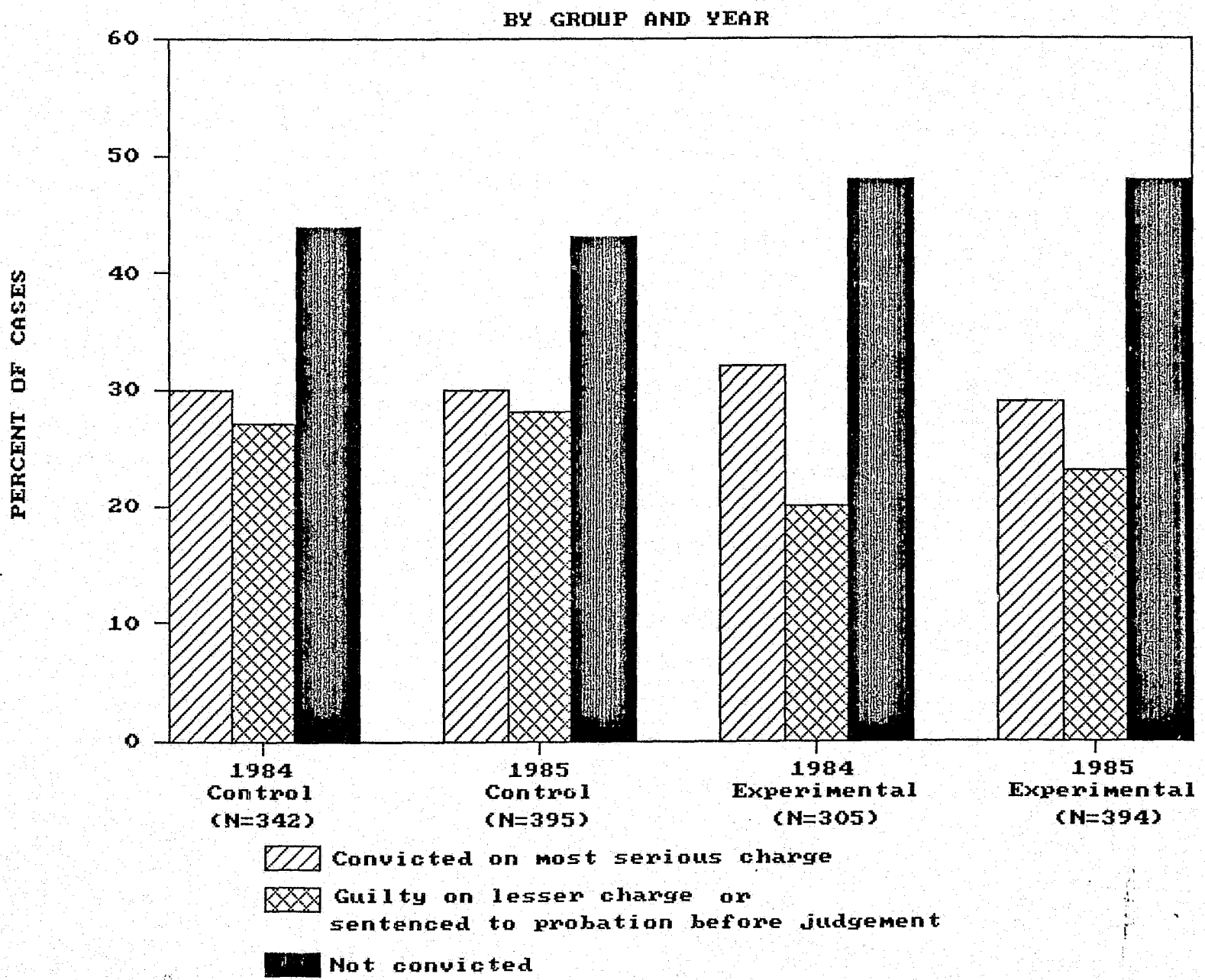
As a result of the offsetting changes shown in Figures X-2 and X-3, there was no net change either in the proportion of cases convicted on the most serious charge or in non-convictions, either for the experimental or the control cases, and no difference between them on either measure in 1985. Figure X-4 shows that in both 1984 and 1985, 30 percent of all control cases were convicted on the most serious arrest charge; experimental cases convicted on the most serious charge decreased slightly, from 32 percent of all cases in 1984 to 29 percent of all cases in 1985. The non-conviction rate for control cases was 43 percent in 1984 and 44 percent in 1985, while 48 percent of all experimental cases resulted in non-convictions in both years.

Reasons for Case Attrition

Data on reasons for actions provided by prosecutors for 1985 cases suggest that evidentiary weakness and constitutional problems were the leading causes of both experimental and control dismissals at felony complaint screening. Fully 78 percent of the control and 57 percent of the experimental felony complaint dismissals were attributed to these reason categories. However, the difference between experimental and control evidentiary dismissals was not statistically significant and, more

FIGURE X-4

FINAL DISPOSITION OF ALL CASES



importantly, the low felony complaint dismissal rate meant that only 15 percent of all control cases and 10 percent of experimental cases reviewed by the felony complaint unit were dismissed due to evidentiary weaknesses or constitutional problems. A review of these cases suggest that only a few of them might have been salvaged by alternative action taken by patrol officers. Most were the result of charges brought on the basis of uncorroborated statements of a codefendant or on the basis of a similar modus operandi for two defendants who were prosecuted on other charges.

After felony complaint screening, evidentiary and constitutional problems accounted for less than 20 percent of the non-convictions in prosecuted cases for both groups. In contrast, prosecutorial policy, particularly the decision to dismiss one case in exchange for a guilty plea in another, accounted for 52 percent of the control and 55 percent of the experimental case non-convictions. Overall, evidentiary-based attrition accounted for 24 percent of all control case dispositions and 16 percent of experimental case outcomes.

Discussion

Several factors may explain the failure of the experimental intervention to result in reduced felony attrition in experimental cases: (1) inadequate implementation of the intervention; (2) the choice of a jurisdiction in which there was limited room for improvement in investigative activities; and (3) a theoretically faulty multi-step change model.

Implementation Problems

The problems in implementing the intended experimental changes limited their impact. Although the felony investigation and post-arrest guides were regularly completed by officers and reviewed by sergeants, the feedback reports that were to include information about charging decisions, case disposition, and prosecutors' reasons for decisions were not produced as planned. The failure to complete retailoring of the county criminal justice system computer system delayed the initial distribution of the reports; permitted preparation of only individual but not cumulative reports indicating squad-wide problems; and made these monthly reports bulky, unattractive, and less informative than had been planned. Many officers reported that they did not get their reports and that there was little discussion of the problems that they were intended to identify.

The Research Site

In Baltimore County police-prosecutor relations were good prior to initiation of the study. Since the police were enthusiastic about participating in the study, however, we assumed that each agency's initial denial of problems was simply reticence to expose them to outsiders. At the weekend conference it became evident that prosecutors were satisfied with police cases and communicated regularly with officers about them. The felony review process routinely enabled a "principal investigating officer" informally to discuss serious felony cases with an experienced prosecutor prior to the initial prosecutorial

charging decision, to actively contribute to that decision, and to learn what additional evidence was needed.

The review of burglary and robbery investigations indicated that police investigations were conscientiously carried out and their reports were complete. The high standards of police work and informal communication between police and prosecutor already in existence meant that the margin for improving evidence collection through either the introduction of closer supervisory review of investigation reports and the use of supplementary guides or the adoption of a formalized written feedback system was more limited than if such had not been the case. Nevertheless, throughout Baltimore County between April and November of 1985, felony arrests rose by 11 percent over the same period in 1984, without an increase in reported crime. Because arrests for all felonies except arson and robbery increased substantially in virtually every precinct in the county (including the three not involved in the study), the most likely explanation appears to be that the change resulted from a delayed effect of the department-wide Accountability Awareness program. That program emphasized improving investigations by more frequently canvassing and interviewing witnesses, and those changes were found in the arrests of both experimentals and controls.

Although no experimental effect was observed during the eight months that the experiment was in effect, the findings suggest that: (1) police behavior can change if the department

seeks to produce it; (2) internal processes rather than feedback from an outside agency may be of central importance in producing the change; (3) changing individual officers' behavior by changing the organizational values and rewards is a slow and gradual process rather than an one to which all immediately respond; and (4) had we continued data collection for a longer period an experimental effect might have appeared.

The Change Model

The change model on which the experiment was based involved a three-step process. It was anticipated that change in officers' conviction consciousness, closer supervision of felony investigations and post-arrest activities, and information about prosecutors' evidentiary needs in cases would motivate officers and improve their skills in developing evidence. These would presumably result in the collection of more and better evidence, which in turn would lead to more felony prosecutions and a higher proportion of case convictions. The model, however, may have rested on several incorrect assumptions. It also put most of the burden of change on the police and ignored the possibility of a variety of adaptive responses by prosecutors other than reduced attrition including a Hawthorne effect resulting in an increase in Circuit Court prosecutions, and an increase in case reductions stemming from heavier caseload pressures.

Among the assumptions that the finding of this study have challenged are the beliefs that existing high rates of felony case attrition: (a) are always undesirable; (b) can be reduced

by improving communication and coordination between police and prosecutors, and (c) primarily are the result of inadequate evidence collection by the police.

The findings of this study and several others funded by NIJ (Petersilia et al., 1987; Schram 1987; Garofalo and Neuberger, 1987; RMA, 1987) suggest that a much smaller proportion of cases than anticipated resulted in non-convictions due to evidentiary shortcomings and generally these were neither the result of an error or not correctable.

Furthermore, the assumption that the police rather than prosecutors made the avoidable errors and failed to respond to communication needs reexamination. Prosecutors, many of whom are less experienced than their police counterparts, may make errors in selecting the most appropriate charge, negotiating a plea agreement with a defense counsel, or presenting a case in court. In addition, because what happens to a case after it has been accepted for prosecution depends much more on the skills and case preparation of the prosecutor than the police officer, it is necessary to reject as inappropriate an outcome measure such as the arrest/conviction rates, over which the police have little control, as the measure of their success or failure.

In Baltimore County there <u>was</u> a substantial increase in both evidence collection and the proportion of cases accepted for Circuit Court prosecution. Because these changes were observed in both experimental and control cases, however, it is unclear to what they can be attributed. What is clear is that there was a

subsequent unanticipated outcome--more case reductions--rather than the desired increase in the felony conviction rate. This suggests that the states attorney's office adapted to change by altering changing standards. It also indicates a need to study court processes and the interaction of evidence with caseload pressures and other factors affecting dispositions to understand case outcomes.

In sum, although there was no specific experimental effect, there was a notable if unexplained increase in felony arrests and in evidence collection throughout Baltimore County. These might be attributable to the informal use of the guides and alteration of investigation standards by control supervisors, in-service training on evidence collection that all patrol officers received, the transfer of investigations across shifts reducing the distinction between experimental and control cases, or to a change in the occupational culture of the department produced by the Accountability Awareness program or some additional factor.

Although the experiment appears to have failed to produce the anticipated changes, the findings do provide some useful information and suggest further research avenues including a reconsideration of the "problem" of attrition. The findings indicate that (1) officers' investigative and evidence collection activities, even when they are adequate, can be improved so that police produce more evidence; (2) stronger evidence leads to acceptance of a greater proportion of cases on the original arrest charges; and (3) routine informal feedback appears to be

more important than a written feedback mechanism in assuring adequate communications between the police and prosecutor; but (4) more evidence and better communication may not be enough to change case outcomes due to the adaptive capacity of the court system. How to improve in each of these areas is a matter for further investigation.

The study also suggests that the "problem" of attrition due to police failure to obtain adequate evidence may be exaggerated, at least in Baltimore County. Though great caution is needed on generalizing from a case study, in Baltimore County the evidentiary problems that might have been eliminated by alternative police actions were quite infrequent and accounted for a small proportion of non-convictions. Police make arrests for a variety of reasons. These include controlling an immediate situation, responding to community demands for action, or pressuring a codefendant to make a confession. To suggest that police should not make such arrests because they are not likely to result in convictions, however, may be a cure that is worse than the disease of attrition. Neither the police nor the prosecutors in Baltimore County were dissatisfied with the existing non-conviction rate; each understood that it reflected the use of discretion in handling situations. It may be useful, therefore, to regard attrition due to evidentiary shortcomings, like that due to lack of prosecutive merit, as a normal occurrence in a multi-stage criminal justice system with a variety of goals, only one of which is obtaining felony convictions.

CHAPTER 1

INTRODUCTION: IMPROVING EVIDENCE COLLECTION THROUGH POLICE-PROSECUTOR COORDINATION

More than 60 years ago the Cleveland Commission's study found that more than half of the felony arrests were dropped before a disposition by plea or trial (Pound and Frankfurter, 1922). Since then a variety of studies have confirmed this finding across diverse jurisdictions and prosecutorial practices. Recent studies that focus on case processing and police-prosecutor relations have concluded that a substantial proportion of felony case dropout or "attrition" is attributable to evidentiary and witness problems that can be reduced by better communication between the police and prosecutors.

In response to those findings, the National Institute of Justice called for experimental efforts to reduce avoidable attrition through improved police-prosecutor communication. This report details one such study, conducted in Baltimore County, Maryland, with the cooperation of the police department, state's attorney's office and criminal justice coordinator's office.

Goals and Objectives of the Study

The broad objective of this project was to test through a field experiment the effects of several interventions designed to reduce felony case attrition through improving police evidence collection. Better evidence collection skills were expected to result from improved police-prosecutor communications and

enhancement of the value placed by the police organization on attaining convictions. To test the effectiveness of this strategy two randomly selected shifts of experimental patrol officers were exposed to three interventions designed to lead to the desired reduction in felony case attrition: (a) closer supervision and use of felony investigation guides to aid felony investigations; (b) monthly feedback reports indicating case outcomes and reasons for them provided to police officers and their supervisors; and (c) increased departmental emphasis on convictions as a measure of police performance. The research design addressed two questions: 1) Did the experimental program improve the quantity and variety of evidence accompanying felony arrests (e.g. more witnesses or additional physical evidence)? 2) Did this result in less attrition due to evidentiary problems in experimental than control cases at both the initial prosecutorial charging decision and at disposition?

Felony Attrition over Time and Across Jurisdictions

Numerous studies of case dispositions over time and across jurisdictions have found that only half of all felony arrests result in convictions (Boland, 1986; Brosi, 1979; Eisenstein and Jacob, 1976; Feeney et al., 1983; Forst et al., 1977; McElroy et al., 1981; McIntrye and Lippman, 1970; Newman, 1966; and Vera, 1977). Most cases are rejected at screening or are nolle prossed or dismissed at an early stage in the disposition process. After felony court indictment, dismissal rates are much lower and more uniform (Boland, 1986). Nevertheless, there is wide variation in

the timing and processes that leads to a variety of case outcomes. For example, Brosi, in a study of case dispositions based on PROMIS data from 13 jurisdictions, found the percentage of arrests rejected at screening by the prosecutor ranged from 8 to 42 percent (1979:12), and the proportion of arrests that ended in convictions ranged from 21 to 62 percent (1979:8). Similar variation is found among the 37 jurisdictions now participating in The Prosecution of Felony Arrests series (Boland et al., 1983; Boland and Brady, 1985; Boland, 1986).

These variations in disposition patterns are related both to differences in technical and legal arrangements in the early stages of case processing and to prosecutorial policies. Screening arrangements are the primary determinant of post-filing dismissal rates. Three primary case processing arrangements have been identified and lead to different dispositional patterns (Jacoby 1979; Jacoby et al., 1982; McDonald et al., 1981; and Boland 1986). One arrangement, found increasingly in large cities (including Washington, D.C., Boston, and Chicago), is for police to bring arrests to the prosecutor for a charging decision within 24 hours of arrest and before any charges have been filed with the court.

A second pattern is for initial charges to be filed in lower court by police prior to prosecutorial review. Arraignment and bond hearings are conducted by a court magistrate within 72 hours of arrest. Although prosecutors can no longer do pre-filing screening, they decide whether to pursue prosecution of the case

as a felony in the upper court (i.e., seek an indictment or criminal information) and do so with substantially less time pressure than in the aforementioned model. The absence of pre-filing screening, however, tends to result in higher attrition at the indictment stage than is found in jurisdictions with such screening. This pattern is characteristic of all counties in Maryland.

A third pattern is one in which the prosecutor shares the screening function with the police. In California, for example, the prosecutor must file charges within 48 to 72 hours of an arrest, and the police have the legal authority to pre-screen less serious arrests and dismiss or refer them for misdemeanor prosecution. In many counties, therefore, a substantial amount of case screening is done by the police. In Los Angeles County, for example, in 1981 approximately 17 percent of all felony arrests were dropped by the police and another 31 percent were referred for misdemeanor prosecution (Boland, 1986:15).

Variations in prosecutorial charging policies also greatly affect case attrition. Jacoby (1979) and Jacoby et al. (1982) identified three principal charging policies that represent different programs, resource allocation plans, and decision-making strategies. In the "legal sufficiency" model, initial case screening is cursory and, if the legal elements of the crime are present, the prosecutor's office will charge and use a variety of dispositional routes in subsequent processing stages. In the "system efficiency" model, which emphasizes speedy and

early case dispositions, the emphasis is on pretrial screening, early plea bargaining and referral of cases to other courts and criminal justice agencies. In the "trial sufficiency" model, oriented toward the trial stage, prosecutors accept cases for prosecution only if they are capable of being sustained at trial.

Each model leads to different dispositional patterns and widely divergent screening rejection rates. To illustrate using 1981 PROMIS data, Boland (1986) found an average rejection rate of 27 percent that masked the range of rejections at screening extending from 3 to 47 percent. In Manhattan, operating from a legal sufficiency model, prosecutors filed all but 3 percent of the arrests but sent most of them to the lower court, where many subsequently are dismissed. In New Orleans, where prosecution rests on a trial sufficiency model and prosecutors in the felony screening unit have 10 days to review cases, prosecutors rejected 47 percent of the arrests after reviewing of the evidence and consultation with victims.

Explaining Attrition and Convictions

Studies of the factors that contribute to convictions and conversely to case attrition have focused on: (1) the guilt or innocence of the defendant as indicated by the evidence in the case; (2) the individual characteristics of the offender (often termed "extra-legal" factors); (3) factors related to the organization, structure and particular policies of criminal justice agencies; and (4) the political and social characteristics of the larger community. Overwhelmingly, they

have found that the seriousness of the offense and the availability of evidence and witnesses are the principal determinants of case disposition, although they were able to explain only a small proportion of the variance (Boland, 1986; Boland and Brady, 1985; Boland et al., 1983; Brosi, 1979; Forst et al., 1977; Forst et al., 1982; Feeney et al.,1983; Jacoby, 1975; Jacoby, 1982; McElroy et al., 1981; McDonald et al., 1981; Myers and Hagan, 1979; Vera, 1977).

Evidence and witness problems stem from three principal sources: factors associated with victims and witnesses; factors related to police arrest and evidence collection practices; and factors stemming from prosecutorial policies and procedures.

The importance of victims and witnesses, particularly their prior relations with defendants, were highlighted by both the Vera Institute's (1977) study of the dispositions of 1,888 felony arrests in New York City and two studies conducted by INSLAW (Forst et al., 1977; Forst et al., 1982). Vera researchers found that in most of the felony arrest cases they studied there was a prior relationship between the defendant and victim that contributed to lack of cooperation by the complainant and resulted in more frequent dismissals than in cases in which the victim and defendant were strangers. In both Washington, D.C. (Forst et al., 1977), and six other sites in the replication study (Forst et al., 1982) prosecutors rejected a substantially higher proportion of arrests that involved victims and offenders who knew each other than they did arrests in which they were

strangers. Feeney et al.'s (1983) qualitative examination of the reasons for non-convictions in robbery and burglary cases in Jacksonville found that these factors played an important role in case attrition: willingness of the victim to assist in the prosecution; the diminished credibility when a victim or witness had a history of drug use, alcoholism, mental problems or criminal activity; and reluctance to cooperate when victims and witnesses were themselves involved in illegal activities. These factors cannot easily be remedied by altering police practices.

Police practices, too, play an important role in developing evidence and affecting attrition. In an examination of the dispositions of nearly 15,000 arrests made in Washington, D.C., Forst et al. (1977) observed that three factors significantly increased the likelihood of a conviction. These were the recovery of tangible evidence, the availability of two or more cooperative witnesses, and the speed at which the police were able to make an arrest following occurrence of the offense. The findings suggested that a speedy arrest means a more likely conviction because it contributed to the recovery of tangible evidence. These findings were replicated in a seven site study (Forst et al., 1982).

Both of these studies also observed that substantial variations in police officers' ability to produce evidence appeared to be associated with the likelihood of conviction. After controlling for variation in the "inherent convictability" of the arrests they made, only a small proportion of the officers

with arrests---between 8 and 19 percent---accounted for more than half the arrests resulting in convictions. An examination of the characteristics of high and low conviction officers indicated that the former took more steps to locate additional witnesses and were able to state a wider variety of techniques for gathering evidence.

Feeney et al., (1983) in a study of the dispositions of robbery, burglary, and felony assault cases in Jacksonville and San Diego, found that evidence variables had far greater impact on case dispositions than offense, processing, and non-legal factors. The impact of various evidentiary variables, however, differed by jurisdiction and type of crime. In San Diego robberies, the most important evidence factor was the quality of the identification evidence linking the suspect to the crime; in Jacksonville robberies, victim and witness problems assumed primary importance. In burglary cases the key variables were the availability of physical evidence (especially recovered stolen property) and the defendant's confession or admission. Greenwood et al. (1976) also found the lack of evidence connecting the suspect and the crime to be the most frequent source of attrition in burglary and marijuana possession cases.

Departmental arrest policies, particularly the evidentiary standards for arrest and charging, also affect the conviction rate. Feeney et al. (1983) found marked differences in the arrest practices in the two cities they studied. For example, in San Diego there was no clear cause of arrest in 15 percent of the

robbery arrests and 10 percent of the burglary arrests. In Jacksonville, in contrast, there was no clear cause of arrest in only two percent of the robberies and burglaries.

Eck's (1983) study of police methods of solving crimes suggests widespread weaknesses in preliminary investigations. He suggests that patrol officers tend to focus too heavily on victims and ignore other sources of information such as witnesses, informants, other police officers, and departmental records. In addition, when a suspect is identified, officers often fail to collect available physical evidence.

Factors related to police organizational patterns and post-arrest activities also have been found to affect attrition. In New York City a police demonstration project on "felony case preparation" (McElroy et al., 1981) involved immediate post-arrest investigation of serious felonies by precinct detectives and preparation of an investigation report with screening recommendations. The project resulted both in increased early voiding by the police of arrests likely to result in dismissal and in reduction of attrition in filed cases in the experimental precinct where it was implemented but no such changes in a control precinct with a similar crime rate. For example, the indictment rate in the experimental precinct rose from 11.5 percent of all arrests to 17.2 percent while in the control precinct it rose only from 13.6 percent to 16.3 percent. The conviction rate in the experimental precinct rose from 45 to 50

percent while it fell in the control precinct from 50 to 44 percent.

Police Prosecutor Relations and Felony Case Attrition

Several studies have found that poor communication and a lack of cooperation between police and prosecutors contribute to case attrition, some of which might be avoided (McDonald et al., 1982; Feeley et al., 1983). The problem in police-prosecutor coordination arises in part from differences in each organization's operational goals and perspectives. Police make arrests for a variety of reasons on the basis of a standard of probable cause; convictions require more evidence than that. Police agencies focus on and reward officers for arrests (which they control) rather than convictions (which they do not). They measure success in terms of clearance rates (i.e., the recorded crime-arrest ratio), which makes them appear more successful the more arrests they make regardless of the quality or outcomes of those arrests. Because police organizations rarely track convictions, officers have little organizational incentive to collect additional evidence, do post-arrest follow-ups or focus on convictions.

For prosecutors, the primary measures of success center on the proportion of charged cases over which they exercise control that result in convictions. Their concern with avoiding acquittals means they will look more successful if harder-to-win cases are rejected or plea bargained. This difference in perpectives and organizational measures of success leads to

prosecutor frustration with and criticism of some of the cases the police bring and police anger at some case dismissals recommended by prosecutors, with little communication between them about these differences.

Although the police know generally what evidence prosecutors need, they tend to underestimate the amount required. In a study using a decision-simulation technique, senior police officers were told to imagine they were being asked by junior officers about the charge to recommend to a prosecutor in a robbery case. In advising the junior officer the senior officer could choose from a folder containing 44 index cards as many items of information as needed to make a recommendation. The same simulation was conducted with senior prosecutors who were to advise junior prosecutors. Analysis of the results showed that prosecutors required 40 percent more items of information than the police before being ready to make a charging decision (McDonald et al., 1982).

This lack of systematic communication about the evidence they need and the absence of feedback to police about case dispositions reduces the effectiveness of both the police and prosecutor. A number of researchers have concluded that many cases could be salvaged by policy changes, including a systematic focus by the police on evidence gathering and "more attention to the problems of convictions" (Feeley et al., 1983:244), by "redefining the police role in a case as ending with conviction rather than arrest" (McDonald et al, 1982:76), and shifting "from

an emphasis on statistics about arrests and offense clearances to an emphasis on making good arrests" (Forst et al., 1977:90). Each noted that prosecutors need to do more too: cooperate with the police in building stronger cases; pay more attention to cases at early stages; and take more risks in accepting cases.

Efforts to increase police-prosecutor communication in various jurisdictions have included coordinating councils, police-prosecutor liaison programs, intake screening units, and formal feedback mechanisms. The latter inform police about case outcomes, indicate what prosecutors need in later stages of case processing, and develop police "downstream orientedness" toward convictions. These programs, however, are scarce and largely unevaluated.

