



Explaining Residential Robberies

*A study into the characteristics of victims, residences and
locations of residential robberies.*

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CHARACTERISTICS OF RESIDENTIAL ROBBERIES

Residential robberies are increasingly seen as a social problem. Their impact on society is high. By identifying potential targets, a focused and efficient approach can be developed to reduce this form of criminality. For this purpose residential robberies in police district Gelderland-Midden from are analyzed. This report shows the results of the collected and analyzed characteristics of victims, residences and locations of residential robberies. It is also examined if there are incidents which precede the residential robberies. The research question is whether residential robberies can be explained, and perhaps prevented, with these the results.

BACKGROUND

The most violent form of robberies, residential robberies, have increased and are becoming more violent. In 2001 fewer than one in five robberies was a residential robbery, but in 2009 this number had risen to nearly one in three (Mesu et al, 2011). The impact on the victims and their environment is high. In recent years both the phenomenon and the approaches to deal with the problem have received national attention, but there is still relative little research into what happens during residential robberies. Politicians also became aware of this growing problem and in 2009 the Dutch government installed a taskforce to do more research into robberies. In addition, the Bovenregionaal Recherche Overleg (BRO) and the the Koninklijke Landelijke Politie Dienst (KLPD) conducted a nationwide analysis. The purpose of this analysis was to develop an integrated national approach to tackle robberies and to develop and address bottlenecks in the current approach. In 2010 a report of this analysis was published. The major conclusion was that there is not a uniform approach in how to tackle the problem of robberies (Rovers et al., 2010). The reports also concluded that there was no policy at the strategic level regarding this type of criminality. The investigation process should be improved.

In addition, the 'Landelijke expertgroep Overvallen' is entrusted with the task to collect and analyze more information about this topic. This expert group has decided to investigate residential robberies in the police Unit East. This study is conducted in Gelderland-Midden, one of the districts in Unit East, and analyzes the residential robberies from 2009 up to and including 2012. The aim of this research is to analyze more information about the targets of residential robberies in Gelderland-Midden and thereby find out how robbers select their targets. A central topic is target selection, but also general information about residential robberies is analyzed. Characteristics of the victims, the residences and the locations are collected. When it is explained why targets have these characteristics, risk objects can be identified. Also, possible preceding incidents of residential robberies are studied. Perhaps some incidents often precede the robberies and victims are repeated victimized. If this is the case, some residential robberies can be prevented by using these incidents as portents. The research question relating with the aim of this research is; *What characteristics do the victims and residences of residential robberies have, and to what extent can residential robberies by explained by this information?* The sub questions used to answer the research question are: (1) *What are the characteristics of the victims and residences which are robbed, and do certain characteristics correlate?* (2) *Are there certain incidents that precede residential robberies and what characterizes these incidents?* (3) *Can residential robberies be explained on the basis of characteristics and preceding incidents?* To answer these questions, theories from the Environmental Criminology are used.

THEORETICAL BACKGROUND

Environmental Criminology is a set of theories that share a common interest in criminal events and the immediate circumstances in which they occur. Environmental criminologists look for crime patterns and try to explain them by environmental influences. They try to make predictions about emerging crime problems and ultimately inform develop strategies that might be employed to prevent crime (Wortley & Mazerolle, 2008). Three environmental criminology theories are central in this study; *the rational choice theory, the routine activity theory and the crime pattern theory*. In addition, theories of *repeat victimization* are used to explain previous incidents. Based on these theories assumptions and hypothesis about characteristics of targets of residential robberies are formulated. When discussing the results it will become clear whether the assumptions and hypotheses are confirmed or rejected.

The rational choice theory is founded on the assumption that offenders are more or less rational in their decision making and seek to benefit themselves by their criminal activity. It is hypothesized that, if the cost-benefit ratio associated with a action is changed so that the likely benefits are outweighed by the likely costs, the potential offenders' choices will change (Morrison & O'Donnell, 1996). The theory seeks to understand how the offender makes crime choices and has an image of the offender who thinks before he acts, even if only for a moment, taking into account some benefits and costs in committing the offence (Felson & Clarke, 1997). The rational choice theory is an 'empty' theory, which need further interpretation for specific situations. According to Cornish & Clarke (1986), criminal behavior is not only purposeful and rational, but also specific crime. There are two points of criticism on this theory. The first point is that the behavior of an offender is never completely rational and explainable. For this, the theory introduced the concept of "bounded rationality". It attempts to say that rationality is not always the same thing as perfection, and that decisions sometimes must be made under less favorable conditions (Cornish & Clarke, 1986) (Petrosino & Brensilber, 2003). The second point of criticism is that some claim that this theory is to some degree untestable, as it is almost always possible to interpret behavior of an offender as rational. Yet, in this research the theory is suitable for explaining certain behaviors of offenders, especially when it is used in combination with other theories (Eck & Weisburd, 1995).

