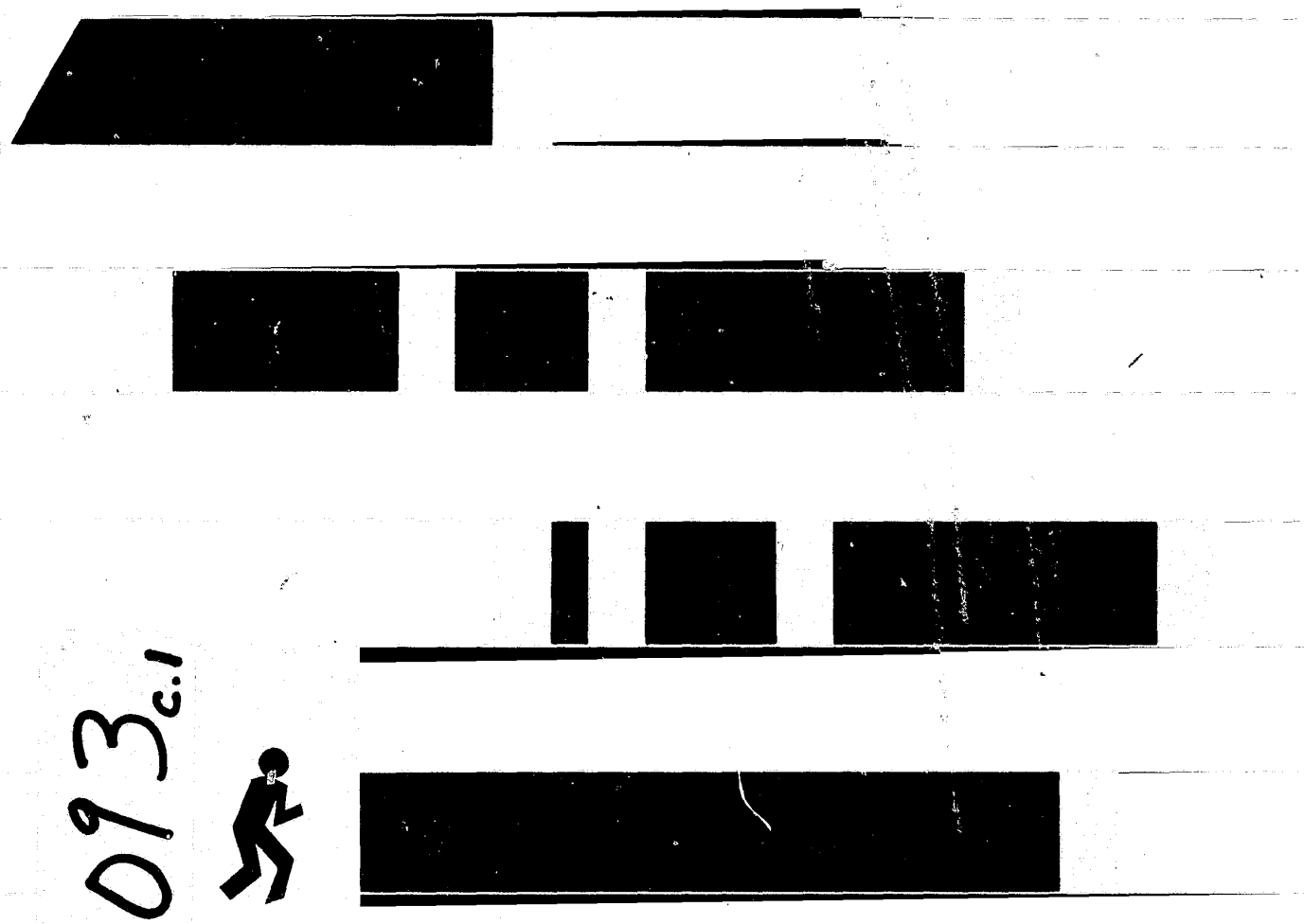
Crime-Specific Analysis:

The Characteristics of Burglary Incidents



DEPARTMENT OF JUSTICE Law Enforcement Assistance Administration
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UTILIZATION OF CRIMINAL JUSTICE STATISTICS **ANALYTIC REPORT 10**

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Utilization of Criminal Justice Statistics Project

ANALYTIC REPORT 10

CRIME-SPECIFIC ANALYSIS: The Characteristics of Burglary Incidents

by **CARL E. POPE**
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This project was supported by Grant No. 75-SS-99-6001, awarded to the Criminal Justice Research Center, Albany, New York by the Statistics Division, National Criminal Justice Information and Statistics Service, Law Enforcement Assistance Administration, U.S. Department of Justice, under the Omnibus Crime Control and Safe Streets Act of 1968, as amended; the project, entitled "Utilization of Criminal Justice Statistics," is being directed for the Criminal Justice Research Center by Michael J. Hindelang and monitored for LEAA by Sue A. Lindgren. Points of view or opinions stated in this document are those of the author(s) and do not necessarily represent the official position or policies of the U.S. Department of Justice.

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THE UTILIZATION OF CRIMINAL JUSTICE STATISTICS Project was funded initially in 1972 by the National Criminal Justice Information and Statistics Service of the Law Enforcement Assistance Administration. One primary aim of the project is the production of annual editions of the Sourcebook of Criminal Justice Statistics, a compilation of available nationwide criminal justice statistical data. A second aim has been and continues to be an examination of the utility that a variety of criminal justice statistical data bases have for addressing questions of practical and theoretical interest in the field.

One product of that examination is a series of analytic reports, of which this volume is one. These reports, written by research staff members of the Utilization of Criminal Justice Statistics Project, all have a common theme: the discussion of a central criminal justice topic using an exemplary or innovative criminal justice data base. Each report in the series not only discusses substantive findings in regard to particular issues, but also considers the qualities and limitations of the data, as well as techniques and problems of analysis, in relation to the substantive findings.

At a time when criminal justice statistics development is extensive, and often expensive, these analytic reports focus attention on one often overlooked function of criminal justice statistics—the analysis of current issues and questions based on available data. In fact, the utilization issue is perhaps as important as any in the area of criminal justice statistics. It often happens that data are collected—usually at great expense—without subsequent efforts to utilize such data to address the pressing problems that confront criminal justice. This series of Analytic Reports explores the problems and prospects inherent in the application of various sources of criminal justice statistical data to issues of interest and concern to agency personnel, planners, researchers, and the public alike.

MICHAEL J. HINDELANG
Project Director

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PREFACE

THIS SERIES of analytic reports constitute an empirical investigation of one specific criminal offense, burglary, exploring patterns and characteristics associated with both the offense and offender. Generally, criminologists have centered their attention on specific types (or categories) of crime and criminal offenders to gain a deeper understanding of the nature of crime. The aim of such undertakings has often been the identification, classification, and description of various types of criminal behavior. As a result, the literature is replete with numerous crime-specific studies ranging from shoplifting (Cameron, 1964) to homicide (Wolfgang, 1958). A notable exception, however, has been the lack of substantive quantitative research devoted to the crime of burglary. This is indeed paradoxical, considering the fact that burglary offenses constitute a substantial portion of all criminal activity.

Although some studies have explored the legal and social psychological aspects of burglary, few studies have undertaken comprehensive investigations of the patterning of burglary incidents. Furthermore, of those that have explored the correlates of burglary, most have focused upon an analysis of the rate and frequency of burglary in conjunction with the distribution of census characteristics, such as median family income, median years of education completed (Dunn, 1974; Scarr, 1973). Although such studies are valuable in describing the relationship of burglary incidents to social area attributes and changes occurring over time, an examination of individual burglary characteristics and their interrelationships has not been adequately pursued. For example, most investigations have reported upon offense characteristics only and have virtually ignored the criminal offender. As a result much less is known about burglary offenders than about other offender groups. Only recently have attempts been made to examine the link between burglary offenders and the crimes that they commit.

The need for an empirical investigation of burglary is further underscored by the seriousness of this offense in relation to the general crime problem. Since its inception, the Uniform Crime Reports (UCR) has consistently noted the high proportion of burglary offenses known to police across the country. In 1971, for example, an estimated 2,368,400 occurrences of burglary, 46 percent of all known property offenses, were reported to law enforcement agencies (Gray, 1972:10). In addition, crimes of burglary account for a substantial proportion of all economic loss occurring as a result of criminal enterprise. Statistics for 1971 also show that the average dollar loss reported per burglary was $312 and reveal an overall economic loss of $739 million (Gray, 1972:21). Losses due to residential burglary ($457 million) were proportionately higher than nonresidential losses ($282 million) (Gray, 1972:21). Victimization data collected in 1972 for eight cities (LEAA, 1974) showed that reported losses for household and business burglaries were quite similar (Hindelang, 1976). Twenty-four percent of those household burglaries sampled involved losses of $250 or more, compared with 28 percent for business burglaries (Hindelang, 1976:459). In 1969, business losses from burglary totaled $950 million (Small Business Administration, 1969:2). Small business organizations alone accounted for 71 percent of these losses or $677 million (Small Business Administration, 1969:2).

Although most studies indicate that the bulk of burglaries involve losses of moderate value (Scarr, 1973), the frequency of burglary creates a multi-million dollar problem in terms of aggregate loss.

A major goal of this series of reports, therefore, is to examine the patterning of burglary incidents including both offense and offender characteristics. Accepting the premise that crime is a structured event, burglary is viewed as a process or sequence of events in which certain phenomena are related to other phenomena. The questions these reports seek to answer are of the following type: How, for example, are burglaries distributed in space and time? Are there certain times of the day, week, or month when burglaries are most likely to occur? With regard to target characteristics, the inquiry focuses upon the types of structures most likely to be burglarized including various aspects of burglary incidents, such as the means used to gain entry, the type and value of the merchandise stolen, and the amount of property damage.

Numerous "target-hardening" characteristics such as artificial lighting and alarm systems are also examined, especially how they relate to burglaries cleared by arrest and attempted or completed burglaries.

Currently little information about the characteristics of apprehended burglary offenders is available. The UCR, at present our best source of national arrest data, provides sparse information on those individuals arrested for the commission of burglary. In 1971, for example, the UCR reported that males constituted 95.1 percent and females 4.9 percent of all burglary arrestees (Gray, 1972:125), and that 83.3 percent of all burglary arrestees were under 25 years of age (Gray, 1972:124). No

data are provided, however, on the combined characteristics of apprehended burglary offenders. What differences exist, for example, between male and female offenders with respect to legal (e.g., prior record) or demographic (e.g., race) characteristics? Because females constitute such a low percentage of all apprehended burglary offenders, it could be valuable to compare them with their male counterparts or with those females arrested for other criminal acts. Similar comparisons could be made between adult and juvenile burglary arrestees in terms of both offender and offense characteristics. The object of this research then is to report on specific traits of burglary arrestees, including age, sex, race, prior criminal history, and similar factors in order to increase our substantive knowledge about the burglary offender group.

Although the separate analysis of both offense and arrestee characteristics is certainly a worthwhile endeavor, much more useful data are obtained when analysis focuses upon their joint relationship. Therefore, a major goal of this undertaking is to examine the link between arrested burglary offenders and the crimes for which they were apprehended. The research question, put simply, is whether and to what extent specific types of apprehended offenders are associated with specific types of offenses.

Similar investigations in other areas have proven informative. For example, analysis of specific violent and personal crimes have produced some significant findings about the relationship between the offender and his victim. Briefly, studies by Wolfgang (1958), Amir (1971) and Normandeau (1968) have demonstrated the existence of distinctive and recurrent patterns in victim-offender relationships. Instead of being randomly distributed, such events were found to be highly consistent phenomena. These findings lent empirical support to von Hentig's (1948) notion of victim-precipitated crime. That is, the criminal's victim is often a direct precipitator of the crime by contributing to the genesis of his own victimization. Furthermore, the characteristics of those offenders frequently apprehended for homicide and rape led to a new theory of crime focusing upon the subcultural attributes of violent offenders. Similar studies, however, have yet to be undertaken for many property offenses, including burglary. Thus, it is still uncertain if patterns discovered for violent offenses do exist for crimes against property. This study attempts to bridge this gap in knowledge by examining the relationship between the arrested burglar and the crime in which he engages.

This first report of the series begins with an examination of various characteristics associated with the commission of burglary. The second report builds upon the first by providing an analysis of the social and legal characteristics of those arrested for the crime of burglary. The third and final report attempts to link the first two by exploring the interrelationship between offense and offender characteristics.

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TABLES AND FIGURES

Highlights of the Findings

IN THIS REPORT, the characteristics of burglary incidents that occurred in six separate police jurisdictions over a 1-year period were examined. A total of 8,137 incidents were analyzed in order to investigate recurrent patterns associated with the crime of burglary. Burglary losses were generally found to be of moderate value and included goods easily converted into cash. Although most burglaries involved some degree of forcible entry, such entries were more likely to occur in nonresidential rather than in residential structures. With regard to temporal factors, residential burglaries were most likely to occur during the week and during the day; nonresidential burglaries were most likely to occur on weekdays and at night. Deterrent features such as artificial lighting did not affect the probability of a crime being cleared nor whether a burglary was completed or resulted in only an attempt. The characteristics of burglary incidents were found to be similar to those found in other studies of burglary regardless of geographic region.

CRIME-SPECIFIC ANALYSIS:

The Characteristics of Burglary Incidents

Introduction

UNDER EARLY COMMON LAW, burglary was defined as the breaking and entering of the dwelling of another, in the nighttime, with intent to commit a felony therein. This offense category evolved under the basic premise that a man's home is his castle, and thus security of habitation is a predominant concern. Under common-law definition, a burglary could not be consummated unless each element listed above existed simultaneously with the others. The act had to occur in the nighttime with an accompanying break and trespass against an existing dwelling with prior intent to commit a felony. If any element was lacking, the crime of burglary had not occurred. The development of statutory burglary laws, however, has been marked by a redefining or elimination of these traditional elements, thus extending the scope of the crime beyond its historic limits. Under most State statutes, for example, there is no requirement that an actual break occur because forcible entry is no longer considered an element of the crime. Further, the concept of dwelling has been enlarged to include a wide variety of structures ranging from telephone booths to automobiles. Variations in degrees of seriousness have also been provided along with corresponding differential penalty structures. Altogether there has been a shift in emphasis from common-law concerns regarding protection of habitation toward a more basic concern with protection of individual property (Cocke, 1969; Schultz, 1970). The fundamental thrust of current burglary statutes toward protection of property is evidenced by the classification of burglary in the general category of crime against property. For many years the *Uniform Crime Reports* (UCR), in reporting on offenses known to the police, has dichotomized index offenses into two distinct classes—crimes of violence and crimes of property (Gray, 1972). Traditionally, burglary has been included in the latter class, because the crime generally involves the unlawful entrance of a structure for the purpose of theft. Although legal definitions of burglary vary from State to State, most could be included under that general definition provided in the UCR, which defines burglary as "... the unlawful entry of a structure to commit a felony or theft, even when no force was used to gain entry" (Gray, 1972:18).