Establishing a useful, ongoing feedback system, however, is no simple task (McDonald et al., 1982). Prosecutors must be willing to justify their decisions in writing and provide information that may interfere with their working relations with police. Officers must have an incentive for using the information, responding to prosecutors' requests, and altering their behavior. Both officers and assistant prosecutors, therefore, are likely to ignore, sabotage, or resist a feedback system unless the incentives in the department or office in which they work are changed by a police manager who is conviction-oriented and a prosecutor who recognizes that in the long-run, feedback enhances the quality of cases the police bring them.

The problem, then is to bring about changes in both organizations and alter inter-organizational relations.

Methodological Issues in Studying Attrition

Variations in case processing practices and prosecutorial policies make comparisons of attrition rates across jurisdictions a methodological minefield. Feeney et al. (1983), in the most extensive examination of the problems of measuring case attrition, noted the lack of uniformity across earlier studies and continuing unresolved issues in current studies regarding:

-the appropriate base for measuring attrition (e.g., arrest, screening, filing, and indictment);

-the unit of count (e.g., how should one count multiple offenses, multiple victims from the same criminal event, and multiple offenders?);

-the label of the unit to be counted (e.g., lack of uniformity in offenses labeled "felonies" across jurisdictions);

-the definition of attrition itself.

Attrition typically is measured from the point of felony arrest, which also is defined in a variety of ways (Sherman and Glick, 1984; Feeney et al., 1983), and is defined as including arrests the police do not present for prosecution, arrests declined for prosecution by the prosecutor, and arrests filed in court but subsequently dismissed or acquitted at trial. Most studies include as a conviction any charge associated with a case. But Boland (1986), for example, does not count as attrition those arrests that are referred to other courts or

jurisdictions or to diversion programs or those acquitted at trial as dropped cases. Other studies vary in the manner in which they treat refiled cases, cases left dangling in the system without a dismissal, bench warrant arrests, and probation and parole violations (Feeney et al., 1983).

Organizational Change, Feedback, and Change Models

Studies of organizational change in many workplaces and of the complex processes in making feedback more effective can suggest ways to overcome the problems posed by the gaps in police-prosecutor communication and differences in organizational values. Those studies suggest that changing organizational behavior is both an art and a science and that simply transferring information without attention to interpersonal relationships, organizational constraints, and occupational values as well as the change process itself may accomplish little.

Feedback

Empirical research on feedback strategies for improving organizational performance consistently has found that the effectiveness of the feedback is dependent on both the content and its manner of presentation. Whether the recipient understands and believes the feedback depends on its source, timing, frequency, specificity, and whether the information is positive or negative (Ilgen et al., 1979).

Several dimensions of the source of the feedback affect the way workers perceive it, including the expertise, credibility,

trustworthiness, and intentions of the source (Giffin, 1967; Klein, Kaut, and Wolfson, 1971). Studies of the timing of feedback suggest that a delay is not always detrimental to learning and may be beneficial in improving performance (Buchwals and Meager, 1974). Hundel (1969) found that the more often feedback was provided to workers who were grinding metallic pieces, the better they performed. Both the sign (i.e., positive or negative) and presentation affect the response of the recipient. The more explicit information about performance and the greater amount of feedback, the more able the individual is to judge his or her own performance and the greater will be the motivating potential (Ilgen et al.). If feedback adds little to what the recipient already knows about his or her performance, however, it may increase the feelings of being controlled and resistance to it.

The recipient may be motivated to behave in line with the feedback by its association with an extrinsic reward through two mechanisms. First through temporally pairing feedback with an extrinsic reward, the feedback may acquire reinforcing properties. Second feedback may serve as an incentive by indicating receipt of rewards (or punishment) at some point in the future. In either case, pairing extrinsic rewards with feedback can lead to substantial effects on behavior.

The manner in which feedback is administered in an organizational context also has been found to be important. In an experiment in altering bank tellers' performance through

providing feedback and altering the work group culture, ten bank branches were selected to be given a new feedback system on productivity and teller performance (balancing accuracy, number of bad checks) (Nadler et al., 1980). They were matched with ten comparison branches. The system was designed collaboratively by a task force of bank personnel at different levels including some tellers from the experimental banks.

Although there was no overall difference in employee participation or work performance between the 10 experimental and 10 comparison bank branches after one year of operation, the feedback system was found to have produced positive results in some experimental branches and negative results in others depending on how the information was used. There was a strong relationship between branches that regularly used the feedback system and increases in teller perceptions of group control, group effectiveness, and intrinsic satisfaction, as well as a moderate relationship with improved teller skill levels, reductions in turnover rates, and acceptance of bad checks. Conversely, infrequent use of the system produced decreases in worker skill and performance levels because feedback was associated with poor managerial adaptation of the system. In at least one case, teller meetings to discuss the feedback led to questioning of the supervisor's decision, the supervisor became defensive, stopped holding meetings, and left the tellers with the feeling that the feedback system was just another burden imposed on them. Those findings suggest that feedback systems

may threaten worker satisfaction and productivity if they are not introduced and managed properly.

Changing Cultural and Work Organization Values

The organizational change literature is inconsistent about how difficult it is to change work cultures but consistent with respect to the highly contingent and intuitive nature of successful attempts. Deal and Kennedy (1982:164) describe changing corporate cultures as a "black art" for which there is little scientific basis. Nevertheless, the literature suggests several useful principles for shaping the change process applicable to increasing the value the police place on convictions.

Among the "building blocks of change" are a visible prime mover of the change who solidifies others' commitment to it as well as a real prime mover (Deal and Kennedy, 1982; Kanter, 1983). Change is fostered by visible "signposts in the morass of organizational messages" (Kanter, 1983:24) such as transition rituals in which the old values are put aside and new ones are celebrated. To last, however, the changes must be integrated into the organization through increased communication, training in both new values and the skills needed to support them, and rewards such as public recognition and performance measures (Deal and Kennedy, 1982). Active participation of those affected by a change in adapting and modifying the behavioral meaning of the values greatly facilitates the development of the consensus in support of the value change (Kanter, 1983; Nadler et al., 1983).

Changes that are segmented from the rest of the organization's culture and structure (as in the bank experiment) are unlikely to take hold (Kanter, 1983).

In sum, the basic determinant of case filing and conviction is the quality of the evidence the police provide to prosecutors and that depends, in large part, on the quality of police investigations. Where police collect physical evidence and obtain two or more witnesses and make an arrest shortly after the occurrence of the crime, the chances of a conviction increase. While some of the factors such as the inherent convictability of certain types of cases cannot be affected by altering police procedures, other sources of attrition can be avoided or reduced, particularly by improved police-prosecutor communication about the evidence needed to charge and win cases. In addition, barriers to communication arising from differences in the organizational perspectives and reward systems of the police and prosecutor must be overcome so that the police put greater emphasis on gaining convictions and the prosecutors take more risks and provide more feedback.

Organization of This Report

Chapter 2 describes the setting in which the program to foster police-prosecutor communication and reduce attrition occurred. It briefly outlines the essential features of the Baltimore County Police Department, explains in greater detail the legal procedures by which cases are processed and case processing policies of the county's State's Attorney's office,

and describes the Criminal Justice Coordinator's role in providing computer-based information from the county computer system. Chapter 3 presents the model of change on which the experimental intervention is based, the intervention itself, and the research methodology used to measure its impact on case attrition. The findings are presented in Chapters 4 through 6. In Chapter 4 the impact of the program on police evidence collection is explored. The effects of the intervention on prosecutorial case screening and case dispositions are examined in Chapter 5. Chapter 6 looks at the reasons provided by prosecutors for case reduction, dismissals, and subsequent non-convictions and how much of the remaining attrition in Baltimore County was "avoidable." The final chapter discusses the findings and presents conclusions and recommendations.

CHAPTER 2

PROCESSING CASES: POLICE, PROSECUTOR AND COURT OPERATIONS

Baltimore County is one of 23 counties in Maryland. It surrounds but does not include the city of Baltimore. The county's population of 655,200 is distributed over a large area that reaches north as far as the Pennsylvania border. The bulk of the population, however, lives in the suburban areas adjacent to the city. Approximately 90 percent of the population is white. Blacks constitute 8 percent and Hispanics and other groups 2 percent. In 1985 the crime rate was 10,982 crimes per 100,000 population.

Almost all police responsibilities in the county are handled by a single agency, the Baltimore County Police Department.[1] The department is headed by Chief Cornelius Behan, who was appointed by the elected County Executive and confirmed by the elected county council. In 1985 the department had an authorized strength of 1,407 sworn officers and 196 civilian employees.

Prosecutorial responsibilities throughout the county are handled by the Baltimore County States Attorney's office. The States Attorney, Sandra O'Conner, is an elected official whose office has about 35 attorneys and a total staff of 70.

The District (lower) Court in Baltimore County is responsible for the disposition of misdemeanors, criminal traffic offenses, and less serious felonies as well as the initial filing, bond review, and preliminary hearings for serious

felonies. There are five District Courts in the county.

The Circuit (upper) Court is responsible for the disposition of serious felonies after grand jury indictment or the filing of a criminal information on specific felony charges; it has concurrent jurisdiction with the District Court over less serious felonies. The District courts in Maryland have jurisdiction over a number of crimes that in other states are considered felonies. Some misdemeanor crimes are punishable by a year or more in prison (e.g., simple assault, attempted robbery, breaking and entering with intent to steal, and most weapon defenses) and these as well as many less serious felonies (e.g., grand larceny, auto theft, false pretenses, and uttering bad checks) often are disposed in District Court although they may result in prison sentences. The penalties for less serious felonies are the same regardless of the court of final disposition. Thus the felonies disposed in Circuit Court are a more serious subset of all crimes typically considered felonies in other jurisdictions.

Police Handling of Investigations and Arrests

The Baltimore County police are organized into three divisions (Eastern, Central and Western), each the responsibility of an area commander. Within each area are several precincts under the command of a captain. The criminal investigation division (CID) operates out of police headquarters and is organized into several specialized units that operate countywide (e.g., homicide, sex crimes, forgery, and fraud) as well as several that operate from area offices (e.g., burglary).

Within each precinct, most officers are assigned to patrol. Since adopting about a decade ago a case screening system that assigns points to a case on the basis of the availability of various types of evidence, patrol officers in Baltimore County have been responsible for follow-up in cases with a named suspect and are encouraged to follow up in other instances with promising leads. Whether a detective comes to the crime scene or becomes involved in the preliminary investigation of a robbery or burglary depends largely on the patrol officer and his or her informal relations with CID investigators. Similarly, after an arrest, a detective may be asked to interview the arrestee if the patrol officer feels special skills are required or the case is complicated. Patrol officers are trained to give Miranda warnings and often question suspects without involvement of a detective. Detectives are immediately responsible for follow-up on homicides, rapes and other sexual assaults, and child abuse cases and assume responsibility for cases that patrol cannot follow up.

The department is both innovative and management-oriented. Chief Behan has taken a leading role in the national movement for departmental accreditation and has adopted such programs as community-oriented policing (the COPE program), directed patrol, and an emphasis on patrol officer investigative responsibility. Supervisors vary, however, in the amount of time they will allow patrol officers to devote to their investigations.

When an arrest is made, the arresting officers bring the arrestee to the precinct for further questioning and completion of the paper work. They also check to see if an arrestee is wanted for other crimes and, if so, include these on the arrest report. After the report is reviewed by a sergeant, the arrestee remains in the precinct until all persons arrested during a shift are taken for a bail hearing before a commissioner. At the bail hearing the commissioner, who is not a judge, issues a charging document (with a warrant or summons), based on a determination of probable cause (except in on-view arrests), sets bail, and informs the arrestee of the right to a preliminary hearing (which may be waived). Thus, all arrests are filed by the police directly with the District Court without prosecutorial review and without police-initiated prefiling screening such as occurs in California.

Copies of the arrest report are sent to police headquarters within 24 hours for additional scrutiny. One copy goes to the department's legal office where an experienced detective reviews all felony arrests, makes copies of the investigation and arrest reports and the arrestee's Baltimore County criminal history for the state's attorney's office, and designates the officer most knowledgeable about the case its principal investigating officer (PIO). The PIO is responsible for meeting with an assistant state's attorney (ASA) to discuss the case prior to the prosecutor's charging decision. This must occur within 40 days of the arrest (and preferably sooner). The legal section officer

completes duplicate assignment slips which are sent respectively to the PIO's supervisor and the State's Attorney's office.

Prosecution

Organization of the State's Attorney's Office

The Baltimore County State's Attorney's office seeks to assure that only the more serious and strongest cases are charged in Circuit (felony) Court and that weaker and less serious cases are reduced quickly and handled in District Court. The emphasis is on conserving Circuit Court resources, ensuring that sufficient prosecutorial attention is devoted to the most serious cases to obtain a felony conviction in Circuit Court, and reducing other cases to misdemeanors for prosecution in District Court (which has a much larger caseload) rather than dismissing them. About half the cases reviewed by the felony screening unit are reduced.

The State's Attorney's office is organized horizontally. It has two major divisions---Circuit division with 10 assistant states attorneys and District division to which 8 assistants are assigned---and several smaller specialized units including the felony complaint, juvenile, domestic relations, and special investigations sections.

Three experienced assistant state's attorneys are assigned to the felony complaint unit (FCU). Two have permanent assignments; the third is taken from the Circuit Court division (which has more experienced assistants than the District Court division) for a four-month assignment. These three assistants

are responsible for reviewing each felony arrest filed by the police, deciding which charges should be filed, and determining whether the case(s) should be sent to Circuit or District Court.

Initial Prosecutorial Review of Cases

Under Maryland law, all persons charged with a felony are entitled to a probable cause review of the charges by a judge to see if there is enough evidence to hold them for trial. The state has the option of producing this evidence at a preliminary hearing before a judge or a grand jury. Unlike many other jurisdictions, however, if this does not happen within 40 days the charges filed by the commissioner are dismissed. In instances where the evidence presented by the police is insufficient the ASA may tell the officer at felony review that the case wll not be charged unless the officer does further follow up. In one arson case, for example, the police officer failed to interview the suspect (who was hospitalized for burns) the night of the fire. The ASA requested the officer do a follow up interview, which was not done, so no papers were filed and the case was dismissed after 40 days.

Prior to presentment to either a preliminary hearing or a grand jury, the case is reviewed and a charging decision is made by an assistant state's attorney from the felony complaint unit, usually during the course of discussion with the PIO. For felony theft and bad check cases the ASA reviews the police reports without a face-to-face discussion with a police officer. Unless the arrestee has a large number of pending theft charges, the

amount stolen is very large, or the arrestee has other felony cases in Circuit Court with which it can be consolidated, the case is left in District Court. Felony complaint unit prosecutors make independent evaluations of cases but informally consult with colleagues about difficult decisions. These decisions, recorded on a felony complaint form, are reviewed by the division chief.[2]

The felony review meeting between the ASA and PIO generally lasts about half an hour. Though styles vary, the ASA usually reads the investigation and arrest reports (either in advance of the arrival of the PIO or at the beginning of the review meeting) then asks the officer to characterize the case in general terms. The ASA then elicits further details about the offense, the history and character of the arrestee, relationship of victim and offender, the strength and nature of the available physical evidence, and the credibility and availability of witnesses. On the basis of the discussion and, in some instances, at the suggestion of the police officer, the ASA decides how to charge the case and records the information on the felony complaint unit's review form.

If the case is to go Circuit Court, the ASA must decide whether to send it to a preliminary hearing or grand jury. Normally the latter is preferred because it is a closed proceeding from which defense attorneys are excluded and there is no cross examination of the state's witnesses. However, the choice depends largely on scheduling (preliminary hearings are

held Thursday, grand jury on Monday). For cases to be charged in Circuit Court, the ASA schedules the preliminary hearing or grand jury after finding out the PIO's assigned court dates and informs the secretaries, who prepare the charging documents to be formally filed in District Court. If the prosecutor decides to reduce the charge to a misdemeanor, he or she must prepare an amended District Court charging document that is presented at the preliminary hearing. During the felony complaint meeting, in addition, he or she schedules the case for the preliminary hearing and arranges a trial date based on the police officer's assigned District Court dates for the next several months, and calls the court clerk to set the dates on the calendar.

Some felony complaint ASAs decide what to charge before the officer arrives and devote the session to eliciting details and inquiring about witnesses and evidence. Others defer the decision until they discuss the case with the PIO. Even in the former instance, however, the process is not a mechanical one. Police officers, particularly if they are experienced or have strong feelings about a case, may play an active role in the decision by suggesting the appropriate charge or attempting to change the ASA's mind. Three instances illustrate these active roles. In the first two the officers suggested reductions; in the third the officer tried unsuccessfully to dissuade the ASA from dismissing the case.

Case 1: Two defendants assaulted the victim, their drinking buddy, who had a radio they wanted to sell to buy more drugs or alcohol. The victim insisted the radio belonged to a girlfriend and refused to turn it over. The defendants took the radio, beat up the victim, and were arrested for assault with intent to kill. The officer asserted, "I hate bringing these bullshit cases...they should make the sergeants come up here. They said 'charge him; charge everybody.'" The ASA after suggesting, "we could put it in District Court as a battery," asked if the victim wanted to prosecute. The officer said someone told him the victim had called the precinct to say that he did not think he had identified the right assailants (despite the fact that the accused were his cousins). The prosecutor asked, "do you think we should just dismiss it?" When the officer showed ambivalence about a dismissal, however, the ASA reiterated, "let's put it in District Court." After they reviewed the facts to write up the felony complaint narrative, however, the ASA again suggested dismissal. The officer added, "I think the reason the victim did not contact me was that he'll tell me it didn't happen the way he told it and I'll charge him for perjury," and agreed to the decision to dismiss.

Case 2: To the ASA's question, "what's this case about?" the officer characterized the case in which three defendants had been charged with robbery and assault with intent to maim as follows: "the victim knows all the suspects. From my experience the victim drinks a lot and mouths off a lot. He was drunk when he called...He said the assault occurred on ___ Road and that John __ did it but later said it was Richie __. He also said that Richie just took the money but didn't hit him."

ASA: "What do you think's going on here?"

Officer: He did get stitches but I think it's a theft not a robbery...The victim is a troublemaker.

ASA: You don't feel it's worth charging?

Officer: Right, I don't think so...especially when the victim called again and changed his story about another suspect. There might be pressure from the suspect's family since they're acquaintances. I personally wouldn't go with robbery. I'd go with assault, battery and theft in District Court and be lucky if the victim shows up.

Case 3: An arson investigator brought a case where an informant's tip led to an arrest but all the evidence regarding a fire resulting in $160,000 damage was circumstantial. Furthermore, the officer noted, the

informant "had a motive to lie" since the defendant and informant had been co-conspirators in a burglary in which the defendant had testified against the informant. The officer added "you're not going to hurt my feelings by dismissing it" but then sought to change the ASA's decision to dismiss. He asserted he would go back and talk to the informant (to try to get evidence) and asked, "You don't think its worth a shot at Grand Jury?" The ASA replied "no, because we'd have to try it," but added, encouragingly, "see if you can come up with something before the preliminary hearing to dismiss it next week."

In about half the felony complaint meetings observed, the case was accepted for prosecution in Circuit Court without any prompting or urging from the officer. In the cases that were reduced or dismissed, there was a clear understanding shared by the police and prosecutors that disputes among family members and friends, particularly where the victim appeared to be a reluctant witness, were appropriately handled in District Court. In one instance in which the officer might have offered more resistance to the prosecutor's charging decision, the latter avoided an objection by deferring the decision to dismiss.

In this burglary case a witness saw a stranger speak to the apartment maintenance man, go into an apartment, and take stereo equipment to his car. The witness got the license number and called the police. The police obtained search and arrest

warrants which were executed on the stranger. The maintenance man was arrested as a codefendant. The stranger (whose case was charged as a burglary) denied knowing or getting the key from the maintenance man who also denied his involvement. The evidence against the maintenance man was circumstantial in the absence of his or his confederate's confession; the prosecutor was unwilling to attempt an agreement with the burglar to obtain information about the maintenance man's role. The ASA told the officer (who was a black female rookie) that he wanted to discuss the case with other prosecutors before deciding what to do. He then consulted with an ASA known for "a good sense of what will 'go'" (i.e., will result in a conviction) rather than one with a reputation for taking cases more readily. The assistant supported the ASA's decision to dismiss the case noting that the maintenance man probably was involved but that the case was unwinnable.

Baltimore County's case processing and review system has advantages and disadvantages. By having the police file the initial charge directly with the court, the prosecutor does not control the intake process or have the opportunity to do pre-filing screening. When initial case review does occur, however, the police have had time to complete supplementary work on the case, obtain a copy of the arrestee's local criminal history, and get lab and other reports to present to the prosecutor. It assures that the officer most knowledgeable about the case has the opportunity to provide the prosecutor with information that

does not appear on the offense report but often is crucial to decision making. As illustrated by all three cases above, the officer and ASA share a definition of "serious crime" based on their characterization of the victim, defendants, and their relationship. The first two cases were characterized as "not serious" despite physical injuries requiring medical treatment because they involved acquaintances and persons with unsavory characters. Because the arson case was a "serious crime" it could not legitimately be reduced. The absence of physical evidence and the relationship of the informant to the defendant, however, decreased its likelihood of being winnable at trial so it was dismissed despite the officer's mild protestations.

The felony complaint form completed by the ASA both serves notice to the secretaries to initiate the appropriate paper work and subsequently informs the trial attorney about defendant's criminal history, the nature of the charges, related cases, facts of the offense, key witnesses, method of identification, scientific evidence, witness and defendant statements, problems to anticipate in the case, and any additional investigation the officer has been requested to do.

If the ASA believes additional information is necessary for trial but not the charging decision, he or she simply asks the officer to get it and records the request on the form. In instances where further police work is required before the ASA is willing to charge, however, the prosecutor informs the PIO that

the case will be dismissed automatically unless particular action is taken and informs the officer of the time deadline.

If the defendant has been charged by the police for several independent criminal events, each must be charged as a separate case in Circuit Court and the ASA must decide which to cases to accept. Normally only the three strongest cases against a defendant are charged and the others dismissed by the felony complaint prosecutor. This reduces case preparation time but does not affect the actual prison term of a convicted defendant because the latter generally are given concurrent sentences. Thus prosecutors seek a single conviction on the most serious offense and are willing to dismiss the additional cases as part of a plea bargain because the actual prison time (assuming incarceration) is likely to be the same whether the defendant is convicted on just the most serious case or all three cases.

From Felony Review to Sentencing

At the preliminary hearing, for defendants whose cases are not reduced or dismissed the prosecutor formally files a criminal information transferring the case from District to Circuit Court. An amended charging document is filed if the case is to be reduced or dismissed. Alternatively, defendants may be indicted or dismissed by a grand jury.

After arraignment a trial date is set and the case assigned to a courtroom. Circuit Court division assistant prosecutors are scheduled to appear in courtrooms on certain days and are assigned the cases scheduled for trial in that courtroom on those

days. Cases involving a homicide, sex crime, or repeat offender and those requiring special attention due to their complexity are specially assigned to one ASA for consistent handling regardless of trial date or courtroom.

Most cases are disposed as a result of a plea agreement, which usually includes both the charges and sentence. Judges also may accept a guilty plea then give a sentence of probation before judgment (PBJ). This means that if the offender successfully completes the conditions of probation, the initial "guilty" finding does not appear on his or her record. PBJs generally are used for first offenders and persons tried for minor offenses.

Shortly before the assigned trial date the Circuit Court ASA reviews the case and discusses a possible plea arrangement with the defense counsel within broad office guidelines. The "going rates" are generally known, ASAs act independently, and the predominant pattern is to accept a guilty plea on the most serious charge in one case in exchange for agreement to nolle prosse in other pending cases.

Chapter 2 - ENDNOTES

1. The state police and several college campus police departments have police powers but there is no local municipal police operation within the county.

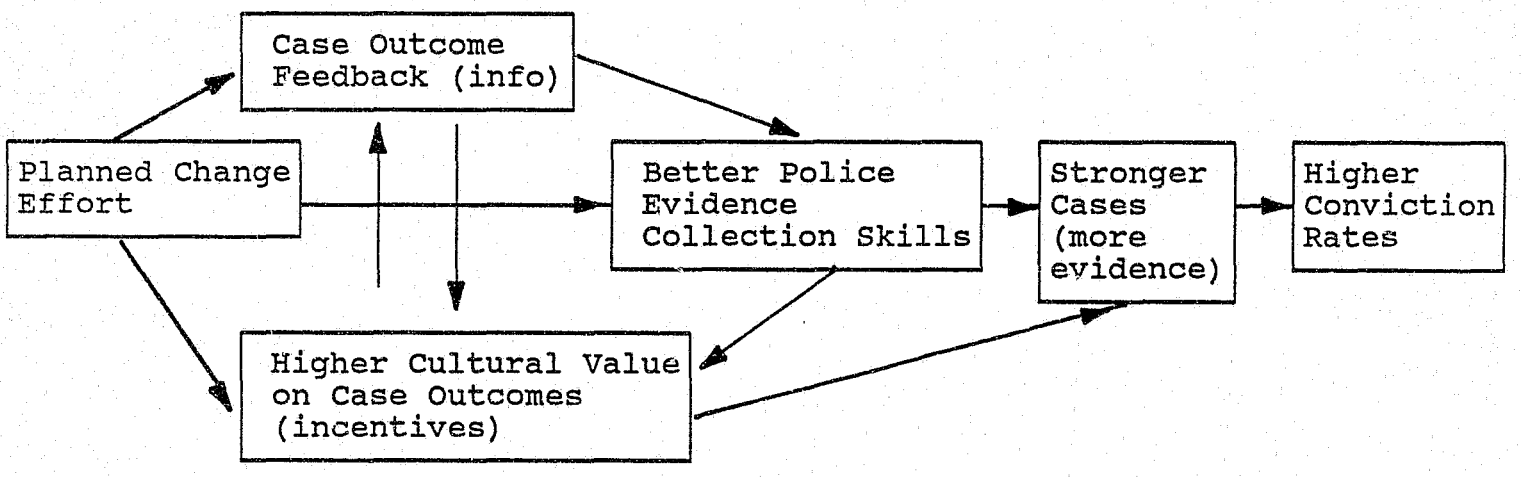
2. During the experiment the District Court division chief was responsible for Felony Complaint Unit oversight; in 1986 responsibility was switched to the chief of the Circuit Court division.