More focused on the actual target is the routine activity theory. This theory is about the cohesion between offender, victim and environment. According to this theory, crime is the result of the convergence in time and space of a certain triangle. The theory is related to the rational choice theory, because it is assumed that most of the criminal activities are rational acts. According to this theory, individual perpetrators cannot be seen separated from their environment. Any successfully completed crime requires at a minimum an *offender*, with both criminal inclinations and the ability to carry out those inclinations, a person or object providing a *suitable target* for the offender, and the *absence of controllers* capable of preventing the violation. The lack of any one of these elements is sufficient to prevent a crime from succeeding. Therefore, prevention needs to be aimed at disrupting this convergence (Felson & Cohen, 1980). There are three types of capable controllers; intimate handlers, guardians and place managers. *Intimate handlers* are people who have direct personal influence over an offender (such as parents or teachers). When these persons are present potential offenders do not commit crimes, but most adults are away from intimate handlers for many hours of the day and many offenders have few or no intimate handlers (Felson, 1986). The possible controllers of the targets are *guardians*. Guardians can be persons, but also formal authorities such as public police. The third type of controllers are

persons who take care of places, the so-called *place managers*. Place managers regulate behavior at the locations they control. Figure 1 shows the three types of controllers and what they control (Eck & Weisburd, 1995).

Figure 1



Eck's crime triangle¹

The presence of certain products can also make a target vulnerable. Some products attract criminals and bring a certain risk with them. These are 'hot products'. What makes a product hot, is summarized by CRAVED; an acronym referring to six elements making products attractive to thieves. Hot products must be *concealable, removable, available, valuable, enjoyable* and *disposable* (Clarke, 1999). In this study, there is a focus on the presence of a safe.

Crimes do not occur randomly or uniformly in time or space. The crime pattern theory is used to gain insight into the target selection patterns of offenders and the areas where they live. This theory states that an offender's direction of travel to a criminal event coincides with paths he or she frequently takes on a routine basis. To gain insight into the target selection patterns of offenders, the areas where offenders live and commit crimes must be analyzed. These areas are often defined in terms of activity and awareness spaces. Activity space is defined as the area that an individual has direct contact with, because of their routine activities. The awareness space can be defined as the environment that the offender has some familiarity with (Iwanski et al, 2011). This theory assumes that offending usually takes place within the awareness space of an offender. The awareness space is determined by the *nodes* and *paths* of the routine activities of the offenders. Nodes are the central places in their lives and paths determine where people go and what they learn about the city. Also, offenders consistently commit crimes in neighborhoods they personally know or that are very similar in physical, social and economic characteristics to their home neighborhoods. Crime patterns cluster around offender and victim nodes and along the principal pathways between them (Brantingham & Brantingham, 1995). Also, crime generators and crime attractors influence the distribution of crime. Crime generators are areas to which large numbers of people are attracted for reasons unrelated to any particular level of criminal motivation they have. Crime generators produce crime by creating concentrations of people and other targets in settings that are conducive to particular types of criminal acts. Crime attractors are places, areas, or neighborhoods, which create criminal opportunities to which strongly motivated offenders are attracted because of the known opportunities for particular types of crime (Brantingham & Brantingham, 1995).

¹ <http://www.popcenter.org/learning/60steps/index.cfm?stepnum=8>, on 15-06-2012

Repeat victimization can be defined as 'a person, object or place is being more than once affected by crimes within a certain period' (Hakkert & Oppen House, 1996). Repeats can be the same or different crime types. There are two explanations for repeat victimization, also known as the signal and the boots explanations. The signal explanation argues that victimization marks people and places that have enduring attributes that attract offenders. According to this explanation, both the initial crime and the repeated crime reflect the elevated risk associated with stable attributes of the target. There is no connection between the crimes, only a shared cause. The second explanation is that the initial victimization boosts the likelihood of a repeat victimization. Under this explanation, the initial crime alters something about the victim that increases his or her risk of becoming a crime victim again. In this case, there is a connection between the crimes and the first crime increases the chance of becoming a victim yet again. Thus the boost explanation is compatible with the possibility that a repeat offence against the same person or target involves the offender who committed the initial offence (Bernasco, 2007) (Lopez, 2007) (Kleemans, 2001). The risk of repeat victimization is elevated during the first few months after the initial victimization and decreases as time passes (Polvi et al. 1991).

