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I, Justin A. Heinonen, hereby submit this original work as part of the requirements for the degree of:

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Measuring how Much Criminologists Know About Crime: Using Environmental Criminology to Assess Our Knowledge of Crime Events

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Measuring How Much Criminologists Know About Crime: Using Environmental Criminology to Assess Our Knowledge of Crime Events

A Dissertation Submitted to the
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In Partial Fulfillment of the
Requirements for the Degree of
Doctor of Philosophy

In the School of Criminal Justice
of the College of Education, Criminal Justice, and Human Services

by
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ABSTRACT

Understanding crime events is critical to theory and practice. Increasingly, some criminologists have pointed to the utility of understanding crime events for understanding both offenders and how crime can be prevented. Nevertheless, there remains today a strong bias toward studying offenders in criminological research even though research indicates that criminological knowledge of the causes of criminality is highly problematic (Weisburd and Piquero, 2008). So there is reason to suspect that criminologists may also know little about crime events. A handful of studies have tried to shed light on this suspicion, but these studies are limited. To directly address this concern, I developed an assessment process that is systematic, replicable and theory-driven to measure what we do and do not know about specific crime events. I used this process to review studies of residential burglary and personal robbery from nine journals over 30 years to answer three research questions: How much do criminologists know about these crime events? Are certain journals more useful for understanding them? And, to what extent do criminologists study specific burglary and robbery events? In response to the first question, my findings suggest that criminologists know very little about these crime events, as compared to what theory would expect them to know. In response to the second question, my findings suggest that environmental criminology journals, compared to traditional criminology journals, are more likely to publish crime event studies. And in response to the third question, my findings suggest that criminologists seldom study specific burglary and robbery events, and show few signs of changing. I discuss the limitations of my findings and their implications for research and policy.
DEDICATION

This dissertation is dedicated to the memory of Mary Ellen Heinonen, my Mom and “best buddy in the whole wide world.”
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There is no way I could have written a dissertation without the guidance and support of so many people. First, I would like to thank God. Through faith, anything is possible (and this dissertation is proof).

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Third, I would like to thank my parents, David and Mary Ellen Heinonen. Dad, no matter what I do in life, you always make me feel like it’s the greatest thing ever. And this was one of those things. When I didn’t want to work anymore, I kept going for you, because I just wanted to make you proud. Thanks, Dad, I love you. Mom, we just had our “talk.” I know you can hear me and I know you can see this. So you already know. Mom, I love and miss you so much.

Fourth, I want to thank Will Stadler, my buddy. Man, graduate school was tough, but we wouldn’t have become friends without it; and for that, I’m thankful. Thanks for all the much-needed laughs throughout the years.

Most of all, I would like to thank Elizabeth Heinonen, my amazing wife and best friend. You never asked to be the wife of a graduate student, and I know it wasn’t always easy. You saw the best and worst of me during this process, but no matter what, you loved and supported me unconditionally. If I could, I’d put your name on my degree. You deserve it. I love and admire you more than you will ever know.
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CHAPTER 1: INTRODUCTION

Understanding crime events is central to criminology. However, criminologists have traditionally tried to explain criminality rather than crime events. The implicit assumption is that if we understand criminality, we can understand crime events, and perhaps reduce them. But this assumption is slowly being abandoned. For example, there has been a shift in ecological theories from the location of the offender (Shaw and McKay, 1972) to the location of the crime event (Brantingham and Brantingham, 1981). Furthermore, early definitions of white-collar crime based on the characteristics of offenders (Sutherland, 1983) have been supplemented with definitions based on the features of the offense (Edelhertz, 1970). Finally, Wortley (2001) described how offender motivation can be precipitated by the situation surrounding the crime event.

For the most part, however, the bias toward studying criminality still remains strong within the criminological community. For example, Taking Stock: The Status of Criminological Theory, edited by Cullen, Wright, and Blevins (2006), provides reviews of research on “traditional” criminology but not event-based theories (i.e., environmental criminology). Moreover, research published in leading journals tends to overlook the crime event. From 2005 to 2009, only about eight percent of studies in Criminology appear to use an event-based theory or framework to study crime. Admittedly these metrics are crude but crime events do not appear to be a high priority in some popular criminology texts.

Increasingly, some criminologists have pointed to the utility of understanding crime events for understanding both offenders and how crime can be reduced. Felson (2002) showed how the basic features of the crime event have important implications for understanding offenders. Weisburd and Piquero (2008) suggested that a lack of crime specificity might explain
the weak empirical performance of some offender-based theories. Clarke and Eck (2005) demonstrated the importance of crime events for problem-solving. Finally, systematic reviews show that event-based crime prevention is often effective (Eck, 1993; Hesseling, 1994; Guerette and Bowers, 2009). In sum, understanding crime events might be far more critical to crime prevention than understanding offenders.

The Research Questions

So how much do criminologists know about crime events? We do not know. In the chapter that follows, I review studies that suggest there is reason to be pessimistic about the answer. However, this is based more on suspicion than strong evidence. Therefore, I shed initial light on this question in this dissertation. Criminologists have assessed what is known about criminality (i.e., offender motivation) but this does not reveal what is known about crime events. Recently some criminologists have assessed our knowledge of crime events but these efforts are few, unsystematic and not crime-specific. More importantly, they do not compare what is known against a reliable objective (i.e., some hypothetical baseline of what should be known). Consequently, these studies do not identify specific gaps in knowledge.

To directly address these concerns, I developed an assessment process that is systematic, replicable and theory-driven to measure what we do and do not know about specific crime events. I used environmental criminology (i.e., from which the objective created) to probe nine journals over 30 years for findings on residential burglary and personal robbery. Assessing all crime events, or even a broad class of crime events (e.g., violent crimes or property crimes), is too large an undertaking for one piece of research. But this research can build a foundation which others can add to and which can help foster debate and discussion about crime event information.
I also answered two other research questions. First, are certain journals more useful for understanding residential burglary and personal robbery? I answered this question by examining in which journals crime event studies and crime event findings are published. Second, has there been a substantial shift toward research on specific burglary and robbery events? I answered this question by examining how criminologists have studied burglary and robbery over time.