Trends in the Incidence of Burglary

Overall, the number of burglaries known to the police in the United States increased 70 percent during the 5-year period from 1966 to 1971 (Gray, 1972:18). Standardizing for population increase, the number of burglary offenses per 100,000 inhabitants increased by 62 percent (Gray, 1972:18). For a 1-year period, from 1970 to 1971, the rate increase was 7 percent. In California alone, 36,522 felony arrests were made for burglary during 1971 (California Department of Justice, 1971:5). Here the burglary rate per 100,000 inhabitants increased by 9 percent from 1970 to 1971 (California Department of Justice, 1971:5). Coupled with this sharp rise is the fact that burglary exhibits one of the lowest clearance rates of any criminal offense. In 1971 only 19 percent of all burglary offenses known to the police were cleared by arrest (Gray, 1972:21).

The UCR also presents some interesting figures concerning the nature of burglary. In 1971, for example, 77 percent of all reported burglaries involved forcible entry; 17 percent involved unlawful entry only; 6 percent in-

volved attempts to commit forcible entry (Gray, 1972:18). The high percentage of forcible-entry burglaries is not surprising, because they are more likely to be noted and hence reported to the police. The low percentage of attempted burglaries is also expected, since victim survey results have shown that attempted burglaries were those most likely to go unreported (Hindelang, 1976). Residential and nonresidential burglary accounted for 60 percent and 40 percent, respectively, of all burglaries reported to the police in 1971 (Gray, 1972:21). From 1966 to 1971 the incidence of daytime residential burglaries increased by 108 percent while nighttime residential burglaries went up 89 percent (Gray, 1972:20). For the same 5-year period, nonresidential burglaries occurring during the daytime increased by 82 percent compared with a 29 percent increase in nonresidential nighttime burglaries (Gray, 1972:20). These figures lend support to the contention that burglary is a serious offense affecting millions of Americans throughout the country.

Aside from the personal impact on the victims of burglary, the increase in the incidence of burglary creates a severe strain on criminal justice resources. Although only one out of every five reported burglaries results in an arrest, the number of burglary offenders handled by the criminal justice system is quite substantial and continues to increase each year. In 1971, for example, the UCR reported that burglary arrests were up 7 percent over the previous year, and from 1966 to 1971 burglary arrests increased by 42 percent (Gray, 1972:21). Persons under 25 alone accounted for 83 percent of all burglary arrests in 1971, and juvenile offenders under 18 constituted 51 percent of all burglary arrests (Gray, 1972:21). Females were infrequently arrested for burglary, being involved in about 5 out of every 100 burglary arrests (Gray, 1972:21). Although white offenders arrested for burglary outnumbered black offenders two to one, black offenders were still disproportionately represented (with respect to their population base) in burglary arrest statistics (Gray, 1972:21). The UCR further reported that of those arrested for burglary, 72 percent were eventually prosecuted (Gray, 1972:21). Of those prosecuted, 51 percent were found guilty as charged; 18 percent were convicted of lesser charges; and 31 percent were freed through acquittal or dismissal of the charges (Gray, 1972:21).

The following disposition of burglary offenders occurred in California during 1971: of the 11,112 arrestees handled at the superior court level, 8.8 percent were either acquitted or had the charges against them dismissed; 75 percent were convicted on a plea of guilty; and 16.2 percent were convicted by trial (judge or jury) (California Department of Justice, 1971:45). As with many other offenses, few burglary offenders went to trial, the substantial majority pleading guilty. Of those burglary defendants convicted at the superior court level, 65.3 percent received probation terms, 14.7 percent jail, 8.3 percent prison and 11.7 percent "other" sentences (California Department of Justice, 1971a:25). The following characteristics of those disposed of by the superior court were also noted: 15.1 percent had no prior record; 45.0 percent were under some form of supervision (e.g., probation) at the time of arrest; 56.2 percent were under 25 years of age; 53.0 percent were white; and 29.6 percent were black (California Department of Justice, 1971a:30).

Previous Research Findings

Although empirical research focusing on the crime of burglary is quite sparse, some studies have attempted to examine incident characteristics. It is instructive at this point to briefly review some of these studies and summarize their major findings. Such a summary provides a basis for comparing present research results and an initial starting point for our analysis. Each study will be reviewed and, in turn, followed by a general synthesis of major recurring conclusions.

Scarr

Scarr analyzed burglary offenses in three separate police jurisdictions, reporting on characteristics of the offense (both residential and nonresidential) and the relationship between social factors and the occurrence of burglary.[1] Scarr also included the results of interviews with both victims and nonvictims, a profile of the typical burglar, and scenarios illustrating the processing of burglary offenders through the court system. Like crime-specific studies in other areas, Scarr's study relied heavily on tabular and correlational analysis.[2] By classifying

[1] The three jurisdictions included in the study were (1) Fairfax County, Virginia, (2) Washington, D.C., and (3) Prince George's County, Maryland. A major contribution of Scarr's work is an analysis of differential patterning of residential and nonresidential burglaries across geographic units over the period for which data were available. Scarr's ecological analysis, however, is not directly relevant to the present undertaking and, therefore, will not be discussed.

[2] Scarr utilized correlation analysis to assess the degree of association between burglary indices (frequency and rates of residential and nonresidential offenses) and selected demographic characteristics of census areas. As noted earlier, however, an investigation of the ecological correlates of burglary has been done elsewhere (Scarr, 1973; Dunn, 1974) and is outside the scope of this study.

burglaries as residential and nonresidential, Scarr noted distinct differences between the two types. Residential burglaries occurred more frequently than nonresidential burglaries and were also increasing in the frequency of their occurrence (Scarr, 1973:32-35). Nonresidential burglaries were most likely to occur at night and on weekends, whereas residential burglaries generally occurred during the day on weekdays (Scarr, 1973:104). Most burglaries involved thefts of moderate value (generally in the $100 to $499 range) and included merchandise easily converted into cash (e.g., home entertainment equipment) (Scarr, 1973:28, 29)

Clarke

A more limited study is Clarke's investigation (1972) of burglary and larceny patterns in Charlotte and Mecklenburg County (North Carolina). Using census tracts as the unit of analysis, Clarke's findings proved quite similar to those of Scarr. Burglary losses were generally of moderate value, usually consisting of easily salable items such as radios, televisions, and phonographs (Clarke, 1972:9). Clarke also found that residential burglaries were most likely to occur during a weekday at daytime; this was followed by weekend nights, weekday nights, and weekend daytime, respectively (1972:8). Nonresidential burglaries exhibited a different pattern and were most likely to occur during the weekday at nighttime followed by weekend nighttime, weekday daytime, and weekend daytime, in that order (1972:11). Residential burglary was found to be mostly a lower-class phenomenon, occurring predominantly in areas that were classified through the measurement of median family income, as low in socioeconomic status (Clarke, 1972:6-7).

Clearance rates were relatively low, about 11 percent for all reported residential burglaries (Clarke, 1972:10). Clarke further observed a relationship between the value of the merchandise stolen and the clearance rate: "The clearance rate is relatively high for low values, drops well below the mean for intermediate values, and reaches a relatively high level again for the highest property values" (Clarke, 1972:10). Clarke's explanation of this relationship centers both upon the professionalism associated with different types of burglaries and upon police response. According to Clarke, low-value burglaries are committed by inexperienced and incompetent burglars, thereby facilitating apprehension. Intermediate-value burglaries are harder to solve, because they are committed by more competent burglars. High value burglaries command more police attention, and therefore, arrests are most likely to occur. This assessment, however, is based on information provided by police informants and thus may be questionable.

Santa Clara Criminal Justice Pilot Program (SCCJPP)

A less methodologically sophisticated study of burglary was undertaken by the Santa Clara Criminal Justice Pilot Program (SCCJPP, 1972). The study included offenses reported to the police for a 4-month period—January 1 to April 22, 1971. This report provides data on the characteristics of burglary offenses, their distribution across census tracts, and some information regarding the social correlates of apprehended offenders.

During this 4-month period, baseline data were collected on all offenses reported to the police. Approximately 70 percent of these baseline offenses were property crimes, and more than half of these were burglaries that accounted for half a million dollars worth of stolen property (SCCJPP, 1972:7). Again, losses were generally of moderate value (63 percent under $500), involving goods easily converted into cash (televisions, stereos, etc.) (SCCJPP, 1972:9). Most burglaries occurred on Friday, Sunday, or Monday, with Friday alone accounting for 41 percent of all burglary incidents (SCCJPP, 1972:9). In about three-fourths of all reported burglaries, force was used to gain entry, and a substantial proportion occurred between noon and midnight (SCCJPP, 1972:9). Most burglaries involved residential targets that were more often homes than apartments (SCCJPP, 1972:23). Finally, in more than three-fifths of the burglaries reported, the owner/resident discovered the offense; the police were responsible for only 3 percent of all discoveries (SCCJPP, 1972:97).

Conklin and Bittner

Conklin and Bittner (1973), restricting their analysis to suburban burglaries, reported on 945 burglary incidents for a 1-year period. According to the authors, ". . . efforts were directed towards the assembly of a relatively detailed cumulative picture of the crime over a significant period of time in a fairly typical suburban community" (Conklin and Bittner, 1973:209). Although these data were geographically limited, overall findings were similar to those reported in other studies. The number of residential burglaries was two-thirds that of nonresidential burglaries, but nonresidential targets faced a greater probability of being burglarized with regard to potential targets at risk. The residential burglary rate was found to be 22 per 1,000 structures, compared with a nonresidential rate of 217 per 1,000 structures (Conklin and Bittner, 1973:212). Like Scarr, Conklin

and Bittner noted little fluctuation in burglaries from month to month; seasonal variation was not evident for either residential or nonresidential burglaries (Conklin and Bittner, 1973:214-215). Three-quarters of all cases involved losses of less than $1,000; however, losses were found to be higher for residential burglaries than for nonresidential burglaries (Conklin and Bittner, 1973:217). Sixty percent of all suburban burglaries coming to the attention of the police were reported by victims. Of those structures burglarized, 5.6 percent had an alarm system of some kind; 39 percent of these systems failed to function (Conklin and Bittner, 1973:223-224). Time of occurrence was based on estimates made within 3-hour limits and was included in only 298 of the 945 cases. Nonetheless, three-quarters of these 298 reported burglaries occurred at night, and 59 percent of all 298 reported burglaries occurred on weekends (Conklin and Bittner, 1973:213-215). Nonresidential burglaries (75 percent) were more likely to occur at night than residential burglaries (61 percent) (Conklin and Bittner, 1973:215).

Investigating the police response to burglary incidents, in terms of the number of personnel working on each case, led Conklin and Bittner to observe that burglaries involving greater losses elicited more police response.

> Residential burglaries led to more police contacts than did commercial burglaries, half of the residential burglaries and only a fifth of the commercial offenses producing two or more contacts between the police and the victim (Conklin and Bittner, 1973:225-226).

Conklin and Bittner further examined the relationship between police response and social class of victims. (The latter was measured by the assessed value of target homes.) They concluded that "... police seem to be responding to the amount of loss in the burglary, not the influence of those who have highly assessed houses" (Conklin and Bittner, 1973:227). The overall clearance rate was quite low, 4.55 percent for all reported burglaries (Conklin and Bittner, 1973:228), and was higher for commercial burglaries (7.1 percent) than for residential burglaries (3.7 percent) (Conklin and Bittner, 1973:229). The amount of time between the occurrence of and reporting of a burglary to the police was related to the clearance rate: the longer the lapse before reporting, the less likely the case would be solved (Conklin and Bittner, 1973:229).

Chimbos

An additional study of burglary based on offenses reported to the police was that of Chimbos (1973), who examined burglary incidents occurring over a 6-year period in a northwestern Ontario city. Breaking and entering offenses were most likely to occur on weekends, and were more frequently residential than nonresidential offenses (Chimbos, 1973:323). Furthermore, these offenses tended to rise during the summer months and to decline during the winter (Chimbos, 1973:323). Forty-one percent of all residential offenses occurred during the summer months compared to 35 percent for nonresidential offenses (Chimbos, 1973:324). Eighty-five percent of all offenses occurred at night, with a higher proportion among nonresidential (92 percent) than residential burglaries (70 percent) (Chimbos, 1973:324).

Reppetto

Another study relying on police incident reports is Reppetto's (1974) investigation into patterns of both residential burglary and robbery in the greater Boston metropolitan area. Its overall goal was "... to identify, describe, and, where possible, explain in a systematic and quantitative manner the rates and patterns of these crimes and their correlation to key variables" (Reppetto, 1974:6). Data were derived from a variety of sources including burglary incident reports from 39 representative police reporting areas, surveys of both victims and nonvictims of burglary, field observations of building security features, and interviews with 97 adjudicated burglars.

Most reported burglaries were found to occur during the daytime and more often during the week than on weekends (Reppetto, 1974:19). As in other studies, losses were generally found to be of moderate value ($100 to $300 range) consisting of goods easily converted into cash (Reppetto, 1974:20).

Data on those reporting burglary victimizations revealed some interesting trends. Victimization rates tended to rise with income among both whites and nonwhites (Reppetto, 1974:57). Although no significant differences in victimization existed between blacks and whites, blacks were more likely to suffer multiple victimization (Reppetto, 1974:59). Those most likely to report burglary victimizations were young, single, educated, and those whose homes were more frequently left unoccupied (Reppetto, 1974:61). Victimization experience did seem to have some effect upon security measures; those who had been burglarized were more likely to install additional locks, alarm systems, and the like (Reppetto, 1974:64).