APPLICATION OF THE THEORY

The theoretical framework serves the purpose of identifying characteristics or elements which need to be considered when examining the residential robberies. There are three elements by which offenders may select their targets; victims, objects and the locations. Characteristics of these elements are examined. The second part of the research examines whether there are incident which precede robberies. From the theories assumptions and hypotheses are extracted to examine and link the characteristics.

Victim selection

The first part of the in-depth analyses concerns victim selection. Assumption 1 is based on the idea that offenders are rational and try to increase the success rate. Based on researches and assumptions, it is expected that victims can be divided into different victim groups (assumption 2). If assumption 2 is confirmed, assumption 3,4 and 5 should show differences between the victim groups.

Assumption 1	Robbers are, at the time of the robbery, in the majority compared to the victims.
Assumption 2	Victims of residential robberies can be classified into the victim groups vulnerable people, entrepreneurs and criminals.
Assumption 3	Robbers are more likely to select a target by which they have concrete reason to expect booty, than any other target.
Assumption 4	Robbers are more likely to select a target in their awareness space, than a target outside their awareness space.
Assumption 5	Robbers are more likely to select a target in their social network, than a target outside their social network.

Residence selection

The second part of the in-depth analysis concerns the objects and whether certain characteristics of the object can explain the selection. There is a focus on the presence of a safe, because the easiest way to get hold on the content of a safe is by way of a robbery.

Assumption 6	<i>Robbers often select residences where CRAVED products are present.</i>
Assumption 7	<i>Robbers often select residences where there is a safe.</i>
Assumption 8	<i>Robbers often select residences where no guardianship is present.</i>
Assumption 9	<i>Robbers often select residences without supervision from the environment.</i>

Location selection

The third part of in-depth analysis examines the location of the targets. After plotting the addresses of the robbed residences, it is to determine whether there are hotspots in the area. By using hypotheses, differences between neighborhoods with hotspots and near neighborhoods without robberies are analyzed. The averages of demographic -, economic - and physical characteristics will be compared.

Hypothesis 1	Hotspots are more likely to be formed near a crime generator, then a random place
Hypothesis 2	Hotspots are more likely to be formed near a crime attractor, then a random place.
Hypothesis 3	Robbers are more likely to select a target in a neighborhood with the same social, economic and physical characteristics as their own neighborhood, than in a random neighborhood

Preceding incidents

The second part of the research, the incident part, examines if there are certain incidents which precede residential robberies. Within the police department Gelderland-Midden, employees wonder if it is likely that offenders observe a safe during a prior incident and subsequently come back to rob this safe. Once again, there is a focus on the safe. This part of the research is a exploratory research and explanations of repeat victimization are not conclusive. Nevertheless elements of repeat victimization are studied.

Assumption 10	The victim groups of residential robberies are often been victim of an preceding incident.
Assumption 11	With victims who have been victim of a preceding incident, there is a high expectation of booty during the robbery
Assumption 12	Victims who have been victim of a preceding incident often have a safe.

METHODOLOGY

In this research all residential robberies from 2009 up to and including 2012 in the police district Gelderland-Midden are analyzed. The study took place using a content analysis of all the registrations in LORS². LORS defines a residential robbery as: *'it by violence or threat of violence removing or extorting certain goods, committed against persons from a confined space'* (KLPD, 2009).

LORS is a central registration system for all robberies and ram raids in the Netherlands and from these records, all necessary data are extracted. The Bedrijfsprocessensysteem (BPS) and its successor Basisvoorziening Handhaving (BVH) are also two data collection methods. BPS was a police registration system which recorded all types of offenses. The BPS was used until mid-year 2009, thereafter the BVH made its entrance. The robberies committed before July 2009 were processed in the BPS and robberies committed after July 2009 are found in the BVH. The remaining data are collected using multiple (police) registration systems.

² Dutch definition: Landelijke Overvallen en Ramkraken Systeem

All the home robberies are coded by means of a checklist. This checklist provides the general description of the home robberies. The information needed for the first part of the study is available in the checklist. Some variables for the in-depth analysis are also available in the checklist. Also a second checklist for coding the incident was developed. This checklist processed the relevant characteristic of the incidents. Once all the files are categorized and the appropriated variables are collected, the assumptions and hypotheses can be tested by entering the results in SPSS and doing statistical tests.