**Placing Results in Context**

Two of the research questions have implications for broader disciplinary perspectives. First, examining how much criminologists know about crime events demonstrates the progress toward scientific realism in criminology. Second, examining how criminologists have studied burglary and robbery over time shows if there has been a paradigm shift in criminological research (toward crime-specific events). Below, I discuss each issue in more detail.

First, realism is a framework for scientific explanation. It is very different from other epistemological approaches that use statistical correlation to establish causation (Eck and Liu, 2008). Correlation does not describe how outcomes are “grown” so it does not truly explain (Eck and Liu, 2008: 1999). By contrast, realists do explain by describing the causal mechanisms that produce an outcome, or how an outcome occurs (Pawson and Tilley, 1997; Eck and Liu, 2008). This dissertation is consistent with the realist’s perspective. I examine criminological knowledge to see how much we know about the processes that create crime. In doing so, I demonstrate the extent of scientific realism in criminology.

Second, criminological research should lead to evidence-based crime prevention. But it can only do so if criminologists produce knowledge about crime itself. Some users of criminological knowledge claim that this seldom occurs (see Clarke, 2004). The contention is
that criminologists traditionally study the causes of criminality for crime in general. This consigns criminology to long-term policies focused on variables that are not easily changed; for instance, anomie or economic deprivation (Clarke, 2004). So what type of research is useful to prevent crime more immediately? Environmental criminology suggests we must study crime-specific events. I examined trends in the publication of research on specific burglary and robbery events. A rise in this type of research suggests a paradigm shift has occurred in criminological research.

**Summary**

Criminological research should help us reduce crime. It does this only if it improves our knowledge of the processes that create crime events. To date, the state of crime event knowledge in criminology is unclear. So we cannot say with certainty how much criminologists contribute to crime prevention. In the chapter that follows, I review previous assessments of criminology’s knowledge. The general conclusion that I reach is that criminologists may know little about crime events. In Chapter 3, I describe how to use theory to assess this claim. In Chapter 4, I use environmental criminology to develop an objective for the assessment process. In Chapter 5, I describe my methods to apply the assessment process in a systematic review of published literature. In Chapters 6 through 8, I report the results of my analyses of the coded literature. Finally, in Chapter 9, I discuss the limitations of generalizing my findings and their implications for research and policy.
CHAPTER 2: PRIOR REVIEWS OF CRIMINOLOGY’S KNOWLEDGE

Recall that the study offenders and the study of crime are not the same thing, though they may be complementary. The former approach produces knowledge about criminality while the latter provides knowledge about an event. In this chapter, I review some studies that assess the state of knowledge in each field. The general conclusion I reach at the end is that criminologists may know little about crime events. Furthermore, the methods that have been used to investigate our knowledge of crime events are limited, but could be improved. The examples that follow are not meant to be exhaustive but intended only to illustrate these points.

**Narrative Assessments of Criminological Theory**

Our understanding of offenders is indicated by the empirical performance of criminological theory (see Weisburd and Piquero, 2008). So in this section and the next I review assessments of several criminological theories. First, Matsueda (1988) reviewed a handful of studies to determine the empirical status of differential association theory. Although it required further development, it was empirically supported. Support was strongest in studies that operationalized “associations with delinquent peers” or measured directly “learned definitions of law violation” (i.e., the theory’s central concept). Support was also strong in studies published in the late 1980s that used more sophisticated statistical techniques (e.g., structural equation modeling).

Second, Burton and Cullen (1992) examined the empirical status of strain theory. Support varied by which version of the theory was tested. Individual strain was seldom supported. By contrast, Merton’s version was supported about 60 percent of the time. In sum, different versions of strain and the way each is tested has resulted in a “fuzzy portrait” of its empirical status (Burton and Cullen, 1992: 17).
Third, Kempf (1993) examined the empirical status of Hirschi’s (1969) social control/social bonds theory. Like strain theory, support varied by methodology. However, she concluded overall that tests of social bond theory represent a “scattered” literature. Consequently, the empirical status of this theory is unclear.

The narrative reviews above are older but researchers still use this method to assess our knowledge of offenders. Recently Cullen et al. (2006) edited a large volume of studies examining the status of criminological theory, many of which were narrative reviews. Each assessment is summarized in Table 2.1 (except the theory of correctional intervention). Table 2.1 also summarizes the other assessments of criminological theory discussed in this chapter.

<table>
<thead>
<tr>
<th>Study</th>
<th>Method</th>
<th>Theory</th>
<th>Results</th>
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<tbody>
<tr>
<td>Matsueda (1988)</td>
<td>Narrative</td>
<td>Differential association</td>
<td>Supported</td>
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<tr>
<td>Burton &amp; Cullen (1992)</td>
<td>Narrative</td>
<td>Anomie/strain</td>
<td>Mixed support</td>
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<tr>
<td>Kempf (1993)</td>
<td>Narrative</td>
<td>Social bonds</td>
<td>Mixed support</td>
</tr>
<tr>
<td>Pratt &amp; Cullen (2000)</td>
<td>Quantitative</td>
<td>Low self-control</td>
<td>Supported</td>
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<td>Pratt &amp; Cullen (2005)</td>
<td>Quantitative</td>
<td>Social disorganization</td>
<td>Supported</td>
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<td>Anomie/strain</td>
<td>Moderate support</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Economic deprivation</td>
<td>Supported</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Routine activity</td>
<td>Moderate support</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Deterrence</td>
<td>Weak support</td>
</tr>
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<td></td>
<td></td>
<td>Social support/altruism</td>
<td>Moderate support</td>
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<td>Subcultural</td>
<td>Weak support</td>
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<td>Criminology overall</td>
<td>Weak support</td>
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<tr>
<td>Weisburd &amp; Piquero (2008)</td>
<td>Quantitative</td>
<td>Anomie/strain</td>
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<td>Cullen et al. (2006)</td>
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<td>Akers &amp; Jensen</td>
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<td>Control</td>
<td>Supported</td>
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<tr>
<td>Gottfredson</td>
<td>Narrative</td>
<td>General strain</td>
<td>Supported</td>
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<tr>
<td>Agnew</td>
<td>Narrative</td>
<td>Institutional anomie</td>
<td>Mixed support</td>
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<tr>
<td>Messner &amp; Rosenfeld</td>
<td>Narrative</td>
<td>Collective efficacy</td>
<td>Supported (but limited evidence)</td>
</tr>
<tr>
<td>Sampson</td>
<td>Narrative</td>
<td>Segregation/inequality</td>
<td>Mixed support (but limited evidence)</td>
</tr>
<tr>
<td>Peterson et al.</td>
<td>Narrative</td>
<td>Radical criminology</td>
<td>Supported (but limited evidence)</td>
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<tr>
<td>Lynch et al.</td>
<td>Narrative</td>
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<td>Miller &amp; Mullins</td>
<td>Narrative</td>
<td>Peacemaking criminology</td>
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<td>Weak support</td>
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<td>Pratt et al.</td>
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<td>Braithwaite et al.</td>
<td>Narrative</td>
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Quantitative Assessments of Criminological Theory