Hindelang

A limited victim survey (Reppetto, 1974) produced information not generally available in official data sources, information that may provide a comparative base from which to gauge the characteristics of those burglaries most often reported to the police. On a larger scale, the Law Enforcement Assistance Administration, in cooperation with the U.S. Bureau of the Census, conducted surveys of crime victims in eight cities in 1972: Atlanta, Baltimore, Cleveland, Dallas, Denver, Newark, Portland, and St. Louis (LEAA, 1974). In this study, a representative sample of respondents were interviewed and asked to report on victimizations occurring within the previous 12-month period. Analysis of the survey data showed that, for residential burglaries, the victimization rate of renters exceeded that of homeowners (Hindelang, 1976:280). Furthermore, over three-quarters of those burglaries occurring in residences were completed rather than attempted regardless of the race of household members and their income level, with the exception of those with an annual income of over $25,000.

> For both whites and black/others, rates of completion for burglary were very similar for all income groups under $25,000—ranging from 73 percent to 79 percent; however, in both racial groups, the rates for those with family incomes of $25,000 and over were slightly *higher*—84 percent for the whites and 83 percent for the black/others (Hindelang, 1976:286).

The following patterns appeared for residential burglaries: 39 percent occurred between 6 a.m. and 6 p.m., 46 percent between 6 p.m. and 6 a.m., and in 15 percent of the cases time of occurrence could not be determined (Hindelang, 1976:294). Again, losses were generally moderate and tended to be higher in black/other households than in white households (Hindelang, 1976:300). Damage to property during burglaries was also more likely to occur in black/other households (94 percent) than in white households (74 percent) (Hindelang, 1976:301). Some recovery of property was realized in only 24 percent of the burglaries, a figure that tended to increase with the value of the property stolen (Hindelang, 1976:305).

Data for nonresidential burglaries also revealed some interesting trends. Like residential burglaries, three-quarters of all nonresidential burglaries were completed (Hindelang, 1976:325). Four out of five business burglaries occurred during the night, sometime between 6 p.m. and 6 a.m. (Hindelang, 1976:333). For those businesses located within the eight cities, 59 percent reported that they had some type of security measure, yet, surprisingly, those businesses with security measures were more likely to be victimized.

> For total businesses, 31 percent of all businesses with security measures, but only 20 percent of those without security measures were victims of burglary and robbery. This pattern generally maintains when the data are further subdivided according to type of business (Hindelang, 1976:344).

A majority of business burglaries (53 percent) resulted in loss of merchandise or other material (Hindelang, 1976:355). Business losses from burglary were found to be moderate; only 1 out of 10 business burglaries resulted in losses of $1,000 or more. The aggregate median loss was generally in the $50 to $249 range (Hindelang, 1976:359). As the value of the loss increased, so did the proportion of businesses recovering some of their losses through insurance (Hindelang, 1976:363). For the most part, the findings of victimization studies such as this one differ very little from findings of burglary studies focusing on offenses reported to the police.

Summary

The following is a synthesis of the major findings regarding the characteristics of burglary. Only those correlates most consistently noted in the previous studies are listed, because many findings are limited by the respective methodology of each particular study. Unfortunately, the results of many studies are not completely consistent. For example, neither Scarr (1973) nor Conklin and Bittner (1973) found a relationship between different seasons of the year and the occurrence of burglary. Chimbos (1973), however, reported that residential burglaries were more likely to occur during the summer months. These divergent findings, however, may partially be accounted for by the nature of each study. Scarr reported on aggregate burglary offenses in relation to seasonal fluctuation for three separate jurisdictions, while Conklin and Bittner dichotomized burglary incidents into suburban residential, and nonresidential burglaries.

Chimbos' study was undertaken in northeastern Canada, an area with a population composition and climate quite different from that found in many parts of the United States. In addition, Canada's statutes regarding breaking and entering offenses are not strictly comparable with those of the United States. Nonetheless, the degree to which similar findings are reported across divergent studies is rather surprising. These major con-

sistent findings are highlighted as a point of departure for the present investigation:

(1) The clearance rate for burglary is generally quite low and seems to be related to reporting time. The longer the lapse between the occurrence of a burglary and its reporting to the police, the less likely the crime will be cleared by arrest.

(2) Residential burglaries occur more frequently than nonresidential burglaries. However, when burglary rates are computed with respect to potential targets at risk (the number of potential or nonresidential targets), nonresidential structures are found to have a greater probability of being burglarized.

(3) Most burglary losses are of moderate value and include goods that are easily converted into cash.

(4) Residential burglaries are mostly daytime phenomena, but nonresidential burglaries occur most often during the hours of darkness. Similarly, residential burglaries are more likely to occur during the week, but nonresidential burglaries usually occur on weekends.

(5) Most burglaries involve some degree of forcible entry, usually breaking glass, forcing a lock, or a similar means. A substantial proportion of entries are effected through available windows and doors, which are frequently left unsecured.

(6) Most reported and unreported burglaries are completed. Attempted burglaries generally account for only about a fifth of all burglaries reported to the police.

(7) In those structures employing some type of alarm system, a surprisingly high percentage of alarms failed to function or were defeated. Establishments that used an alarm system were more likely to be burglarized than those that did not.

Data Source

To a large extent, the lack of adequate research on burglary can be attributed to the inadequacy of available data sources. Police agencies, like other criminal justice organizations, do not generally record and report statistics in a form amenable to social research. Burglary data, for example, are often incomplete and are not compiled in a manner that easily links the offender with offense information. It is not surprising that earlier investigations of burglary centered attention on offense characteristics and virtually ignored the criminal offender, because such data were difficult, if not impossible, to obtain. Although new and improved methods of data collecting and reporting are currently evolving,[3] much of today's criminal justice statistics cannot be applied to current research issues. Occasionally, however, specific projects are undertaken that provide a raw data source not generally available. The data used herein are a case in point.

The data base for the present study was derived from a crime-specific burglary program, sponsored by the California Council on Criminal Justice, which extended from April 1972 to May 1973.[4] During this 1-year period, data were compiled on (1) burglaries and (2) burglaries in which an offender was matched to a specific offense. The overall aim of the project was to assess the impact of various measures employed to reduce the incidence of burglary in the target areas. Six law enforcement agencies were involved in the study: two from northern California (the San Francisco and Oakland Police Departments) and four from southern California (the Los Angeles and San Diego Police Departments plus the Los Angeles and Orange County Sheriffs' Offices). A specific geographic section consisting of various census tracts from within each jurisdiction was selected by the respective law enforcement agencies for inclusion in the study. Although the criteria used for selection were left up to each individual agency, it would seem from Table 1 that each target section is a high crime area (the increasing incidence of burglary offenses buttresses this contention). Characteristics of the population and their distribution were found to vary across target areas (Table 1). Similarly, burglary prevention measures differed by agency but generally included specific enforcement plans (e.g., team policing or saturation patrols) and

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[3] For a review and discussion of some of the more interesting and innovative data collection techniques, see Michael J. Hindelang and Carl E. Pope, "Sources of Research Data in Criminal Justice" in Emilio Viano (ed.), *Role of Research in Criminal Justice*, 1975).

[4] This study employs a legal definition of burglary quite similar to that provided in the Uniform Crime Reports. Under California law, burglary is defined as follows:

> Every person who enters any house, room, apartment, tenement, shop, warehouse, store, mill, barn, stable, outhouse, or other building, tent, vessel, railroad car, trailer, coach as defined by the Vehicle Code, vehicle as defined by said code when the doors of such vehicle are locked, aircraft as defined by the Harbors and Navigation Code, mine or any underground portion thereof, with intent to commit grand or petit larceny, or any felony, is guilty of burglary (California Penal Code, 1960:32).

In conjunction with the use of a legal definition of burglary, it should also be emphasized that data used herein reflect burglary offenses coming to the attention of police agencies and arrests resulting from these offenses. This, of course, excludes a wide spectrum of criminal activity that, for one reason or another, never comes to the attention of police authorities. Both victim surveys and self-report studies have generally shown that substantially more crime exists than that uncovered by official police resources.

community involvement (e.g., elements of public awareness).

Overall, the California data contain much valuable information about both burglary offenses and offenders that has not been available heretofore. Information on offenders includes both demographic (age, race, sex) and criminal history (prior record, criminal status) data. Data on the distance from the offense occurrence to the offender's residence is also provided, thus permitting an analysis of spatial mobility patterns. Offense information includes traditional factors such as means of entry, amount stolen, time of occurrence, and type of premise entered. Attempted burglaries are distinguished from completed ones. Deterrent characteristics are also reported and include the availability of artificial lighting, presence of a dog, use of alarm systems, and the like.

Before a discussion of the specific variables included in the data set and their measurement, a few comments about the overall reliability of the data are in order. When utilizing official data sources, one is often plagued by doubts about their accuracy. A recent paper on juvenile arrests by Malcolm Klein et al. (1974) highlights this problem. Klein and his associates note, for example, that the criteria for recording juvenile arrests in California vary from one police agency to another throughout the State. Some record arrests that are based on initial police contact in the street, yet others use stationhouse detention. Furthermore, disparate definitions of arrest may be employed by different juvenile officers within the same department. Some departments even maintain separate juvenile arrest records: one for internal usage, one for the Uniform Crime Reports, and one for compilation by the California Bureau of Criminal Statistics. As Klein notes "... the accuracy of the state's juvenile arrest statistics, since they mirror county and city reports, should be questioned. At a minimum, they lack uniformity; at a maximum, they lack meaning" (Klein et al., 1974:13).

Questions about the reliability of data are frequently overlooked at the initial collection stage. Hence, whereas those findings reported may be reliable, they may not accurately reflect the phenomena that the researcher originally intended to study. Although there is no direct way of assessing the reliability of the California burglary data, some general observations can be made. The data used herein were part of an intensive burglary data collection program, so more faith can be placed in their accuracy than might otherwise be the case. Much effort went into the provision of special checklist forms for recording those characteristics of burglary incidents that are not usually compiled and into monitoring proper use of the checklists. Furthermore, the California Bureau of Criminal Statistics (BCS), which served as a central clearinghouse for these data, is highly regarded for ensuring the accuracy of data submitted to them. When information is missing or when inconsistencies occur, it is not unusual for BCS to investigate the matter by initiating a field reliability check. The crime-specific burglary program was closely monitored by BCS, which assigned a senior researcher the responsibility for supervising compilation of the data. Although random errors are bound to occur, these data are thought to be quite reliable and to reflect accurately the characteristics of known burglaries that occurred during the project period.

Level of Analysis

Problems of aggregation occurred quite early in the analysis of the California burglary data. The basic question was whether the data should be grouped together for analysis or broken down according to some criterion such as target area or census tract. The solution, based on both empirical and theoretical grounds,[5] was not to conduct separate analysis based on distinct criteria, but rather to include possible breakdowns (for example, variations across census tracts) as variables in the analysis. Separate analysis showed that although each of the target areas exhibited some differences, those located in southern California were quite similar, as were those located in northern California. That is, the four southern California jurisdictions exhibited characteristics that were similar to each other's but distinct from the two agencies located in northern California. For example, a quick perusal of the areal characteristics for each jurisdiction contained in Table 1 shows that the northern California agencies generally selected target sites that were, on the average, more socially disadvantaged than those located in southern California. Hence, for many of the analytic techniques used, the northern/southern California designation was included as a variable in the analysis.

Also included in the California burglary data was information pertaining to the census tract in which the offense occurred. Although an investigation of the ecolo-

[5] Separate analysis for the six agencies revealed patterns that were, on the average, quite similar to our overall results when the data were combined. Furthermore, in most instances, any attempt to divide the data would hinder much of the analysis because of case attenuation and would increase the complexity of the presentation with few resulting advantages.

TABLE 1 Sample characteristics of target areas[a]

	Los Angeles County Sheriff's Department	Los Angeles Police Department	Oakland Police Department
Target Area	Bellflower	Palms–Mar Vista	Patrol District 5 (12 square miles)
Population:	51,797	26,256	70,000
Makeup:	Homeowners, commuters, retail trade centers and commercial establishments	Mostly residential	76% black, 10% Mexican American and 14% white. Many deteriorating residential and commercial buildings. Large percentage high school drop-outs and family incomes below poverty level.
Burglary crime rate:	Up 40% in last 7 years.	In period 1969-1971 burglaries increased 14.6% a year.	In 1970 there were 3,429 burglaries. During 5-year period there was an increase of 65% in burglaries of commercial establishments and an increase of 493% in burglaries of homes.
Measures to reduce burglary:	Burglary profile. Expert advice by sheriff's personnel to citizens on preventive methods. Publicity campaign. Burglary prevention seminars for deputies. More than 20,000 inspections of residential and commercial buildings identifying security deficiencies. "Neighborhood car" program (same deputies—same beat for 1 year).	Team policing. 1 citizen per block acts as liaison with police on daily basis. Discussions with community on police-community problems with burglary. Security inspections of residences and businesses.	Intensifying public education and citizen involvement. Stressing burglary prevention and control. Intensive training of selected police personnel on burglary prevention and control. Have commercial security inspection. Initiating residential security inspection (training 10 local residents to inspect under department supervision). Saturation patrols, stakeouts, and surveillance. Burglary Prevention and Control Coordination Group—community-police effort to coordinate anti-burglary project.

gical[6] correlates of burglary is beyond the scope of the present study, area data about census characteristics cannot be completely ignored. For each of the 120 census tracts included in the study, various demographic characteristics reported in the 1970 census were compiled. Of these characteristics, four were selected as general indicators of socioeconomic status. These included median family income, median years of education completed, percent of homes that were owner-occupied, and percent population that was black. Also included was census information pertaining to the percentage of females in the labor force.[7] The above census information was then

[6] Ecological analysis generally focuses on the characteristics of the geographic area in relation to a certain phenomenon, such as crime.

[7] Percentage of females in the labor force may provide a relative indicator of the opportunities that exist for the commission of burglary. It may be that the higher the percentage of females in the labor force, the more likely it is that dwellings would be unoccupied during the daytime, thus increasing the proportion of vulnerable targets.