This research can be divided into two parts. The first part consists of a general analysis, followed by a in-depth analysis. The in-depth analysis combines certain characteristics to each other, based on the assumptions extracted from the theory. The second part examines possible preceding incidents. Given the fact that the risk of repeat victimization decreases with time (Polvi et al, 1990) only the incidents in the year prior to the robbery are analyzed. If one type of incident often precedes a robbery, the two offences might have a connection. However, the incident may also occur when a robbery is no consequence. The aim is to examine the differences between 'the incident with robbery as a consequence' and 'the incident without robbery as a consequence'. A sample will be taken to create the group 'incident without robbery as a consequence' and the characteristics of the groups will be compared. If differences between the two groups are found, perhaps the incident with the relevant characteristic can be used to predict robberies.

THE RESULTS

In the period 2009 up to and including 2012, 107 residential robberies are committed in Gelderland-Midden. The general analysis shows that most residential robberies take place in dark months and dark hours. That most robbers operate in the dark can be explained by the fact that there is less supervision from the environment in the dark. According to the routine activity theory, there is absence of effective control. This statement is strengthened by the fact that during the light months robberies are committed later.

A t-test and a victim/robber ratio of 0.71 show that robbers are in the majority at the time of the robbery. They have ensured that they have the possibility to overpower victims, something that increases the likelihood of successful committing the crime. **Assumption 1** can be confirmed. Although robbers make sure they are in the majority, they choose to attack during dark hours on which most victims are present in the residence. Perhaps less supervision from the environment is more important than less present victims. Victims of residential robberies can be classified into the victim groups vulnerable people, entrepreneurs and criminals. Only 11 times (10,3%) a victim cannot be classified in these groups. **Assumption 2** can also be confirmed. The largest group is the vulnerable people, followed by the entrepreneurs and the criminals. When characteristics are being set of against the groups, differences become visible. The expectation of booty (**assumption 3**) is confirmed for the entrepreneurs and the criminals, but not for the vulnerable people. Mostly robbers select victims within their awareness space, but this is not the case for entrepreneurs. So **assumption 4** is confirmed for vulnerable people and criminals, but not for entrepreneurs. Lastly, **assumption 5** seems only applicable on criminals. Due to the combination of high expectation of booty and the proximity of the robbers, is it assumed that there is familiarity between the criminals and the offenders. Vulnerable people seem to become victim of an opportunity robbery; there is low expectation of booty and the only element that explains their selection is the proximity. Offenders seem to work oriented at entrepreneurs; there is a high expectation of booty and offenders travel more kilometers to rob this victim type.

Table 1

Victim group	Booty expectation	Victim/offender distance
Vulnerable people	Low	0-5 kilometer
Entrepreneur	High	> 15 kilometer
Criminal	High	0-5 kilometer

Another option is that robbers select their targets based on the residences. According to the theories, guardianship and the presence of booty play an important role. The stolen goods consist mainly of cash, jewelry and electronics. These are all craved products, so it can be concluded that offenders often select residences where CRAVED products are present.

(Assumption 6). However, it should be noted that the definition of the CRAVED products by Clarke (1999) is very broad. The presence of a safe is also examined. In less than a quarter of the cases a safe is present. Unfortunately, in most cases it is unknown whether a safe is present or not. Based on these findings we cannot conclude that offenders select residences where safes are present, so **assumption 7** cannot be confirmed. Detached houses are the most selected (31,8%). It is striking is that these residents also have the most security. According to the routine activity theory offenders select objects with a absence of control. **Assumption 8** cannot be confirmed based on these results. There are two other elements on which offenders can base their residence selection; the environment or the residents. Detached houses do have low supervision from the environment, because there are fewer people in the immediate vicinity. This is consistent with **assumption 9**. In addition, entrepreneurs or persons with a higher income often live in detached houses, what ensures a high expectation of booty. A safe is also most present in a detached house. A flat is least selected. This can again be associated with the same two elements. Besides, stolen goods from a flat deviates from the overall image of stolen goods. The most common stolen good is money, but in a flat this is a mobile phone.