Other researchers have used statistical approaches to assess criminological theory. First, Pratt and Cullen (2000) used meta-analysis to examine the empirical status of low self-control theory. Support was “fairly impressive” (p. 951). In fact, low self-control emerged as one of the strongest predictors of crime. However, it did not explain the majority of variation in offending. Consistent with theoretical expectations, self-control also had general effects across different outcomes and samples.

Second, Pratt and Cullen (2005) used meta-analysis also to examine the empirical status of macro-level criminology. This is not a specific theory of crime but rather a broader criminological perspective focused on the relationship between characteristics of ecological aggregates (e.g., cities, states, neighborhood and Census tracts) and crime rates. Seven specific macro-level theories were assessed. Social disorganization and resource/economic deprivation were most strongly supported. Anomie/strain, social support/altruism, and routine activity theory were moderately supported. Deterrence/rational choice and sub-cultural perspectives were weakly support.

Third, Pratt et al. (in Cullen et al., 2006) meta-analyzed the empirical status of individual-level deterrence theory. Relative to other theories, deterrence theory was weakly supported (but it did predict white-collar offenses). The strength of theoretical variables also weakened in multivariate models and varied by methodology (e.g., sampling procedures and model specification).

Finally, Weisburd and Piquero (2008) examined the status of criminology in general. They argued that explanatory power in criminological theory reveals “how criminologists are doing in practice” (p. 463). Accordingly, they assessed variance explained in empirical tests of
criminological theory published in *Criminology* between 1968 and 2005 (N=169). There were three major findings. First, the average $R^2$ across all theoretical models was low (.389), with a quarter of the models below twenty percent. Second, explanatory power has not improved over time. In fact, it has declined. Third, crime-specific models were superior to general models (e.g., rape or homicide were better explained than index offenses or deviance in general).

According to the authors (p. 492), this demonstrates the importance of “specific crime problems” and the difficulty of explaining “individual criminality.”

**Conclusion**

The preceding review makes two important points. First, criminologists struggle to explain offenders. Most criminological theories are not strongly supported and have not improved over time (Weisburd and Piquero, 2008; also see Table 2.1). Second, being crime-specific helps to explain offenders (Weisburd and Piquero, 2008). This is consistent with a long literature suggesting that the process of crime differs, even within certain classes of crime (Clarke 1980; 1983; Cornish and Clarke, 1987). A seemingly simple crime like “robbery” is actually a collection of several more specific crime events: bank robbery and personal robbery are very different. And even personal robbery has multiple forms that are only superficially similar: forced taking of lunch money among school students, armed attacks on pedestrians and aggressive panhandling, for instance. Goldstein (1990) makes the same point about prostitution. Restricting attention to a crude category of crime would conceal these differences and limit our ability to understand and prevent distinct crime events. Later, I discuss how this issue relates to assessing our knowledge of crime events.

So what does this suggest about the state of crime event knowledge? If criminologists do not understand offenders, it is possible they may also know little about another core area in the
field—crime events. But it is clear that we must understand crime-specific events in order to improve both theory and practice. So it is critical for researchers to assess the state of knowledge in this area.

Assessments of Crime Event Knowledge

Some studies have tried to assess what we know about crime events. First, Vazquez et al. (2005) analyzed 7 years of data (1995 to 2001) from Idaho’s National Incident-Based Reporting System (NIBRS) to describe our knowledge of intimate partner violence. Results were based on over 36,000 incidents of intimate partner violence involving almost 40,000 victims from NIBRS (no other sources were reviewed). Overall, we have only basic knowledge about intimate partner violence events (e.g., trends in incidence, temporal patterns and counts of offenders and victims). The authors concluded that situational context of intimate partner violence is not well-understood.

Second, White and Fisher (2008) examined our knowledge of identity theft. However, they preemptively claimed that we lack even very basic information about the crime (e.g., prevalence, offender and victim characteristics and victim losses). Therefore, they did not actually conduct an assessment. Instead the authors focused on why our knowledge is so sparse. Based on a loosely structured literature review (i.e., there was no methods section) they argued our knowledge is “weak” (p. 14) because reliable data and research are limited. But this is speculative since no assessment was done.

Third, Prior (2009) examined our knowledge of anti-social behavior. In particular, he reviewed “official” statistics to determine its prevalence. He suspected this would be well-understood given that Britain has responded aggressively to anti-social behavior (i.e., where
policy exists so too must sufficient knowledge). However, due to inconsistent definitions and data limitations, very little is known about the true prevalence of anti-social behavior.

Finally, *The Oxford Handbook of Crime and Public Policy*, edited by Tonry (2009), summarizes our knowledge of 24 types of crime. To save space, the topics covered in each entry are listed in Appendix 1. Overall, knowledge on offense prevalence and policy effectiveness was most common (these topics were discussed in every entry). However, knowledge about the process of crime was far more limited (e.g., victim-offender relationship, targets and techniques and process).