TABLE 1 concluded

Orange County Sheriff's Department	San Diego Police Department	San Francisco Police Department
Southern Orange County	Northeastern San Diego (25 square miles)	Mission District
72,000	129,546	90,000
Unincorporated, upper middle-class community in large housing tracts. Median per capita income above national average (1970 new home cost $33,800).	Predominantly white middle class. 44,545 family residential units. 794 businesses.	Broad cultural, ethnic and economic spectrum.
In 1970 there were 2,200 burglaries compared to 1,800 in surrounding similar areas.	Burglaries increased by 34 percent in past year. 794 residential burglaries, 408 commercial burglaries (only 23% rise in rest of city).	Highest in city in past 18 months. 60 to 70% burglaries committed during daytime.
Special anti-burglary night police patrols. Inspections of residential and commercial buildings. Publicity campaign to increase public knowledge. Local insurance companies, architects and builders groups contacted to assist in recommending security standards and devices through architectural design and improved construction practices.	(1) Task Force Operation: Surveillance of known burglars and stolen property fences. Saturation patrol. Burglary profile. (2) Public awareness: Education about burglary and its prevention and control (use of media, seminars, meetings, security inspections). Citywide property identification program. Radio alert program.	Utilizing specially trained officers in undercover and investigative work. Selective saturation of most burglarized areas in district. Stakeouts of known burglary suspects and known fences to increase likelihood of catching them in the act. Development of community participation and awareness (media distribution of literature, speeches in Spanish and English).

[a]These characteristics were reported by the California Council on Criminal Justice in an article published in *Police Chief* entitled, "Crime Specific—An Answer" by J.W. Rockwell.

keypunched and added to the original data set. As might be expected, within each target area certain census tracts were more disadvantaged than others in terms of socioeconomic status. Median family income, for example, ranged from a low of $4,716 to a high of $23,762, and median years of education completed range from 9.6 to 16.2. It is not unreasonable to assume that burglary patterns and characteristics are likely to differ between areas of more favorable and less favorable socioeconomic status. Reppetto (1974), for example, found that white burglary offenders were disinclined to work in predominantly black areas; however, the converse did not follow. Black offenders, in fact, favored predominantly white areas in which lucrative burglary opportunities were thought more likely to exist.

Rather than aggregate the data according to census characteristics (i.e., low, medium, and high socioeconomic status areas), each burglary incident was placed in one of four quartiles based upon the five census indicators. With the exception of the percent of

the population that was black, each of five census variables was scaled from lowest to highest. Thus, for median family income, quartile one contained those incidents located in census tracts with the lowest median family income, and quartile four contained those incidents located in census tracts with the highest median family income. For the percent of the population that was black the order was reversed—quartile one contained those incidents located in tracts with the highest percent of black population, and quartile four contained those incidents located in tracts with the lowest.

The intercorrelation matrix for all census indicators is presented in Table 2. An examination of this table shows that the four census variables reflecting socioeconomic status are highly intercorrelated. For example, those census tracts with high median family income are also characterized by high educational levels, a large percentage of owner-occupied homes, and a relatively small black population. Percentage of females in the labor force, however, is relatively independent of the four socioeconomic status variables. A moderate correlation of −.2844 is noted between the percentage of females in the labor force and the percentage of owner-occupied homes. Thus areas with a high percentage of owner-occupied homes are not likely to have a high percentage of females in the labor force.

Measurement

Each variable utilized in the study was dichotomized into two mutually exclusive categories according to theoretical and empirical considerations. The aim was, first of all, to create categories that would be meaningful in light of current knowledge about burglary and the types of possible patterns to be found in the data. A second aim was that each category (where possible) contain a sufficient number of cases to ensure reliable results when the various analytic techniques used in this report were applied. A series of tables was compiled showing the percent distribution and the number of cases in each category for every variable relevant to the analysis. These tables and relevant variables are discussed below. The categories established in this section are used consistently throughout this study unless otherwise noted.

Characteristics of Reported Burglary Incidents

The following sections examine various characteristics of burglary incidents, which were grouped into four descriptive categories. The cutting points for each variable are discussed, and Tables 3 through 12 present the distribution of cases for selected variables. A description of the variable as well as the percent and number of cases occurring in each category are included.

Structural Characteristics of Burglary Incidents

Data presented in this section pertain to structural characteristics of reported burglary incidents, and include such variables as type of structure burglarized, point of entry, and means used to gain entry.

Table 3 reveals that single-family homes were most likely to be burglarized (41 percent) followed by apartments and duplexes (25 percent). Nonresidential burglaries include a number of categories, none of which accounts for more than 8 percent of the total cases. The highest percentage of nonresidential burglaries occurs in

TABLE 2 Intercorrelations among census indicators (Pearson's r)

	Median family income	Percent of labor force that is female	Median years education completed	Percent of homes that are owner-occupied	Percent of population that is black
Median family income	1.0000	−.1333	.7790	.6837	−.5967
Percent of labor force that is female		1.0000	−.0818	−.2844	.1297
Median years education completed			1.0000	.4631	−.5125
Percent of homes that are owner-occupied				1.0000	−.3213
Percent of population that is black					1.0000

TABLE 3 Type of structure burglarized

[Percent]

Type of structure	Case distribution	
Residential:		
Single-family structure	41.3	(3,357)
Apartments/duplexes	25.0	(2,032)
All other residence and associated buildings	3.6	(297)
Nonresidential:		
Commercial lodging	0.9	(75)
Retail business—services	7.7	(623)
Retail business—commodities	6.4	(519)
Automobile dealers	0.5	(40)
Private offices	2.1	(167)
Unoccupied hotel/motel rooms	0.2	(18)
Medical offices	1.1	(89)
Recreational facilities	1.0	(83)
Warehouse and storage	1.7	(136)
Industrial, manufacturing, construction companies	3.6	(294)
Financial institutions	0.1	(8)
Government buildings	0.3	(23)
Schools	3.0	(245)
Churches	0.9	(71)
All other	0.7	(58)
Total[a]	100.1	(8,135)

[a]Total does not add to 100.0 percent because of rounding.

the two categories of retail business, which include both businesses that deal in services and those that deal in commodities. All nonresidential burglaries amount to 30 percent, or approximately one-third of all reported burglaries. These data were then dichotomized into two mutually exclusive categories consisting of residential and nonresidential targets. Residential targets constituted 70 percent (5,686) of the cases studied, nonresidential targets accounting for the remaining 30 percent (2,449) of the cases.

Table 4, extent of property loss, shows that the most frequent burglary losses fell into the $200 to $499 range. In 65 percent of all reported burglaries, monetary loss was valued at less than $500. Losses in excess of $5,000 were reported in less than 1 percent of all burglaries. In 1,424 cases, monetary loss was not determined, and these cases were eliminated when the remaining cases were dichotomized into no loss (e.g., offender apprehended at the scene) and loss of some type. Eighty-two percent (5,534) of those cases for which information was provided involved a financial loss, and 18 percent (1,179) involved no financial loss. Similar findings have been reported elsewhere: in 24 percent of the burglary incidents analyzed by Chimbos, the apprehended offender did not take anything (1971:319); approximately 18 percent of those burglary incidents examined in San Jose involved no reported financial loss (SCCJPP, 1972:67).

Doors and windows were the most frequent points of entry, accounting for 94 percent of all illegal trespasses. The residual category of "other" contained only 6 percent of the cases, too few to warrant separate analysis. Hence, point of entry was dichotomized into either door or window. Doors were the more favored means, accounting for 63 percent (4,792) of all entries. Windows were used in only 37 percent (2,839) of the cases. Data reported by Scarr produced similar findings, showing a substantial proportion of all entries as occur-

TABLE 4 Financial loss resulting from burglary

[Percent]

Extent of loss	Case distribution	
Unknown—not reported	17.5	(1,424)
No loss	14.4	(1,179)
Loss:		
$9 or less	2.7	(222)
$10 to $49	8.6	(696)
$50 to $99	8.0	(651)
$100 to $199	11.8	(958)
$200 to $499	19.2	(1,566)
$500 to $999	10.2	(828)
$1,000 to $4,999	7.2	(583)
$5,000 to $9,999	0.2	(20)
$10,000 or more	0.1	(10)
Total[a]	99.9	(8,137)

[a]Total does not add to 100.0 percent because of rounding.

ring through either doors or windows (1973:135). Furthermore, doors alone accounted for more than half of all illegal entries in Scarr's study (1973:135).

Nonforcible entries included incidents in which doors or windows were left unlocked or screens were removed, or in which passkeys, picks, or other similar devices were used. Excluded were entries occurring by means of prying, jimmying, cutting, and the like, which were grouped under forcible entries. In 5 percent of the cases (427), no entry was made; these cases were excluded.

Forcible entries were about twice as likely to occur as nonforcible entries. (Force was used in 62 percent or 4,825 of the cases and was absent in 38 percent or 3,012 of the cases.) Scarr also found the percentage of forcible entries to be quite high, accounting for more than half of all entries (1973:138). Approximately 30 percent of all reported burglaries in San Jose occurring over a 4-month period did not involve the use of force to gain entry (SCCJPP, 1972:80). Although the percentage of forcible entries reported by Clarke was also high, more nonforcible entries occurred in residential burglaries (28 percent) than in nonresidential burglaries (17 percent) (Clarke, 1972:12).

In 63 percent (4,859) of the cases, a tool of some type (e.g., screwdriver, prybar, drill, knife) was used to effect entry. In the remaining 2,844 cases, entry was gained by the use of bodily force. The percent distributions for both means of entry and for type of tool are quite similar, because they reflect a similar modus operandi. Generally, if a tool is used to gain entry, then evidence of forcible entry would most likely be found along with an increased likelihood of property damage occurring. Forty percent of the cases involved no damage, but 60 percent involved some damage to property.

The type of property stolen during burglaries generally includes a wide range of commodities, as Table 5 indicates. The theft of drugs and firearms was quite rare, accounting for less than 5 percent of the total merchandise stolen. By far the largest proportion of stolen property (48 percent) included items of the hard sale variety, such as televisions and stereo equipment, followed by theft of currency (13 percent). Type of property taken was dichotomized into two categories: money and hard salable items, and a residual category of all other. The former accounted for 76 percent (4,934) of the cases, the latter for 24 percent (1,558) of the cases.

Findings reported in other burglary studies are generally similar to those noted here. That is, items such as home entertainment equipment and currency are those most frequently reported as stolen (Scarr, 1973; SCCJPP, 1972; Clarke, 1972; Reppetto, 1974). For suburban burglaries, however, Conklin and Bittner found that jewelry, furs, and silver accounted for 52 percent of all reported losses, followed by theft of currency and home entertainment equipment (1973:219).

TABLE 5 Type of property taken during burglary

[Percent]

Type of property	Case distribution	
Unknown	20.2	(1,645)
Money	13.1	(1,062)
Negotiable items (e.g., credit cards)	0.5	(43)
Jewelry/furs	6.3	(509)
Soft salable items (e.g., clothing, furniture)	5.2	(423)
Hard salable items (e.g., televisions, stereos)	47.6	(3,872)
Drugs	0.4	(29)
Firearms	2.7	(220)
Items from inside safe	0.3	(24)
All other	3.8	(310)
Total[a]	100.1	(8,137)

[a]Total does not add to 100.0 percent because of rounding.

Temporal Characteristics of Burglary Incidents

Temporal characteristics include the day of the week, time of the day, and season of the year during which the reported burglaries occurred. The distribution of cases in Table 6 shows the period from 5 p.m. to midnight as the most likely time for burglaries to occur. Unfortunately, some of the categories are not mutually exclusive, and others cover too broad a range. For example, although in 15 percent of the cases the time during which the burglary occurred was reported as unknown, in 10 percent of the cases the burglary occurred some time during a 24-hour period—a relatively useless bit of information. Furthermore, some categories (midnight to noon) include others (midnight to 7 a.m.). In light of these problems, time of day was dichotomized into a range within which most of the original categories could be included. Thus, the period from 7 a.m. to 5 p.m. (daytime) also includes from 12 noon to 5 p.m. and from 7 a.m. to 12 noon, accounting for 44 percent

TABLE 6 Time of day during which burglary occurred

[Percent]

Time occurred	Case distribution	
Unknown	15.2	(1,237)
7 a.m. to 12 noon	5.8	(471)
12 noon to 5 p.m.	13.4	(1,089)
5 p.m. to midnight	16.8	(1,370)
Midnight to 7 a.m.	8.0	(653)
5 p.m. to 7 a.m.	13.5	(1,102)
7 a.m. to 5 p.m.	11.6	(946)
Midnight to noon	1.0	(78)
5 p.m. to 12 noon	4.3	(348)
24-hour period	10.4	(843)
Total	100.0	(8,137)

TABLE 7 Day of the week during which burglary occurred

[Percent]

Day	Case distribution	
Unknown	7.1	(579)
Sunday	7.9	(640)
Monday	9.7	(793)
Tuesday	8.7	(710)
Wednesday	9.0	(735)
Thursday	9.2	(746)
Friday	9.9	(808)
Saturday	7.7	(625)
Weekday	15.2	(1,238)
Weekend	15.5	(1,263)
Total[a]	99.9	(8,137)

[a]Total does not add to 100.0 percent because of rounding.

(2,506) of the cases. Conversely, the period from 5 p.m. to 7 a.m. (nighttime) includes from 5 p.m. to midnight and from midnight to 7 a.m. and contains 56 percent (3,125) of the cases. In using this criterion, however, 31 percent of the original cases had to be excluded from the analysis because they could not be classified in this dichotomy.

On the whole, the days of the week during which the burglaries occurred produced no patterns (Table 7). Data were collapsed to include those burglaries occurring on weekdays (Monday through Friday) and those occurring on weekends (Saturday and Sunday). Reported burglaries were more likely to occur on weekdays (67 percent or 5,030) than on weekends (33 percent or 2,528).

The month during which the burglary was reported to the police was trichotomized into the three seasons of winter, spring-autumn, and summer. Winter included the months of November, December, January, and February. Spring-autumn included the months of March, April, September, and October. Summer included the months of May, June, July, and August. The data revealed little seasonal variation in the incidence of reported burglaries: 2,623 cases (32 percent) were reported during winter, 2,701 cases (33 percent) in spring-autumn, and 2,812 (35 percent) in summer.[8] This finding is similar to that of Scarr who, using aggregate burglary data, discovered no seasonal fluctuation in the incidence of burglary (1973:141).