CHAPTER 3

THE EXPERIMENTAL INTERVENTION AND EVALUATION METHODOLOGY

Intervention Model and Change Strategy

Based on a review of the literature on felony attrition and organizational change, the following model of the process for reducing case attrition in Baltimore County was adopted:



The model suggests that rather than simply providing feedback, it is necessary to address and alter simultaneously three elements--information, incentives and skills--to produce both individual and organizational change. Feedback alone does not lead directly to better cases. Instead, it is treated as an intervening variable that reinforces new cultural values and leads to better evidence collecting skills. Changes in police values and incentives, at the same time, stimulate correction of errors indicated in feedback reports and more careful review of evidence

even by officers who already have good evidence collecting skills so that both contribute to preparation of stronger cases (i.e., those with more and more varied types of evidence). The model can be stated as a series of hypotheses for testing.

1) Feedback to police officers, increased departmental emphasis on felony convictions, and increased supervisory attention to case outcomes leads to increased efforts and improved skills in evidence collection.

2) Better skills and greater efforts to collect evidence result in collection of a greater amount and more varied evidence that corrorborates other items by independent means (e.g., physical and testimonial).

3) More varied and corroborative evidence leads to:
   a) more prosecutions of felony arrests as felonies.
   b) more convictions on felony charges, and
   c) more case convictions on any charge.

To test the effectiveness of this change model two experimental interventions were adopted to reduce case attrition in Baltimore County: (1) investigative and post-arrest guides to be used by police officers, completed with each felony investigation and arrest, and reviewed by supervisors; and (2) individualized feedback reports prepared by the criminal justice coordinator's office for police supervisors to review and pass on to individual police officers. The reports were to include reasons provided by the prosecutor for felony arrest outcomes

other than prosecution on the most serious arrest charge or conviction on the most serious prosecution charge.

In developing and implementing these specific changes as part of a broader effort to change organizational values, attention also was given to the process of change. We sought to maximize the involvement of persons to be affected so that they would view the changes as their own and become committed to them. Following principles derived from the organizational change literature previously noted, we adopted several "transition rituals" involving the state's attorney and police chief as symbolic leaders who made clear to their subordinates their concern with evidence gathering and increased felony conviction rates. The first was a ceremony at police headquarters to introduce the experimental interventions to police administrators and to select the two shifts that would be the experimentals; the second was a weekend conference in which key participants from both the police and state's attorney's office aired agency perspectives and shaped the instruments to be used in the change process.

The change process and participants' mutual goals were reinforced by participation of the 10 experimental shift commanders (lieutenants) and the sergeants and corporals on those shifts in periodic meetings and training sessions and the operation of a "steering committee" consisting of representatives of the police, state's attorney's office, and criminal justice coordinator that met periodically with the principal

investigator. The collaborative nature of these activities allowed participants to shape and modify the interventions and address problems in implementating them. While the police department was unable to provide immediate rewards for officers who increased their conviction rate, it was assumed that the changes would be long term and that consideration of conviction as well as arrest productivity subsequently would be built into performance evaluations and promotion to detective.

Developing and Implementing the Intervention

Selecting Experimental Shifts

At an initiation ceremony at police headquarters, the experimental study was presented to the affected area commanders and shift commanders (lieutenants).[1] At that time the two experimental shifts were randomly selected by placing four slips of paper (labeled one through four) in the chief's hat and drawing two (shifts 3 and 4) that became the experimental shifts.[2]

The Weekend Conference

Eight weeks after initiation of the study the ten experimental shift commanders, eight assistant state's attorneys, representatives of the police command staff, the Criminal Justice Coordinator and her staff, representatives of the county data processing unit (which was responsible for completing the retailoring of the local PROMIS system necessary to produce the feedback reports), the NIJ grant monitor, and Police Foundation researchers attended a weekend conference at a site outside

Baltimore County. The agenda and draft feedback reports had been designed by the steering committee; the draft investigative and post-arrest guides had been developed by police supervisors; the draft reasons code developed by the principal investigator and assistant state's attorney.

Friday evening participants heard remarks from the Chief and States Attorney, followed by an opportunity to meet informally. The working sessions all day Saturday and Sunday morning included both plenaries and small discussion groups. During the initial group discussion period, first police, then prosecutors aired complaints about police-prosecutor relations. In other sessions discussion groups reviewed and suggested revisions of the draft investigative guides, reason codes, and feedback reports and discussed mechanisms for training both police and prosecutors in the use of the various forms.

The discussion strongly suggested that the problems in police-prosecutor relations in Baltimore County were minor. At the operational level police officers routinely discussed cases with prosecutors at felony complaint review and often were consulted about plea bargains. At the policy level the Chief and State's Attorney had a cordial working relationship. Prosecutors' primary complaints were difficulty in reaching officers and uncertainty that messages were received; their desire for officers more frequently to dust for fingerprints, check out alibis, and preserve evidence better; and the need for better preparation in testifying in trials. Police complained

about prosecutors' failure to explain the reasons for case dismissals and reductions, particularly those resulting from plea agreements about which the officer had not been consulted; the distance from several precinct stations to the state's attorney's office that made face-to-face meetings very time-consuming; and the high rate of turnover in the states attorney's office that contributed to the lack of trial preparation of some inexperienced District Court prosecutors. By and large, however, each group could identify few specific problem cases or incidents and stated it was satisfied with relations, but agreed that the experiment was worth trying since "there was always room for improvement."

Implementing the Felony Investigation and Post-arrest Guides

As a result of the conference the guides, reason codes, and feedback forms were modified, and plans were made for the training sessions for experimental shift sergeants. The manner in which those sergeants would train their squads was left for discussion as part of their training sessions to more actively involve these first line supervisors in making the experiment work. The police department decided that the guides would be subject to a two-week pretest prior to final adoption. It also determined that experimental officers would be trained by their own supervisors in the precinct due to logistical problems and high overtime costs involved in scheduling a single session at headquarters.

The guides that were adopted were one page, all-purpose (rather than crime-specific) checklists of activities that officers should remember to do at the crime scene, in seeking out possible additional witnesses, in eliciting information about a suspect, collecting evidence, and obtaining additional information (see Appendix 1). Their use was made mandatory. For each item (e.g., "Was the scene processed for latent prints?"), officers were to indicate whether it had been done (by circling "yes") or was "not applicable" in the case. All items were to be completed and comments indicating plans for additional investigative activities were to be written on the back of the form, which was to be turned in to the squad supervisor. Supervisors were to review the guides in conjunction with the crime and arrest reports and return them to the officer if additional investigative activity was needed.

To avoid contamination of the experiment, officers were instructed not to include the guide when they turned in a late report to a sergeant on the next shift, but to leave it in their own sergeant's box. Similarly, each officer was given a pad of guides and instructed to keep it in his or her briefcase.

All experimental sergeants and corporals attended one of the four three-hour training sessions held at police headquarters. At each session Police Foundation staff explained the study, a representative of Chief Behan reiterated the department's support for the project, the lieutenants presented the guides and the operating procedures they had developed, an assistant state's

attorney presented the reason codes, and the Criminal Justice Coordinator presented plans for the feedback reports.

During the next two weeks, all squads on experimental shifts were informed about the experiment, trained in using the guides and informed about the feedback reports they would be receiving. Most sergeants chose to hold these training sessions when the squads were working on midnight shift, either by having officers report to roll call an hour early or taking half of the officers off the street for a special meeting between 3 a.m. and 4 a.m.

Seven of the ten training sessions were observed. Each was run by the experimental lieutenant but had the sergeants explain implementation procedures. Although they varied in style, emphasis on the goals versus the mechanics of the project, and openness to officers' questions and complaints, all sessions conveyed the supervisors' understanding of the goals of the project and research design and the department's commitment to it. Supervisors emphasized the need to increase canvassing for witnesses, obtain more written statements, and add descriptive detail to report narratives. Several lieutenants explained that the guides were mandatory but functioned as "reminders" of what should be done since felony arrests are rare events. As one lieutenant stated, "basically you're putting everything in black and white. In the end we'll see if that increases the conviction rate." Another stated the experiment provided officers with "the opportunity to make another step toward the professionalism we're

striving for." A sergeant, pointing out the benefits for the officers observed,

> We're going to investigate felonies and not just be report takers any more. This may lead to stacking of foolish dog bite calls, but that's OK. They're giving you the opportunity to do more investigations and you'll do them in the proper way.

In several precincts supervisors told officers that when they served an arrest warrant that they had not obtained, they were to question the arrestee (although several officers protested because they did not have information about the facts of the case). In one precinct the use of the guide was translated into specific standards: interview at least three non-complainant witnesses.

Officers' reactions varied from stony silence, to expressions of concern about the impact of the guides, to questions about the rationale and implementation of the study. One officer asked, "if I spend more time on felony investigations, will I be penalized if my traffic stops fall?" Another asserted, "How are the state's attorneys being monitored?" A third observed, "to avoid using the guides officers will downgrade offenses from felonies to misdemeanors and the name of the game will be 'downgrade that call.'"

One inducement to accuracy in completing the guides was the opinion of the prosecutors that the guides were discoverable by defense attorneys if they learned of their existence and sought to review them for possible discrepancies between the police report and guide. Police were thus urged to exercise care in

completing them and to make sure they remained in the hands of their supervisors rather than being included with other case materials sent to police central records.

Implementing the Disposition and Reasons Forms

Two forms were developed and put into all new felony case jackets by State's Attorney staff. Each identified the defendant and case, had a place for the ASA to indicate either the screening decision or final disposition, and spaces in which to enter up to three reasons for each using the reasons code finally approved by the steering committee. The list included approximately 60 "reasons" for reduction or dismissal grouped by type of problem. Among the problems were evidentiary shortcomings (e.g. analysis results unavailable; physical evidence insufficient), victim/witness problems (e.g., victim unwilling to prosecute; witness cannot be located), defendant characteristics (e.g., absence of prior record; ill health), jurisdiction issues (e.g., transferred to juvenile court), and considerations of prosecutive merit (e.g., dismissed in favor of other case; defendant made restitution). Most of these codes subsequently were used by ASAs.

In mid-May at a training session for all prosecutors including the State's Attorney, Tom Basham, Chief of the Felony Complaint Unit and District Court division and State's Attorney's liaison to the project, explained the goals of the experiment and the role of the prosecutors in it. He introduced the reason codes, reviewed the meaning and appropriate use of individual

codes, and explained procedures for completing and returning the forms, and gave each ASA a copy. (See Appendix 1.)

The three felony complaint unit ASAs reliably completed the forms indicating initial charging decisions. There were problems, however, in getting completed disposition forms, particularly for cases handled in District Court. In some instances prosecutors did not know a reason form was to be completed because it was not in the case jacket. In other instances, they simply ignored the forms that were in the jackets. Out of a total of 378 prosecuted cases in 1985 for which a reason form should have been provided, 95 (25 percent) were never obtained. Eighty-six of these were disposed in District Court. Many of the forms that were obtained, however, were completed several months after the experiment (and provision of feedback reports) ended and the reasons never reached the officers.

It took several weeks to discover that forms for grand larceny cases were not being prepared or included in District Court case jackets, and more time to rectify the situation. It took even longer to develop a system for keeping track of all the cases and their changing trial dates, and for the reason code forms to be completed. Even after that system was established, however, difficulties in collecting reason code forms continued. New ASAs sometimes were unaware of both the study and the form to be completed. The office files for District Court cases that result in a nolle prosequi or acquittal were thrown out within a

few days. If the disposition and reason code form was not completed by a District Court prosecutor on the day of disposition, it was very difficult subsequently to get a reliable reason for a disposition.

A final problem was the reluctance of many ASAs to use the codes that indicated a police error when it occurred. Prosecutors rely on police to provide them with additional information and to help them win a case through their testimony. Providing police supervisors with reasons implying criticism of an officer threatened to put the prosecutor in the position of being an informant against the police and to sour existing relations. Particularly in light of the tendency of police departments to use punitive control systems, several of the ASAs expressed concerns that police supervisors would discipline or otherwise punish officers on the basis of the ASA's reasons despite assurances that the reasons would be used only to counsel and improve performance.

Implementing the Feedback Reports

Implementation of the feedback reports proved to be a major problem. Producing the reports as planned required two modifications of the county computer: (1) linking two separate criminal justice data bases (one including arrest and initial District Court charging data, the other including dispositions of the cases arraigned in Circuit Court and those tried in District Court); (2) modifying the existing PROMIS system by adding screens on which to enter the badge number of the investigating

officer and PIO and the prosecutors' reasons data into the computer. Despite assurances that this was a simple task, the job of retailoring the county computer took far more money and time than had been anticipated.[3]

The initial research design called for individual, squad, and all-squad cumulative feedback reports to be sent to experimental supervisors for review and delivery to their officers on a biweekly basis. Designing the exact formats and contents of these reports, however, was delayed by uncertainty about the ability of the modified computer system provide the information desired. For example, it was unclear whether it could distinguish between felony and misdemeanor cases or could calculate actual prison or jail time by subtracting the amount of time suspended as a condition of probation from the full sentence. This uncertainty led to vague presentations at the training sessions and, far more important, a delay in the initiation of the experiment.

When several projected dates for completion of the computer retailoring came and went and the police became frustrated with the additional paper work in the absence of feedback on their efforts, it was decided to produce "interim" feedback reports. In fact, the computer retailoring never was completed. Throughout the eight months of the experiment officers received only individual "interim" reports that consisted of two separate printouts. One printout contained information on each arrest made by the officers and the initial prosecutorial charging

decision; the other contained information on the dispositions of all cases in which that officer was listed as a witness. To produce the reports the printouts were collated and the reasons provided by the prosecutors for reductions or dismissals of felony arrests at case screening and for dispositions other than guilty on the highest charge were added manually.

The first report, covering arrests and dispositions between April 1 and May 31, 1985, was distributed June 25th. Following distribution of the second report, which covered a three-week period, the steering committee decided that future interim reports should be prepared monthly rather than biweekly. A total of six reports were prepared and distributed, including a final cumulative 7-month report.

If feedback had been given only to the arresting officer in each case, report preparation would have been far simpler. But the intervention and research design called for providing feedback to the experimental investigating officer who signed the crime report (P.D. Form 10) and to the principal investigating officer (PIO).

Arrest data routinely entered into the county computer include the badge number and name only of the arresting officer. When the experiment began the police department created a hand written log of all felony arrests and the name and ID numbers of the arresting, investigating, and principal investigating officers. It was expected that this information would also be put into the computer and included in the feedback reports once

the retailoring was completed. In the absence of the computer modification, however, in instances where an experimental PIO or investigating officer was not the arresting officer, the feedback report data had to be manually prepared and added to the officer's feedback report. The result was that the interim reports looked sloppy and took a great deal of time to prepare.

An additional unanticipated problem related to the feedback reports related to their timing. In Baltimore County, where police file initial charges, as much as a month may elapse between a felony arrest and arraignment or other court proceedings and, therefore, completion of the preliminary screening reason code form. To assure that reasons for initial screening decisions were available for all arrests in a given month, it became necessary to wait at least four weeks to prepare the report. Since a single report included both screening and case disposition information, this meant a delay of several weeks in providing feedback on dispositions. Furthermore, the delay, coupled with a deferred screening decision in cases in which the prosecutor asked the officer to obtain more evidence before an indictment was sought, led to the failure of police supervisors to get timely information about those few cases that were truly problematic. For example, in one case where an officer had failed to do a crucial interview, the felony complaint prosecutor told the officer that he would have to dismiss the case unless the officer recontacted the witness. The officer never did what the prosecutor asked but the supervisor did not

learn about the problem until several weeks later when the feedback report indicated a dismissal and the reason for it.

Experimental Design and Research Methodology

A standard pre-test/post-test random allocation design was used to assess the impact of the two treatments on (1) the quality of officers' investigations, (2) the initial prosecutorial screening decision, and (3) the final dispositions of the cases presented by patrol officers assigned to the two experimental and two control shifts in the five precincts included in the study. Across the county each patrol officer is assigned to one of four shifts. Each shift of officers rotates its hours of duty work every six days so that during a 24 day period each officer works six tours on day work, six on evenings, six on midnights and has two days off. This rotation pattern meant that over eight months each shift worked an equal number of day, evening, and midnight tours of duty, ruling out the need to control statistically for day of the week or time of day differences among the four shift groups. Shifts 3 and 4 were randomly selected as experimentals (E's); shifts 1 and 2 became controls (C's).

Because officers assigned to the two experimental and two control shifts may have differed on pre-existing variables, data were gathered both on the charactersitics of the officers and on all investigations leading to arrests made by officers on the E and C shifts for two time periods. The experimental or study period during which the officers on the experimental shifts were

required to complete the checklists and receive feedback extended from April 1 to November 20, 1985. The pre-experimental period included the same eight months in 1984.

Data Collection Instruments

Several instruments were used to collect data. The primary findings are based on data obtained from the investigation and arrest reports (PD forms 10 and 166) completed by the officers in the study and the disposition of their cases based on information from court records. These findings were supplemented by police department data on the officers assigned to both Experimental and Control shifts in the study precincts), two surveys of these officers, an examination of burglary and robbery investigation reports for both E and C shift officers, and observation of police-prosecutor interaction at the felony complaint meeting in court. These will be described briefly prior to discussing collection of the primary investigation and case outcome data.

a) Officer Data

Data were obtained from the department on the age, sex, race and length of police service as well as all assignment changes between April 1, 1984 and November 30, 1985 for all officers in the study. These data suggest that (1) there were minimal differences among the officers on the four shifts with respect to age, race, years of experience either in November, 1984 or in November, 1985 as indicated in Table 3-1 but that (2) there was some turnover in the groups of officers assigned to E and C shifts during this 20 month period.

TABLE 3-1

RACE, SEX AND EXPERIENCE IN NOV. 1984 AND NOV. 1985 BY SHIFT

	Shift 1	Shift 2	Shift 3	Shift 4
% Male-Nov.1984	96	90	92	92
% Male-Nov.1985	96	90	93	93
% White-Nov.1984	95	93	92	94
% White-Nov.1985	93	93	92	95
Mean years police experience-Nov.84	10.4	10.2	10.3	9.5
Mean years police experience-Nov.85	8.8	9.2	9.3	8.3

* Decrease due to assignment of recruits to the precincts in late 1984.

Sixty-two percent of the officers on shift 1 at any time between April 1984 and November 1985 were on that shift the entire 20-month period. The proportion of non-changers for shifts 2, 3, and 4 were 58, 64 and 61 respectively. Table 3-2 shows the number of officers assigned to each shift as of November 1985 that had and had not changed assignment (including rookies getting their first assignment during the 20-month study period). It suggests that there was some crossover between the experimental and control squads during the 8-month experimental period but that this was limited and evenly distributed.

b) Officer and Supervisor Surveys

Two surveys were conducted. The initial survey was distributed to all officers and supervisors on the experimental and control shifts. It sought to determine if there were existing differences between experimental and control shift officers and supervisors in the closeness of supervision and attitude toward conducting investigations, the extent to which the experiment had been implemented in the experimental precincts, and experimental shift officers' perceptions of the guides. The follow-up survey was distributed only to experimental officers and supervisors. It repeated many of the questions from the initial survey regarding implementation of the interventions, their impact on officers' activities, and attitudes toward the guides and feedback reports.

c) Assessment of Robbery and Burglary Investigations

TABLE 3-2

CHANGE IN ASSIGNMENT BETWEEN APRIL 1984
AND NOVEMBER 1985 BY SHIFT

# in assignment	Shift 1	Shift 2	Shift 3	Shift 4
Unchanged	78	78	83	83
Left shift*	22 (3)	26 (4)	19 (6)	23 (1)
Joined shift*	25 (6)	30 (3)	28 (5)	31 (4)
Total Ever on Shift	125	134	130	137

* Figure in () indicates crossover in experimental status i.e., from E to C or vice versa rather than transfer to or from non-experimental condition between April 1 and November 30, 1985.

To explore the impact of the felony investigation guides onthe quality of all investigation (including the more than 80 percent that do not result in an arrest), an assessment was made of all robbery reports and a random sample of one-sixth of the felony burglary reports completed between May 1 and June 30, 1984 (pre-test), and May 1 and June 30, 1985 (study period), by patrol officers on the E and C shifts in the five study precincts. The 382 reports (157 robbery reports and 225 burglary reports) were coded with respect to the characteristics of the offense (e.g., number of victims, type of crime), the officer's description of the crime, the investigative activities of the officer (e.g., number of witness interviews, whether crime scene work was done), the relationship between the victim and suspect if one was named, the outcome of the investigation (i.e., whether charges were filed or an arrest made), and the overall rating of the quality of the investigative work and the report. Coding was completed by an experienced police officer who did not know which reports were completed by experimentals and which by controls.

d) Observation of Police-Prosecutor Interaction

Four days were spent observing three assistant state's attorneys assigned to felony complaint handle more than a dozen face-to-face reviews, and three days were spent observing ASA's in court. In addition, in the process of tracking cases and seeking reasons forms in the State's Attorney's office, we had ample opportunity to observe prosecutors at work and extensive

informal discussions with at least ten ASAs about more than thirty cases.

Investigation and Case Disposition Data

a) Compiling the Master Lists

A master list of all 1985 felony arrests made between April and November 30th that involved officers on the E and C shifts as investigating or arresting officer or PIO was developed from the felony arrest log provided by the legal section of the Baltimore County Police Department. Completion of an analogous list of 1984 arrests was much more difficult because no record of the investigating officer or PIO had been maintained by the department prior to initiation of the study.

The 1984 master list was developed in several steps. Initially, the arrest book in the police headquarters was reviewed by a coder. All investigations resulting in a felony or probable felony arrests made by a study officer were recorded on the "sure arrest" coding sheet.[4] Felony investigations leading to arrests made by detectives and special investigative unit officers in the five study precincts were recorded on "possible arrest" coding sheets for further review. The coder then pulled the file of the "possibles" to determine whether a study officer had signed the investigation report. If so, the arrest was added to the master list.

To supplement what appeared to be an incomplete list,[5] the Criminal Justice Coordinator provided a report on all arrests between April 1 and November 30, 1984, by precinct and arresting

officer ID (badge) number. Arrests made by study officers not previously on the list were added. Data on the PIO were obtained by manually reviewing felony review worksheets in the State's Attorney's office.[6]

Homicides, rapes and other sexual assaults, and child abuse cases were omitted from the study because the primary responsibility for preparing each of those types of cases rests with a detective regardless of patrol officer's role in making an arrest.

b) Data Items Collected

For each case the arrestee's name, date of arrest, BCI (Baltimore County Identifier given to each individual at first arrest), and c.c. number (i.e. the number of the crime report form) were obtained. This list was given to the Baltimore County Police Department, which provided photocopies of all investigation and arrest reports for these cases for subsequent coding. Reason code data were provided by the State's Attorney's office. Initial screening, trial disposition, and sentencing data were obtained using a computer in the SA's office and, when problems arose, from the office files. Criminal history information, not available on the county computer, was provided by a Baltimore County detective who volunteered to manually search department files.

Data items obtained from the crime reports (form 10 and supplementary form 11) and arrest reports (form 166) included: offense characteristics (i.e., loss value, amount of force,

offense date, number and type of victims, and extent of injury); investigative activities (number of witnesses other than the victim interviewed throughout the investigation, whether a suspect was identified, i.d. method, and type of crime scene work done); arrestee characteristics (age, race, sex, and relation to victim); arrest characteristics (most serious offense charge, whether on a warrant or not, arrestee's pretrial status, and the amount of bail); and available evidence (whether weapon or property were recovered; number of positive eyewitness identifications; whether the arrestee or a coparticipant made a statement to the police; and whether fingerprints, photos, forged checks, drugs, or other evidence was specified as available). (See Appendix 1.)

Case processing data included case identification number, prosecutor's screening decision, most serious prosecution charge, disposition date, most serious conviction offense, whether the defendant pled guilty, sentence type if convicted and, if incarcerated, the term and whether consecutive or concurrent.

Prior history information included total number of arrests and total Part I arrests prior to April 1, 1984, for 1984 arrestees and April 1, 1985, for 1985 arrestees.

Data Analysis

Unit of Analysis

The primary unit of analysis was the shift. However, this is not a substantively meaningful unit for the officers who simply rotate as a cohort at the same time across the county.[7]

Examination of the findings suggested that differences between the Shift 1 and 2 officers and their arrests and the Shift 3 and 4 officers and their arrests were negligible. Therefore, for presentational clarity, the two control and two experimental shifts have been combined and in the subsequent discussion, are referred to simply as the "controls" or "control group" and "experimentals," or "experimental group."