**Conclusion**

The preceding assessments provide a glimpse into our knowledge of crime events. As was the case with offenders, crime events do not appear to be well-understood. We sometimes possess descriptive knowledge about them, but not always. Rarely do we have knowledge about the processes that create crime. However, these studies suffer from three limitations that make these conclusions seem based more on suspicion than strong evidence.

First, these studies do not have an objective for knowledge. By itself, the “story” of what we know is not enough to determine if we know little, some or a lot. It shows only what criminologists believe the field knows about different crime events. Using an objective lets us compare what is known to what should be known. Weisburd and Piquero (2008), for instance, used explanatory power so they could show a gap between some abstract ideal ($R^2=1.00$) and an estimate of true knowledge. So there are gaps in knowledge whenever explained variance is less than 100 percent. They found that most theories fell short of this objective by about 60 to 80 percent. The author’s in Tonry’s (2009) volume can point to “what we know we know” but
cannot estimate “what we know we do not know.” I will elaborate on this distinction in the next chapter.

Second, these assessments are not systematic. Importantly, authors do not defend why they review certain publications to determine the state of knowledge. If methods are not transparent it will be difficult to assess the reliability of the findings. Furthermore, assessments are not replicable.

Third, most assessments are not crime-specific. For reasons mentioned above, it is not useful to examine crude offenses like anti-social behavior, robbery, assault and burglary. What we know about bank robbery could differ substantially from what we know about personal robbery. So it is inappropriate to assess our knowledge of robbery in general.

Summary

In this brief review, I have shed light on our knowledge of offenders and crime events. Assessments of each topic lead to the conclusion that criminologists may not understand crime events and, therefore, may contribute little to crime prevention. But limitations in previous assessments of crime event knowledge raise questions about the validity of this claim. At the same time, however, these limitations also show how future assessments could be improved. In order to describe the true state of crime event knowledge, I argue there is a need to develop an assessment process that is systematic, replicable and theory-driven to identify what we do and do not know about specific crime events. In the chapter that follows, I describe how environmental criminology can be used to create the objective for this process.
CHAPTER 3: USING THEORY TO ASSESS CRIME EVENT INFORMATION

The way researchers assess our knowledge of crime events could be improved. In this chapter, I make progress by using theory to create an objective to measure crime event information. First, I explain why theory must be used. Second, I discuss why environmental criminology is the appropriate theoretical framework. Third, I review three foundational theories in environmental criminology to identify constructs for the objective. In the chapter that follows I will use these constructs to create three distinct types of crime event information. These will serve as the foundation for the assessment process introduced in Chapter 5.

Why Theory?

Reviews of literature are undertaken because we suspect much is known on a topic so it should be gathered and summarized. The result of a good review tells us “what-we-know-we-know” about a particular topic. But, how do estimate “what-we-know-what-we-do-not-know” about a topic? Reviews of literature, no matter how systematic, cannot show this. We need some objective that tells us what we should know. Theory provides this objective for crime events.

A good theory identifies what must be known in order to understand a particular phenomenon. Criminological theory, for instance, “tells us what we need to examine in the world in order to understand crime” (Paternoster and Bachman, 2001: 1). For example, routine activity theory (Cohen and Felson, 1979; Eck, 2003) posits that, in addition to offenders, we must examine targets and places to understand crime events.

Figure 3.1 uses a bucket analogy to illustrate how theory provides an objective for crime event information\(^1\). The bucket represents the “universe” of knowledge on a topic. Theoretical

\(^1\) The bucket analogy is a modification of a “bucket metaphor” Wilson, Rostker, and Fan (2010) used to explain the police staffing challenge.
information (represented by the dashed line) is what we are expected to know about a topic.

Because theory is tentative, the dashed line can move upward over time as theory changes. The
difference between what we know (i.e., known-knowns) and theoretical information show what
should be known but is not. These gaps are known-unknowns. Because theories change, there is
information that we do not know is yet relevant and do not possess. These unknown-unknowns
are a mystery but can be revealed often when theory changes.

To complete this description, I suggest there are also unknown-knowns. This is
information that researchers have not yet made sense of. The field is unaware it possesses this
information but it is apparent once revealed. For example, take the diffusion of crime prevention
benefits. This phenomenon was well-documented in the literature prior to the mid-1990s but
was not organized in a useful way. After Clarke and Weisburd (1994) drew attention to it, these
unknown-knowns became obvious and important. Using my analogy, they took some of the
“puddle” and put it into the bucket.

Figure 3.1: A Bucket Model for a Theory-Based Objective
A good way to conclude this section is to summarize each type of knowledge mentioned so far, using Donald Rumsfeld’s (2002) rather infamous typology:

- “known-knowns”: existing knowledge in which we are confident we know we know;
- “known-unknowns”: knowledge that theory tells us we should know but do not (i.e., identified gaps in existing knowledge);
- “unknown-knowns”: empirical regularities the field has not yet made sense of;
- “unknown-unknowns”: undiscovered knowledge of which its potential existence remains unsuspected by theory.

Is Theory the Only Option?

There is no alternative to using a theory-based objective for assessing crime event information. Objectives used commonly in other studies are not plausible. For example, Weisburd and Piquero (2008) used explanatory power, the ideal being $R^2=1.00$. $R^2$ cannot be used to measure crime event information because findings are not necessarily statistical estimates. Crime events findings can be descriptive. For example, a study might show that personal robberies are frequently committed on weekends.

This is why theory is so useful. It can be used to probe for gaps in knowledge even if it is descriptive. But it is a radical departure from typical assessments. Reviews of criminality have asked, given knowledge, how good is theory? By contrast, I ask, given theory, how good is information? Based on the bucket analogy, this approach is advantageous because it does more than summarize what is known. It enables us to also identify what specifically is unknown.