Offense Characteristics of Burglary Incidents

Other characteristics of reported burglary incidents refer to such variables as the manner in which the offense was cleared and whether the burglary was completed or only attempted. As Table 8 shows, over four-fifths of all reported burglaries remained unsolved at the end of the project period. Of those cases solved, the highest proportion was cleared by the arrest of a suspect. Relatively few cases were unfounded, that is, the police determined that a burglary had not actually occurred. Data were broken down into those burglary cases that were cleared (18 percent or 1,465 cases) by any means and those that still remained unsolved (82 percent or 6,669 cases). A substantial proportion of all reported burglaries were completed. In this data set completed burglaries occurred 95 percent (7,710) of the time, compared with 5 percent (427) for attempted burglaries.

Means of detection refers to the manner in which the burglary was discovered. Table 9 reveals that a substantial proportion of all reported burglaries (57.2 percent) were discovered upon the return of the victim after

[8]Information was also available about the month during which the burglary occurred. Generally, these variables proved to be quite similar, in that burglaries were reported to the police on the same dates they were said to have occurred. The distribution of cases for the season during which the burglary occurred was similar to that for the season during which the burglary was actually reported.

TABLE 8 Method by which burglaries were cleared

[Percent]

Method of clearance	Case distribution	
Not specified	[a]	(3)
Not cleared—still open	82.0	(6,669)
Cleared exceptionally	1.1	(89)
Arrest of suspect	14.9	(1,211)
Arrest in other jurisdiction	0.3	(25)
Death of suspect	[a]	(1)
Case unfounded	1.5	(124)
Classification changed	0.2	(14)
All other	[a]	(1)
Total	100.0	(8,137)

[a]Less than one-tenth percent.

TABLE 9 Method by which burglaries were detected

[Percent]

Method of detection	Case distribution	
Unknown	0.1	(10)
Return of victim	57.2	(4,656)
Other than victim	6.1	(498)
Next working day (commercial)	17.5	(1,420)
Citizen complaint (e.g., passing citizen)	4.7	(384)
Victim returns—burglary in progress	1.5	(119)
Victim present during burglary	7.4	(600)
Passing patrolman	2.1	(168)
Burglary alarm	3.3	(266)
All other	0.2	(16)
Total[a]	100.1	(8,137)

[a]Total does not add to 100.0 percent because of rounding.

a household burglary had been completed. The next most frequent category was the next working day for commercial burglaries (17.5 percent). Relatively few burglaries, however, were originally uncovered by the police. Findings here closely parallel those in San Jose, where burglaries were most likely to be discovered by the owner or resident, and next by witnesses or passing citizens. In only 3 percent of the cases did the police discover the burglary (SCCJPP, 1972:97). Data were divided into two categories: (1) return of the victim (66 percent or 5,375 cases), and (2) other (34 percent or 2,752 cases). The former category includes those burglaries in which the victim returns either while the crime is in progress or after completion, but excludes those discovered the next working day (commercial only).

Table 10 presents data pertaining to the target area in which the offense was committed. It is apparent from Table 10 that Oakland accounted for the highest percentage of burglary incidents (28.1 percent), San Francisco the second highest (24.1 percent). The fewest burglary incidents occurred in Los Angeles (5.4 percent). Target area data were dichotomized into northern and southern California. Northern California includes both the Oakland and San Francisco Police Departments, and southern California includes the Los Angeles and San Diego Police Departments, plus the Los Angeles and Orange County Sheriffs' Offices. The northern/southern California split was utilized, because target characteristics were found to be quite similar within each area and, in addition, such a dichotomy followed naturally within State boundaries. Fifty-two percent (4,252) of all reported burglaries occurred in northern California and 48 percent (3,885) in southern California.

TABLE 10 Target area in which burglaries occurred

[Percent]

Target area	Case distribution	
San Francisco Police Department	24.1	(1,965)
Oakland Police Department	28.1	(2,287)
Los Angeles Police Department	5.4	(441)
Los Angeles Sheriff's Office	12.1	(986)
Orange County Sheriff's Office	14.6	(1,191)
San Diego Police Department	15.6	(1,267)
Total[a]	99.9	(8,137)

[a]Total does not add to 100.0 percent because of rounding.

Table 11 presents data reflecting the distribution of reported burglary incidents according to the five census indicator variables. Most reported burglary incidents occurred in areas that were relatively socially and economically disadvantaged. Approximately two-fifths of all incidents, for example, occurred in areas characterized as "low" in median family income and median educational level. Similarly, two-fifths of all reported burglaries were committed in areas where a high percentage of the population was black. Burglaries were also more likely to occur in areas with a lower percentage of owner-occupied homes. It is interesting that reported burglaries were less likely to occur in areas with a low percentage of females in the labor force—regions that may not provide the most optimal opportunities for burglars because residences are probably more likely to be occupied during the day.

Deterrent Characteristics of Burglary Incidents

As noted above, the primary intent of the California project was the reduction of burglary by the application of various abatement programs. Therefore, interest focused on deterrent aspects of burglary targets, such as lighting, alarm systems, and security checks.

Most of the data elements included here and the categories are self-explanatory, as seen in Table 12. Most of those premises burglarized had street lights within 100 feet (65 percent), but only 31 percent had lighting at the point where entry was made. Furthermore, most entry points were not visible (70 percent), because they were concealed by fences, shrubbery, and the like. Not surprisingly, few premises were protected by alarms. Of those that had alarms, the system failed to function in half the cases. Again, few premises (12 percent) were inspected for security before the burglary, and few premises (9 percent) had a dog present. In only 9 percent of the cases were identifying serial numbers etched on property within the burglarized premise.

Method of Analysis

The univariate distributions for burglary incident characteristics have been examined, now a more detailed analysis will be undertaken of the correlates of burglary as they occur across time and space, of the methods or techniques used in the commission of burglary, of the nature of those deterrent features designed to prevent or impede the occurrence of burglary, and similar characteristics. Such data provide a basis for comparison

TABLE 11 Distribution of burglary incidents by census characteristics

(Percent)

Census characteristic	Case distribution				Total[a]
	Low	Low-medium	Medium-high	High	
Median family income	39.7 (3,198)	27.8 (2,241)	21.3 (1,713)	11.2 (898)	100.0 (8,050)
Percent of labor force that is female	13.2 (1,064)	35.4 (2,847)	26.5 (2,131)	24.9 (2,007)	100.0 (8,049)
Median educational level	40.5 (3,145)	31.8 (2,470)	18.8 (1,461)	8.8 (682)	99.9 (7,758)
Percent of population that is black	13.3 (1,074)	20.5 (1,654)	22.7 (1,829)	43.4 (3,493)	99.9 (8,050)
Percent of homes that are owner-occupied	34.6 (2,711)	30.5 (2,392)	20.5 (1,606)	14.4 (1,133)	100.0 (7,842)

[a]Totals may not add to 100.0 percent because of rounding.

TABLE 12 Deterrent characteristics of burglary incidents

[Percent]

Characteristics	Case distribution[a]	
Extent of lighting:		
Street lights within 100 feet	65	(5,214)
No street lights within 100 feet	35	(2,776)
Lighting with respect to the point of entry:		
Lighted	31	(2,435)
Not lighted	69	(5,360)
Visibility of point of entry:		
Visible	30	(2,405)
Not visible	70	(5,472)
Extent of alarm systems:		
Premises without alarms	93	(7,578)
Premises with alarms	7	(559)
Functioning of alarm systems:		
Alarm operated	50	(274)
Alarm did not operate	50	(274)
Security inspection conducted:		
Security inspection	12	(920)
No security inspection	88	(7,104)
Dog on premises:		
Dog present	9	(435)
Dog not present	91	(4,457)
Serial numbers etched on property:		
Identifying serial numbers	9	(431)
No identifying serial numbers	91	(4,392)

[a]Total number of cases for each variable may vary because of missing cases.

with the findings of other studies and also lay a foundation for exploration of the interrelationship among offense and offender characteristics, which will be undertaken in a subsequent report. In order that findings may be easily compared with previous research, type of structure burglarized is used as a variable for much of the analysis reported herein. A series of tables depict the relationship between selected offense variables (e.g., time of day, amount of loss) and both residential and nonresidential target sites. This and subsequent analysis is conducted in accordance with those categories established above except in those instances in which more detailed information was desired.

Two methods of analysis were selected to examine the interrelationship of burglary offense variables. These were tabular analysis and predictive attribute analysis (PAA). Tabular analysis was employed because of the ease with which tables can be presented and interpreted. A particular problem in presenting tabular results, however, is that of evaluating the magnitude of observed percent differences. It is often difficult to determine how much weight should be given to findings showing differences among categories of 5, 10, or 15 percent points. Even in those instances in which tests of significance are applied to percent differences, the actual relationships may be quite trivial although the resultant

statistic is "significant" at a specified probability level.[9] Furthermore, a fundamental requirement of virtually all statistical tests is that of independent random sampling, a condition not met in this study, because a *total population* was used (Blalock, 1972). Additionally, significance tests are directly influenced by sample size: as the absolute number of cases increases, so does the probability of finding a significant relationship (Hagan, 1974). Because the number of reported burglary incidents is rather large (8,137), one would expect statistical significance to occur even when only a slight relationship actually exists. Because of such problems, tests of significance were not employed in this analysis, thus necessitating some alternative method for specifying substantial relationships.

The solution decided upon was to use percents and frequency counts specifying a 10 percent point difference as a criterion for evaluating the magnitude of observed relationships. Thus, if a percent difference is equal to or greater than 10 percent, then the relationships will be considered substantial. If the difference is less than 10 percent, the relationship is considered not substantial.[10] In certain instances, however, cases in categories of some variables are so few in number that a 10 percent difference could not occur. Burglaries, for example, include two mutually exclusive categories consisting of completed and attempted burglaries. Because the latter category contains only about 5 percent of the cases, a difference of 10 or more percent points across categories of a second variable would be precluded. In such circumstances, when the cases are too few to support a 10 percent difference criterion, the relationship will be considered substantial if the percent figure occurring in one cell is twice that of its adjoining cell (a "proportionate difference" criterion).

Consideration was given to dividing the data into two distinct sets based on whether or not the case was cleared, either through arrest of the perpetrator or by other means. It would not be unreasonable to assume that the characteristics of burglary incidents may differ on this criterion. For example, those cases that were cleared may be characterized by substantially different frequency distributions across the offense variables than those cases that were not cleared. Although some differences were noted between crimes cleared and those not cleared, these were not large enough to justify undertaking separate analysis for both sets of data. Preliminary analysis revealed few differences when the data were dichotomized on the basis of cases cleared or were left as a complete set. With few exceptions, the distribution of burglary incident characteristics was quite similar regardless of how the data were broken down. In light of these findings, results were reported based on all the burglary incident data collected during the 1-year life span of the project.

Patterning of Burglary Incidents

Tables 13 to 17 present bivariate relationships for the structural correlates of reported burglary incidents. Table 13 cross-tabulates the nature and amount of financial loss and the type of structure burglarized, either residential or nonresidential. Eighty-five percent of all reported residential burglaries and 75 percent of all reported nonresidential burglaries resulted in monetary loss of some type. This 10 percent difference meets the criterion indicating a substantial relationship. Thus, residential structures were substantially more likely than nonresidential structures to suffer a loss resulting from a burglary. However, when amount of loss was examined, no substantial differences were noted between residential and nonresidential structures. That is, both types of

[9] Hagan (1974), in a recent review of sentencing research, notes that the meaning of substantive significance is often confused with that of statistical significance. As he states:

> A relationship is considered statistically significant when we have established, subject to an accepted risk of error, that *there is* a relationship between two variables. Separate from the issue of whether or not a relationship exists is the question of *how strong* the relationship is. The strength of a relationship is indicated by a measure of association. Tests of significance are inappropriate for this purpose because they are markedly influenced by the size of the sample involved. For example, when the sample size is large, as is usually the case in studies of sentencing, it is generally quite easy to establish statistical significance for even a very small relationship. Within the context of large samples, then, one says very little by indicating that a relationship is "statistically significant" (Hagan, 1974:361).

[10] Although the designation of a 10 percent difference as indicative of substantial relationships is arbitrary, differences of this magnitude have been used successfully in previous research endeavors. As Glaser and Strauss state:

> In place of making tests of significance, the sociologist can establish working rules to fit his particular situation. For example, two rules for establishing an acceptable percentage difference level are not to consider any relationship of, say, less than 10 percent difference; or any relationship in which three people's changing their minds or being misclassified would change the percentage to below an established level (Glaser and Strauss, 1967: 201-202).

See also Cohen (1974).

TABLE 13 Financial losses due to burglaries, by type of structure burglarized

[Percent]

Losses	Type of structure		Total
	Residential	Nonresidential	
Loss:			
No loss	15 (724)	25 (455)	18 (1,179)
Loss	85 (4,154)	75 (1,378)	82 (5,532)
Total	100 (4,878)	100 (1,833)	100 (6,711)
Amount of loss:			
$9 or less	3 (137)	6 (85)	4 (222)
$10 to $49	11 (465)	17 (230)	13 (695)
$50 to $99	12 (495)	11 (155)	12 (650)
$100 to $199	17 (718)	17 (240)	17 (958)
$200 to $499	30 (1,261)	22 (305)	28 (1,566)
$500 to $999	16 (643)	14 (185)	15 (828)
$1,000 to $4,999	10 (417)	12 (166)	11 (585)
$5,000 to $9,999	[a] (13)	[a] (7)	[a] (20)
$10,000 or more	[a] (5)	[a] (5)	[a] (10)
Total[b]	99 (4,154)	99 (1,378)	100 (5,532)

[a] Less than .1 percent.
[b] Totals may not add to 100 percent because of rounding.

structures were about equally likely to suffer similar financial losses through burglary incidents. Although residential targets (30 percent) were slightly more likely to be victimized in the $200 to $499 range than were nonresidential structures (22 percent), this difference was not substantial. In approximately 74 percent of all residential and nonresidential burglaries, losses were valued at less than $500.