The case, as defined by the court system, was the principal outcome measure and the arrest an additional measure. There were several reasons for relying primarily on the case. A number of individuals were arrested for participation in several separate criminal offenses. Each offense was investigated by a different investigating officer and at felony complaint the evidence available for prosecuting each offense was reviewed, a reason was provided for each charging decision, and, generally, the experiment sought to alter patrol officers' investigation activities. It was hypothesized that a thorough investigation would increase the likelihood of a subsequent arrest (e.g., through linking property that had been completely described in the crime report). Because of the number of arrests that involved charges for offenses that had been separately investigated and that resulted in several cases against the individual, the case appeared to more closely reflect the evidence collection activities that the experiment was designed to alter than the arrest. There were 1,622 cases in the cases data base: 730 from 1984 and 892 from 1985.

Most studies use the arrest as the basis for measuring case attrition, counting as a single case all charges arising from the arrest of a single individual including charges that are subsequently added. Therefore, to facilitate comparison with other studies, a separate arrest data base was developed from the cases data base and the analyses rerun using arrest as the unit of analyses.

Most arrestees had only one case, hence the data bases are similar. For all persons with more than one case emanating from a single arrest in the cases data base, only one was included in the arrest data base. The decision rules for selecting the case that was retained were: 1) select the case that was prosecuted in preference to those that were dismissed at felony screening and the conviction over the non-conviction; 2) retain the case in which the E or C officer was the PIO and/or had been both arresting and original investigating officer; 3) select the most recent offense since it was the one most likely to have been an on-view arrest. In the few instances where none of these rules applied (e.g., were an individual was arrested on multiple warrants) and the choice was between and an experimental and a control case, an alternation rule was used (first the E then the C was included). The resulting arrest data base included 1,440 arrests: 658 made in 1984 and 782 made in 1985.

Classifying Experimental and Control Cases and Arrests

Four different measures of "officer group" or "group status" were used to classify cases and arrests by shift and as

"experimentals" and "controls." Because the intervention emphasized investigative activities and feedback was provided to the PIO and investigating as well as the arresting officer, data were collected and analyzed on cases involving officers in each of these statuses. Thus each case had associated with it three officer group identifiers: the arresting, investigating, and PIO, each of whom might be on an E or C (or might not be included in the study at all, such as a detective). In addition, a fourth, composite group status variable was created and used in most of the analyses and tables.

Creation of this composite variable was designed to get beyond reliance only on arrest as a measure of an officer's work. Often the most crucial work in obtaining evidence is done by the patrol officer who conducts the preliminary investigation (Eck, 1983; Greenwood et al., 1977) while the offender is taken into physical custody by another individual who simply serves a warrant or signs the arrest form. The composite variable officer status allowed "credit" for the arrest or case to be given to either the PIO, investigating or arresting officer (if they were different people), and, therefore, is a more comprehensive measure of the patrol officer's involvement than the usual "arresting officer" measure.

The composite group variable was constructed as follows: any arrest in which the officer was involved in any of the three roles but no officer of the other type was involved was coded according to the officer's shift and group (E or C). In cases

where both an experimental and a control were involved, a two-out-of-three-role decision rule was used. The 95 mixed cases (i.e., those in which there was an E and a C and the third officer was not in the study, or in which there was no PIO), were omitted from the composite "group" variable.[8]

All analyses were done four times, using each of the officer group measures. Tables 3-3a and 3-3b indicate the number of experimental and control cases and arrests in each of the two data bases using each of the officer group measures.

Definition and Measurement of Attrition

Measurement of attrition generally is defined from the point of arrest and includes arrests the police do not present for prosecution, arrests declined for prosecution by the prosecutor, and arrests filed in court but later dismissed, nolled or acquitted. If any charge emanating from the arrest results in a conviction, it counts as a conviction.

In Baltimore County all arrest charges are filed directly by the police in the District Court without pre-filing screening. Preliminary prosecutorial screening occurs once, when a felony complaint unit prosecutor decides what charges to file and formalizes the decision in the District Court (through a preliminary hearing, grand jury indictment, or dismissal). Furthermore, the District Court handles many minor felonies often handled in the upper court in other jurisdictions.

To use standard measures that also reflected the case processing realities in Baltimore County, attrition was measured

TABLE 3-3a

NUMBER OF CASES USING VARIOUS OFFICER GROUP MEASURES

	1984		1985		
	CONTROL	EXPER.	CONTROL	EXPER.	TOTAL
Arresting	283	243	311	284	1121
Investigating	333	323	420	425	1501
PIO	157	149	227	215	748
Composite	356	321	424	426	1527
TOTAL	730		892		1622

TABLE 3-3b

NUMBER OF ARRESTS USING VARIOUS OFFICER GROUP MEASURES

	1984		1985		
	CONTROL	EXPER.	CONTROL	EXPER.	TOTAL
Arresting	263	229	285	252	1029
Investigating	304	291	370	373	1338
PIO	148	142	206	197	693
Composite	320	290	380	370	1360
TOTAL	658		782		1440

from arrest to two decision points: the prosecutorial charging decision (for serious felonies) and final case disposition. Ateach point two measures were used: charging or conviction on any charge included in a case (the standard measure of attrition), and prosecution or conviction on the most serious arrest or prosecution charge. This second measure permitted us to test the hypothesis that stronger evidence might not only decrease the proportion of non-convictions but also might affect the proportion of cases that were reduced or that resulted in convictions on lesser charges. Measures of prosecutorial charging decisions show reductions as a separate category but omit grand larcenies which are handled in District Court without formalized review.

Two case disposition analyses were conducted: one examined the dispositions of prosecuted cases; the other included those previously dismissed to give an overall measure of attrition. Because diversion occurs as a sentence to "probation before judgment" (PBJ) following an admission of guilt, but technically is not a conviction, it is shown as a separate category but was included as a conviction in the overall attrition measure. Cases that were charged but still pending as of September, 1986, are included in measures of attrition at prosecutorial charging but omitted from disposition measures. Acquittals are included in the non-conviction category, as are cases placed on the "stet docket" (i.e., indefinitely suspended by the prosecutor but subject to reopening). Cases with unknown or no dispositions

(i.e., those referred to juvenile court or with defendants who were sent for mental observation for indefinite periods) were treated as "pending" and eliminated from outcome measures.

There is no single measure distinguishing between "avoidable" and other kinds of attrition. At the weekend conference the prosecutors suggested adopting a reason code that included several specific codes for various police errors and a single code, "out of police control," for all other causes of attrition. The police objected to this, asserting that it failed to provide them with adequate information about cases. Similarly there was resistance to having an additional item on prosecutors' forms to indicate whether the attrition was attributable to the police. Instead, police managers were expected to review each case in which the prosecutor's reasons might suggest a police error. The reason code analysis, therefore, treats cases not charged or convicted due to evidentiary or constitutional problems and those lost due to police failure to appear or provide adequate testimony as <u>potentially</u> avoidable attrition for more detailed examination.

<u>Analytic Strategies and Measures</u>

Both the case and arrest data sets were analyzed using both bivariate and multivariate measures to compare 1984 and 1985 Control and Experimental groups. To examine evidence collection, for example, the bivariate relationship of the group variable and each type of evidence (number of witness interviews, confessions, fingerprints, etc.) was examined. Then, each type of evidence

was treated as the dependent variable and regressed on experimental-1985, control-1985, and control-1984 independent variables (dichotomously coded, with experimental-1984 as the suppressed category) alone and then with offense type variables (dummy coded with forgery as the suppressed category). Similarly, the bivariate relationships between officer group by year and prosecutorial screening decisions and case dispositions were examined initially, then those relationships were further explored using a multiple regression model that statistically controlled for available evidence and offense type when looking at group and year effects.

Summary

In brief, the study involved assessing the effect on felony case attrition of an effort to change police culture and individual officer behavior through mandatory use of felony investigation and post-arrest guides, closer supervision of patrol officer investigations, and monthly feedback reports indicating case dispositions and prosecutors' reasons for case reductions, dismissals and other non-convictions. These interventions were introduced for an eight-month period to two randomly selected shifts of patrol officers. A standard pretest-posttest experimental design was used to assess temporal changes and differences between cases developed by officers assigned to two experimental and two control shifts in the amount of evidence collected, in the initial prosecutorial charge decision and case disposition, and the reasons for case attrition.

CHAPTER 3 - ENDNOTES

1. The department decided that because another independent program was being implemented in the Central Division, it would be excluded from the Police Foundation study and only the three precincts in the Western and two precincts in the Eastern Division would be included.

2. Although the number of officers on each of the four shifts was not exactly the same from day to day, in making transfers and assignments the department sought to assure that each shift had the same number of officers. This was desirable since each shift worked the day, evening and midnight watches for six days during the department's 24 day rotation period.

3. Exactly what program redesign and computer manipulation tasks were required was never clearly explained. The initial work, however, had to be done on contract by INSLAW, the company that originally had developed and sold the PROMIS system to Baltimore County. In February, 1985, shortly after signing the contract with the county, INSLAW declared bankruptcy and the work was delayed by several months. Subsequently, two County employees were trained by INSLAW staff to complete the work but the project was aborted before they did so.

4. Most larceny arrests were recorded in the arrest book simply as "larceny" without distinguishing between grand larceny (a felony) and petty larceny (a misdemeanor). Similarly, breaking-and-entering arrests may be felonies or misdemeanors depending on the section of the criminal code which usually was not recorded in the arrest book. The coder's recording rule was include probable felonies for subsequent review.

5. The number of arrests made and/or investigated by study officers in 1984 was substantially less than had been made during the analogous period in 1985. This led to the belief that we had failed to locate all 1984 arrests and the additional effort to locate them. Data subsequently provided by the Baltimore County police department, however, indicated that there were 11 percent more felony arrests between April and November, 1985 than the same eight months in 1984. The number of 1984 arrests and cases made by arresting officers included in the data base appears to be complete since there are 88 percent as many 1984 arrests as 1985 arrests. (see Table 3-3.)

6. The number of 1984 arrests in which the PIO was known appears to be too low since it represents only 72 percent as many PIO arrests as in 1985. Similarly there are only 80 percent as many investigating officer arrests in 1984 as 1985 suggesting that we failed to locate some 1984 cases. There is no reason to believe, however, that there is a difference between E and C shift in the amount of underrepresentation.

7. In seeking assignments, for example, officers may request to work in a particular precinct but do not request a shift.

8. The following combinations were possible for a case to be classified as an experimental (or, conversely, as a control):

Investigating	Arresting	PIO
E	-	-
-	E	-
-	-	E
E	E	-
E	E	-
-	E	E
E	-	E
E	E	E

CHAPTER 4

CHANGES IN THE COLLECTION OF EVIDENCE

The primary goal of the experiment was to reduce avoidable felony case attrition by enabling police to make stronger cases. Producing this change involved several steps. Closer supervision, use of checklists, and prosecutorial feedback on case outcomes and the reasons for them were expected to improve police evidence collection. Stronger evidence was expected to increase the proportions of cases that were prosecuted as felonies and that resulted in convictions on the most serious charge.

The discussion of findings in the next three chapters follows the expected change model. This chapter examines changes in evidence collection by officers. Chapter 5 presents case dispositions. Chapter 6 examines the reasons that the assistant state's attorneys provided for case attrition. In Chapter 7 the possibility of differential implementation and outcomes among the experimental precincts is examined and the contamination effect is explored.

The first step in examining the impact of the experiment was to determine if it resulted in increased collection of evidence (including identification and written statements from victims and witnesses and statements from arrestees). The data regarding evidence collection come from two sources: an examination of 382 burglary and robbery investigations conducted by officers in the

experimental and control shifts in May and June 1984 and 1985 regardless of whether they resulted in an arrest; examination of data on the evidence available in all Experimental and Control shift officers' investigations resulting in felony arrests between April 1 and November 30, 1984 (pre-test) and 1985 (study periods). The former data set explored the initial (i.e. second and third month of use) impact of the investigation and post arrest guides on the quality of all investigations of two serious felony offenses regardless of their outcome; the latter focused on whether the guides produced the hypothesized change in available evidence which in turn was expected to affect prosecutorial decision making.

Assessment of Robbery and Burglary Investigations

Table 4-1 shows that there were fewer robbery investigations conducted by both groups in 1985 although the drop is sharper for the experimental than the control shifts. Looking separately at burglary and robbery offenses, however, there were no significant differences between the E and C groups with respect to the type or number of victims or the availability of suspect information for either offense type. The proportion of cases with a mean loss value of more than $300 increase for both groups in 1985, but it did not differ between them.

Two striking characteristics of investigation reports are their completeness and the initiative shown by the officers. For example, not a single piece of information about the victim was missing in the overwhelming majority of reports (see top row,

TABLE 4-1

DISTRIBUTION OF ROBBERY AND BURGLARY INVESTIGATIONS

	1984				1985				Total	
	Control		Experimental		Control		Experimental			
	N	%	N	%	N	%	N	%	N	%
Burglary	52	54	51	55	61	58	61	69	225	59
Robbery	45	46	41	45	43	42	28	31	157	41
Total	97	100	92	100	104	100	89	100	382	100

Table 4-2); only two of the 382 reports were rated as containing "inadequate" victim information. Similarly high rates of completeness were found for the descriptions of victim injury and the offense, data regarding the offense location, time of occurrence, and modus operandi. Another indicator of the thoroughness of patrol officers' investigations in Baltimore County is the finding that about 15 percent of the cases in each group required patrol officer follow up reports, but, as shown in Table 4-3, many more follow-ups were actually done on the officer's own initiative than were required by department procedures both prior to and after implementation of the experiment.

Tables 4-2 and 4-4 show that there were several significant changes in experimental officers' investigations of burglaries and robberies in 1985, apparently in response to the use of the guides and tighter supervision. (The first feedback report had not been provided by June 30, 1985 so this component of the experiment could not have had an impact). First, the proportion of burglary reports in which the lost property was described sufficiently for it to be subsequently identified increased for E but decreased for C reports. (There is no satisfactory explanation for the decrease.) Second, there was an increase in the proportion of E but not of C reports that included both a description of the lost property and a form completed by the victim listing lost property items. Both officer groups increased the frequency of crime scene work in 1985 (see Table

TABLE 4-2

EVIDENCE COLLECTED IN ROBBERY AND BURGLARY INVESTIGATIONS
BY YEAR AND INVESTIGATING OFFICER GROUP

Percent of cases with:	1984		1985	
	CONTROL	EXPER.	CONTROL	EXPER.
No missing victim information	94	91	97	93
Lost property sufficiently described so it could be identified	41	28	31	38
Burglary cases with both description of lost property and Form 25	24	14	24	30
Crime scene work done	38	40	50	52

TABLE 4-3

NUMBER OF CASES REQUIRING AND ACTUALLY GETTING FOLLOW-UP
BY YEAR AND INVESTIGATING OFFICER GROUP

OFFICER INITIATIVE	1984		1985	
	CONTROL	EXPER.	CONTROL	EXPER.
Number requiring officer follow-up	10	15	20	16
Number in which officer did follow-up	29	25	29	25
Extra initiative ratio	290%	160%	145%	154%

TABLE 4-4

WITNESS INFORMATION IN ROBBERY AND BURGLARY INVESTIGATIONS
BY YEAR AND INVESTIGATING OFFICERS GROUP

MEAN NUMBER OF	1984		1985		SIGNIFICANT DIFFERENCE*
	CONTROL	EXPER.	CONTROL	EXPER.	
Witness Interviews	1.6	1.5	1.4	2.0	C85 vs. E85
Victim Statements	.25	.36	.13	.40	C85 vs. E85

* Comparisons shown are significant at $p < .05$.

4-2, row 4) but did not differ from each other in the proportion of cases in which fingerprints, photos, composites, or print comparisons were ordered.

Experimental officers also increased the number of witness interviews conducted and the number of written statements they obtained in 1985, while there were no such gains for controls. Consequently, as Table 4-4 shows, using a series of t-tests to compare various pairs of means, the only statistically significant differences were between (1) the number of witness interviews in experimental and control investigations in 1985 ($t=2.37$, $p < .02$) and the number of written statements obtained in E and C investigations in 1985 ($t=2.08$, $p < .04$).

These differences in evidence collection had not resulted, as of September 1985, in any change in the rate at which investigations led to the filing of charges or arrests. In 1984 18 percent of the control and 22 percent of the experimental robbery and burglarly investigations resulted in an arrest or charge filed; in 1985 the arrest rates were 16 and 17 percent respectively. The slight decrease in the 1985 arrest rate is probably a temporary one, however, because about 25 percent of all robbery and burglary arrests occur more than 30 days after the offense in Baltimore County.

These changes in evidence collection resulted in a substantial improvement in the overall ratings of the E but not the C investigations. As a final single measure of the quality of the investigations the coder gave each report an overall

rating on a three-point scale (outstanding, acceptable, or poor). Table 4-5 shows that in 1984 C reports were rated better than E reports although the difference did not achieve statistical significance; in 1985 the proportion of experimental shift reports rated as "outstanding" doubled and poor reports decreased while the proportion of "outstanding" control shift reports declined slightly. Converting those ratings into an interval measure ("outstanding" = 1, "acceptable" = 2, and "poor" = 3), tests of the significance of pairs of means found that the 1985 experimental investigations were rated significantly better than the 1984 experimental investigations (84-experimental mean = 1.98, 85-experimental mean = 1.80, $t=2.43$; $p < .02$) although the difference between 1985-E and 1985-C ratings was not significant.

The examination of robbery and burglary investigations suggests that the patrol officers on both the E and C shifts in Baltimore County did good investigations and prepared adequate reports prior to the initiation of the experimental intervention in April, 1985. Nevertheless, the use of the felony investigation and post-arrest guides appears to have increased the completeness of experimental officers' descriptions of stolen property, the numbers of witnesses interviewed, and the numbers of written statements obtained. Consequently, the experimental officers' investigation reports in 1985 were rated as significantly better than in their 1984 reports, while there was no change in the quality of control officers' reports. These changes did not appear to affect the proportion of investigations resulting in

TABLE 4-5

OVERALL RATING OF INVESTIGATION REPORT BY YEAR AND STUDY GROUP

PERCENT RATED AS	1984 CONTROL (N=97)	1984 EXPER. (N=92)	1985 CONTROL (N=104)	1985 EXPER. (N=89)
Outstanding	21	13	17	26
Acceptable	73	76	76	69
Poor	6	11	7	6

arrest. The issue of the quality of those arrests as measured by the proportion resulting in felony convictions was left for investigation using a different set of data.

Evidence Collection in Felony Arrest Cases

Examination of data on investigations of all types of felony offenses resulting in arrest yields a somewhat different picture of evidence collection than the burglary and robbery investigation data on evidence. Table 4-6a and b, using the composite "group" variable, indicates that there were few significant changes in the evidence collection of experimental officers in the expected direction and, where those changes occurred, they occurred for the controls as well. The clearest change, similar to that previously observed, was an increase in the number of witness interviews. As shown in Table 4-6a, the proportion of experimental officers' cases in which the officer interviewed no witness other than the complainant fell from 27 percent in 1984 to 16 percent in 1985; correspondingly, the proportion of cases with two or more witness interviews increased from 52 to 63 percent. At the same time, there was a increase in control officers' witness interviews, although the increase was primarily from zero to one additional witness interviewed.[1]

The lower part of Table 4-6 shows the proportion of cases in which various items of evidence were available.[2] The table suggests that both experimental and control officers obtained more fingerprints and collected more miscellaneous items of physical evidence (e.g., bloodstained clothing, a driver's

TABLE 4-6

POLICE WORK CONTRIBUTING TO CASE OUTCOMES

A. Witness Interviews by Group and Year

Percent cases with	84 Con.	84 Exp.	85 Con.	85 Exp.
None	25	27	16	16
One	21	21	29	21
2 or more	53	52	56	63
Total	100%*	100%	100%	100%
Number of cases	(347)	(313)	(422)	(424)

$chi^2 = 31.11$ df = 6 $p < .001$

* Not equal to 100% due to rounding.

B. Identification and Physical Evidence by Group and Year

Percent with evidence available	84 Con.	84 Exp.	85 Con.	85 Exp.	chi^2	Prob.
Witness statements	25	29	28	30	4.22	NS
1 or > positive eyewitness IDs*	57	52	58	59	4.63	NS
Admission/confession	28	34	29	34	4.86	NS
Fingerprints**	6	10	9	14	15.33	.002
Recovered property	49	47	44	43	4.13	NS
Photos	29	27	28	31	1.59	NS
Weapon	10	12	13	10	2.87	NS
Other physical evidence***	27	24	34	34	12.52	.006

* Comparison of pairs of means indicated the difference between 1984 and 1985 Experimental groups was significant ($p < .05$).

** Comparison of pairs of means indicated that the differences between 1984-E vs. 1985-E and 1985-C vs. 1985-E were significant ($p < .05$).

*** Comparison of pairs of means indicated that both the differences between 1984-C vs. 1985-C and between 1984-E and 1985-E were significant.

license found in a recovered stolen wallet, a forged loan application, or bullet shells) in 1985 than they had in 1984; that experimentals also significantly increased the number of eyewitness IDs they obtained and that the only significant difference between E and C evidence available in 1985 cases was the greater proportion of E cases in which fingerprints were available.[3]

The fingerprint data are somewhat suspect, however, because in a large number of cases in which prints were taken, the report was silent on whether a positive match had been achieved. Unless the report specifically indicated that this type of physical evidence was available, it was coded as not available. The difference thus may be primarily an artifact of report writing style (emphasized in the training sessions) than an indicator of evidence actually available.

Regression analysis was used to separate the effect of the experimental intervention from the effects of initial differences between experimentals and controls, any temporal change affecting both groups in 1985, and differences in evidence collection related to differences in the types of offenses leading to arrest. Table 4-7 shows seven regression models, each with a different type of evidence as the dependent variable (dummy coded as 1 if available and 0 if not). Because of the skewed distribution of witness interviews (i.e., most cases had one or two witness interviews but a few cases had a large number of interviews) and the likelihood that the effect of additional

TABLE 4-7

REGRESSIONS OF GROUP, YEAR AND ARREST CHARGE TYPE ON AVAILABLE EVIDENCE ITEMS

Independent Variables	Model I Log of Witness Interviews+	Model II Positive Eyewitness ID	Model III Finger Prints Available	Model IV Photos Available
experimental-1985	.180*** (.048)	.084* (.034)	.036 (.022)	.049 (.034)
control-1985	.146** (.046)	.077* (.033)	.018 (.021)	.000 (.033)
control-1984	.016 (.050)	.044 (.036)	.043 (.023)	.026 (.035)
drug case	.207* (.100)	.179* (.072)	.027 (.046)	.098 (.070)
ag assault	.256** (.089)	.224*** (.064)	.050 (.040)	.336*** (.063)
robbery	.194* (.087)	.038 (.063)	.109** (.040)	.220*** (.062)
burglary	.209* (.082)	.335*** (.058)	.213*** (.038)	.177** (.057)
larceny & other[a]	.021 (.083)	.103 (.059)	.066 (.037)	.060 (.058)
Constant	.750*** (.084)	.618*** (.060)	.011 (.038)	.112 (.059)
Adj R^2	= .046	= .156	= .066	= .038
F	= 9.93**	= 35.56**	= 14.22**	= 8.37**
df	= 8,1491	= 8,1491	= 8,1491	= 8,1491

+Unstandardized regression coefficient; standard error in parenthesis.

*p < .05 **p < .01 ***p < .001

[a]Includes 376 grand larceny, 17 arson and 4 conspiracy cases.

TABLE 4-7 (cont.)

REGRESSIONS OF GROUP, YEAR AND ARREST CHARGE TYPE ON AVAILABLE EVIDENCE ITEMS

Independent Variables	Model V Recovered+ Property	Model VI Recovered Weapon	Model VII Other Evidence	Model VIII Made Confession or Admission
experimental-1985	-.036 (.032)	.012 (.020)	.096** (.034)	.000 (.035)
control - 1985	-.043 (.032)	.034 (.020)	.093** (.033)	-.050 (.034)
control-1984	-.039 (.034)	.000 (.021)	.027 (.035)	-.053 (.036)
drug case	-.060 (.068)	.023 (.042)	.048* (.071)	-.158 (.073)
ag assault	-.000 (.060)	.504** (.038)	.172** (.063)	.031 (.065)
robbery	.339*** (.059)	.268** (.034)	.023 (.062)	.045 (.064)
burglary	.509*** (.055)	.000 (.035)	-.055 (.058)	.000 (.060)
larceny & other	.660*** (.056)	.019 (.035)	-.118* (.059)	-.074 (.060)
Constant	.081 (.054)	-.014 (.036)	.267*** (.059)	.309*** (.061)
Adj R^2	= .261	= .298	= .042	= .012
F	= 67.32**	= 79.99**	= 9.12**	= 3.32**
df	= 8,1491	= 8,1486	= 8,1491	= 8,1491

+Unstandardized regression coefficient; standard error in parenthesis.

*p < .05 **p < .01 ***p < .001

interviews beyond two had only a marginal effect on the case disposition, the witness interview dependent variable was logarithmically transformed. In each model, the type of offense was binary coded and forgery was the suppressed category. The four combinations of arrest year and officer group were binary coded and experimental-1984 was the suppressed category.

Table 4-7 shows that after controlling for differences in the type of arrest offense, wherever significant intervention effects were found in the evidence collected by experimental officers in 1985, similar changes were found for control officers in 1985. Thus, a temporal change in evidence collection is evident. Both 1985 E and C cases were significantly more likely than experimental 1984 cases to have two or more witness interviews, at least one positive eyewitness ID, and other pieces of physical evidence available (as well as have had a non-significant decrease in recovered property). These findings, like those in Table 4-6, suggest either contamination of the experimental effect (e.g., the officers in the control group, aware of the experiment, may well have engaged in competition with the officers in the experimental group) or a source of change in officers' behavior independent of the experimental intervention (e.g., in service training in evidence collection to which all officers were exposed or a delayed effect of the department's awareness program).