Environmental Criminology

If using theory is required, what theories should be used? Environmental criminology is a set of theories about crime events. There is no other competing set of event-based theories.
The only possible exception would be the criminal event perspective by Meier, Kennedy, and Sacco (in Meier, Kennedy, and Sacco, 2001). This perspective draws attention to the importance of crime events but does not present a formal theory of them. Broadly, it suggests that, in order to fully understand crime, criminologists must consider how interaction among offenders, victims and context shapes an event. This idea is fully compatible with environmental criminology and is entirely consistent with my assessment process. Three theories in environmental criminology show which constructs should be included in the objective: routine activity theory, rational choice and situational crime prevention. Each is discussed in more detail below.

**Routine Activity Theory**

According to Cohen and Felson (1979), everyday (i.e., routine) activity patterns help us to understand crime. Routine activity theory proposes that structural changes alter where and when people spend time which, in turn, affects the convergence the elements necessary for crime to occur: motivated offenders, suitable targets and an absence of capable guardianship. Absent any one of these factors, crime cannot occur (Cohen and Felson, 1979).

Since its development in 1979, routine activity theory has been elaborated by others. Eck (2003) summarized this expansion in the “crime triangle” (Figure 3.2). The inner triangle describes the necessary elements of crime. The outer triangle contains “controllers” that are responsible for supervising each original element. Overall, handlers have been added (Felson, 1986), places have become explicit elements of crime (Felson, 1987; Sherman, Gartin, and Buerger, 1989), and place managers have been added (Eck, 1994; 1995; Eck and Weisburd, 1995). Guardians, therefore, are one of the controllers of crime. In sum, the inner triangle
identifies what it takes for crime events to occur while the outer triangle shows what it takes to prevent them.

**Figure 3.2: The Crime Event Triangle**

![Triangle Diagram](image)

**Rational Choice**

The convergence of crime elements does not mean that crime will automatically occur. It suggests just that it could—criminals must make the choice to offend. The rational choice perspective sheds light on this process. Offender choice can be divided into two parts: involvement and event decisions (Clarke and Cornish, 1985). Involvement decisions refer to a person’s initial choice to commit a crime (influenced by various social, psychological and biological factors). Once criminals are “ready” to offend, they make event decisions (i.e., how to commit the crime). The immediate situation has a strong influence here. For example, residential burglars might select targets based on the availability of escape routes.

**Situational Crime Prevention**

Situational crime prevention is the practical component of environmental criminology. Its goal is to reduce crime through the manipulation of the immediate environment (Clarke, 1995). Simply, it addresses the minimal elements of crime in a way that makes crime look like a bad choice. So it leverages the principles of routine activity theory and rational choice. In its
latest form, situational crime prevention identifies five factors that shape offender choice: effort, risk, rewards, excuses and provocations (Wortley, 2001; Cornish and Clarke, 2003). So crime is best prevented when effort and risk are increased, rewards and provocations reduced and excuses removed (Cornish and Clarke, 2003).

Summary

In closing, I have argued that it is necessary to use environmental criminology to create an objective to measure crime event information. Routine activity theory specifies the minimal elements of crime. Rational choice suggests that these elements influence offender choice. And situational crime prevention identifies the choice criteria that make crime look good or bad. Taken together, two basic constructs are critical to understanding crime events: the minimal elements of crime and offender choice. In the next chapter, I use these constructs to create three types of crime event information that form the foundation of the assessment process.
CHAPTER 4: THREE TYPES OF CRIME EVENT INFORMATION

I begin this chapter by arguing that our understanding of crime events is indicated by the information we possess on offender choice. I then argue that information about the minimal elements of tell us about offender choice. Therefore, I use the minimal elements of crime to create three distinct types of crime event information grounded in offender choice. Each type of crime event information describes the crime event but they vary how much they reveal about offender choice. I use these differences to create four distinct assessment outcomes: nothing is known, little is known, some is known and much is known.

Why Offender Choice?

A crime event is a process. In this sense, crime events unfold much like a “scripts” involving a sequence of logical steps (Cornish, 1994). Crime scripts can be divided into three stages: actions that occur before, during and after the event (Clarke and Cornish, 1985; Cornish, 1994; Clarke and Eck, 2005). By examining what offenders do across theses stages, we learn how crimes are committed, which is equally important as understanding why (Clarke and Eck, 2005). Understanding the process of crime events is critical to prevention—it reveals multiple intervention points where the crime could be disrupted.

But to understand the process of crime events we must understand offender choice. According to Cornish (1994: 187), scripting the crime process “expresses the routinized, yet flexibly responsive nature, of criminal decision making.” For example, a crime script for auto theft might show that offenders make choices about preparation (e.g., gathering tools), instrumental action (e.g., vehicle selection, approach, break-in techniques) and exiting after the crime (Cornish, 1994). Empirical research has also demonstrated offender choice in the process of street robbery (Jacobs and Wright, 1999), residential burglary (Wright and Decker, 1994),
convenience store robbery (Petrosino and Brensilber, 2003) and shoplifting (Weaver and Carroll, 1985).

In sum, our understanding of crime events is indicated by our understanding of how they occur. We learn about the process of crime through offender choice. Thus, our knowledge of offender choice is a benchmark for how much criminologists know about crime events. Accordingly, I use offender choice as the objective to measure crime event information.

**Obtaining Information on Offender Choice**

Obtaining information about offender choice is difficult because choice-structuring criteria (e.g., effort, risk, rewards, provocations, excuses) are seldom directly measured or explicit in research. However, according to rational choice theory, we can infer information about offender choice by examining the context of crime events. This is the basis for the criminal event perspective (Meier, Kennedy and Sacco, 2001). It is also consistent with the field of victimology which suggests that, in addition to offenders, we must consider victims in order to fully understand crime events.

So what elements comprise the context of crime events? Again, we turn to routine activity theory: an offender, a target and a place. These elements are part of every crime event so they must shape offender perception and, ultimately, offender choice. For that reason, I used these basic elements to create three types of crime event information discussed below. Before doing so, however, I explain why crime controllers are excluded.