Table 14 provides information about the nature of the property stolen and the type of structure burglarized. As the distribution shows, hard salable items (including stereo systems, televisions, and so on) accounted for more than half of all property reported stolen. Furthermore, no differences were noted between the theft of hard salable items from residential and nonresidential burglary targets. Twenty-five percent of all nonresidential structures and 15 percent of all residential structures suffered the loss of currency, which yields a substantial difference of 10 percent points. As one might expect, jewelry and furs were more likely to be taken from residential structures (10.5 percent) than from nonresidential structures (1.5 percent). The proportionate difference here also meets the criterion for substantiality, since the figure 10.5 is seven times greater

TABLE 14 Type of property stolen, by type of structure burglarized

[Percent]

Property	Type of structure		Total
	Residential	Nonresidential	
Money	15.0 (672)	25.0 (390)	17.2 (1,062)
Negotiable items	0.6 (30)	0.7 (13)	0.7 (43)
Jewelry/furs	10.5 (484)	1.5 (25)	8.2 (509)
Soft salable items	6.6 (306)	7.4 (117)	6.8 (423)
Hard salable items	63.0 (2,897)	61.6 (974)	62.6 (3,871)
Drugs	0.1 (5)	1.5 (24)	0.5 (29)
Firearms	4.3 (201)	1.2 (19)	3.6 (220)
Items from inside safe	0.1 (5)	1.2 (19)	0.4 (24)
Total[a]	100.2 (4,600)	100.1 (1,581)	100.0 (6,181)

[a]Totals may not add to 100.0 percent because of rounding.

than the figure 1.5. Similarly, firearms were more than twice as likely to be stolen from residential structures (4.3 percent) than nonresidential structures (1.2 percent). For residential structures only, few differences in type of property stolen were noted between single family dwellings and apartments/duplexes. (Table not presented.)

Methods used in burglaries are examined in Table 15. The category "method" includes means used to gain entry (either door or window), whether or not force or a tool was used to gain entry, and whether property damage occurred as a result of the burglary. Little difference was found between the means used for entering residential structures and the means used for entering nonresidential structures (Table 15). Sixty-five percent of all nonresidential burglaries were made through doors, compared with 62 percent for all residential burglaries. Residential structures were further dichotomized into single family dwellings and apartments/duplexes to determine if differences might exist between them in the means used to gain entry. Although single family dwellings were somewhat more likely than apartments/duplexes to be entered through the door (42 percent versus 36 percent, respectively), the percent differences did not meet the criterion for substantiality. (Table not presented.)

Although no relationship was found between point of entry and type of structure burglarized, a substantial relationship was found between force used to effect entry and type of structure; nonresidential structures were far more likely than residential structures to be subject to forcible entries. Seventy-three percent of all nonresidential entries involved force of some type, compared with 57 percent of all residential entries. This finding is similar to that of Clarke, who also reported that nonresidential burglaries were more likely to be effected by means of force than were residential burglaries (1972:9, 12). In only two instances were explosives used to gain entrance, once to enter a single family dwelling and once to enter a service-oriented business. Tools were more likely to be involved in nonresidential burglaries (72 percent) than in residential burglaries (59 percent).

The data were also broken down according to single-family dwellings and apartments/duplexes and cross-tabulated with the use of tools. Although burglaries of single-family dwellings were less likely to be effected by a tool than were apartment/duplex burglaries, the relationship, with a difference of approximately 5 percent points, was not substantial. (Table not presented.) Property damage data found in Table 15 reveal that nonresidential burglaries (72 percent) were substantially more likely to result in damage to property than were residential burglaries (55 percent).

These data thus show that nonresidential burglaries are frequently characterized by forcible entries, the use of tools, and property damage. That these variables are interrelated is not surprising; if force is used to gain entry one would also expect a tool to be used and the probability of resulting property damage to increase. It is interesting to note, however, that these variables are correlates of nonresidential rather than residential burglaries. This finding may be suggestive of a general lack of attention given to security measures by those residing in residential areas. Clarke, for example, found that illegal trespasses gained through unlocked doors and windows were more likely to occur in residential than in nonresidential buildings (1972:9, 12).

TABLE 15 Methods employed in burglary incidents, by type of structure burglarized

[Percent]

Method	Type of structure		Total[a]
	Residential	Nonresidential	
Door	62 (3,390)	65 (1,402)	63 (4,792)
Window	38 (2,075)	35 (764)	37 (2,839)
Total	100 (5,465)	100 (2,166)	100 (7,631)
No force	43 (2,370)	27 (642)	38 (3,012)
Force	57 (3,097)	73 (1,727)	62 (4,824)
Total	100 (5,467)	100 (2,369)	100 (7,836)
No tool	41 (2,198)	28 (646)	37 (2,844)
Tool	59 (3,178)	72 (1,681)	63 (4,859)
Total	100 (5,376)	100 (2,327)	100 (7,703)
No damage	45 (2,544)	28 (682)	40 (3,226)
Damage	55 (3,044)	72 (1,735)	60 (4,779)
Total	100 (5,588)	100 (2,417)	100 (8,005)

[a]Total number of cases for each variable may vary because of missing cases.

Table 16, which shows temporal characteristics of reported burglary incidents, indicates that residential burglaries were more likely to occur during the day (56 percent) and on weekdays (70 percent). Forty-four percent of all reported residential burglaries and 85 percent of nonresidential burglaries occurred during nightime hours. Table 16 reveals few seasonal differences in the reporting of residential and nonresidential burglaries. Thirty-three percent and 32 percent of all residential and nonresidential burglaries, respectively, occurred during the winter months. Similar distributions were present when the data were tabulated by month of occurrence rather than month of reporting. (Table not presented.)

Table 17 presents the joint relationship between whether or not the burglary was cleared and whether the target was a residential or nonresidential structure. Both residential and nonresidential burglaries were about equally likely to be cleared during the 1-year span of the project. Nineteen percent of all residential burglaries were cleared compared with 16 percent of all nonresidential burglaries. Burglaries of medical offices in which drugs were taken were among those most likely to be cleared by the arrest of an offender. Also included here were burglaries occurring in financial institutions and business sales offices. Interestingly, none of the 18 burglaries occurring in hotels or motels were cleared.

TABLE 16 Temporal characteristics of burglaries, by type of structure burglarized

[Percent]

Temporal characteristics	Type of structure		Total[a]
	Residential	Nonresidential	
Time:			
Day	56 (2,274)	15 (232)	45 (2,506)
Night	44 (1,812)	85 (1,313)	55 (3,125)
Total	100 (4,086)	100 (1,545)	100 (5,631)
Day:			
Weekday	70 (3,681)	58 (1,348)	67 (5,029)
Weekend	30 (1,568)	42 (959)	33 (2,527)
Total	100 (5,249)	100 (2,307)	100 (7,556)
Season:			
Winter	33 (1,858)	32 (765)	32 (2,623)
Spring-autumn	33 (1,883)	33 (818)	33 (2,701)
Summer	34 (1,945)	35 (866)	35 (2,811)
Total	100 (5,686)	100 (2,449)	100 (8,133)

[a]Total number of cases for each variable may vary because of missing cases.

Other burglaries less likely to be cleared included those of vehicle sales offices and industrial buildings. Although residential and nonresidential burglaries are about equally likely to be cleared by arrest, it is quite possible that other incident characteristics may differ between crimes cleared and crimes not cleared. The following section, therefore, provides a more intensive examination of the correlates of crimes that were cleared during the course of the burglary project.

Burglary Clearances

This section focuses on whether and to what extent the incident characteristics of burglaries cleared by arrest differ. As a starting point, the relationship between reported financial losses occurring during the burglary and whether or not the crime was cleared is examined. Earlier it was noted that Clarke (1972) discovered a relationship between the amount of financial loss occurring during a burglary and the probability of the crime being cleared. Briefly, the clearance rate for offenses involving little financial loss was relatively high, dropping for burglaries involving medium value losses and increasing again for the highest property losses (Clarke, 1972:10). Furthermore, Conklin and Bittner discovered that, for suburban burglaries, crimes involving higher property losses commanded more police attention (1973:227). The data presented here lend some support to these previous findings.

Table 18 reveals that burglaries involving no reported financial losses were more likely to be cleared than those resulting in a financial loss. Thirty-four percent reporting no financial loss were cleared compared with 15 percent reporting financial losses, a substantial difference of 19 percent points.

TABLE 17 Whether or not burglary was cleared, by type of structure burglarized

[Percent]

	Type of structure		
Clearance	Residential	Nonresidential	Total
Not cleared	81 (4,616)	84 (2,052)	82 (6,668)
Cleared	19 (1,069)	16 (395)	18 (1,464)
Total	100 (5,685)	100 (2,447)	100 (8,132)

TABLE 18 Whether or not offense was cleared, by whether or not a loss occurred during the burglary

[Percent]

	Loss		
Clearance	No loss	Loss	Total
Not cleared	66 (779)	85 (4,672)	81 (5,451)
Cleared	34 (400)	15 (895)	19 (1,259)
Total	100 (1,179)	100 (5,531)	100 (6,710)

Table 19 examines the relationship between the amount of financial loss and whether or not burglaries were solved. This table reveals a trend similar to that noted by Clarke. That is, for those burglaries reporting less financial loss the percent of crimes cleared is rather high. Approximately 34 percent of those burglaries with losses in the $0 to $9 range were cleared, followed by 21 percent in the $10 to $49 range, and 16 percent in the $50 to $99 range. The figures continue to decline until reaching the $500 to $999 range, where a slight upswing is noted. Of those burglaries with reported losses of $5,000 to $9,999 and $10,000 or more, 25 percent and 10 percent, respectively, were cleared by arrest. It is interesting to note that those burglaries in the $200 to $499 range, the most frequently reported category of financial loss, are those least likely to be cleared (12.3 percent) with the one exception of a burglary involving a loss of $10,000 or more.

In order to examine the extent to which other incident characteristic variables were related to the frequency of burglaries being cleared, predictive attribute analysis (PAA) was employed. The primary concern is with two mutually exclusive outcomes (either the case was cleared or it was not); therefore, PAA was considered an effective analytic technique, because it identifies those variables most highly associated with the criterion being investigated. According to Turner:

> PAA is best used when there are many variables in which nonlinear effects are present or suspected and in which unanticipated interactions may exist. Furthermore, it deals with the problem of interrelatedness of items. PAA analysis prevents one from using as predictors variables that are related to the criterion, but do not add anything to predictive power when used in conjunction with other variables (1969:37).

PAA was developed by MacNaughton-Smith in an attempt to predict outcomes of selected variables by dividing the subjects into hierarchical groupings (Wilkins, et al., 1964; Wilbanks, 1972). In its final form, it identifies clusters of variables, presented as a branching network, that are associated with the criterion variable under consideration. The procedure is straightforward and developed by successively splitting the predictor variables based on the degree of their relationship to the criterion. First, the data are broken down into dichotomies. The outcome (criterion) variable is then determined, for example, whether or not a defendant is sentenced to prison. The correlation coefficients of each predictor with sentence outcome are examined, and the split is made on the variable that evidences the highest degree of correlation. For example, if age were most highly correlated with the decision to incarcerate, the split would be made there. Then within each category of age, for example, under 30 and 30 and older, the next variable having the highest degree of association with the criterion would be selected. In one category of age, under 30, it might be sex, and in the other, prior record may show the highest correlation. The next split is then made and the process continues until the cases are exhausted or some stopping point has been determined. This process results in a specific pattern (or grouping) of variables that best accounts for differences in the specified outcome under consideration.

PAA is a clustering technique; it groups variables based upon their degree of association with the criterion. In any clustering program one must carefully avoid including those variables that are logically related by necessity, because the inclusion of such variables is likely to play havoc with the clustering process. The problem is concisely summarized by MacNaughton-Smith:

> . . . two sources of association can be a nuisance. Firstly, two attributes may be highly associated because of some logical connection between them (e.g., sex and motherhood; a high degree of association arises because no man is a mother). Secondly, although the attributes are not logically connected, there may be a strong empirical association between them which is so well known as to be totally uninteresting to the researcher (e.g., shortness and childhood). In either case the classification will be distorted, in the sense that it will partly be based on information which is deducible or well-known; in other words, the object of a descriptive classification is to summarize compactly as much information as possible which concerns us; thus information which we could deduce from logic or from past experience without bothering about classification should not be included in the analysis (1965:21).

A number of attribute variables contained in the burglary data are "logically necessitated" because the absence of one precludes the presence of the other. For example, if a burglary were only attempted and not completed, one would expect no financial or property loss to have occurred. Relationships of this type, therefore, have been excluded from the clustering process both here and in subsequent reports.

PAA branching networks are depicted in Figure 1 for those burglary incidents cleared during the California project. In each instance both the criterion variable and each predictor variable were dichotomized according to those cutting points established earlier. The ordinal measure of association, Somers' *d*, was used to interpret the strength of the relationship between the criterion variable and each predictor, thus specifying where each PAA split should be made.[11] In each figure, the number

[11] Somers' *d* is extremely sensitive to percentage differences in two-by-two tables. Although the measure normally requires ordinal data, dichotomized nominal data may safely be used.

TABLE 19 Whether or not offense was cleared, by the amount of loss occurring during the burglary

[Percent]

Clearance	$9 or less	$10 to 49	$50 to 99	$100 to $199	$200 to $499	$500 to $999	$1000 to $4,999	$5000 to $9,999	$10,000 or more	Total
Not cleared	66.2 (147)	79.2 (551)	83.9 (546)	85.7 (819)	87.7 (1,372)	85.4 (707)	86.8 (506)	75.0 (15)	90.0 (9)	84.5 (4,664)
Cleared	33.8 (75)	20.8 (145)	16.1 (105)	14.3 (137)	12.3 (193)	14.6 (121)	13.2 (77)	25.0 (5)	10.0 (1)	15.5 (859)
Total	100.0 (222)	100.0 (696)	100.0 (651)	100.0 (956)	100.0 (1,565)	100.0 (828)	100.0 (583)	100.0 (20)	100.0 (10)	100.0 (5,523)

of cases reported (N) represents the base on which the percentage of those cases cleared (clearance rate) was derived. Three criteria were employed as a stopping rule in order to determine when each branching network should be terminated. These criteria included a 5 percent difference between branches, a minimum of at least 50 cases in each branch, and four successive splits. Thus, each PAA network would continue until a difference of 5 percent or less existed between branches, the number of cases in each branch was 50 or less, or four successive splits (branches) had occurred. While some branches could logically have been carried out beyond four successive splits, this criterion was thought sufficient to determine any patterning that might exist in the data.