To determine whether the observed changes in evidence collection were uniquely related to the use of the composite

group variable, the evidence analyses were rerun using the arresting officer, investigating officer, and PIO group variables. As Table 4-8 indicates, which group variable is used makes little difference: Where there was significant change it tended to appear in each group variable. Thus the observation that both experimental and control officers conducted more witness interviews and collected more miscellaneous physical evidence in 1985 than 1984 is consistent across measures.

TABLE 4-8

COMPARISON OF SIGNIFICANCE OF REGRESSIONS OF OFFICER GROUP, YEAR, AND ARREST CHARGE TYPE ON AVAILABLE EVIDENCE ITEMS USING DIFFERENT MEASURES OF GROUP*

Model 1
Log of Witness Interviews

	Comp.	Arr.	Inv.	PIO
Exp.85	.01	.001	.01	.01
Con.85	.01	.001	.05	.01
Con.84	NS	NS	NS	NS

Model 2
Positive ID

	Comp.	Arr.	Inv.	PIO
Exp.85	.05	NS	.05	.01
Con.85	.01	NS	.05	NS
Con.84	NS	NS	NS	NS

Model 3
Confession or Admission

	Comp.	Arr.	Inv.	PIO
Exp.85	NS	NS	NS	NS
Con.85	NS	NS	NS	NS
Con.84	NS	NS	NS	NS

Model 4
Fingerprints

	Comp.	Arr.	Inv.	PIO
Exp.85	NS	NS	NS	NS
Con.85	NS	-.02	NS	-.02
Con.84	NS	-.02	NS	-.05

Model 5
Photos

	Comp.	Arr.	Inv.	PIO
Exp.85	NS	NS	NS	NS
Con.85	NS	NS	NS	NS
Con.84	NS	NS	NS	NS

Model 6
Recovered Property

	Comp.	Arr.	Inv.	PIO
Exp.85	NS	NS	NS	NS
Con.85	NS	NS	NS	-.05
Con.84	NS	NS	NS	NS

Model 7
Weapon Recovery

	Comp.	Arr.	Inv.	PIO
Exp.85	NS	NS	NS	NS
Con.85	NS	NS	NS	NS
Con.84	NS	NS	NS	NS

Model 8
Other Evidence

	Comp.	Arr.	Inv.	PIO
Exp.85	.01	.001	.01	NS
Con.85	.01	.001	.01	.05
Con.84	NS	NS	NS	NS

* Arrest type included in regression but not displayed in table.

CHAPTER 4 - ENDNOTES

1. The actual group mean number of interviews were 1.99 and 2.05 for 1984 control and experimental groups, and 2.55 and 2.45 for 1985 control and experimental groups, respectively. Using the Scheffe procedure to test differences in pairs of means, the only significant difference ($p \leq .05$) was between the 1984 and 1985 control groups. While this finding may appear strange, the mean is easily affected by a few very large numbers. In several control cases more than 20 witnesses were interviewed and these increased the C mean.

2. In a number of instances reports stated that the crime lab had taken prints but did not indicate whether they matched those of the arrestee. Evidence was coded as "available" only if the report specifically linked the lab or other evidence and the arrestee.

3. Examination of evidence collection data by shift indicated that all four shifts significantly increased the collection of "other" evidence in 1985 over 1984. Other changes were observed for three of the four shifts (e.g., the proportion with two or more witness interviews signigicantly increased for shifts 2,3, and 4), two shifts (e.g., written statements increased significantly only for shifts 1 and 4; positive IDs increased significantly for shifts 2 and 4), or, as in the case of positive fingerprints, went in contradictory directions (i.e., increased significantly for shifts 1 and 3; decreased significantly for shift 4). Patterns of changes were not consistent within or between shifts.

CHAPTER 5

THE EFFECT OF CHANGES IN EVIDENCE COLLECTION ON PROSECUTORIAL CHARGING AND CASE DISPOSITIONS

It was hypothesized that increases in the amount and types of evidence available to prosecutors would lead to a higher proportion of felony cases that were accepted for prosecution (both on the most serious or any charge) and subsequently would result in a higher proportion of convictions. More evidence, however, might also produce other changes. For example, police arrest and charging practices may change if they give greater priority to achieving convictions. If standards of proof for making an arrest move from probable cause to proof beyond a reasonable doubt, the number of felony arrests should decrease (assuming a constant crime rate), the number screened out by the police prior to filing as a felony in the court should increase, the ratio of felony to misdemeanor arrests should decrease or a combination of these changes may occur. Alternatively, if the police emphasize making better cases and more felony arrests without an increase in their conviction orientation, the increase in the number of cases for felony complaint review, and (assuming no change in the proportion of cases accepted), the larger number of Circuit Court cases may lead to workload pressures that result in more reductions as Circuit Court prosecutors cope with the increased caseload.

Changes in prefiling screening patterns are much easier to detect than changes in arrest standards because there is no

documentation of arrests that do not occur. In Baltimore County, however, prefiling screening does not occur. Nor is there evidence that the standard of proof for making an arrest was toughened. In fact, county-wide there was an 11 percent increase in felony arrests made between April 1 and November 30, 1985 over the same period in 1984 but only a 2.8 percent increase in reported Part I offenses in 1985 and a much more modest increase in total arrests rates. As shown in Table 5-1, the increase occurred in 8 out of 9 precincts.[1]

Initial Prosecutorial Case Screening

Table 5-2 indicates that the types of felony arrests made by E and C officers were similar in both 1984 and 1985 and changed very little from one year to the next though the actual number of felony arrests increased. The only substantial differences between the groups are in 1985 robbery cases (due to an unexplained but previously observed drop in experimental robbery cases which parallels a countywide drop in robbery arrests) and in "other felony" (primarily forgery) cases. The effects of these differences in charge type, however, are controlled in subsequent regression analyses.

The results of the first stage in case processing, the initial prosecutorial charging decision, are shown in Table 5-3.[2] The table suggests that although there was no unique experimental effect, three other changes occurred: 1) an increase in the proportion of both experimental and control cases prosecuted on the most serious arrest charge in 1985; 2) a decrease in the

TABLE 5-1
CHANGES IN PART I ARRESTS BY PRECINCT

Precinct	1984 Part I Arrests	1985 Part I Arrests	Percent Change
1	423	404	-4
2	275	297	+8
3	425	483	+14
6*	707	752	+6
7*	119	165	+39
8*	129	148	+15
9*	180	185	+3
11	644	702	+9
12	379	500	+32
TOTAL	3,281	3,639	+11%

*Precincts in Central Division not included in study.

TABLE 5-2

ARREST CHARGE FOR CASES BY GROUP AND YEAR

ARREST OFFENSE	84 Con.		84 Exp.		85 Con.		85 Exp.	
	#	%	#	%	#	%	#	%
ag. assault	44	13	49	15	49	12	55	13
burglary/felony b&e	103	29	105	33	150	35	149	35
drug dist. or mfg.	29	8	13	4	28	7	29	7
robbery	75	21	56	18	74	18	44	10
grand larceny	89	25	84	26	102	24	101	24
other felony*	12	3	12	4	21	5	47	11
Total	352	100%	319	100%	424	100%	425	100%

* Includes forgery, arson and conspiracy charges.

TABLE 5-3

PROSECUTORIAL CASE SCREENING*
BY GROUP AND YEAR

% in Screening Disp. Category	84 Con.	84 Exp.	85 Con.	85 Exp.
Highest Charge	46	50	54	56
Reduced	37	31	25	26
Dismissed	17	19	22	19
Total	100%	100%	100%	100%**
Number of cases	(267)	(238)	(332)	(329)

$chi^2 = 14.1$ df = 6 p. < .03

* Excludes 89, 83, 95, and 97 grand larceny cases for the 4 groups respectively. These routinely are sent to District Court without face to-face review.

** Not equal to 100 percent due to rounding.

proportion of both experimental and control cases that were reduced in 1985; 3) an increase in 1985 in the proportion of control but not experimental cases that were dismissed. Although there was no reduction in the early case attrition (i.e., dismissal) rate of the experimentals, there was a "improvement" in case quality suggested by the higher proportion of cases accepted for prosecution on the most serious arrest charge and pursued in Circuit Court. The controls also had a higher proportion of cases prosecuted on the most serious charge in 1985 but in addition had an increase in early attrition. The change in prosecutors' initial charging behavior may be due to the changes previously observed in the evidence collected by both E and C groups. Alternatively, it may reflect a "Hawthorne effect" stemming from prosecutors' knowledge that their decisions were subject to increased scrutiny by the police, their own supervisors, and an outside evaluator.

The number of cases prosecuted by arrest charge type and the proportion of each type of felony carried forward for prosecution in Circuit Court are displayed in Table 5-4a. In 1985 the proportion of experimental burglary and drug distribution cases was higher but the proportion of robbery cases was much lower than the proportion of control cases prosecuted in Circuit Court for those offenses. There also appears to be a temporal effect with both E and C increases in the proportion of aggravated assault, burglary, and drug distribution cases prosecuted on the most serious charge in 1985. Table 5-4b shows

TABLE 5-4

A. NUMBER OF CASES PROSECUTED BY ARREST CHARGE TYPE, GROUP, YEAR, AND PERCENT CARRIED FORWARD TO CIRCUIT COURT

	84 Con.		84 Exp.		85 Con.		85 Exp.	
ARRESTS ARRAIGNED	#	%	#	%	#	%	#	%
ag. assault	12	30	19	38	23	47	26*	47
burglary/felony b&e	52	48	60	57	77	51	92	62
drug dist. or mfg.	12	41	8	62	14	50	23	79
robbery	39	52	29	54**	51	69	22	50
other felonies***	7	58	9	75	11	52	22	49
Total	122	46%	125	50%	176	54%	185	56%

* Includes three assault with intent to kill arrests reduced to assault with intent to maim.
** Includes two armed robberies reduced to simple robbery.
*** Includes forgery, arson and conspiracy uses.

B. DISTRICT COURT CASES

NUMBER OF CASES	84 Con.	84 Exp.	85 Con.	85 Exp.
Original:				
grand larcenies	89	81	95	97
Reduced Cases:				
assault and battery	34	29	30	26
misdemeanor b&e	17	21	20	16
drug possession	14	4	11	6
larceny	28	11	17	25
misc. misdemeanors	3	5	4	9
Total Reduced	96	70	82	82
Total District Cases	185	151	177	179

that there were decreases in the number of control cases that were reduced and in the total number of control District Court cases but increases in experimental case reductions and total cases tried in District Court.

Case Dispositions

In Table 5-5, which shows the dispositions of prosecuted cases, all cases resulting in a conviction on the most serious prosecution charge, regardless of whether they previously had been reduced, were categorized as guilty on the highest charge. Non-convictions included cases placed on the stet docket (i.e., indefinitely suspended but subject to reopening by the prosecutor), cases in which the prosecutor requested a nolle prosequi, and those resulting in acquittal. Because a sentence to probation before judgment (PBJ) resembles a conviction in that the defendant admits guilt but technically is not judged as guilty, it is treated as a separate category.

The table indicates that in 1985 for both E and C cases there was a decrease in the proportion of those convicted on the most serious charge, an increase in the proportion that resulted in a conviction on a lesser charge, and a decrease in the proportion of non-convictions. In both years the experimentals had fewer convictions on reduced charges, more non-convictions and fewer PBJs than the controls. None of these differences or changes, however, are statistically significant.

Table 5-6 shows the outcomes of all closed cases from arrest to disposition.[3] It suggests that the changes previously noted

TABLE 5-5

DISPOSITION OF PROSECUTED CASES
BY GROUP AND YEAR

% Prosecuted Cases in Disp. Category	84 Con.	84 Exp.	85 Con.	85 Exp.
Guilty on Highest Prosecution Charge	44	50	42	43
Guilty on Lesser Prosecution Charge	7	3	15	10
Not Convicted	35	40	31	38
Probation before judgment (PBJ)	14	7	13	8
Total	100%	100%	100%*	100%*
Number of cases	(296)	(261)	(324)	(333)

$chi^2 = 36.2$ df = 9 $p < .0000$

* Not equal to 100% due to rounding.

TABLE 5-6

DISPOSITION OF ALL CASES
BY GROUP AND YEAR

% Cases in Disp. Category	84 Con.	84 Exp.	85 Con.	85 Exp.
Guilty on Highest Arrest Charge	30	32	30	29
Guilty on Reduced Arrest Charge	27	20	28	22
Highest Pros-> Reduced or PBS	(11)	(7)	(28)	(13)
Reduced-> Conv. or PBJ	(15)	(13)	(10)	(9)
Not Convicted	43	49	43	48
Early Dismissal	(13)	(15)	(18)	(16)
Reduced->Non-Conv.	(13)	(10)	(9)	(9)
Highest->Non-Conv.	(17)	(24)	(16)	(23)
Total	100%*	100%	100%	100%
Number of cases	(341)	(306)	(397)	(396)

$chi^2 = 12.01$ df = 9 p - NS

* Not equal to 100% due to rounding.

in Tables 5-2 and 5-5 offset each others. The proportion of cases that were reduced initially, handled in District Court, and resulted in a conviction on the lesser charge decreased for both E and C in 1985 and the proportion tried on the most serious arrest charge that were subsequently reduced increased. Consequently, there was no discernable effect of the experiment on experimental case outcomes nor any indication that the increases in evidence collection by both experimental and control officers in 1985 were reflected in case dispositions. The apparent willingness of felony complaint prosecutors to take more risks by accepting a higher proportion of marginal cases for Circuit Court prosecution simply led to a delay in their reduction.

To complete the bivariate examination of case outcomes, Tables 5-7 and 5-8 show types of sentences and length of prison terms by group and year respectively. Again the data indicate an increase in the proportion of both experimental and control cases resulting in a prison or jail sentence in 1985 although the increase is negligible for the experimentals. In both 1984 and 1985 experimental convictees got longer sentences than the controls, but the differences were not significant.[4]

Multivariate Analysis and Factors Associated with Prosecution and Conviction

To further examine the felony complaint unit's screening decision, multiple regression analysis was used to distinguish the experimental effect from temporal changes, preexisting

TABLE 5-7

TYPE OF SENTENCE FOR CASES RESULTING IN CONVICTION
BY GROUP AND YEAR

% Cases Resulting in Sentence Type	84 Con.	84 Exp.	85 Con.	85 Exp.
Prison or Jail*	45	50	54	52
Probation**	55	50	46	48
Total				
Number of cases	(192)	(160)	(211)	(200)

$chi^2 = 5.60$ df = 6 p - NS

* Includes time served.

** Includes fine, restitution and other non-incarcerative sentences included as a condition of probation for convictees and those given probation before judgment.

TABLE 5-8

PRISON SENTENCE LENGTH FOR CASES RESULTING IN INCARCERATION BY GROUP AND YEAR

% Sentenced Serving Term	84 Con.	84 Exp.	85 Con.	85 Exp.
Up to 12 months	40	39	47	35
13 - 59 months	39	29	30	33
5 years or more	21	32	24	33
Total	100%	100%	100%*	100%*
Number of cases	(87)	(79)	(115)	(104)

chi^2 = 7.54 df = 9 p - NS

differences between experimental and control arrests, and differences relating to arrest type, offender characteristics, and evidentiary variables. Table 5-9 shows four different models of the screening decision. Model I compares cases charged on the most serious arrest offense with all those that were either reduced or dismissed. Models II and III examine the factors related to case reduction and dismissal respectively by comparing cases sent forward for prosecution on the most serious arrest charge with those that were reduced and dismissed. Model IV shows predictors of cases sent forward for prosecution on either the most serious or reduced charges versus those that were dismissed at screening. In each of the models larceny cases were excluded, since they are routinely prosecuted in District Court, and the dependent variable was dichotomously coded (e.g., charge versus reduce or dismiss). The independent variables included three binary-coded officer group and year combinations (e.g., Experimental-1985, coded as "1" and the other combinations coded zero) with Experimental-1984 cases the suppressed category; binary-coded offense type variables (with forgery as the suppressed category); and a number of evidentiary and offender characteristics variables. Each model was run with just the officer-year variables, then the other variables were entered using a forward stepwise procedure.[5] None of the models show an experimental effect in 1985 either before or after inclusions of the offense type, offender characteristics, and available evidence variables. However, the models do suggest that both

TABLE 5-9

BEST PREDICTORS OF FELONY REVIEW CHARGING DECISIONS FOR CASE

Independent Variables	Model I (Indict vs. Red. or Dis.) b/seb	Model II (Indict vs. Reduce) b/seb	Model III (Indict vs. Dismiss) b/seb	Model IV (Pros. On Any Charge vs. Dis.) b/seb
Experimental-1985	.033	-.067	-.023	-.022
	(.040)	(.041)	(.043)	(.032)
Control-1985	.017	-.069	- .035	-.046
	(.040)	(.040)	(.042)	(.031)
Control-1984	-.046	-.076	-.000	-.013
	(.043)	(.042)	(.046)	(.034)
victim knows def.	-.167***	-.272***		
	(.034)	(.034)		
photos available	.166***	.142***	.132***	.065**
	(.031)	(.031)	(.032)	(.024)
prints available	.197***		.211***	.165***
	(.045)		(.043)	(.035)
confession/admiss.	.122***		.210***	.151***
	(.030)		(.031)	(.024)
log of bail	.015***	.025***		
	(.000)	(.000)		
ag. assault arrest	-.121**	-.186***		
	(.040)	(.040)		
log witness inter.	.069**	.077***	.056*	
	(.022)	(.022)	(.023)	
drug arrest	.130*		.276**	.140***
	(.052)		(.057)	(.041)
white	-.065*			
	(.029)			
no days to arrest		-.122***		.059*
		(.033)		(.028)
gun used		.108**		
		(.039)		
> 30 days to arrest		.089*		.058*
		(.036)		(.028)
positive ID			.128***	.110***
			(.031)	(.025)
male			.191**	
			(.060)	
codef. squealed			-.094**	-.089**
			(.036)	(.029)
forged check avail.		-.138*	.148*	
		(.060)	(.070)	
Over 30				.066*
				(.026)
Constant	.85***	.317***	.291***	.677***
	(.057)	(.057)	(.075)	(.033)
	Adj R^2=.156	Adj R^2=.249	Adj R^2=.160	Adj R^2=127
	F=18.00***	F=25.94***	F=13.36***	F=14.43
	df=12,1092	df=12,888	df=12,767	df=12,1092

* $p < .05$; ** $p \leq .01$; *** $p < .001$

offense type and evidence play an important role in the prosecutor's charging decision. Model I, which focuses on cases accepted for prosecution in Circuit Court on the most serious arrest charge, shows that aggravated assaults were significantly less likely and drug manufacturing or distribution cases were significantly more likely than others to be prosecuted on the most serious charge. The availability of prints, photos, a confession or admission, and multiple witness interviews significantly increased the likelihood of prosecution on the most serious charge while the existence of a relationship between the defendant and victim significantly reduced the likelihood of prosecution of the case as a felony.

Both Model II, focusing on the factors related to case reduction, and Model III, showing the predictors of prosecutorial dismissal in contrast to prosecution in Circuit Court, show the absence of a 1985 experimental effect. Models II and III together, however, suggest that the factors related to charge reduction by the felony complaint prosecutors were different from those related to dismissal. Cases that were dismissed were significantly less likely than those prosecuted in Circuit Court to have essential evidence available including photos, fingerprints, a confession or admission, several witness interviews, and a positive eyewitness identification. Dismissals also were more likely to have included--probably because the arrests were based on--the testimony of a codefendant not backed up by other evidence. In contrast, fewer evidentiary

variables and more offense and offender characteristic variables were significantly related to the decision to reduce a case included the relationship between the defendant and victim, and the charge of aggravated assault. Finally, examining the predictors of prosecution of a case on any charge versus those that were dismissed, the victim-defendant relationship and defendant characteristics cease to be significant and the availability of physical and testimonial evidence remains the essential determinant of the prosecutorial decision. The number of witness interviews per se is no longer a significant predictor of prosecutorial screening, but the presence of a positive ID witness is.

The predictors of conviction on the most serious prosecution charge and of conviction on any charge are shown in Models I and II of Table 5-10. Similar to the finding shown in Table 5-5, the table indicates that Experimental-1985 cases were significantly less likely than Experimental-1984 cases to result in a conviction on the most serious prosecution charges but a similar decrease was found for Control-1985 cases as well. Cases prosecuted as aggravated assaults and those previously reduced were less likely than others to result in a conviction on the most serious charge. Other factors predictive of a conviction on the most serious prosecution charge were an on-scene arrest and three evidentiary items: the presence of a positive eyewitness identification, recovered property, and photos.

TABLE 5-10

BEST PREDICTORS OF CONVICTION
FOR PROSECUTED CASES BY GROUP AND YEAR

Independent Variables	Model I (Conviction on Most Serious Prosecution Charge)		Model II (Conviction on Any Prosecution Charge)	
	b	seb	b	seb
Experimental-1985	-.090*	(.040)	-.009	(.038)
Control-1985	-.113**	(.040)	-.065	(.038)
Control-1984	-.091*	(.041)	-.034	(.040)
pros. as ag.assault	-.156*	(.068)		
pros. on drug charge			.232***	(.069)
pros. on reduced charge	-.141***	(.039)	-.150**	(.039)
pros. on larceny charge			-.121**	(.037)
log of bail	.035***	(.000)	.017***	(.003)
recovered prop.	.094**	(.030)	.125***	(.031)
positive ID	.083**	(.032)	.104**	(.031)
photos available	.114***	(.031)	.073*	(.030)
no days to arrest	.070*	(.031)	.104***	(.030)
victim injury	-.104*	(.044)	-.092*	(.039)
defendant under 21			.087**	(.030)
confession or admission			.060*	(.029)
Constant	.153**	(.048)	.332***	(.056)
	Adj R^2 = .127 F = 16.29*** df = 11,1147		Adj R^2 = .122 F = 12.50 df = 14,1144	

* $p \leq .05$; ** $p \leq .01$; *** $p \leq .001$.

Looking at the predictors of a conviction on any charge shown in Model II, there was neither an experimental nor a temporal effect. The other significant predictors of conviction, however, are very similar to those predicting conviction on the most serious charge. The principal difference is that cases prosecuted as larcenies were significantly less likely and drug cases and significantly more likely than other offenses to result in a conviction. Youthful defendants and those who confessed or admitted their crime also were more likely to be convicted than older and more reticent defendants.

Finally, two models were developed to examine the predictors of a conviction on the most serious arrest charge and a conviction of any charge for <u>all</u> cases. As shown in both models in Table 5-11, there was no intervention effect on either the likelihood of a case to result in a conviction either on the most serious charge or on any charge. Nor was there any change between 1984 and 1985 case outcomes. The models suggest that the presence of three physical evidentiary factors--photos, fingerprints, and recovered property--as well as a defendant confession and positive eyewitness IDs, were significant predictors of both a conviction on any charge and conviction on the original arrest offense. They also suggest that aggravated assaults were less likely and drug offenses more likely than other offenses to result in a conviction. On-scene arrest cases were more likely to result in convictions than cases resulting

TABLE 5-11

BEST PREDICTORS OF CONVICTION FOR ALL CASES BY GROUP AND YEAR

Independent Variables	Model I (Conviction Most Serious Arrest Charge)		Model II (Conviction on Any Arrest Charge)	
	b	seb	b	seb
Experimental-1985	-.047	(.034)	-.028	(.037)
Control-1985	-.033	(.034)	.027	(.037)
Control-1984	-.032	(.035)	.025	(.038)
recovered property	.097***	(.027)	.132***	(.029)
log of bail	.022***	(.003)	.132***	(.003)
arr. for larceny/arson	.140***	(.032)		
arr. for ag. assault	-.170***	(.039)	-.119**	(.042)
arrest for drugs			.302***	(.056)
photos available	.139***	(.027)	.110***	(.289)
positive ID	.094***	(.026)	.143***	(.029)
finger prints available	.109**	(.041)	.087*	(.044)
victim knows defendant	-.085***	(.029)		
defendant over 30	.070**	(.028)		
white	-.055*	(.025)		
confession or admission	.063*	(.026)	.140***	(.028)
codefendant squealed	-.063*	(.032)		
no days to arrest			.132***	(.030)
Constant	-.007	(.049)	.186***	(.045)
	Adj R^2 = .130 F = 16.5** df = 15,1349		Adj R^2 = .124 F = 17.15** df = 12,1352	

* $p \leq .05$; ** $p \leq .01$; *** $p \leq .001$

from more prolonged investigations probably due to the increased likelihood of eyewitness indentifications and fresh evidence.

The same case outcome analyses were run using the principal investigating officer group variable to include only a) those cases in which an E or C officer was determined to have played a central role and b) the more serious felony offenses. Looking first at the prosecutor's felony screening decisions shown in Table 5-12, there was a substantial decrease in case reductions and an increase in dismissals at screening in 1985 for both E and C PIO cases. This may suggest that increased information, particularly that obtained through on-scene arrests, led both to strong cases and to elimination of marginal cases as predicted. The case disposition findings, presented in Table 5-13, strongly suggest the absence of any experimental effect, and, even more discouraging, indicate that experimental PIO's cases in 1985 were substantially <u>less</u> likely to result in a conviction on the highest charge and more likely to result in a non-conviction than they were in 1984, while in 1985 the control officers' case dispositions were unchanged. These two tables together, like those previously presented, suggest that there were changes in police evidence collection and, consequently, in case screening otucomes. However, these changes did not appear to affect case dispositions.