**What about Handlers, Guardians and Managers?**

Routine activity theory also identifies handlers, guardians and managers as “outer” elements of the crime event. But these are controllers of crime. They help us understand why crime events do not occur. There is a separate literature devoted to evaluating crime prevention
based on these controllers (see Eck, 1993; Poyner, 1993; Lester, 1993; Hesseling, 1994; Guerette, 2009; Guerette and Bowers, 2009).

Evaluation research demonstrates offender choice but in terms of preventing crime. I try to demonstrate offender choice in terms of committing crime. Therefore, I reviewed only studies that potentially contain findings about how offenders choose techniques, times, targets and victims. This research is more in line with Clarke’s (2004: 59) for criminologists to better understand “the steps in the process of committing crime” as well as the “conditions that facilitate its commission.” Just as this type of research is not included in crime prevention evaluations, I did not review evaluation research here.

**Types of Crime Event Information**

Information about offender choice comes from the context of crime. So the more we know about offenders, targets and places the more we understand offender choice. Below, I use offenders, targets and places to create three distinct types of crime event information: irrelevant, basic and contingent. I describe each in more detail below.

First, irrelevant information comes from the offender. It describes the offender but, by itself, says nothing about offender choice. Offender race, gender and age are some examples. Knowing that most street robbers are males under the age of 30 describes the crime event, but offenders have no choice over these factors. Irrelevant findings do not help us understand offender choice.

Second, basic information describes a single variable associated with offender choice. Offenders have no choice in their race, gender or age, but they do choose a technique, time, target and place. An example is finding that most street robbery victims are less than 25 years
old. This demonstrates offender choice (i.e., target selection) but does not describe why younger victims are preferred. Basic findings are superior to irrelevant findings but they are not the best.

Third, contingent information describes how offender choice is based on the situation. By definition, it involves interaction—contingent findings must describe at least two variables. One example is finding that street robbers are more likely to use violence against younger victims. Here, the choice of technique depends on the target. Contingent findings might describe more than two variables. For example, a study could show that some street robbers use the snatch method on shoppers with visible bags in busy entertainment districts. This finding demonstrates offender choice from the technique, target and place.

The more variables described by a finding the better we understand the crime event. In the last example we can infer that perceived rewards are high (i.e., the shopping bag is exposed), effort is low (i.e., no direct contact with the victim is needed to snatch the bag) and risk is low (i.e., the offender can escape into the crowd). Contingent findings are the most useful for understanding crime events because they reveal the most about offender choice.

Finally, offender demographics (e.g., race, age, gender) “count” for contingent findings. On its own, offender age is irrelevant information because it says nothing about choice. However, knowing that older street robbers commit most of their crime at night is more meaningful. This contingent finding demonstrates that the age of a street robber influences their choice of victim.

Arguably, there is a lot we could know about crime events. Consequently, the types of crime event information described above might not capture everything. However, they are defensible on theoretical grounds. Furthermore, they are parsimonious and make the assessment process more practical.
Assessment Outcomes

All crime event information is not equal. Irrelevant tells us the least; basic tells us more; and contingent tells us the most. I use these differences to create four distinct assessment outcomes: nothing is known, little is known, some is known or much is known.

1) *Nothing is known*: This outcome is the easiest to detect. We do not possess any irrelevant, basic or contingent findings. The number of known-unknowns is at its maximum.

2) *Little is known*: Most findings are irrelevant, coupled with little to no basic or contingent findings. So most knowledge does not help us understand offender choice. The number of known-unknowns is high.

3) *Some is known*: Most findings are basic, coupled with little to no contingent findings. We understand offender choice but only somewhat. The number of known-unknowns is medium.

4) *Much is known*: Most findings are contingent. The number of irrelevant or basic findings does not matter. The number of known-unknowns is small. Clearly, this is the most desirable result.

Summary

In this chapter I have argued that offender choice is a useful objective to measure our knowledge of crime events. I then discussed how information about offenders, targets and places informs offender choice. I used these variables to create three distinct types of crime event information. Contingent information is superior because it describes how the situation influences offender choice. Absent contingent findings, our understanding of crime events is
limited. In chapter that follows, I describe my methods for probing the published literature for each type of finding.

However, before I conclude this chapter, there is one important qualification. By definition, my approach overlooks decision-making by other actors in the crime event, notably victims. Victim choice can shape the process and outcome of a crime event (e.g., victim resistance). So information about victims helps us better understand crime events although it does not reveal anything about offender choice. Later, I will discuss briefly the victimology and its implications for the assessment process.
CHAPTER 5: METHODS

In this chapter, I discuss my methods for using a theory-based objective to assess our knowledge of crime events. First, I introduce the assessment process and explain its basic operation. Specifically, I operationalize the three types of crime event information and discuss coding procedures for each. Second, I describe my procedures for selecting journals and studies to review. Finally, I explain my reasons for assessing residential burglary and personal robbery.

Basic Coding Operations

Figure 5.1 is an instrument to assess crime event information. It operates like a checklist and should be applied study-by-study (i.e., one instrument per study). Up to three distinct findings can be assessed on a single form (if there are more than three findings additional forms can be used). For a single finding, I first coded it as irrelevant, basic, contingent or other in the column “information type” (I explain “other” findings below). No further coding is necessary for irrelevant or other findings. For basic and contingent findings, I also selected a specific sub-category (e.g., “technique” for a basic finding or “offender/technique” for a contingent finding).

Earlier, I argued that offender choice should be understood across the entire process of a crime event (e.g., before, during and after). However, theory is not entirely clear about whether one stage is particularly more or less important to understand. So unlike crime event information, process information cannot yet be meaningfully ranked in order to create definitive assessment outcomes (e.g., it is unclear when much is known). Therefore, I did not code process information for findings.

I coded studies in two ways: event or non-event and crime-specific or crime-obscure. This produces four distinct types of studies: crime-specific/event, crime-obscure/event, crime-specific/event and crime-obscure/non-event. Later, I describe each type of study in more detail.
and how I used them to examine how criminologists have studied burglary and robbery over time. I also coded the journal name and date of publication for each study. Finally, I coded studies into two types of journals: a conventional criminology group or an environmental criminology group.