The incident characteristics of those burglaries cleared by arrest are graphically illustrated by Figure 1. As noted above, the PAA results show the importance of financial loss in that the first split occurs on that variable. Thirty-four percent of those burglary incidents with no financial loss were cleared compared with 15 percent of those incidents involving a financial loss. In the no-loss category, property damage is most highly correlated with the criterion variable (percent cleared): 49 percent of those burglaries involving no property damage were cleared compared with 28 percent involving property damage of some type. For those cleared burglaries involving a financial loss, the next split includes type of structure burglarized (residential or nonresidential). Of those residential structures burglarized (for which a financial loss also occurred) the clearance rate is 17 percent, and for nonresidential structures the clearance rate is 11 percent. Both branching networks continue until one of the stopping rules has been encountered.

Those variables producing branches in the no-loss category include property damage, type of structure, attempted or completed burglary, use of tools to gain entry, time of day, and presence of alarm system. In the loss category the following variables produced splits: type of structure, visibility of entrance point, time of day, use of tools to gain entry, point of entry, and type of property stolen. Three of these variables refer to the different types of methods used to gain entry. These include the manner in which entry is effected (through either door or window), use of tools to gain entry, and occurrence of property damage. The burglaries less likely to be cleared are those in which a tool was used to gain entry and in which property damage resulted. Two of the deterrent characteristic variables, visibility of entry point and presence or absence of an alarm system, also appeared in the branching network. In completed burglaries in which there was damage but no loss, if the structure had an alarm system of some type the burglary was more likely to be cleared than if it did not. Those residential premises that incurred loss and where the point of entry was not visible, however, were more likely to be cleared than those where the point of entry was visible.

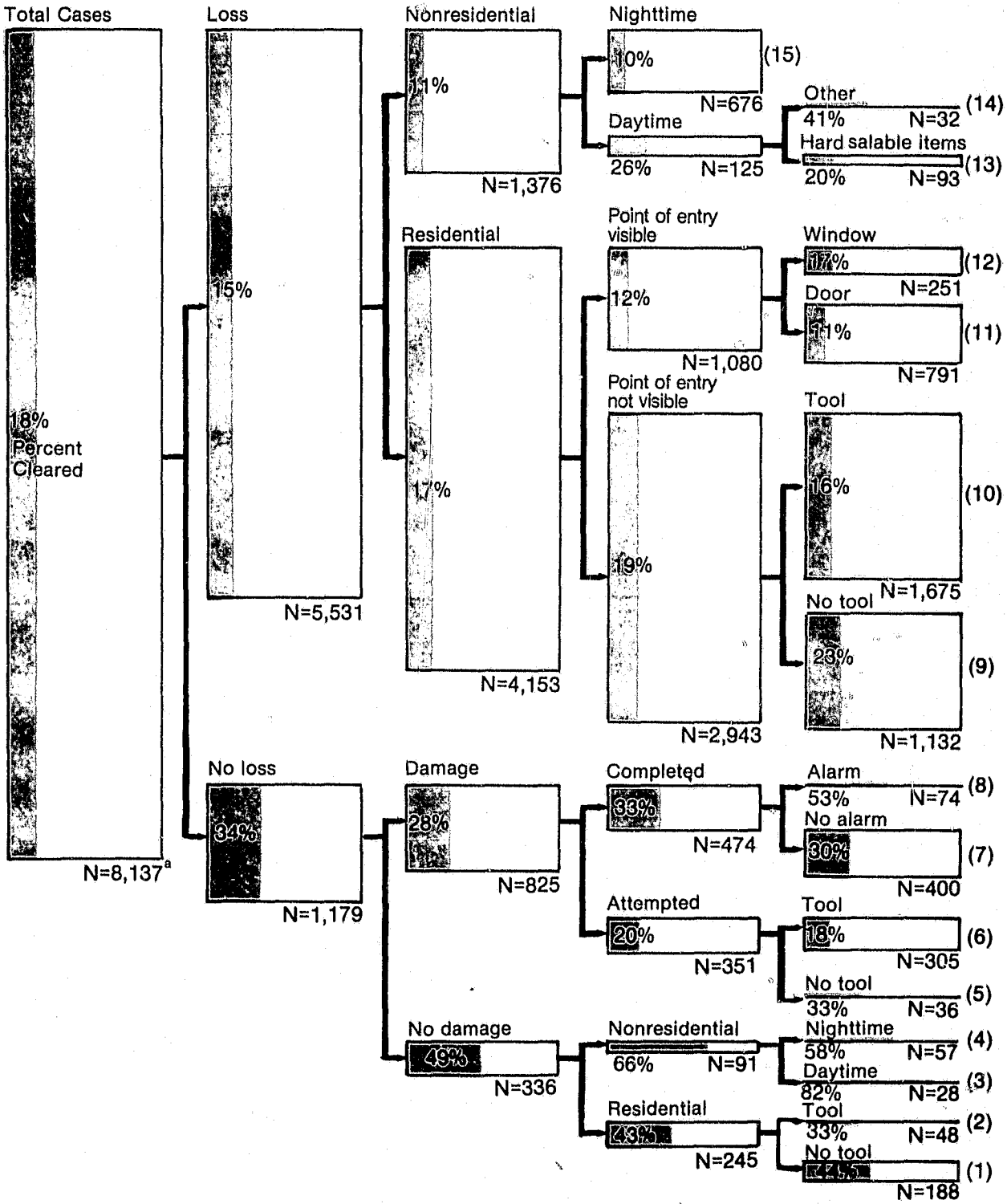
Numbers in parentheses (Figure 1 and Table 20) define distinct clusters of variables each related to the criterion variable under consideration. The clearance rate for group 1 is 44 percent and includes the following characteristics: no financial loss, no property damage, residential targets, and no tool used to gain entry. Group 15 has a clearance rate of 10 percent and subsumes those burglaries characterized by financial loss, nonresidential structures, and nighttime occurrence.

PAA results are summarized in Table 20 and reveal a rather wide range of clearance rates. For example, those nonresidential burglaries occurring in the nightime that resulted in financial loss evidenced a clearance rate of only 10 percent (group 15). On the other hand, group 3 included those daytime nonresidential burglaries in which neither financial loss nor property damage was reported. For these, the clearance rate was 82 percent, a rate substantially higher than that of any other group. It is possible that offenders committing burglaries with the latter characteristics were more likely to be apprehended at the scene or shortly thereafter than were others.

Table 20 provides some interesting, if not unusual, findings. Groups 13 and 14, for example, have substantially different clearance rates yet differ on only one defining characteristic. Both groups include burglaries of nonresidential structures committed in the daytime for which a financial loss was reported. In group 13, however, money or hard salable items were taken; in group 14 other property was the object of the theft. It is possible that "other property" consisted of unusual items, items that were difficult to dispose of or easily traced to the offender, thus leading to an apprehension.

Earlier, the type of structure was found to be unrelated to whether or not the offense was cleared. That is, residential and nonresidential burglaries were about equally likely to result in clearances. In combination with other characteristics, however, burglary clearances do differ by target structure. Residential burglaries characterized by no reported financial loss, no tool used to gain entry, and no property damage (group 1) were less likely to be cleared than nonresidential burglaries occurring during the nighttime and involving no damage or no financial loss (group 4); the clearance rates were 44 percent and 58 percent, respectively. Two groups had

FIGURE 1 PAA results for burglary offenses cleared



[a]Cases reported in subcells may not add to the total number of cases because of missing values.

TABLE 20 Summary of the PAA results for burglary offenses cleared

Group number	Group characteristics	Number	Percent Cleared
(15)	Burglary resulted in loss Nonresidential structure Burglary occurred during nighttime	676	10
(11)	Burglary resulted in loss Residential structure Point of entry visible Entry made through door	791	11
(10)	Burglary resulted in loss Residential structure Point of entry not visible Tool used to gain entry	1,675	16
(12)	Burglary resulted in loss Residential structure Point of entry visible Entry made through window	251	17
(6)	Burglary resulted in no loss Damage to premises Burglary attempted Tool used to gain entry	305	18
(13)	Burglary resulted in loss Nonresidential structure Burglary occurred during daytime Money or hard salable items taken	93	20
(9)	Burglary resulted in loss Residential structure Point of entry not visible No tool used to gain entry	1,132	23
(7)	Burglary resulted in no loss Damage to premises Burglary completed No alarm on premises	400	30
(5)	Burglary resulted in no loss Damage to premises Burglary attempted No tool used to gain entry	36	33
(2)	Burglary resulted in no loss No damage to premises Residential structure Tool used to gain entry	48	33
(14)	Burglary resulted in loss Nonresidential structure Burglary occurred during daytime Other property taken	32	41

TABLE 20 concluded

Group number	Group characteristics	Number	Percent Cleared
(1)	Burglary resulted in no loss No damage to premises Residential structure No tool used to gain entry	188	44
(8)	Burglary resulted in no loss Damage to premises Burglary completed Alarm on premises	74	53
(4)	Burglary resulted in no loss No damage to premises Nonresidential structure Burglary occurred during nighttime	57	58
(3)	Burglary resulted in no loss No damage to premises Nonresidential structure Burglary occurred during daytime	28	82

the same clearance rate. Both group 5 (attempted burglaries in which no loss was reported and no tool was used to gain entry but damage did occur) and group 2 (residential burglaries in which no loss was reported and a tool was used to gain entry with no resulting property damage) had clearance rates of 33 percent.

Considering the incident characteristics and the associated clearance rates of all groups, the lack of any overall pattern is quite striking. Although clearance rates vary by more than 70 percent points, the characteristics of those groups with high rates are remarkably similar to the characteristics of those groups with low rates. Only two rather consistent relationships seem to be present. As noted above in Table 18, burglaries resulting in no financial loss are substantially more likely to be cleared than burglaries resulting in a financial loss.

The PAA network also shows that those burglaries exhibiting the highest clearance rates are consistently characterized by no financial loss. Furthermore, in those groups that exhibit similar characteristics, burglaries in which no tool was used to gain entry and in which no damage to property occurred were most likely to be cleared. These relationships were more pronounced when targets were nonresidential structures than when they were residential structures. The lack of a consistent pattern suggests that clearance rates of burglaries differ little among single incident characteristic variables but do evidence some variability among combined character-

istics. Considering the low percentage of burglary clearances that are generally reported nationally, it could be that the determining factors in whether or not burglary incidents are cleared involve chance.

Deterrent Characteristics of Reported Burglary Incidents

In this section target-hardening characteristics of reported burglary incidents are examined in some detail. In order to explore further the relationships between various deterrent characteristics and target structure, Table 21 was prepared. Overall, the data reveal that some of the target-hardening variables are substantially related to target structure. For example, both residential and nonresidential structures were about equally likely to have street lights within 100 feet of the premises (64 percent and 68 percent, respectively). Nonresidential structures, however, were substantially more likely than residential structures to have an entranceway that was lighted and one not concealed by shrubbery, fences, or some other abutment. Thirty-nine percent of all nonresidential buildings had lighted entranceways compared with 28 percent of all residential buildings. Similarly, 41 percent of all nonresidential structures but only 26 percent of all residential structures had visible entranceways.

By far the most substantial relationship in Table 21 exists between presence of an alarm system and type of structure. Only 1 percent of all residential structures had alarm systems compared with 26 percent for nonresidential structures. The data further show that an alarm system is about equally likely to operate as not to operate. Nonresidential alarm systems (51 percent) were slightly more likely to operate than were residential alarm systems (43 percent), but this difference, although suggestive, does not meet the criteria of substantiality. Security inspections were conducted in only about 11 percent of all cases and were slightly more likely to be conducted in nonresidential buildings, although the difference, again, is not substantial. Only 9 percent of all burglarized structures had dogs present on the premises, but residential structures were substantially more likely than nonresidential structures to have a dog present. Both residential and nonresidential structures were about equally likely to have identifying serial numbers etched on personal or business property.

Since these target-hardening variables are often thought likely to deter potential burglars, it may prove instructive to examine their relationship to attempted and completed burglaries. If target-hardening procedures are effective deterrents, it could be that those burglaries involving structures with such characteristics would more likely result in attempted burglaries than in completed ones. Table 22 presents the cross-tabulation of

TABLE 21 Deterrent characteristics, by type of structure burglarized

[Percent]

Characteristics	Type of structure		Total[a]
	Residential	Nonresidential	
Extent of lighting:			
Street lights within 100 feet	64 (3,553)	68 (1,661)	65 (5,214)
No street lights within 100 feet	36 (2,011)	32 (765)	35 (2,776)
Total	100 (5,564)	100 (2,426)	100 (7,990)
Lighting with respect to the point of entry:			
Lighted	28 (1,516)	39 (919)	31 (2,435)
Not lighted	72 (3,904)	61 (1,456)	69 (5,360)
Total	100 (5,420)	100 (2,375)	100 (7,795)

TABLE 21 Deterrent characteristics, by type of structure burglarized - continued

Characteristics	Type of structure		
	Residential	Nonresidential	Total[a]
Visibility of point of entry:			
Visible	26 (1,432)	41 (973)	30 (2,405)
Not visible	74 (4,091)	59 (1,380)	70 (5,471)
Total	100 (5,523)	100 (2,353)	100 (7,876)
Extent of alarm systems:			
Premises with alarms	1 (57)	20 (501)	7 (558)
Premises without alarms	99 (5,629)	80 (1,948)	93 (7,577)
Total	100 (5,686)	100 (2,449)	100 (8,135)
Functioning of alarm systems:			
Alarm operated	43 (23)	51 (250)	50 (273)
Alarm did not operate	57 (31)	49 (242)	50 (273)
Total	100 (54)	100 (492)	100 (546)
Security inspection conducted:			
Security inspection	9 (512)	17 (407)	11 (919)
No security inspection	91 (5,117)	83 (1,987)	89 (7,104)
Total	100 (5,629)	100 (2,394)	100 (8,023)
Dog on premises:			
Dog present	12 (402)	2 (33)	9 (435)
Dog not present	88 (3,071)	98 (1,386)	91 (4,457)
Total	100 (3,473)	100 (1,419)	100 (4,892)
Serial numbers etched on property:			
Identifying serial numbers	9 (299)	10 (132)	9 (2,131)
No identifying serial numbers	91 (3,129)	90 (1,263)	91 (4,392)
Total	100 (3,428)	100 (1,395)	100 (4,823)

[a]Total number of cases for each variable may vary because of missing cases.

eight deterrent characteristic variables with attempted and completed burglaries. Few of the relationships observed here could be considered substantial. Of those burglaries that were attempted but not completed, 11 percent occurred on premises having alarms, and 5 percent on premises with no alarm systems; this is a substantial relationship according to the "proportionate difference" criterion. Attempted burglaries were also more likely to occur on premises with no identifying serial numbers (5 percent) than on premises with identifying serial numbers etched on property (1 percent). The remaining relationships are not substantial and show few differences between deterrent characteristic variables and attempted burglaries. For example, attempted burglaries are as likely to occur on those premises in which a dog is present as on those in which there is no dog.