TABLE 5-12

PROSECUTORIAL SCREENING OF PRINCIPAL INVESTIGATING OFFICERS' CASES BY GROUP AND YEAR

% in Screening Disp. Category	84 Con.	84 Exp.	85 Con.	85 Exp.
Highest Charge	42	49	51	51
Reduced	50	40	32	33
Dismissed	8	11	17	17
Total	100%	100%	100%	100%*
Number of cases	(157)	(149)	(226)	(214)

$chi^2 = 18.58$ df = 6 p. < .005

* Not equal to 100 percent due to rounding.

TABLE 5-13

DISPOSITION OF ALL PRINCIPAL INVESTIGATING OFFICERS' CASES (Incl. felony review dismissals) BY GROUP AND YEAR

% Cases in Disp. Category	84 Con.	84 Exp.	85 Con.	85 Exp.
Guilty on Highest Charge	25	28	25	23
Guilty on Reduced Charge	25	26	23	23
Not Convicted	38	40	37	48
Probation before Judgement (PBJ)	12	5	14	6
Total	100%	100%	100%	100%
Number of cases	(151)	(141)	(215)	(197)

$chi^2 = 17.08$ df = 9 p = .05

* Not equal to 100% due to rounding.

Dispositions of Arrests

All of the foregoing data were based on the case as the unit of analysis and the 1,622 cases developed by the E and C officers. To increase comparability with other studies of attrition, the analyses were repeated using the arrest data base. The results, shown in Tables 5-14 through 5-16, are very similar to those for the case-based analyses. The primary difference is that for all groups the proportion of dismissals at felony review and the proportion of non-convictions was lower using arrest as the unit of analysis. As indicated in Table 5-14, the previously observed 1985 increase in the proportion of both E and C arrests prosecuted in Circuit Court and the drop in reductions at felony review remained (though the changes were greater for C than E arrests), while dismissals were unaffected by either year or experimental intervention. Similarly, as shown in Table 5-15, both E and C non-convictions decreased slightly from 1984 to 1985, and reductions increased, but there was no experimental intervention effect.

The regression models for felony screening, dispositions of prosecuted arrestees, and disposition of all cases were also rerun using the arrest data (data not shown). Turning first to the screening decision to charge on any offense versus dismiss, no experimental effect was found, although some of the variables associated with prosecution of arrests were different from those that were significant in the analysis using the case data set. White arrestees were significantly more likely to be prosecuted

TABLE 5-14

PROSECUTORIAL SCREENING*
OF ARRESTS BY GROUP AND YEAR

% in Screening Disp. Category	84 Con.	84 Exp.	85 Con.	85 Exp.
Highest Charge	44	51	58	56
Reduced	42	34	28	31
Dismissed	14	14	15	13
Total	100%	100%**	100%	100%
Number of cases	(232)	(210)	(285)	(276)

$chi^2 = 14.21$ $df = 6$ $p < .03$

* Excludes grand larceny cases normally handled in District Court without formal review session.

** Not equal to 100 percent due to rounding.

TABLE 5-15

DISPOSITION OF PROSECUTED ARRESTS BY GROUP AND YEAR

% of Prosecuted Arrests in Disp. Category	84 Con.	84 Exp.	85 Con.	85 Exp.
Guilty on Highest Charge	43	51	42	45
Guilty on Lesser Charge	8	4	15	11
Not Convicted	34	38	29	35
PBJ	15	7	14	9
Total	100%	100%	100%	100%
Number of arrests	(273)	(244)	(309)	(304)

$chi^2 = 34.91$ $df = 9$ $p < .0001$

TABLE 5-16

DISPOSITION OF ALL ARRESTS (Incl. felony complaint dismissals) BY GROUP AND YEAR

% Arrestees in Disp. Category	84 Con.	84 Exp.	85 Con.	85 Exp.
Guilty on Highest Charge	30	34	32	32
Guilty on Reduced Charge	15	15	18	18
Not Convicted	41	45	38	42
Probation before Judgement (PBJ)	13	7	12	8
Total	100%*	100%*	100%	100%
Number of arrests	(306)	(274)	(351)	(339)

chi^2 = 13.45 df = 9 p - NS

* Not equal to 100 percent due to rounding.

than non-whites, as were those where property was recovered and defendants who were not acquainted with their victim. Defendants arrested more than 30 days after the offense were significantly less likely to be convicted than others.

Turning to prosecuted cases resulting in a conviction on the most serious charge, both Control-1984 and Control-1985 cases were significantly less likely than Experimental-1984 cases to result in a conviction on the most serious prosecution charge. Experimental-1985 arrestees were also less likely to be convicted on the top charge than Experimental-1984 arrestees, but this difference did not reach statistical significance. The only offense type significantly different from the others is burglary: burglars are significantly more likely to be convicted for burglary. Two offender characteristics, race and prior record, also become significant while time to arrest disappeared from the model.

Focusing on conviction on any prosecution charge, neither an experimental nor a temporal effect was found. The only notable change is that in this model persons arrested on the day of the offense were significantly more likely than those arrested later to be convicted.

Neither the model for conviction on the most serious charge nor conviction on any charge using the arrest data set showed a significant temporal or experimental change. However, for convictions on any offense, in addition to the previously observed variables, arrestees who were under 21 years old and

those convicted of offenses against strangers were significantly more likely to be convicted than offenders 21 or older and those involved in offenses against acquaintances or intimates. Arrestees who used a gun and those who had a prior record were significantly more likely to be convicted on the most serious arrest charge; those arrested for robbery were significantly less likely to be convicted on the most serious arrest charge.

In summary, using two different measures (i.e., cases and arrests) and four different officer group variables (i.e., arresting, investigating, PIO, and composite) the findings consistently indicate the absence of a specific intervention effect. Nevertheless, efforts to increase police-prosecutor communication and the physical and testimonial evidence obtained by patrol officers did result in an increase in 1985 in the proportion of both E and C cases initially accepted for Circuit Court prosecution by the felony complaint unit screening unit. The net effect of this change, however, was an increase in the proportion of prosecuted cases and arrests that subsequently resulted in conviction on lesser charges and a small (3 percent) but no significant decrease in felony case attrition.

CHAPTER 5 - ENDNOTES

1. In 1984, there were 37,770 Part I index crimes known to the Baltimore County police. In 1985, there were 38,853 Part I index crimes (U.S. Department of Justice, 1985; U.S. Department of Justice, 1986). The department was unaware of the increase and could not provide any explanation for it.

2. Technically the screening decision is the result of a preliminary hearing before a judge or a presentation to a grand jury which may issue a criminal information or indictment, respectively. In fact, cases are reviewed by an ASA and their decisions are recommended to the court or grand jury, which virtually always ratifies them.

3. Ninety-one cases were still pending as of September 1, 1986. These have been included in analyses of evidence collection and the initial screening decision, but excluded from the final disposition analyses.

4. The mean sentences of 1984 C and E convictees after truncating sentence length at 15 years, were 35 and 48 months respectively; those of 1985 Cs and Es were 37 and 47 months respectively.

5. An ordinary least squares regression model was used rather than the technically more correct LOGIT model for two reasons. First, the interpretation of the data is much more straightforward; second, when the dependent variable is within a 75-25 percent split, there is little difference in the outcomes of these models (see Goldberger, 1964).

CHAPTER 6

EXAMINING ATTRITION:

REASONS FOR CASE REDUCTIONS AND NON-CONVICTIONS

Chapter Five showed that using a variety of measures of attrition from arrest to disposition, the experimental intervention had no measurable effect on the proportion of experimental felony arrests that were convictions. Nevertheless, there was an increase in the proportion of both E and C cases accepted for prosecution in Circuit Court that paralleled the increase in available physical evidence and witness interviews. Of crucial importance then are the reasons for case attrition and how E and C cases may differ in the proportion of reductions and non-convictions that alternative police activity might have avoided. This chapter explores the reasons for decisions provided by ASAs at initial prosecutorial screening and disposition.

The relatively large number of reasons that prosecutors used, the small number of cases, the inability of even the large number of codes to capture the complex factual situations in many instances, and the reluctance of ASAs to give a reason clearly indicating a police error if one occurred limit the quantitative analysis. In addition, the absence of pre-filing screening limits the comparability of the reasons for attrition provided by Baltimore County prosecutors to the reasons data reported by Boland (1986). Therefore, to supplement the reasons analysis, we

used observational data and examples from individual cases to help in identifying differences between E and C groups in the frequency of "avoidable" attrition and also to determine the extent to which cases ending in a non-conviction might have been salvaged by the police.

Reasons for the Felony Complaint Unit Screening Decisions

Table 6-1a shows the six broad categories of reasons given for E and C cases that were reduced and dismissed following felony complaint unit review. Prosecutorial policy accounted for two-thirds of the reductions whereas a majority of the dismissals resulted from constitutional, evidentiary, or victim/witness problems.

Focusing first on reduced cases, a larger proportion of experimental than control cases were reduced due to evidentiary problems. Turning to dismissals, substantially more control than experimental cases had constitutional and evidence problems but the numbers are small (14 and 6 cases) and the difference thus is not statistically significant.

Using arrest rather than case as the unit of analysis, the number of arrested persons dismissed by felony complaint screening sharply fell from 63 to 41 for Cs and from 55 to 34 for the Es. Twenty-seven of the 41 control dismissals (66 percent) and 20 of the 34 experimental dismissals (56 percent) at initial prosecutorial screening were due to either evidentiary or constitutional problems, but this difference was not significant ($Chi^2=.698$; $df=2$).

TABLE 6-1a

FELONY REVIEW REASONS FOR 1985 CASE REDUCTIONS AND DISMISSALS BY GROUP

% in Reason Category	Reduced		Dismissed	
	Control	Exp.	Control	Exp.
Evidence	8	25	77	57
Constitutional	-	-	1	-
Victim/witness	11	7	11	20
Jurisdiction/limitation	-	-	5	6
Defendant characteristics	3	4	1	-
Prosecutorial policy	78	64	5	18
Total	100%	100%	100%	100%
Number of cases	(74)	(68)	(63)	(55)

TABLE 6-1b

FELONY REVIEW REASONS FOR 1985 ARREST DISMISSALS* BY GROUP

Percent in Reason Category	Dismissals	
	Control	Experimental
Evidence	61	56
Constitutional	5	-
Victim/witness	15	29
Jurisdiction/limitation	7	6
Defendant characteristics	2	-
Prosecutorial policy	10	9
Total	100%	100%
Number of cases	(41)	(34)

* There are the same number of reductions in the cases and arrest data bases so numbers are not repeated.

In Table 6-2 case dismissals and reductions are broken down by most serious arrest charge. The table indicates clear differences in the types of problems that arose in prosecuting cases for different offenses. For example, aggravated assault and drug distribution cases were more likely to be reduced than dismissed and the reductions were primarily based on prosecutional policy related to the nature of the case (amount of harm and victim-defendant relations in the former, amount of contraband seized in the latter); burglaries tended to be reduced for lack of prosecutive merit but dismissed due to the absence of evidence linking the defendant and the crime; the problems in robbery cases were largely evidentiary and victim/witness based. The number of cases in each offense category is small and the differences between the experimental and control cases are not statistically significant although more C than E burglary cases were dismissed due to evidentiary problems and more E than C aggravated assaults had evidentiary and victim/witness problems.

Table 6-3 shows the specific reasons provided by assistant state's attorneys for reductions and dismissals of cases following felony review. The only notable difference between the reasons given for experimental and control cases not accepted for prosecution on the original arrest charge is the higher number of control than experimental cases where probable cause was not established by adequately linking the defendant and crime. This difference is almost entirely due to the fact that 16 cases for the 18 control cases in for which probable cause was not

TABLE 6-2

FELONY SCREENING REASON FOR REDUCTION OR DISMISSAL OF CASES IN 1985 BY ARREST OFFENSE AND GROUP*

Number and Percent of Reason for Decision	Ag. Assault		Burglary/ Fel. B&E		Drugs Dist./Mfg.		Robbery		Other Felony	
	85C	85E	85C	85E	85C	85E	85C	85E	85C	85E
Crime/const.	-	-	26 (18)	9 (5)	7 (1)	-	-	10 (2)	13 (1)	-
Evidentiary	8 (2)	30 (8)	36 (25)	41 (22)	7 (1)	33 (2)	40 (8)	30 (6)	13 (1)	19 (3)
Victim/witness	16 (4)	26 (7)	7 (5)	9 (5)	-	-	30 (6)	20 (4)		
Jurisdiction	-	-	3 (2)	-	-	-	10 (2)			6 (1)
Defendant characteristics	-	4 (1)	-	2 (1)	7 (1)	-	-	-	13 (1)	6 (1)
Prosecutive policy	76 (19)	41 (11)	29 (20)	39 (21)	79 (11)	66 (4)	30 (6)	30 (6)	63 (5)	69 (11)
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of Cases	(25)	(27)	(70)	(54)	(14)	(6)	(20)	(20)	(8)	(16)

* Number of cases by crime type in parenthesis.

TABLE 6-3

FELONY REVIEW REASONS FOR REDUCTION AND DISMISSALS
IN ALL 1985 CASES BY GROUP

Reason for Reduction or Dismissal	Control		Exper.	
	N	%	N	%
Evidentiary Problem	(55)	(40)	(48)	(38.8)
no corpus (elements missing)	-	-	2	1.6
defendant factually innocent	2	1.4	4	3.2
pc arrest; defendant and crime not linked	16	11.9	1	.8
analysis report unavailable	1	.7		
physical evidence unavailable	1	.7	4	3.2
physical evidence insufficient/inconclusive	12	8.9	15	12.2
no corroboration of offense	1	.7	3	2.4
no ID at line up or photo show	3	2.2	1	.8
unreliable or weak ID	1	.7	1	.8
no corroboration of codef. statement	15	10.6	13	10.6
defendant role in crime unclear	3	2.2	4	3.2
Constitutional Problem	(2)	(1.4)		
no probable cause for arrest	1	.7		
evidence justifiably suppressed	1	.7		
Victim/Witness Problems	(15)	(10.9)	(16)	(13.6)
victim unavailable-no show/can't be located	1	.7	2	1.6
victim won't prosecute/cooperate	4	2.9	6	4.8
victim credibility problem	8	5.9	3	2.4
witness uncooperative			2	1.6
witness credibility problem	2	1.4	2	1.6
police no show			1	.8
conflicting testimony			1	.8
Jurisdiction Problem	(2)	(2.2)	(3)	(2.4)
referred to other jurisdiction	2	2.2	1	.8
referred to juvenile court			2	1.6

TABLE 6-3 (cont.)

FELONY REVIEW REASONS FOR REDUCTION AND DISMISSALS
IN ALL 1985 CASES BY GROUP

Reason for Reduction or Dismissal	Control		Exper.	
	N	%	N	%
Defendant Characteristics	(2)	(1.4)	(3)	(2.4)
defendant's age	1	.7		
defendant's mental condition			1	.8
defendant's lack of prior record	1	.7	2	1.6
Prosecutorial Policy	(61)	(43.4)	(53)	(42.8)
better handled in district court	10	7.4	8	6.4
victim provocation	10	7.4	1	.8
small amount contraband	10	7.4	2	1.6
small amount harm/loss	11	8.1	13	10.6
convicted on lesser - same sentence	2	1.4		
convicted on lesser - sufficient punishment	1	.7	3	2.4
family offense	14	10.3	19	15.4
good defense (ability)	1	.7		
defendant already doing long time			1	.8
dismissed in favor of other case			6	4.8
dismissed to aid conviction of other	1	.7		
	137	100%	123	100%

established came from two codefendants. These two men were caught committing a burglary which had a very similar modus operandi (m.o.) to eight others in the precinct (i.e., a brick prosecutor dropped all but the original case against each man but stated that he shared the police officers' beliefs that the arrestees had perpetrated the other offenses and supported the officers' decision to charge the other offenses with the hope of getting a confession and additional clearances.

The table also suggests that another frequent reason for reduction or dismissal at prosecutorial charging was the absence of corroboration of a codefendant's statement. In most of these cases one apprehended codefendant told the police about several other burglary offenses in which he and the current codefendant had been involved. The police charged both codefendants with these additional crimes, but the only evidence was the initial offender's confession.

Using arrest rather than case as the unit of analysis, Table 6-4 suggests that the number of C and E defendants not prosecuted on the initial police arrest charge due to crime-defendant linking and corroboration problems falls substantially. The proportion of <u>both</u> reductions and dismissals at initial prosecutorial charging due to evidentiary or constitutional problems that could potentially be attributed to police shortcomings is 30 percent for the Cs and 35 percent for the Es.

A closer look at some of the cases in the constitutional and evidentiary problem categories and additional information

TABLE 6-4

FELONY REVIEW REASONS FOR REDUCTION AND DISMISSALS
IN 1985 ARRESTS BY GROUP

Reason for Reduction or Dismissal	Control		Exper.	
	N	%	N	%
Evidentiary Problem	(31)	(27.7)	(36)	(35.0)
no corpus (elements missing)	-	-	2	1.9
def factually innocent	2	1.8	3	2.9
pc arrest; def and crime not linked			1	1.0
analysis report unavailable	1	.9		
analysis report inconclusive/insufficient	2	1.8		
physical evidence unavailable	2	1.8	3	2.9
physical evidence inconclusive/insufficient	9	8.0	15	14.6
no corroboration of offense	1	.9	2	1.9
no ID at line up or photo show	3	2.7	1	1.0
unreliable or weak ID	1	.9	1	1.0
no corroboration of codef. statement	7	6.2	4	3.9
defendant role in crime unclear	3	2.7	4	3.9
Constitutional Problem	(2)	(1.8)	-	-
no probable cause for arrest	1	.9		
evidence justifiably suppressed	1	.9		
Victim/Witness Problems	(14)	(14.4)	(15)	(14.5)
victim unavailable/no show/unfit	1	.9	2	1.9
victim won't prosecute/cooperate	4	3.5	6	5.8
victim credibility problem	8	7.1	3	2.9
witness unfit/unavailable/no show	-		-	
witness uncooperative			2	1.9
witness credibility problem	1	.9		
police no show			1	1.0
conflicting testimony			1	1.0
Jurisdiction Problem	(3)	(2.7)	(2)	(1.9)
referred to other jurisdiction	3	2.7		
referred to juvenile court			2	1.9

TABLE 6-4 (cont.)

FELONY REVIEW REASONS FOR REDUCTION AND DISMISSALS
IN 1985 ARRESTS BY GROUP

Reason for Reduction or Dismissal	Control		Exper.	
	N	%	N	%
Defendant Characteristics	(3)	(2.7)	(3)	(2.9)
defendant's age	1	.9		
defendant's mental condition			1	1.0
defendant's lack of prior record	2	1.8	2	1.9
defendant's physical condition/died				
Prosecutorial Policy	(58)	(51.2)	(46)	(45.7)
better handled in district court	10	8.8	8	7.8
victim provocation	10	8.8	1	1.0
small amount contraband	10	8.8	2	1.9
small amount harm or loss	11	9.7	14	13.6
convicted on lesser - same sentence	2	1.8		
convicted on lesser - sufficient punishment			3	2.9
family offense	14	12.4	18	17.5
good defense (ability)	1	.9		
dismissed for plea in other case			1	1.0
	111	100%	103	100%

provided by ASAs suggest that in several instances the problem was not a correctable police error. For example, one case coded "unreliable ID" was dismissed because the victim subsequently admitted to filing a false report. Two of the cases in which the elements of crime were missing involved marginal charging decisions by the police that led to reductions. In one, the police robbery charge was reduced to a theft because the offender had grabbed the victim's bag of groceries as she left a store and, although she held on to it and the groceries spilled, the ASA determined that there was not sufficient force involved to be prosecuted as a robbery (but said the police had acted and charged appropriately). In the other the victim heard noises in her patio, but thought it was her son. A short while later she observed the defendant in her patio and, believing he was trying to get into the house, called the police, who arrested him for burglary. The case was reduced to a misdemeanor breaking and entering offense; in the prosecutor's judgement the intent to steal, an element necessary in a felony charge, was missing.

To more fully explore the nature of the evidentiary problems, eight of the 27 cases a prosecutor had reduced or dismissed due to "insufficient evidence" were randomly selected for closer examination. Three of those were dismissals; six reductions. There were several questionable charges (D1, R4), one arrest that probably should not have been made (R5), but only one clear police error (R6) and that was not identified by the reason provided by the prosecutor.

Dismissed Case 1:

A gun taken in a burglary in Baltimore County was later used in a Baltimore City robbery for which the offender was apprehended. The gun was linked through NCIC to the burglary and a detective interviewed the suspect. He said he obtained the gun from a woman he'd met at a bar. Both were arrested for burglary (on warrants obtained by a detective) although there was no physical evidence linking him to the burglary.

Dismissed Case 2:

The defendant and complainant were roommates. While still living together, someone sent in an application for a credit card to a department store by mail in the name of the complainant. She moved to a new address and had the post office forward her mail. Several weeks later the complainant received the approved application forwarded from her old address. She said she did not submit it, although the application looked like the defendant's handwriting. The complainant alleged that her name had been forged. The defendant denied it. The felony complaint prosecutor found the evidence insufficient but asked the officer to seek a handwriting sample from the defendant and if it matched, the case could be refiled as a misdemeanor.

Dismissed Case 3:

Two men with concealed pistols tried on shoes at an athletic shoe store; as one was making the purchase, the other drew

his gun on the lone salesperson. He resisted and was shot three times by the assailants. Extensive canvassing led to no witnesses although several people later called the police and said they had been in the store just before the robbery and had noticed two suspicious characters they might be able to identify. Bullet fragments were recovered from the victim. Three men were apprehended for another armed robbery committed in Baltimore County. Ballistics tests indicated that bullets from the two guns found in their car matched the fragments removed from the victim. All three men were charged with this assault with intent to kill. The victim identified one of his assailants by photo and the other in a live line up. The arrest charges in this case (but not the other robbery) against the third arrestee were dropped.

Reduced Case 1:

In a residential burglary a large amount of jewelry was stolen. Two weeks later, a defendant picked up on a detainer from Baltimore City, was found during processing to be wearing a college ring with the name of the victim inscribed in it. A detective checked and found the ring reported stolen. The defendant claimed she was given the ring by an inmate in the city jail. A check on the information she gave proved negative. The defendant was charged with the burglary, which was reduced to receiving stolen property in the absence of eyewitnesses, a

confession, or physical evidence linking her to the break in.

Reduced Case 2:

The victim was carrying a bag of money from his shop to his car. The codefendant approached, implied his accomplice with a gun was watching, and demanded the money. The victim hit the codefendant, who grabbed the money and ran around the corner. The victim pursued in his car and, as he saw a car speed over the curb, recorded the car's license number. He did not see the codefendant, however. A broadcast of the license provided another police unit with the address to which the vehicle was registered. The car was in the driveway with the motor still warm. The officers rang the bell and the young man in the house denied being at the scene and was brought back for a "one-on-one." A witness identified him as the driver of the car that sped away. The defendant gave the police the name of the robbery suspect/codefendant. He stated that he had gone with the codefendant to the area, did not know what he planned to do and had gotten frightened and sped away. No money bag was recovered. Charges against both arrestees were reduced from robbery to assault and theft.

Reduced Case 3:

The defendant initially called the police following a quarrel with three neighbors. While interviewing the neighbors, one alleged that the defendant had attempted to

rape her and another said he'd heard cries from the woman while he was showering and was told of the incident. The defendant was arrested but alleged that the victim initiated sexual activity and was trying to get even with him for accusing her of theft earlier that evening. No physical evidence was collected. The case was reduced to a battery and subsequently ended in an acquittal due to victim credibility problems.

Reduced Case 4:

A gas station attendant's money apron was snatched from her by a "customer." The single suspect fled on foot behind a drug store. A woman living by the drug store called the police shortly after the robbery call because she noticed two suspicious subjects in a car and feared they would steal tools her husband had left out. She gave a description of the car and the vehicle's license. Two officers stopped the car, found a shirt and hat matching the robbery victim's description as well as a money apron. The victim and witness were taken for a one-on-one, which led to a positive ID of the robbery suspect. Both occupants of the car were arrested; one spontaneously admitted to the robbery but both were charged by the police with robbery. They both were convicted of grand theft.

Reduced Case 5:

The victim called the police after the defendant drove past his house and shot at it three times. The incident arose

from an earlier disagreement between the arrestee and the victim's friend. A broadcast of the vehicle led to the arrest of the defendant. Three shells were found in the car, but no shotgun. Officers dispatched to the defendant's house to inform the wife of his arrest went to the back door and got no response, but while standing in the doorway saw through the glass door a shotgun leaning against the wall. They entered the unlocked house, found the gun had recently been fired, and seized it. No warrant had been obtained, so the search and seizure of the gun were illegal. The case was reduced to an assault, then nolle prossed with no reason provided.

Many of the victim/witness problems codes suggest problems beyond police control; those that appeared to be attributable to the police error, often were not. The "police officer no show" occurred in a two-year old case. In the interim, the investigating officer (a key witness) resigned from the department and moved from the area. The prosecutor opted to drop the case rather than pay the costs of bringing the witness to the area. In one "victim no show" cases the victim of an attempted sexual assault gave a false address and phone number and could not be found despite several active attempts by the police to recontact her.

Examining cases or arrests dismissed due to evidentiary or constitutional problems as a proportion of <u>all</u> cases or arrests rather than as a percentage of dismissed cases, puts the

"problem" of "avoidable" attrition in a somewhat different perspective. Although evidentiary problems dominate dismissals, only 49 C cases out of 332 (or 15 percent) and 31 E cases out of 329 (ten percent) that were reviewed by the felony complaint unit respectively were dropped due to evidentiary weaknesses. Using the arrest data base, only 9 percent of all control arrests and 7 percent of the experimental arrests resulted in dismissals due to evidentiary or constitutional weaknesses. Since may of the evidentiary problems were not attributable to police error, the magnitude of the attrition problem appears to be less than initially hypothesized.