**Figure 5.1: An Instrument to Assess Crime Event Information**

**CrimeType:**

**Journal Information:**

<table>
<thead>
<tr>
<th>Information Type</th>
<th>Technique</th>
<th>Time</th>
<th>Target</th>
<th>Place</th>
<th>Offender Technique</th>
<th>Offender Time</th>
<th>Offender Place</th>
<th>Technique Time</th>
<th>Technique Place</th>
<th>Time Target</th>
<th>Place Target</th>
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<tr>
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</tbody>
</table>

**Study Type:**  
- Crime-specific  
- Crime-obscure

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**Event**

**Non-event**

**Coding Crime Event Findings**

Next, I describe how I code actual study findings. I coded only original research findings. I did not code findings cited in systematic reviews of research or literature reviews. I coded findings only if they are irrelevant, basic, contingent or “other” and describe either
residential burglary or personal robbery. Below, I operationalize these types of findings below and provide an example of each.

**Irrelevant Findings**

I coded a finding irrelevant if it describes offender race, age or gender. For example, most street robbers are under the age of 30. I did not code information about offender motivation.

**Basic Findings**

I coded basic findings into four types: technique, time, target or place.

1) *Technique*: describes how the crime is committed (most residential burglars use a rear entry-point to enter dwellings).

2) *Time*: describes when the crime occurs (most street robberies occur after 6 p.m. or on Tuesdays or during the Christmas season).

3) *Target*: describes the person or object targeted (senior citizens are seldom targeted for street robbery).

4) *Place*: describes where the crime occurred (most street robberies occur near drinking establishments).

**Contingent Findings**

I coded contingent findings into 11 types:

1) *Offender/technique*: describes how an offender trait relates to their method (older street robbers use non-violent techniques).

2) *Offender/time*: describes how an offender trait relates to when crime occurs (older street robbers typically offend during daytime).
3) **Offender/target**: describes how an offender trait relates to the person or object targeted
   (older street robbers prefer attacking people carrying visible goods).

4) **Offender/place**: describes how an offender trait relates to where the crime occurs
   (younger street robbers like to attack near bars).

5) **Technique/time**: describes how the method of offending relates to the timing (street robbers use the “snatch-method” during daytime).

6) **Technique/place**: describes how the method of offending relates to the location (street robbers use violence when they attack near bars).

7) **Technique/target**: describes how the method of offending relates to person or object targeted (street robbers use weapons to attack younger victims).

8) **Time/place**: describes how the timing of crime relates to the location (street robbers offend near check-cashing businesses on Fridays).

9) **Time/target**: describes how the timing of crime relates to the person or object targeted (street robbers target students at the beginning of the school year).

10) **Place/target**: describes how the location of crime relates to the person or object targeted (street robbers attack female college students at nearby off-campus areas).

11) “3+”: describes how more than two variables describe offender choice (street robbers use the “snatch-method” to attack shoppers with bags in busy shopping areas).

**Other Findings**

Some crime event findings cannot be coded as irrelevant, basic or contingent. Take the finding that a large proportion of street robberies involve repeat victims. It appears street robbers prefer certain victims but it is not clear why. Is this choice based on a characteristic of the victim or perhaps a certain place? We cannot tell from this finding. Therefore, I would code it as
“other” information. I coded findings about repeat victimization as basic or contingent only when they also describe a specific variable. For example, I coded as basic a finding that shows repeat residential burglaries are most common at multi-unit apartment buildings. This demonstrates that targets influence the choices to commit repeat burglary.

The role of victims in the crime event has important implications for coding “other” findings. Broadly, victimology tries to identify the factors that increase or decrease the risk of crime victimization. Some theories in this field describe how patterns of routine activities and differences in lifestyle explain victimization risk over time (Cohen and Felson, 1979) and across social groups (Hindelang, Gottfredson, and Garofalo, 1978). Still others have offered alternative explanations of victimization risk, including low self-control (Schreck, 1999; Schreck et al., 2002) and feminism for sexual victimization (Schwartz and Pitts, 1995).

No matter the explanation, victimology highlights the importance of the offender-victim dyad for understanding crime events. Victims can shape crime events independent of offender choice. For example, a street robbery victim can choose to resist an attack. The offender does not make this choice but the finding still helps us understand the crime event. I coded findings on victim choice as “other.”

It is hard to foresee all the different findings that could be coded as “other.” So I cannot say in general how they will affect the assessment outcome. However, I will carefully consider these findings in my assessment. “Other” findings might also lead to the creation of additional categories of crime event information beyond those describe above.

Before shifting to coding studies, I will describe briefly how I distinguished study findings for coding. I coded the study’s “main” finding(s). For example, one study described the risk of robbery by age group. I did not count findings for each group as a separate finding.
Instead, I counted only the main finding: overall, some elderly groups have higher rates of robbery victimization than some younger age groups. Each secondary finding (i.e., the risk for each age group), though slightly different, contributes to this main point.

**Coding Studies**

I first coded studies as either event or non-event. Event studies describe offender choice. Therefore, they must contain basic, contingent or other crime event findings. Studies with just irrelevant findings are non-event. Non-event studies do not contain crime event findings.

Next, I coded studies as either crime-specific or crime-obscured. Crime-specific studies examine a distinct crime event (e.g., bank robbery). By contrast, crime-obscure studies examine crime in general (e.g., robbery). I did not code findings from these studies. It is possible that one contains a basic finding for “robbery,” for instance, but it is not separated by personal robbery, bank or gas station robbery. The finding might be true for bank robbery but not for personal robbery. But we cannot make this determination—the finding is obscured by aggregation.

This coding creates four different types of studies: crime-specific/event, crime-obscure/event, crime-specific/non-event and crime-obscure/non-event. These categories are useful for describing how criminologists have studied burglary and robbery over time. Specifically, I used them to determine whether or not there has been a shift in research toward specific burglary and robbery events (i.e., crime-specific/event research). Below, I describe how each type of study relates to this issue.