However, examining relationships for attempted and completed burglaries creates a major problem: there is no valid way of determining the actual number of potential burglaries that were thwarted. In other words, it may be that certain characteristics of target structures deterred potential offenders from even attempting an illegal entry. Attempted burglaries, for example, would most likely be reported to the police if someone (e.g., the victim or a neighbor) either observed the illegal trespass or if there were some physical evidence that an attempt had actually been made (e.g., presence of a broken window). Even with this limitation, it was nonetheless thought worthwhile to examine in further detail the characteristics of attempted and completed burglaries.

Table 23 examines the relationship between attempted and completed burglaries and the type of structure burglarized. Its data show that attempted burglaries are about equally likely to occur in residential and nonresidential structures. Five percent of all residential burglaries were attempted compared with 6 percent of all nonresidential burglaries.

Because two mutually exclusive outcomes were involved (either the burglary was attempted or it was completed), PAA would seem to be an efficient method for exploring these possible relationships. The data, however, did not fully support a PAA solution. First, only about 5 percent of all cases reported herein resulted in attempted burglaries; thus, the data were quite skewed. Because there were only 427 attempted cases, case attenuation quickly limited the number of PAA branches. Furthermore, a number of relationships were "logically necessitated," and, therefore, these variables had to be excluded from the analysis. For example, financial loss exhibited a substantial relationship with attempted burglaries, for if a burglary was only attempted, then no financial loss could occur. The data showed that all attempted burglaries were characterized by no financial loss. A similar relationship was also evident for forcible and nonforcible entries. All attempted burglaries were characterized by a forcible entry, thus supporting the earlier supposition that unless some physical traces of an

TABLE 22 Deterrent characteristics, by attempted and completed burglaries

[Percent]

Characteristics	Attempted	Completed	Total[a]
Extent of lighting:			
Street lights within 100 feet	5 (285)	95 (4,929)	100 (5,214)
No street lights within 100 feet	5 (137)	95 (2,639)	100 (2,776)
Lighting with respect to point of entry:			
Lighted	6 (147)	94 (2,288)	100 (2,435)
Not lighted	5 (263)	95 (5,097)	100 (5,360)

TABLE 22 Deterrent characteristics, by attempted and completed burglaries - continued

[Percent]

Characteristics	Attempted	Completed	Total[a]
Visibility of point of entry:			
Visible	6 (155)	94 (2,250)	100 (2,405)
Not visible	5 (262)	95 (5,210)	100 (5,472)
Extent of alarm systems:			
Premises with alarm systems	11 (59)	89 (500)	100 (559)
Premises without alarms	5 (368)	95 (7,210)	100 (7,578)
Functioning of alarm systems:			
Alarm operated	12 (34)	88 (240)	100 (274)
Alarm did not operate	9 (25)	91 (249)	100 (274)
Security inspection conducted:			
Security inspection	6 (51)	94 (869)	100 (920)
No security inspection	5 (369)	95 (6,735)	100 (7,104)
Dog on premises:			
Dog present	5 (20)	95 (415)	100 (435)
Dog not present	5 (223)	95 (4,234)	100 (4,457)
Serial numbers etched on property:			
Identifying serial numbers	1 (3)	99 (428)	100 (431)
No identifying serial numbers	5 (228)	95 (4,164)	100 (4,392)

[a]Total number of cases for each variable may vary because of missing cases.

TABLE 23 Attempted and completed burglaries, by type of structure burglarized

[Percent]

	Type of structure		
	Residential	Nonresidential	Total
Attempted	5 (273)	6 (153)	5 (426)
Completed	95 (5,413)	94 (2,296)	95 (7,709)
Total	100 (5,686)	100 (2,449)	100 (8,135)

attempted burglary were present, it was unlikely to be discovered and subsequently reported to the police.

Figure 2 presents the initial PAA branches obtained for those burglaries that were attempted. The first split occurred on the variable property damage. Those instances in which no damage resulted (2.0 percent) were less likely to be attempted burglaries than those in which property was damaged (7.0 percent). Under the category "no damage" the next split included the variable time of day. One and two-tenths percent of all daytime burglaries were attempts compared with 3.8 percent of those burglaries occurring at night. For those burglaries characterized by property damage, attempted burglaries were more likely to occur in structures that had alarm systems (13.9 percent) than in structures having no alarm system (6.8 percent). The rate of attempted burglaries was highest for incidents characterized by alarm systems and damage to property, and lowest for burglaries occurring during the daytime with no property damage: the respective figures are 13.9 percent and 1.2 percent. These findings, however, must be viewed cautiously because of the small number of cases included in Figure 2.

Summary and Conclusions

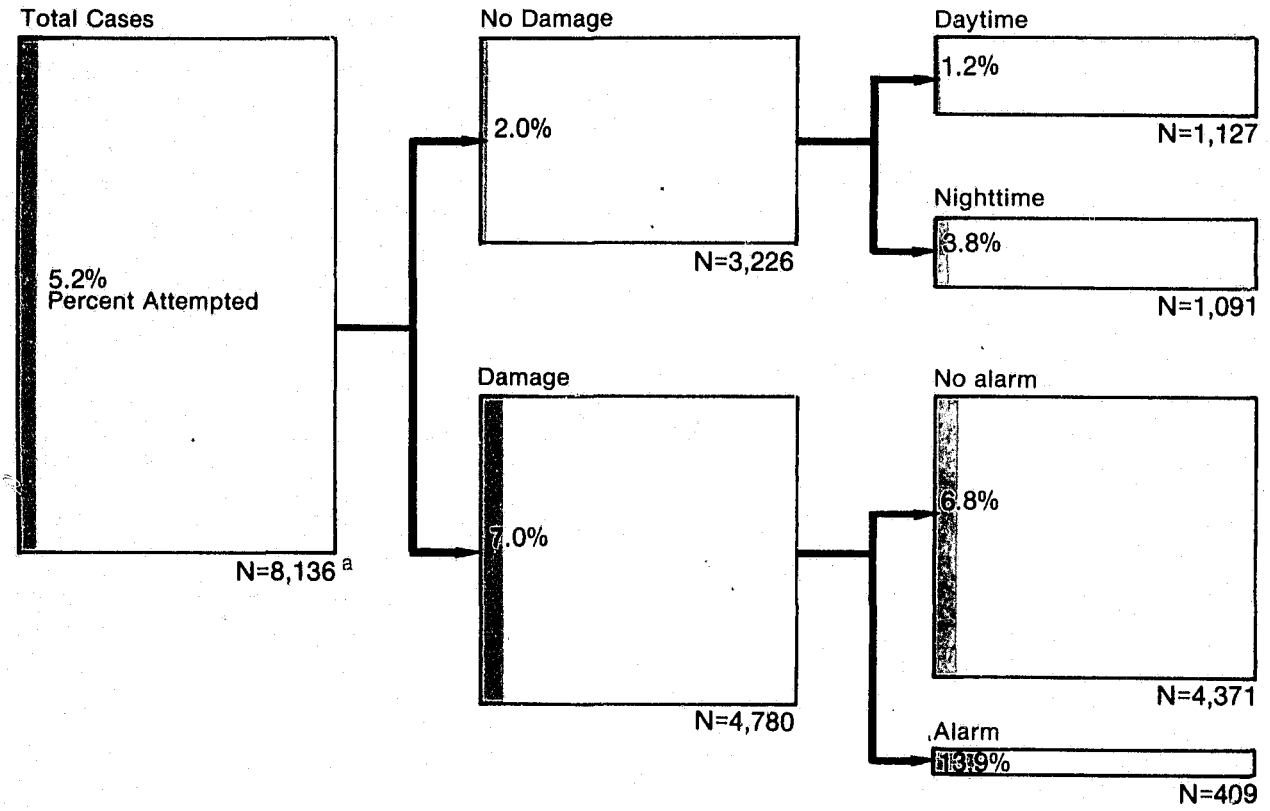
The examination of burglary incident data undertaken in this report has focused upon the correlates of burglary as distributed across space and time. Although the orginal goal of the California project was an assessment of the relative reduction of burglary over a 1-year period, the data serve many other areas of inquiry as well. Accepting the premise that crime is a structured event and that patterned variation could be discovered in the commission of burglary, the analysis sought to uncover the relationships among various incident characteristics. For example, burglary losses were found to be of moderate value and included goods easily converted into cash. Although residential burglaries were more likely than nonresidential burglaries to result in a financial loss, the amount of loss reported was similar for both types of structures. Currency was more likely to be stolen from nonresidential than from residential structures. Jewelry and furs, however, were more frequently the object of residential burglaries. Most burglaries involved some degree of forcible entry that was more likely to be associated with nonresidential than with residential burglaries. Furthermore, nonresidential burglaries were frequently characterized by forcible entries in which tools were utilized and property was damaged.

Residential burglaries occurred predominantly during the week and in the daytime, with nonresidential burglaries occurring more frequently on weekdays and during the hours of darkness. No seasonal fluctuation in burglaries was found to exist (for either residential or nonresidential burglary), and with the exception of alarm systems, deterrent characteristics bore little relationship to whether or not a burglary was completed. Attempted burglaries were more likely to be reported for those premises that had alarm systems.

PAA singled out those variables most closely associated with the percent of burglaries cleared. Financial loss was found to be substantially related to whether or not a burglary was cleared. Burglaries in which no financial losses were reported were more likely to be cleared than those resulting in a financial loss. To a lesser extent, the use of tools and property damage were also associated with the percentage of burglaries cleared. Within those groups exhibiting similar characteristics, burglaries were more likely to be cleared if no tool was used, if no property damage resulted, and if the burglary occurred in a nonresidential structure.

It is interesting to note the extent to which the correlates of burglary incidents are similar across widely

FIGURE 2 PAA results for attempted burglaries



[a]Cases reported in subcells may not add to the total number of cases because of missing values.

divergent geographic areas. That is, research focusing on burglary conducted in different settings has produced similar findings, indicating that similar types of burglaries are being committed across various geographic regions of the country. Furthermore, victimization studies have also shown quite consistent results in that the characteristics of burglary incidents reported in victimization studies are quite similar to those reported to the police.

The data further show that burglaries are most likely to be committed when residents or employees are absent. Thus, residences are more likely to be burglarized during the daylight hours when many people are at work or away from home for other reasons (e.g., shopping). On the other hand, commercial establishments face a higher probability of being burglarized at nighttime when employees have left for the day. These findings, coupled with the relatively high percentage of nonforcible burglaries, may underscore a lack of attention to simple security precautions by many victims of burglary.

Although the analysis of deterrent characteristic features was problematic in some respects, the data do, at least, question the utility of employing such measures on a wide scale and underscore the need for evaluative research on prevention programs. For example, the more expensive or difficult to implement the deterrent characteristic, the less likely it was to be in general use. Although approximately 65 percent of all reported burglaries included structures with street lights within 100 feet of the premises, fewer than 10 percent had alarm systems.

Analysis of various deterrent characteristics also revealed few differences between attempted and completed burglaries. A higher percentage of attempted burglaries might be expected to occur for those structures employing preventive techniques of some type, but this was not the case. Only where alarm systems were present were attempted burglaries more likely to be reported to the police. Although it is possible that protected properties may be the targets of few attempts, these findings nonetheless suggest that use of various burglary abatement techniques requires closer scrutiny than it has previously received.

The second report in this series continues the line of inquiry initiated above. Just as certain incident characteristics were found to be associated, so too may the characteristics of burglary offenders. Hence, the subsequent report examines the social correlates of those apprehended for burglary, including age, race, sex, and previous criminal history of burglary offenders; number of crime partners; and distance traveled to commit the offense.

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U.S. DEPARTMENT OF JUSTICE
LAW ENFORCEMENT ASSISTANCE ADMINISTRATION

USER EVALUATION QUESTIONNAIRE

Crime-Specific Analysis:
The Characteristics of Burglary Incidents
Analytic Report No. 10

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8. Can you point out any specific statistical techniques or terminology used in this report that you feel should be more adequately explained? How could these be better explained?

9. Are there ways this report could be improved that you have not mentioned?

10. Please suggest other topics you would like to see addressed in future analytic reports.

11. Please suggest any specific criminal justice data bases or sources of criminal justice data that could be explored in future analytic reports. (Please give as full a citation as possible.)

CUT ALONG THIS LINE

12. In what capacity did you use this report?

- ☐ Researcher
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- ☐ Government employee other than criminal justice - *Specify* _____
- ☐ Other - *Specify* _____

13. If you used this report as a governmental employee, please indicate the level of government.

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14. If you used this report as a criminal justice agency employee, please indicate the sector in which you work.

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- ☐ Public or private defense services
- ☐ Courts or court administration
- ☐ Probation
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- ☐ Parole
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15. If you used this report as a criminal justice employee, please indicate the type of position you hold. *Mark all that apply*

- ☐ Agency or institution administrator
- ☐ General program planner/evaluator/analyst
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- ☐ Operations or management planner/evaluator/analyst
- ☐ Program or project manager
- ☐ Statistician
- ☐ Other - *Specify* _____

16. Additional comments

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