Reasons for Post-Screening Non-Convictions

Turning from the reasons for negative charging decisions to the reasons for subsequent case dispositions, Table 6-5 suggests that once a case was reviewed and charged by the prosecutor, evidentiary problems accounted for only a small proportion of the non-convictions (18 percent of the C and 15 percent of the E cases) but frequently contributed to case reductions. Furthermore, a higher proportion of E than C cases (52 percent versus 31 percent) were reduced due to these problems. Probation before judgment generally rested on the defendant's characteristics, especially the prior record.

Prosecutorial policy, particularly the decision to reduce or dismiss one case in exchange for a guilty plea in another case against the same defendant, accounted for most non-convictions (nolle prosequis, stets, and acquittals).

TABLE 6-5

PROSECUTORS' REASONS FOR DISPOSITIONS OF 1985 PROSECUTED CASES NOT CONVICTED ON MOST SERIOUS PROSECUTION CHARGE*

% in Reason Category	Reduced		PBJ		Nolle Pros, stet or acquit	
	Control	Exp.	Control	Exp.	Control	Exp.
Evidentiary	31	52	8	-	18	15
Victim/witness	24	16	16	33	24	23
Jurisd/statute of limitations	-	-	-	-		1
Defendant char.	-	-	60	50	4	5
Pros. policy	29	26	12	17	52	55
Judge or jury verdict-reason unclear	15	7	4	-	1	1
Total	100%	100%	100%	100%	100%	100%
Number of cases	(41)	(32)	(25)	(12)	(73)	(98)

$chi^2 = 4.02$ df = 4 p - NS

$chi^2 = 2.84$ df = 4 p - NS

$chi^2 = 1.33$ df = 5 p - NS

* Reasons were not provided for 49 control and 46 experimental cases. Of these 95 cases, 88 were tried in District Court. Due to the volume of district court cases, prosecutors' case files are routinely discarded within a week following dispositions of acquittal or nolle prosse. Files for cases put on the stet docket, those that are reduced and sentenced to probation before judgment are retained for 6 months. When prosecutors did not provide a reason immediately following a disposition, it became virtually impossible to obtain it at a later date.

One possible explanation for the high proportion of evidentiary problems in reduced cases is that felony review accepted more marginal cases in 1985 than 1984. This may be a result of the availability of more evidence or a reaction to the increased visibility of prosecutorial decisions through the feedback reports and subsequent study. Regardless of the explanation, however, the risk-taking strategy did not result in more felony convictions but, due to evidentiary weakness and/or increased caseload pressures, led to plea agreements.

In Table 6-6 the specific reasons for case dispositions other than convictions on the most serious prosecution charge are displayed. Overall, there is virtually no difference between control and experimental cases in the crime and evidentiary problem categories in which police errors might occur (though more E than C cases had insufficient physical evidence) and two instances (both experimental) in which police trial preparation was deficient.

Tables 6-7 and 6-8 combine the reasons given for felony complaint unit dismissals with those provided by Circuit and District Court ASAs for non-convictions for cases and arrests respectively. The latter shows, for example, that 39 percent of the control arrests and 31 percent of the experimental arrests resulting in non-convictions were due to evidentiary or crime problems. While in the hypothesized direction, the difference between experimental and control groups in potentially avoidable non-convictions is not significant ($Chi^2 = .97$; df=1). When the

TABLE 6-6

REASONS FOR DISPOSITIONS OTHER THAN GUILTY
ON HIGHEST CHARGE IN 1985 PROSECUTED CASES BY GROUP

Reason for Disposition	Control		Exper.	
	N	%	N	%
Evidentiary Problem	(28)	(20.1)	(31)	(21.8)
no corpus (elements missing)	4	2.9	3	2.1
defendant factually innocent	2	1.4	5	3.5
pc arrest; def and crime not linked	3	2.2	1	.7
analysis report inconclusive/insufficient	1	1.7		
physical evidence inconclusive/insufficient	7	5.0	12	8.5
no corroboration of offense	1	.7		
no ID at line up or photo show			1	.7
unreliable or weak ID	5	3.6	3	2.1
no corroboration of codef. statement	2	1.4	1	.7
defendant role in crime unclear	3	2.2	5	3.5
Victim/Witness Problems	(31)	(22.4)	(31)	(22.7)
victim unavailable-no show/can't be located	8	5.8	7	4.9
victim won't prosecute/cooperate	8	5.8	10	7.0
victim credibility problem	6	4.3	5	3.5
witness unfit/unavailable/no show	4	2.9	1	.7
witness uncooperative	1	.7	1	.7
witness credibility problem	4	2.9	3	2.1
police trial prep. deficient			2	1.4
conflicting testimony			1	.7
witness privilege			1	.7
Jurisdiction Problem	(2)	(1.4)	(1)	(.7)
referred to other jurisdiction	1	.7		
referred to juvenile court	1	.7	1	.7

TABLE 6-6 (cont.)

REASONS FOR DISPOSITIONS OTHER THAN GUILTY
ON HIGHEST CHARGE IN 1985 CASES BY GROUP

Reason for Disposition	Control		Exper.	
	N	%	N	%
Defendant Characteristics	(19)	(13.8)	(12)	(8.4)
defendant's age	1	.7		
defendant's mental condition			2	1.4
defendant's lack of prior record	17	12.4	9	6.3
defendant's physical condition/died	1	.7	1	.7
Prosecutorial Policy	(51)	(36.2)	(64)	(45.0)
victim provocation			1	.7
small amount contraband	2	1.4	2	1.4
small amount harm/loss	2	1.4		
convicted on lesser - same sentence	3	2.2	3	2.1
convicted on lesser - sufficient punishment	5	3.6	3	2.1
family offense	2	1.4	1	.7
good defense (ability)	-		1	.7
defendant already doing long time	2	1.4	3	2.1
restitution or private remedy	8	5.8	13	9.2
dismissed to aid conviction of other	9	6.6	5	3.5
reduced/dismiss for plea in other case	17	12.4	32	22.5
Other	(8)	(5.8)	(3)	(2.1)
judge or jury verdict: reason unclear	8	5.8	3	2.1
	139	100%	142	100%

TABLE 6-7

REASONS FOR NON-CONVICTIONS IN 1985 ALL CASES BY GROUP

Reason for Non-Conviction	Control		Exper.	
	N	%	N	%
Evidentiary Problem	(67)	(48.1)	(46)	(30.3)
no corpus (elements missing)	1	.7	2	1.3
defendant factually innocent	4	2.9	8	5.2
pc arrest; def and crime not linked	18	12.9	2	1.3
analysis report unavailable	1	.7		
analysis report inconclusive/insuff.	1	.7		
physical evidence insufficient/incon.	9	6.4	8	5.2
physical evidence unavailable	3	2.2	3	2.0
no corroboration of offense	1	.7	3	2.0
no ID at line up or photo show	3	2.2	2	1.3
unreliable or weak ID	4	2.9	2	1.3
no corroboration of codef. statement	17	12.2	14	9.2
defendant role in crime unclear	3	2.2	2	1.3
Constitutional Problem	(2)	(1.4)		
evidence justifiably suppressed	1	.7		
no probable cause for arrest	1	.7		
Victim/Witness Problems	(24)	(17.3)	(33)	(21.7)
victim unavailable-no show/can't be located	5	3.6	6	4.2
victim won't prosecute/cooperate	8	5.8	10	6.6
victim credibility problem	6	4.3	5	3.3
witness unfit/unavailable/no show	1	.7	1	.7
witness uncooperative	1	.7	3	2.0
witness credibility problem	3	2.1	4	2.6
police officer no show			1	.7
conflicting testimony			2	1.3
witness privilege			1	.7
Jurisdiction Problem	(4)	(2.9)	(4)	(2.6)
referred to other jurisdiction	4	2.9	1	.7
referred to juvenile court			3	2.0

TABLE 6-7 (cont.)

REASONS FOR NON-CONVICTIONS IN 1985 ALL CASES BY GROUP

Reason for Non-Conviction	Control		Exper.	
	N	%	N	%
Defendant Characteristics	(5)	(3.6)	(5)	(3.3)
defendant's age	1	.7		
defendant's mental condition			2	1.3
defendant's lack of prior record	3	2.2	2	1.3
defendant's physical condition/died	1	.7	1	.7
Prosecutorial Policy	(37)	(26.7)	(63)	(41.4)
victim provocation	1	.7	1	.7
small amount contraband			1	.7
small amount harm/loss	1	.7		
family offense	4	2.9	4	2.6
defendant already doing long time	2	1.4	2	1.3
restitution or private remedy	8	5.8	13	8.6
dismissed to aid conviction of other	5	3.6	5	3.3
reduced dismiss for plea in other case	16	11.5	37	24.3
Other	(2)	(1.4)	(1)	(0.7)
judge or jury verdict: reason unclear	1	.7	1	.7
statute of limitations expired	1	.7		
	139	100%	152	100%

TABLE 6-8

REASONS FOR NON-CONVICTIONS IN ALL 1985 ARRESTS BY GROUP

Reason for Non-Conviction	Control		Exper.	
	N	%	N	%
Evidentiary Problem	(38)	(39.6)	(34)	(32.2)
no corpus (elements missing)	1	1.0	2	1.8
defendant factually innocent	4	4.0	7	6.4
pc arrest; defendant and crime not linked	2	2.0	2	1.8
analysis report unavailable	1	1.0		
analysis report inconclusive	2	2.0		
physical evidence unavailable	2	1.0	2	1.8
physical evidence insufficient/inconclusive	6	5.9	8	7.3
no corroboration of offense	1	1.0	2	1.8
no ID at line up or photo show	1	1.0	2	1.8
unreliable or weak ID	4	4.0	2	1.8
no corroboration of codef. statement	9	8.9	5	4.6
defendant role in crime unclear	3	2.0	2	1.8
Constitutional Problem	(2)	(2.0)		
no probable cause for arrest	1	1.0		
evidence justifiably suppressed	1	1.0		
Victim/Witness Problems	(23)	(22.8)	(30)	(27.5)
victim unavailable-no show/can't be located	5	5.0	5	4.6
victim won't prosecute/cooperate	8	7.9	10	9.2
victim credibility problem	6	6.0	5	4.6
witness uncooperative/unavailable	2	2.0	4	3.6
witness credibility problem	2	2.0	2	1.8
witness privilege			1	.9
police no show			1	.9
conflicting testimony			2	1.8
Jurisdiction Problem	(4)	(4.0)	(3)	(2.8)
referred to other jurisdiction	4	4.0		
referred to juvenile court			3	2.8

TABLE 6-8 (cont.)

REASONS FOR NON-CONVICTIONS IN ALL 1985 ARRESTS BY GROUP

Reason for Non-Conviction	Control		Exper.	
	N	%	N	%
Defendant Characteristics	(4)	(4.0)	(4)	(3.7)
defendant's age	1	1.0		
defendant's mental condition			2	1.8
defendant's lack of prior record	3	3.0	1	.9
defendant died			1	.9
Prosecutorial Policy	(28)	(27.7)	(36)	(33.2)
victim provocation	1	1.0	1	.9
small amount contraband			1	.9
small amount harm/loss	1	1.0		
family offense	4	4.0	3	2.8
defendant made restitution/private remedy	8	7.9	13	11.9
defendant already doing long time	2	2.0	1	.9
dismissed for plea in other case	8	7.9	12	11.0
dismissed to aid conviction of other	4	4.0	5	4.6
Other	(2)	(2.0)	(1)	(.9)
compromise or jury verdict	1	1.0	1	.9
statute of limitation expired	1	1.0		
	101	100%	108	100%

* Does not include 76 cases for which a reason was not provided.

"defendant factually innocent" cases are eliminated, since they represent desirable attrition, the proportions fall to 35 and 25 percent respectively. While differences in coding categories and case processing procedures make cross-jurisdictional comparisons difficult, the Baltimore County attrition due to evidentiary weakness and constitutional problems appears to be similar to or lower than the rates in Manhattan (30 percent), San Diego (52 percent), and Greeley, Colorado (34 percent) (Data from Boland, 1986).

The findings of this examination of the reasons for case reduction and non-convictions provided by Baltimore County prosecutors indicate that evidentiary weakness and constitutional problems were the primary causes of early case dismissals. Nevertheless, few of these dismissals are attributable to police errors and only a few of the cases might have been salvaged by alternative actions taken by a patrol officer. After initial prosecutorial screening, evidentiary and constitutional problems account for a small proportion of non-convictions while prosecutorial policy--particularly dismissal in one case in exchange for a guilty plea in another--was the primary cause of attrition. At neither screening nor final disposition was there significant difference between the reasons for experimental and control case non-convictions.

CHAPTER 7

DISCUSSION AND CONCLUSIONS

Why did neither the intervention nor the change in the available evidence found in both experimental and control cases result in a significant decrease in felony case attrition in 1985? There are several explanations for the findings: 1) shortcomings in the implementation of the intervention; 2) selection of a jurisdiction in which there was no significant room for improvement; and 3) problems with the model of planned change.

Implementation Issues

As is frequently the case in field experiments, there were problems in implementing the planned intervention. Although the officers appear to have completed the felony investigation and post-arrest guides, how consistently they got supervisory oversight and feedback reports is less certain. In addition, the feedback reports were less informative and less useful in reality than on the drawing board. It is also possible that differential implementation of the intervention occurred across the ten experimental precinct/shift groups, resulting in positive changes in some and negative changes in others that were hidden in the overall findings. Finally, the extent of the contamination of the experimental effect by the apparent collection of more evidence by the control groups in 1985 must be noted.

Survey Findings

How well were the various components of the intervention implemented? The initial and follow-up surveys completed by experimental officers and supervisors (as well as limited observation in the precincts) suggest that use of the felony investigation and post-arrest guides was consistent but that careful review by supervisors and discussion of problems with officers was less predictable. Nevertheless, the guides were used and affected the officers' work. For example, Table 7-1, showing experimentals' responses to the follow-up survey, indicates that about a third of the officers reported spending more time on felony investigations and conducting more witness interviews, while most of their supervisors observed such changes in some or most of their officers. Other changes were reported and observed less frequently. The absence of change in the work of more officers, however, may be due to the fact that many were already doing satisfactory work. Similarly, 30 percent of the officers said they discussed investigation reports with their supervisors more often than in the past and only 43 percent of the supervisors stated that they had increased the amount of time spent discussing investigations with officers. This may be interpreted as an indicator of weak supervision. Alternatively, this may reflect the fact that the guides reminded the officers of what to do, they improved their investigations and reports, and thus decreased the need for such discussion.

TABLE 7-1

IMPLEMENTATION OF USE OF FELONY INVESTIGATION AND POST-ARREST GUIDES: FOLLOW UP SURVEY OF EXPERIMENTAL OFFICERS AND SUPERVISORS

	% officers reporting increase (N=120)	% supervisors reporting increase/improvement in some or most officers (N=22)
Time spent on felony investigations	38	77
Number of interviews conducted	38	82
Variety of leads followed up	20	60
Specificity of descriptions of stolen property	11	46
Frequency of calls to crime lab	16	41
Amount of physical evidence collected	9	36
Amount of time spent on paper work	73	100
Amount of time spent at crime scene	42	50
Number of investigation reports discussed with supervisor	30	
Frequency of supervisor's suggestions	26	
Time spent on post-arrest follow up	22	28
Number of arrestee interrogations	20	60
Quality of arrest report		50
Quality of investigations		81
Time spent discussing investigations with officers		43
*******		
Percent reporting positive attitude toward guides	21	46

By the end of the eight-month experimental period, there was a strong consensus among the experimental lieutenants that completion of the guides had become routine and mechanical but that they had been effective nonetheless. Half of the supervisors observed some improvement in the quality of the arrest reports, and more than 80 percent asserted that some or most officers did better investigations as a result. These observations appear to be borne out by the increase in evidence collection observed in both the assessment of burglary and robbery reports and in the analysis of felony arrest data.

Use of the feedback reports, however, was far less thorough, as suggested by Table 7-2. Fully 40 percent of the officers said they had not gotten one of the six monthly reports, and more than half did not get the cumulative report. Furthermore, by the officers' reports most supervisors were not using feedback reports to help correct errors or reinforce the greater emphasis in the police culture on gaining convictions. Less than half remember their sergeant discussing feedback reports in roll call or talking with them individually about the report. Most supervisors, too, acknowledged devoting very little time to reviewing the feedback reports, discussing them with officers, and checking arrest reports where attrition might have been attributable to the police.

Some of the limited distribution and use of the feedback reports probably was due to the fact that an officer got a monthly report only if he or she made an arrest or was called as

TABLE 7-2

IMPLEMENTATION OF CHANGE THROUGH FEEDBACK REPORTS:
FINDINGS FROM FOLLOW UP SURVEYS

A. Officer Survey (N=120)	Percent of experimental officers
Got at least one monthly feedback report	59
Got six-month cumulative feedback report	47
Had sergeant discuss monthly report in roll call	41
Had sergeant discuss monthly report individually with officer	41
Had sergeant discuss 6-month cumulative report individually with officer	27
Had positive attitude toward feedback reports	23

B. Supervisor Survey (N=22)	Percent of supervisors reporting spending 15 minutes or less per month
Reviewing individual officers' monthly feedback reports	76
Discussing monthly feedback reports with lieutenant	76
Discussing specific cases individually with officers in squad	64
Discussing problems in roll call	72
Reviewing arrest and investigation reports in which feedback suggested police error	36
Reviewing 6-month cumulative reports	76

******

Percent reporting positive attitude toward feedback reports	45

a witness during that month. While most officers made occasional misdemeanor arrests (which were included in reports but excluded from the reasons data), most made very few felony arrests and many failed to make any. In fact, the mean number of felony arrests per officer during the full eight-month 1985 study period was only 1.36. Even when they got feedback reports, several factors limited their impact: (1) their makeshift nature stemming from the failure to complete necessary computer retailoring; (2) the time gap between a case decision and the feedback about it reaching an officer or supervisor; and (3) the unavailability of a reason in many cases where one was expected and the vagueness of many of the reasons that were provided.

The delay was related to the elapsed time between the date of arrest, date of felony complaint review and date of preliminary hearing or grand jury formalization of the screening decision, as well as the amount of time necessary to prepare the reports. If an arrest occurred in early May, for example, it did not appear in a report typically until the end of June. If the arrest occurred in late May and felony review was not completed within three weeks, the screening decision would not appear until the July report. Because we waited until mid-June to have the computer run May dispositions, feedback on the outcome and reason for a case disposed through a plea arrangement in early May also did not reach the officer until late June.

The reason codes were frustratingly terse (limited to 36 characters for computer entry) and deliberately ambiguous

("insufficient physical evidence" for example, did not indicate the reason for the insufficiency or how thorough the officer had been in seeking evidence). Supervisors were expected to pull reports to identify the source of problems in cases but they had little motivation to do so for a large number of cases that had been disposed several weeks earlier.

Prosecutors' failure to provide reasons for case dispositions and their preference for ambiguous statements over those that clearly suggested that the police officer had made an error when it occurred undermined the value of the feedback reports for the police. Their behavior should not be surprising. Although the experiment promised better evidence and, thereby, cases easier to try and convict, it also threatened an existing comfortable relationship. Prosecutors rely on the police and did not want to make a formal record of the mistakes of individual officers (or too clearly highlight their own misjudgments or shortcomings in accepting a plea or handling a trial).

The police, too, had something to gain but potentially more to lose from the experiment. For the PIO, the feedback report provided no new information about the screening decision but did create a record that exposed him or her to supervisors' criticism. Although supervisors got information they previously did not have, for problem cases it did not come until a dismissal had occurred--not soon enough. The cumulative reports that might have been more useful in systematically highlighting squad- or department-wide problems (as well as comparisons across squads

and precincts that supervisors felt would be unfair) never materialized.

Other studies (e.g., Ilgen et al., 1979) have found that the source, timing, nature, frequency and specificity of feedback all affect recipients' responses to it. In Baltimore County the feedback reports failed in most respects: they were bulky, unattractive, largely negative (e.g., there was no code, "good investigation"), too late, and not specific enough to be of value to police supervisors, unless they sought out and reviewed the reports of the cases to which a "reason" referred.

Explaining the Contamination of the Experiment

To what can the increase in evidence available in experimental' cases be attributed in light of similar changes in controls' cases? Three explanations of the apparent contamination of the experimental intervention appear likely. First, there may have been a spillover effect of the experiment on the control group since control supervisors could easily have viewed the study as a competition between the experimental and the controls and told their squads to interview more witnesses without having the officers complete the guides (although the controls may have obtained copies of the guides). If such contamination occurred, this would suggest that diffusion of change in the police culture, a goal of the study, is far more easily achieved, at least in Baltimore County, than had been anticipated.

Cross-shift contamination is a second possible source of the increased evidence collection by both experimental and control groups. As one supervisor noted, when an officer cannot complete work on an arrest or a report, sometimes it is turned over to an officer on the next shift. This supervisor asserted that the guides led to inclusion of more detail in experimentals' reports so that the person who took over knew what had been done and what was left to do (though officers were explicitly instructed not to include the guides in the paperwork they turned over). If experimental investigations were turned over to control officers on the next shift and the latter made an arrest on the basis of the experimental's investigation, the improved investigation would have been reflected in control arrests as well as those of the experimental. In reality, arrests often are the final product of several officers; this fact of the organization of police work may have affected the experimental findings.

A third explanation is that the change in both groups is attributable to one or more other sources or changes within the police department. As part of their 40 hours of in-service training in 1985, all officers in the county were exposed to two hours of instruction on report writing, including proper interviewing techniques, and two hours on evidence collection that focused both on the new "print track" system for matching fingerprints and on storing recovered weapons. Since both experimental and control officers were exposed to this training, it is possible that some of the change in experimentals' cases

that otherwise might be attributed to the experimental intervention is, in fact, attributable to the more intensive and extensive in-service training that officers in both groups received.

Another potential source of change in officers' behavior was the Accountability Awareness Program adopted by the department in April 1984, as part of an effort to increase the responsibility of patrol officers for conducting investigations and simultaneously improving their quality. This program required all shift commanders to review and sign off on all crime investigation reports. It required sergeants to see that interviewing and canvassing was done and review all reports to maintain their quality. And it required officers to write reports in compliance with the report manual and do more interviews and canvassing to upgrade the quality of investigations (Standard Operating Procedure #84-7). This program, of which the researchers were unaware until one sought an explanation of the findings, probably contributed to the department's willingness to participate in the study. Assuming that the program contributed to the increase in felony arrests and the evidence available in them, the fact that evidence collection showed an increase only in 1985 would suggest that the diffusion of change in response to a broad policy occurs slowly. Therefore, the experimental treatment effect may have not had sufficient time to show an impact in the eight-month study period but might have been found had it been measured a year later.

It is impossible to pinpoint the specific sources of the changes in evidence collected by experimental and control shift officers in 1985. What is clear is that the department was determined to improve investigations and adopted several routes to bring this about, including participation in the experimental study. That study's design based on randomization by shift did not eliminate contact between officers receiving the experimental treatment and those on control shifts so that some contamination was possible. While this may be regarded as a failure from the perspective of the study, it may be seen as encouraging news for those that seek to implement changes in police departments and other work organizations. Such change may not be as difficult to achieve as some (e.g., Cohen and Tonry, 1983) have asserted.

Differential Implementation

To determine whether there was a difference in the implementation of the experiment in the ten precinct/shift groups analyses of evidence collection, prosecutorial charging decisions, and case dispositions were conducted that included the precinct and shift of both the arresting officer and the investigating officer. Because the findings generally were similar, only tables showing the investigating officer are shown. Precincts differ widely in the types of cases they handle so comparisons focus on: a) temporal changes for each precinct/shift group, and b) differences between the two shifts in each precinct that serve the same population. In each table differences of 15 percent or more between the two shifts of

officers in the same precinct for the same year are indicated by an underline beneath the higher one; changes from 1984 to 1985 for each of the 10 groups are indicated by an asterisk if they were increases of 15 percent or more and by a pound sign if they were decreases of 15 percent or more.