An important element within the environmental criminology is the location. The location of a target can have a major influence on the risk of being robbed. In Gelderland-Midden five hotspots are form in the examined period³. Hotspot neighborhoods are compared with neighborhoods without robberies. This comparison reveals two significant differences: (1) The average income is lower in the hotspot neighborhood and (2) more businesses are established in the hotspot neighborhood (Table 2). A low average income shows that offenders commit robberies in neighborhoods similar to their own, because the motives of offenders usually are of an economic nature and offenders do not live in rich neighborhoods (Petrosino & Brensilber, 2003). So, on one element there is a confirmation for **hypotheses 3**. Secondly, businesses attract many different people for reasons unrelated to criminal motivation and can therefore function as crime generators. **Hypothesis 1** can also be confirmed. No evidence was found for **hypotheses 2**, non on the neighborhood level and non on the district level.

³ In this research, the criteria for a hotspot is three or more robberies in one neighborhood.

Table 2

Variable	Hotspot neighborhood	Control neighborhood	P-value
Average income	28716,67	33300	P = 0,069**
Established businesses (excl. agricultural businesses)	316	99	P =0,031*

*Significant at $\alpha = 5\%$

**Significant at $\alpha = 10\%$

The second part of this research consists of a exploratory study into preceding incidents. The analysis shows that prior to 26,2% of the robberies, in the year preceding the robbery, an incident occurred. Vulnerable people are less often victim of preceding incidents and they lower the average (Table 3). Criminals are most frequent victim of a preceding incident. This is attributable to the social network of a criminal. Criminals become victims of various incidents, without a pattern. Entrepreneurs also often become victim of a preceding incident, mostly of a burglary. Entrepreneurs are selected because of the expected booty. **Assumption 10** can be confirmed for criminals and entrepreneurs, but not for vulnerable people.

Table 3

	No preceding incidents	Preceding incidents	Total	Total within the preceding incidents
Vulnerable people	83,6% (46)	16,4% (9)	100% (55)	32,1% (9)
Entrepreneur	61,5% (16)	38,5% (10)	100% (26)	35,7% (10)
Criminal	60% (9)	40% (6)	100% (15)	21,4% (6)
Unknown	72,7% (8)	27,3% (3)	100% (11)	10,7% (3)
Total	73,8% (79)	26,2% (28)	100% (107)	100% (28)

When looking at the relation between preceding incidents and expected booty, most preceding incidents occur in residences where, during the robbery, robbers had a high expectation of booty (71%). Additionally, after an incident the expectation of booty is high (67,9%). **Assumption 11** can be confirmed.

It might be possible that offenders observe a safe during a preceding incident and subsequently come back to rob this safe. This explanation is in line with the 'boost' explanation of repeat victimization. At a majority of the victims who have a safe, an incident did not precede (60%). This is due to the fact that the number of robberies with no preceding incidents is three times as large as the number of robberies with preceding incidents. Comparing these groups will not produce a proper comparison. When looking only at the robberies with preceding incidents, it appears that most incidents precede at victims with a safe (35,7%). So, **assumption 12** also can be confirmed; victims who have been victim of a preceding incident, often have a safe.

Based on these results no explanation for repeat victimization can be given, because no explanation can be excluded. For example; it is not sure whether expectation of booty is gained

during the first incident or whether it already existed. Also the relationship between the safe and repeated victimization cannot be confirmed. By means of a offender study a confirmation for repeated victimization can be given, but due to the lack of offender data this research did not included these variables.

The analysis of preceding incidents shows that burglary is the type of incident that often precedes residential robberies. Because the aim is to distinguish the burglaries with a robbery as a consequence from other robberies, a comparison between the groups 'burglary with robbery as a consequence' (group 1) and 'burglary without robbery as a consequence' (group 2) have been made⁴. A few inequalities are found. Table 4 shows the noteworthy differences between the characteristics.

Table 4 (N = 21)

Characteristic	Group 1	Group 2
Type of victim	Entrepreneur	Vulnerable victim
Type of residence	Detached house	Terraced house
Presence safe	57,1%	9,5%
Residence secured	38,1%	4,8%
Booty	Money	Jewelry

Although the sample is too small to be statistically substantiated, this comparison is a useful exploratory study and the results can be used for a possible follow-up study. Entrepreneurs seem to become victim of preceding burglaries, but vulnerable people are most commonly victims of a 'normal' burglary. The differences concerning the presence of a safe are also remarkable, but it is not clear whether the presence of a safe is a cause or indicator for possible repeat victimization. The booty and the type of residence as well mismatch, but perhaps these differences can be ascribed to the different victim groups. These results give enough material to consider a follow-up study to substantiate the results of this comparison.