Table 7-3 shows evidence available in cases by precinct and shift. It suggests that in 1984 the amount of evidence of various types was quite similar for the two shifts in each precinct--except in precinct 2, where the fourth shift collected substantially more evidence than the third. In 1985, however, the difference disappeared; the only difference worthy of note between shifts is found in precinct 1. At the same time, there were differences among the groups in the amount of change that occurred over time in the evidence available in investigations leading to arrests. This suggests the possibility of offsetting increases and decreases in 1985 by experimental group. Precinct 12 shift 3, precinct 2 shift 3, and precinct 3 shift 4 made substantial increases in the availability of at least three different types of evidence in their cases. In precinct 2 shift 4 there were sizable decreases in the availability of three types of evidence in 1985 cases. The checkerboard pattern of changes, however, suggests caution in interpreting these changes as clearly indicating differential implementation. Furthermore, the strange pattern in precinct 2 shift 4 probably is best explained by a set of unique circumstances and illustrates the problems of field research. The energetic young lieutenant who commanded

TABLE 7-3

EVIDENCE COLLECTED IN EXPERIMENTAL INVESTIGATING OFFICERS' CASES BY PRECINCT, SHIFT AND YEAR

	Precinct 1				2				3				11				12			
	Shift 3		4		3		4		3		4		3		4		3		4	
Percent of Cases with:	YEAR 84	85	YEAR 84	85	YEAR 84	85	YEAR 84	85	YEAR 84	85	YEAR 84	85	YEAR 84	85	YEAR 84	85	YEAR 84	85	YEAR 84	85
2+ Wit. Int.	70	60	58	*79	46	*76	37	*65	53	51	78	#55	51	62	63	66	37	*68	29	*61
1+ Wrt. Stmt.	45	#8	45	39	18	22	37	#13	28	39	24	37	33	35	25	30	13	*40	31	41
1+ Pos. ID	58	44	42	*61	63	60	70	65	41	*72	30	*55	67	64	38	46	63	50	59	62
Confess/Admit	18	32	49	42	26	30	44	39	44	33	41	47	44	#26	30	36	6	*32	12	*40
Prints Avail.	3	8	18	6	5	13	22	#5	3	13	20	24	12	9	6	12	19	33	6	16
Recov. Prop.	32	*52	52	#36	48	41	48	62	47	39	48	*68	37	33	67	#42	56	#30	47	47
Recov. Weap.	10	0	6	*15	10	15	33	#5	13	5	2	*21	16	11	0	6	13	9	12	16
Photo Avail.	42	40	36	40	7	*26	48	*32	28	28	24	37	35	35	21	24	31	41	35	24
Other Evidence	27	36	36	36	12	*33	32	38	34	28	17	24	19	*38	18	24	25	*43	24	36
Lab or Crime Scene Called	46	52	58	44	39	53	59	#41	53	51	70	#53	42	47	88	#50	56	*77	47	40
No. of Cases	(33)	(25)	33)	(33)	(41)	(45)	(27)	(37)	(32)	(39)	(46)	(38)	(43)	(55)	(32)	(50)	(16)	(44)	(17)	(57)

* Increase of 15% or more in 1985 compared to own 1984 cases.
\# Decrease of 15% or more in 1985 compared to one 1984 cases.
_ Difference of 15% or more between 2 shifts within the same precinct.

shift 4 in 1984 obtained the reassignment he had sought to a precinct outside the study in May 1985, shortly after the experiment began. The shift commander who replaced him in precinct 2 had been quite ill and died shortly after the end of the experiment. Although this lieutenant was briefed on the experimental procedures, his health problems and their impact on his ability to function in a supervisory capacity, rather than resistance to the experiment per se, probably affected the work of the officers under his command.

Did the changes in the available evidence in the four high change precinct/shift groups lead to changes in the proportion of felony cases accepted for prosecution at all or on the most serious arrest charge? Table 7-4 suggests that there was no discernable relationship between changes in the availability of different types of evidence and in the prosecutorial screening decision. Of the four higher change groups, in only one, precinct 3 shift 4, was there a corresponding change in prosecutorial charging decisions. That precinct/shift group showed a substantial decrease in felony case dismissals. In precinct 2 shift 3, however, the dismissal rate increased despite the increase in evidence; the effect of the negative changes in evidence collection in precinct 2 shift 4 did not affect prosecutorial screening decisions. The most substantial decreases in dismissal rates in 1985 were found in precinct 11 shift 4 and precinct 12 shift 4, neither of which showed much change in evidence collection. Since those two groups were the

TABLE 7-4

FELONY COMPLAINT UNIT SCREENING OF EXPERIMENTAL INVESTIGATING OFFICERS' CASES
BY PRECINCT, SHIFT AND SHIFT

[t]Percent Accepted for Prosecution on:	Precinct 1				2				3				11				12			
	Shift 3		4		3		4		3		4		3		4		3		4	
	YEAR 84	85	YEAR 84	85	YEAR 84	85	YEAR 84	85	YEAR 84	85	YEAR 84	85	YEAR 84	85	YEAR 84	85	YEAR 84	85	YEAR 84	85
Highest Charge	50	*75	39	*63	52	51	62	60	56	46	58	68	53	57	42	*58	64	58	22	*43
Reduced	46	#13	48	#25	32	22	24	25	32	33	16	21	38	26	19	22	18	19	44	37
Dismissed	4	13	13	13	16	27	14	15	12	21	26	#11	9	17	39	#19	18	22	33	20
Total Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Number	(26)	(16)	(23)	(24)	(31)	(37)	(21)	(20)	(25)	(33)	(38)	(28)	(32)	(46)	(26)	(36)	(11)	(36)	(9)	(49)

[t] Excludes grand larceny cases.

ones with the highest dismissal rates in 1984, the changes may simply represent a shift toward the mean.

The relationship between changes in available evidence in the precinct/shift groups and case disposition is weak and contradictory. As Table 7-5 indicates, the decrease in attrition was substantial only in the cases of precinct 1 shift 4, which was not a high change group; there was a substantial increase in attrition for precinct 2 shift 3, which increased several types of available evidence. Another high change group, precinct 12 shift 3, had a small decrease in attrition and a larger increase in reductions. Thus, although there appears to have been differential implementation of the experiment among precinct/shift groups, resulting in differences among them in the amount of change in available evidence, there was little relationship between change in the availability of evidence by precinct/shift group and the changes in prosecutors' charging decisions and case dispositions.

Lack of Institutionalization

The final implementation problem was the failure to institutionalize the feedback system or include consideration of conviction rates in a police performance measure. The key to the intended change was a routinized information system that could be a useful management tool for both police and prosecutors. This failed to materialize. At the end of the eight-month study period, mandatory use of the guides ended although the department formalized their use in the training academy and as an optional

TABLE 7-5

DISPOSITIONS OF ALL EXPERIMENTAL INVESTIGATING OFFICERS' CASES BY PRECINCT, SHIFT AND YEAR

Percent and Number of Case Dispositions	Precinct 1				2				3				11				12			
	Shift 3		4		3		4		3		4		3		4		3		4	
	YEAR 84	85	YEAR 84	85	YEAR 84	85	YEAR 84	85	YEAR 84	85	YEAR 84	85	YEAR 84	85	YEAR 84	85	YEAR 84	85	YEAR 84	85
Guilty on Highest	35	36	32	*48	37	33	48	36	23	16	33	30	30	28	34	28	43	33	19	27
	(12)	(8)	(9)	(15)	(15)	(13)	(12)	(12)	(6)	(6)	(15)	(11)	(13)	(14)	(11)	(13)	(6)	(14)	(3)	(15)
Guilty on Lesser	15	5	14	19	17	8	16	18	19	25	11	14	12	18	9	11	-	17	25	18
	(5)	(16)	(23)	(24)	(31)	(37)	(21)	(20)	(25)	(33)	(38)	(28)	(32)	(46)	(26)	(36)	(11)	(36)	(9)	(49)
Not Convicted	44	55	46	#26	37	*54	28	33	54	50	52	51	56	47	50	54	50	45	50	47
	(15)	(12)	(13)	(8)	(15)	(21)	(7)	(11)	(14)	(18)	(24)	(19)	(24)	(24)	(16)	(25)	(7)	(19)	(8)	(26)
PBJ	6	5	7	6	10	5	8	12	4	8	4	5	2	8	6	7	7	5.	6	7
	(2)	(1)	(2)	(2)	(4)	(2)	(2)	(4)	(1)	(3)	(2)	(2)	(1)	(4)	(2)	(3)	(1)	(2)	(1)	(4)
Total Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Number	(34)	(22)	(28)	(21)	(41)	(39)	(25)	(33)	(26)	(36)	(46)	(37)	(43)	(51)	(32)	(46)	(14)	(42)	(16)	(55)

* Number of cases in parenthesis.

supervisory tool for officers whose investigations needed improvement. Representatives of the police and state's attorney's office, however, jointly decided to discontinue preparation of the "interim" feedback reports. Neither found them useful enough to continue given the time and effort required to generate them. From the prosecutor's perspective, providing reasons put a burden on limited clerical staff that had to prepare the two reason forms for each case jacket, required assistants formally to justify their decisions not only to supervisors but to police, and required supervisors to demand and review more forms but provided no visible benefits. Although some police supervisors stated that they found the feedback reports useful, the information gain was not proportional to the time required to sift through so much paper, given the frequent absence of reasons and the ambiguity of those that were provided.

Had the computer retailoring been completed, permitting preparation of a single individual report for each officer and cumulative reports for supervisors, the police might have argued vigorously to retain the system. But after eight months of interim reports and promises, they were justifiably skeptical that completion of the computer retailoring was imminent. (They were right; the job was abandoned several months later.) The initial commitment to written feedback reports gradually dissipated without the technology to implement the information system as planned.

Problems with the Site: Police-Prosecutor Relations and Case Attrition in Baltimore County

The attrition rate in a jurisdiction by itself tells little. A high attrition rate may reflect lax performance by the police or prosecutor, illegal or very aggressive police work, or a very careful police command and control system. "The best test is not the rate itself but the kind of marginal arrests or charges that are made" (Feeney et al., 1983:243).

In Baltimore County there was no evidence of lax performance. On the contrary, the assessment of burglary and robbery investigations suggested thorough and careful police work including extensive canvassing, complete victim-witness information, and frequent follow-up investigations taken at the patrol officer's initiative. The officers are well trained initially and receive 40 hours of in-service training a year. Furthermore, unlike many other jurisdictions, in Baltimore County police-prosecutor relations were good prior to initiation of the study. Since the police were enthusiastic about participating in the study we assumed that there were some problems that both agencies were reluctant to acknowledge to outsiders.

At the weekend conference, however, it became evident that prosecutors were satisfied with police cases and routinely provided informal feedback to the principal investigating officer through the felony complaint meetings. That discussion, moreover, proceeds without the time pressure found in the jurisdictions in which the prosecutor must screen arrests within 72 hours and actively involves the officer in the charging

decision. ASA's also frequently consult with the police prior to accepting a plea agreement. And at the organizational level, the Chief and State's Attorney meet regularly and have generally harmonious relations.

In a simulation study, McDonald et al. (1982) found that the police have a good general idea of the kinds of information prosecutors need, but differ from them in what they consider sufficient detail. Prosecutors required 40 percent more items of information than police officers before making a simulated charging decision. In Baltimore County, however, the officers routinely discuss cases with prosecutors, are questioned about the strength of the evidence they have collected, are encouraged to point out weaknesses in cases, and occasionally are asked to get additional items of evidence. Thus they may be more aware than officers in other jurisdictions of the evidence that prosecutors require for a case to be accepted in Circuit Court.

Felony arrests are infrequent events for most individual patrol officers in most jurisdictions, including Baltimore County. This meant that supervisory review of post-arrest guides and monthly feedback reports indicating the reasons for case reductions, dismissals, and non-convictions were unlikely to result in a measurable learning effect for individual officers in only eight months.

For these reasons, introduction of an experiment to reduce avoidable felony case attrition through improving police-prosecutor communication in Baltimore County provided a very

stringent test of the change model. There may well have been less room for improvement in that jurisdiction than in many others. Nevertheless, throughout Baltimore County between April and November of 1985 felony arrests increased by 11 percent (in the absence of an increase in reported crime) over the same period in 1984. Because the increases occurred both in all four precincts that were excluded from the study and in four of the five precincts included in the experiment, the most plausible explanation is a delayed effect of the department-wide Accountability Awareness program.

Shortcomings of the Change Model

The change model on which the intervention was based involved several sequential steps to reduce felony case attrition. It was anticipated that conviction consciousness, closer supervision of felony investigations and post-arrest activities, and information about prosecutors' evidentiary needs would motivate officers and improve their skills in developing evidence. These changes would result in the collection of more and better evidence, and this in turn would lead to more felony prosecutions and a higher proportion of convictions.

What the model failed to consider, however, was (1) the two-way nature of communication and shared understandings between police and prosecutor; (2) the possibility that better evidence would result in more arrests, alteration of prosecutors' standards, and a variety of other adaptive responses; and (3) the role and responsibility of prosecutors for maximizing the

evidence that the police make available to them. The entire focus of change was on altering police behavior; once that changed, the response of the prosecutor was assumed to follow.

The expectation that more evidence would result in fewer non-convictions oversimplified a complex system and underestimated both the system's capacity for adaptive responses and the difficulty of measuring marginal changes. Cohen and Tonry (1983:483) observed with respect to various sentencing reforms, "...whatever system changes occurred were limited to modifications of case processing procedures" rather than changes in dispositions or sentences. If major systemwide reforms made little difference, it should hardly be surprising that a short-term, limited change effort did not alter dispositions. Perhaps what requires explanation is that any change occurred at all.

Yet there was change: the police made more felony arrests and increased the collection of certain types of evidence. The available evidence as well as the increased visibility of the decisions of the felony complaint prosecutors probably led to an increase in the proportion of cases accepted for prosecution in Circuit Court. The increase in felony arrests on top of the increase in marginal Circuit Court cases, however, appears to have increased caseload pressure and contributed to the greater willingness of Circuit Court prosecutors to accept guilty pleas on reduced charges than previously.

The model assumed "avoidable" attrition is the result of poor police work and should be reduced. It failed to recognize

that not all police arrests are intended to result in conviction. The police may arrest to gain control of an immediate situation, to please an insistent citizen, or to gain a confession where evidence is shaky or based on the uncorroborated statement of a codefendant. Both the police and prosector recognize and accept such instance as normal and acceptable attrition. In fact, such attrition may be an extension of their definition of "normal crimes" (Sudnow, 1965). It does not reflect bad police work; prosecutors--and victims--would be upset if police stopped making such arrests.

Jacoby (1981:8) argues that performance measures should be based on the actions taken by the other agency at the next stage of decision making rather than the ultimate outcome.

> Conviction rates or other trial dispositions ...occur so far along the adjudication process that the effects of police work cannot be easily separated from the effects of other influences such as the quality of prosecution or defense and even court capacity or court activity.

According to the principles of accountability, once the prosecutor accepts a case for prosecution, even if the case is flawed by evidentiary weakness or a bad search and seizure, then "the responsibility is his and complaints should not be lodged against the police. The cutting edge of police work should fall directly on the charging decision" (Jacoby, 1981:13-14). Using this standard, focused on how many of those cases rejected by the prosecutor were the result of poor police work, the nature and magnitude of the attrition problem changes. Even if every prosecutorial dismissal for an evidentiary problem had been due

to a police failure, only 10 percent of the 1985 experimental cases and 15 percent c , the control cases could be considered police-related attrition.

Conclusions and Implications

Although the experiment did not produce the anticipated changes, the findings do provide some useful and encouraging information and point to several issues for further study. The changes observed in police and prosecutor activity in Baltimore County suggest that: (1) officers' investigative and evidence collection activities, even when they are good, can be improved; (2) police can be motivated and trained to produce more evidence that leads to acceptance of a greater proportion of cases on the original arrest charge; (3) that mutual respect, trust, and routinized informal feedback may be more important than formalized, written feedback reports in assuring adequate communication between the police and prosecutor; (4) that collecting more physical evidence and increasing communication between police and prosecutors about it may not be enough to change case outcomes; and (5) changing the behavior of individuals in an organization is a gradual process, so that evaluations of the impacts of innovations should include longer term and more sensitive process and outcome measures.

This study leaves many questions unanswered. Future research efforts need to test different--but operational--automated feedback systems on evidence collection, preferably in jurisdictions where informal communication is not routinized, to

have a clearer indication of the effect of written feedback. Questions of the quantity, quality, and frequency of data to be sent to officers and supervisors need to be addressed. More complex and comprehensive reason codes than those used in this study are needed capture the complexity of a factual situation.

At a more basic level, there is a need to reconsider what is "avoidable" attrition and how much it can and should be reduced. Once police officers are adequately trained and informed about prosecutors' evidentiary needs, it may not be worth the additional effort and cost to try to reduce attrition. Instead, it may be more useful to develop an informal consensus among police and prosecutors about when police should bring cases to the prosecutor that meet the standard of "probable cause" and leave the determination of whether the evidence will be sufficient to convince a jury "beyond a reasonable doubt." Although it is desirable for police to be more concerned with case outcomes than they have been traditionally, police performance should not be measured primarily in terms of convictions. From the post-arrest perspective, a more realistic measure might be "charging acceptability," although we recognize the difficulty in objectively shaping such a measure in most settings.

Studies of prosecution have focused on exposing the nature and mechanisms of plea bargaining through which most dispositions come about. Far less attention has been given to the initial screening and charging decision making process. This study found

that an increase in cases accepted for prosecution in Circuit Court was offset by an increase in reductions at disposition. The apparent resistance of the system to increase the proportion of felony convictions suggests the need for further study of the interactions between initial charging practices, the availability of various types of evidence, prosecutors' skills, caseload pressures, and other factors that affect prosecutors' use of discretion and the case dispositions they achieve.

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APPENDIX A

BALTIMORE COUNTY POLICE DEPARTMENT

INVESTIGATIVE GUIDE

/_____ Date _____ Crime _____

NOTE: * INDICATES THAT THIS INFORMATION MUST BE INCLUDED IN THE OFFENSE REPORT, IF APPLICABLE.

Other questions are aids to investigations and may be included in report if applicable.

CRIME SCENE

	Has supervisor been notified?	Yes	No	N/A
*	Has point of entry been established?	Yes	No	N/A
	Has broadcast to other Districts/Agencies been made?	Yes	No	N/A
*	Has Crime Lab been notified?	Yes	No	N/A
	Has victim been interviewed?	Yes	No	N/A
	Has complainant been interviewed?	Yes	No	N/A
*	Was method of suspects' escape determined?	Yes	No	N/A
	Are additional personnel needed to search/investigate?	Yes	No	N/A
*	Were crime scene photos taken?	Yes	No	N/A
*	Were photos of victim taken?	Yes	No	N/A
	Will photos of victim/location be taken later?	Yes	No	N/A
*	Has the time of occurrence been narrowed down?	Yes	No	N/A
*	Has the crime been adequately described to allow for its reconstruction from your report?	Yes	No	N/A
	Has a diagram been prepared?	Yes	No	N/A
*	Has the M.O. been described?	Yes	No	N/A
*	Were statements obtained? How many?	Yes	No	N/A
	Were other valuables left behind by the thief (not taken)?	Yes	No	N/A
*	Did you note any distinctive aspects of the crime?	Yes	No	N/A
*	Are all the details you learned in the report?	Yes	No	N/A
	Have your reread your report?	Yes	No	N/A

WITNESSES

	Does victim/complainant have a suspect in mind?	Yes	No	N/A
	Do other officers have a suspect in mind?	Yes	No	N/A
	Do you have a suspect in mind?	Yes	No	N/A
*	Was an area canvass conducted for additional witnesses?	Yes	No	N/A
	Does anyone routinely pass through the area of the crime at the time the crime occurred?	Yes	No	N/A
	Have all witnesses been interviewed?	Yes	No	N/A
	Are there witnesses to contact at a later time?	Yes	No	N/A
	Can victim/witness make a composite?	Yes	No	N/A
*	Have the victim/witnesses supplied home and work phone numbers and addresses? Are they complete?	Yes	No	N/A

SUSPECT

	Is there any evidence of prior offenses by the suspect?	Yes	No	N/A
*	Is there evidence of suspects' motive?	Yes	No	N/A
	Can a relationship of multiple suspects be made?	Yes	No	N/A
	Did suspect have inside information or access to same?	Yes	No	N/A
	Has composit been circulated in vicinity of crime?	Yes	No	N/A

EVIDENCE

*	Were scene and related areas searched?	Yes	No	N/A
*	Was scene processed for latent prints?	Yes	No	N/A
*	Has a list of all stolen property been made, with items adequately described so ready identification can be made?	Yes	No	N/A
*	If a weapon was used, has it been described as thoroughly as possible at this time?	Yes	No	N/A

SOURCE - ONLY APPLIES IF SUSPECT IS KNOWN OR DEVELOPED

	Have Departmental files been accessed for leads (FIR's,pawnshop files, etc.)?	Yes	No	N/A
	Have informants been developed and consulted?	Yes	No	N/A
	Has Crime Analysis been checked for similar offenses?	Yes	No	N/A
	Have other agencies/units been notified and efforts coordinated?	Yes	No	N/A
	Have local schools been checked for truant juvenile offenders?	Yes	No	N/A
	Have there been a number of seemingly unrelated calls, i.e. prowler, suspicious subject, etc.?	Yes	No	N/A

(SEE BACK)

LEADS/NOTES

OFFICER _____ ID# _____ SUPERVISOR _____ ID# _____

BALTIMORE COUNTY POLICE DEPARTMENT

POST ARREST INVESTIGATIVE GUIDE

SOR_____ Date _____ Crime _____ BCI#_____

Miranda Read ☐ Johnson Waiver Signed ☐

SUSPECT

1. a.	Was a lineup conducted ?	Yes	No	N/A
b.	Was a photo lineup conducted ?	Yes	No	N/A
c.	Was there a one-on-one confrontation ?	Yes	No	N/A
2.	Has a motive for the crime been established ?	Yes	No	N/A
3.	Has a motive been verified ?	Yes	No	N/A
4.	Has the suspect been questioned ?	Yes	No	N/A
5.	Did the suspect have an alibi when questioned ?	Yes	No	N/A
6. a.	Has the alibi been substantiated ?	Yes	No	N/A
b.	Has the alibi been refuted ?	Yes	No	N/A
7. a.	Are there co-conspirators ?	Yes	No	N/A
b.	Have the co-conspirators been questioned ?	Yes	No	N/A
8. a.	Has the suspect's family been questioned ?	Yes	No	N/A
b.	Have the suspect's friends been questioned ?	Yes	No	N/A
c.	Have the suspect's work associates been questioned ?	Yes	No	N/A
9. a.	Did the suspect give any statements ?	Yes	No	N/A
b.	Has each statement been documented ?	Yes	No	N/A

EVIDENCE

10.	Has suspect's clothing/shoes been taken as evidence ?	Yes	No	N/A
11.	Was physical evidence obtained from the scene/person of the suspect ?	Yes	No	N/A
12.	Was a secondary search of the scene and related areas conducted ?	Yes	No	N/A
13.	Are there any unique items of evidence or circumstances in this case ? (If so, list on separate sheet.)	Yes	No	N/A
14.	Was the suspect in possession of any property/evidence linked to the original crime scene ?	Yes	No	N/A
15.	Was a search warrant obtained to recover stolen property or evidence ?	Yes	No	N/A
16.	Were color photos taken of the suspect ?	Yes	No	N/A
17.	Has a comparison with other recent cases with the same/similar M.O. been made ?	Yes	No	N/A
18.	Has crime analysis information been examined for similar crimes ?	Yes	No	N/A
19.	Have neighboring jurisdictions been contacted concerning similar crimes ?	Yes	No	N/A
20.	Have the neighboring jurisdictions been contacted concerning this suspect ?	Yes	No	N/A

INTELLIGENCE INFORMATION

21.	Have the suspect's personal effects been reviewed for possible intelligence information ?	Yes	No	N/A
22.	Was suspect questioned regarding his knowledge of other criminal activity ?	Yes	No	N/A
23.	Is the suspect a possible informant ?			

LEADS/NOTES

OFFICER _____ ID# _____ SUPERVISOR _____ ID# _____

Form# 209

APPENDIX B

Abbrev. REASONS FOR DISMISSAL AND CHARGE REDUCTION-3/26/85

CRIME PROBLEM

100_no corpus (elements missing)
101_defendant factually innocent
102-p c arrest;def-crime not linked

EVIDENTIARY PROBLEM

200_analysis report unavailable
201_analysis insuffic/inconclu.
202_phys evid unavailable
203_phys evid insuffic/inconclu..
204_no corroboration of offense
205_no ID at lineup
206_no ID at photo or show-up
207_unreliable or weak ID
208_no property recovered
209_no corroboration of codef
210_def's role in crime unclear
211_can't estab. chain of custody

VICTIM/WITNESS PROBLEM

300_victim no show
301_victim unfit or unavailable
302_victim won't prosecute/uncoop
303_victim credibility problem
304_victim cannot be located
310_witness no show
311_witness unfit or unavailable
312_witness uncooperative
313_witness credibility problem
314_witness cannot be located
320_police officer no show
321_police trial prep deficient
322_police trial testm'y deficient
330_suspect descr not match def
331_conflicting testimony
340-witness privilege
341_unable to qualify witness

JURISDICTION PROBLEM

400_lack of venue
401_referred to other jurisd.
402_referred to juvenile court
403_referred to federal court

DEFENDANT CHARACTERISTICS

500_def's age
501_def's mental condition
502_def's physical condition

503_def's lack prior crim record
506_def's personal circumstances
504_def not mentally resp at crime
505_def now not mentally compentent
507_defendant died

CONSTITUTIONAL PROBLEM

600_no probable cause for arrest
601_no basis for stop
610_search warrant-no PC to issue
611_search war not specify what
612_search war not specify where
620_tech problem:police control
621_tech problem:no police control
630_false affidavit for warrant
631_served war on wrong address
632_got war for wrong address
640_defective charge by police
641_defective charge by pros
650_entrapment
651_inadmissible confession
652_inadmissible ID
660_lack of speedy trial
670_evid supprs'd:pros agrees
671_evid supprs'd:pros disagrees

PROSECUTIVE MERIT/POLICY DECISION

700_better handled District Court
701_victim provocation
702_small amt of contraband
703_small amt loss/harm to victim
704_plea to lesser = same sentence
705_plea to lesser = suffic punish.
706_offense personal or family
707_reduce for plea in other
710_good defense (alibi)
711_def already doing long time
712_old case
713_def restitution/private remedy
714_dismissal request other agency
715_dismissal favor of other cases
716_dism aid convict. other offndr
717_dismiss for plea in other
718_immunity for testimony in case
719_extradited other jurisdiction

OTHER

800_charge mooted by other dispos
801_proced'l delays (180 Day Rule)
802_statute of limitations expired
810_pros unprepared for trial
811_prosecutor procedural error

820_compromise verdict
821_jury verdict
822_reason unclear or unknown