DISCUSSION

The aim of this research is to distinguish potential targets of residential robberies, so that a efficient and focused approach can be developed to reduce the problem of residential robberies. Characteristics of the victims, houses, locations and preceding burglaries are examined.

Most residential robberies take place in dark periods, when there is low supervision from the environment. The victims, which are usually in the minority compared to the robbers, can be divided into three groups; vulnerable people, entrepreneurs and criminal. Vulnerable people become victim of an opportunity robberies, almost all the offenders live within 5 kilometers. The entrepreneurs become victim of offenders how work more focused. The majority of the offenders travel more than 15 kilometer to rob this victim and the booty expectation is high. Criminals become victims because of their social network. The offenders have a connection with

⁴ For group 2, a sample was taken from the committed burglaries in Gelderland-Midden, in the period 2009 up to and including 2012.

the criminals and they know where to collect booty. It is remarkable that detached houses are the most selected and have the most security. Monetary does not seem to deter offenders. Low supervision does seem to have influence. Detached houses have low supervision from the environment. Flats are the least selected and have a high supervision from the environment. Two characteristics from the location seem to influence the target selection process of offenders. The average income in neighborhood with robberies is low, so it is concluded that offenders commit robberies in neighborhoods similar to their own. Also, significantly more businesses are established in neighborhoods with robberies. Businesses function as a crime generators.

Criminals and entrepreneurs most frequently become victim of preceding incident. Looking more closely at the incidents, it can be concluded that only burglaries at entrepreneurs are likely to lead to robberies. Also, the presence of a safe is an important indicator. On the basis of these data, no conclusive explanation can be given about whether there is repeat victimization or any connection between the incidents.

RECOMMENDATIONS FOR PREVENTION

First of all, because robberies take place in dark months and dark hours, monitoring during these moments should be enhanced. The routine activity theory claims that the elimination of one of the required elements (an motivated offender, suitable target or the absence of controllers) is sufficient to prevent a crime from succeeding. Residents can take preventive measures to increase control on the houses. They can use a neighborhood alarm or shutters. In addition, residents can choose not to open the door when it is dark. Control of the (potential) offenders can be improved by assigning handlers to offenders.

Victims need to influence the elements which can be influenced by intervention. Vulnerable people are not able to influence the fact that they are vulnerable, but they can see to it that they; close windows and doors, put CRAVED products out of sight and do not open the door when it is dark. Entrepreneurs should not bring earnings to their residence and make use of a (professional) security transport. Designing a invention for criminals is often not possible, because they are often unwilling to leave the criminal circuit or cooperate with the police.

Areas where many businesses are located, should also add measures. Additional patrol by police, more security cameras or improvement of the lightings, are options to make it more difficult for robbers to complete the crime. The fact that many offenders live proximately to victims can improve the identification and monitoring of (potential) offenders. Finally, targets in neighborhoods with high crime rates have an increased risk of being robbed. Victimization increases the chance for surrounding persons and/or objects to become a victim (Lopez, 2007).

Although it is not certain and proved that there is repeat victimization, burglaries often precede at entrepreneurs who live in detached houses. In addition, a safe is mostly present. These entrepreneurs need to extend their security to their houses. When a burglary has taken place, the police could inform the victim about preventive measures and prepare a security plan together.

LIMITATIONS

The chosen research design and the data collection method contain certain restrictions which have its impact on the level of generalization and validation of the results. Because of the available information and the nature of the assignment, it is not possible to form a control group

and test certain hypotheses. Secondly, the available data was restricted. This results in less available data for some analysis and poor comparisons. By means of other data sources it is possible to fill in some of the gaps. Because of the little information about offenders, this element is not examined and certain conclusions cannot be made. Without motives or other offender information no explanation can be given for possible repeat victimization and a relation between preceding incidents and residential robberies cannot be proven. Finally, limited information about the presence of a safe is available. In most cases it is unknown whether a safe is present, because this is not discussed during interrogations.

RECOMMENDATIONS FOR FURTHER RESEARCH

Offender research is necessary to examine repeat victimization. Without motives or other offender information no explanation for repeat victimization can be given. Further, this study shows that burglaries precede certain robberies and that certain characteristics of these burglaries differ from the overall image of burglaries. In order to substantiate the results of the study into preceding incidents, it is necessary to increase the amount of cases. Another option is to conduct a research into burglaries and study when residential robberies are a consequence.

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