1) **Crime-specific/event**: These studies describe specific burglary or robbery events. A steady increase in them indicates a shift in criminological research from offenders to crime-specific events. This is the most desirable study.
2) *Crime-obscure/event:* These studies describe the event of burglary or robbery but not a distinct form. So the finding is obscured by aggregation. The accumulation of these studies indicates a partial shift in criminological research. This is not the most desirable study, but it is not the least.

3) *Crime-specific/non-event:* These studies examine a specific burglary or robbery event but the findings do describe offender choice (e.g., low self-control and street robbery are positively related). The accumulation of these studies also indicates a partial shift in criminological research. Again, this is not the most desirable study, but it is not the least.

4) *Crime-obscure/non-event:* These studies provide no crime event findings and treat crime generally. The accumulation of these studies indicates there has been no shift in criminological research. This study is the least desirable.

**An Example Instrument**

Figure 5.2 is an example of a completed assessment instrument for a hypothetical study. The study examined residential burglary. It was published in *Criminology* in 1999. The study provided three crime event findings. Finding 1 is irrelevant (coded ‘0’ in “information type”). Therefore, no checks were placed in any other columns. Finding 2 is basic (coded ‘1’ in “information type”). It described a target (indicated with an “X” under “target”). Finding 3 is contingent (coded ‘2’ in “information type”). It described interaction between the technique and the target. Accordingly, the study is crime-specific/event.
The assessment instrument shown above is schematic. In reality, I coded studies and study findings directly into an SPSS database. Coding procedures can be found in Appendix 2. Each crime event finding is treated as a case. But studies are also treated as cases. In this sense, the data are hierarchical. Depending on the discussion, findings can be cases and so can studies. So I could find that 16 percent of studies on personal robbery contained irrelevant information, but 34 percent of the findings were irrelevant.

**Literature Search Strategy**

Next I selected publications to review. If the goal is to determine how much is known about a crime event ideally I should have reviewed every relevant publication. This is
impractical and beyond the scope of any single effort. For example, a keyword search in Criminal Justice Abstracts alone nets over 2,000 publications for “robbery” and nearly 1,900 for “burglary.” Exhaustive search strategies that use multiple databases are more practical for systematic reviews focused on narrower topics; for instance, crime displacement (Guerette and Bowers, 2009), the effectiveness of CCTV (Welsh and Farrington, 2009) or the use of meta-analysis in criminal justice and criminology (Wells, 2009).

I took an approach similar to Weisburd and Piquero (2008). As seen in Table 5.1, I extended their work in three ways. First, they also argued that reviewing all tests of criminological theory is impractical and focused on just one journal. I extended this by reviewing nine journals. Second, they used explanatory power as an objective. I used theory. Third, they measured our knowledge of offenders (i.e., criminality). I measured our knowledge of crime events.

<table>
<thead>
<tr>
<th></th>
<th>Weisburd &amp; Piquero</th>
<th>This dissertation</th>
</tr>
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<tr>
<td>Publications</td>
<td>One journal</td>
<td>Nine journals</td>
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<td>Theory</td>
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<tr>
<td>Unit of Analysis</td>
<td>Knowledge of offenders</td>
<td>Knowledge of crime events</td>
</tr>
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</table>

**Table 5.1: How I Extend Weisburd and Piquero (2008)**

**Journal Selection**

Over the last few decades, numerous criminologists have tried to rank the quality of their journals. More recently, Jennings, Higgins, and Khey (2009) extended this literature by examining the stability and variability of journal rankings over time. The top quartile of journals included *Criminology, Sexual Abuse: A Journal of Research and Treatment (SA), Journal of Research in Crime and Delinquency (JRCD), Criminal Justice and Behavior (CJ&B), Crime and Justice (C&J), Journal of Criminal Law and Criminology (JCLC), and Aggression and Violent Behavior*.  

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Behavior (A&VB). I do not review all of these journals, however. Some of them were not always highly ranked (e.g., JCLC fell from second to eighteenth in just a few years). Furthermore, some journals, like SA, are not relevant to burglary or robbery.

There were also some more notable journals missing from this list. These include Justice Quarterly, the Journal of Quantitative Criminology and the British Journal of Criminology. I reviewed these journals because they rank highly in other studies (Stack, 1987; Williams et al., 1995; Sorensen et al., 2006). Finally, I included journals that I expect will focus on crime events. According to Guerette and Bowers (2009: 1340), Security Journal, Crime Prevention and Community Safety: An International Journal and Crime Prevention Studies are “the most relevant” in this area.

In all, I included nine journals that I divided into two groups. The conventional criminology group includes Criminology, the Journal of Research in Crime and Delinquency, Criminal Justice and Behavior, Justice Quarterly, the Journal of Quantitative Criminology and the British Journal of Criminology. The environmental criminology group includes Security Journal, Crime Prevention and Community Safety: An International Journal and Crime Prevention Studies.

In sum, the journals I reviewed varied in rank depending on the study. But each journal received either an “A*” (e.g., Criminology and the British Journal of Criminology), “A” (e.g., JRCD, CJ & B, Justice Quarterly and The Journal of Quantitative Criminology) or “B” (e.g., Security Journal and Crime Prevention & Community Safety) in the Australian Research Council’s (2010) latest outlet rankings. Crime Prevention Studies was not ranked but probably because it is not considered a conventional journal. This suggests that these journals are at least highly visible in the field. Therefore, there is an expectation that they contain findings about
crime events, a fundamental area in the field. There are serious questions about the relevance of these journals if they do not.

I searched these journals over the last 30 years (i.e., 1980-2009). If a journal began publishing after 1980, I reviewed all volumes through 2009. This decision is both practical and strategic. I start in 1980 because this is about the time when the crime event emerged as a concept in mainstream criminology. Therefore, searching prior to these years could result in selection bias.

**Identifying Studies for Analysis**

Regardless of topic area, I logged every original research study from every journal since 1980 into a spreadsheet. Therefore, I excluded editorials, book reviews, introductions, presidential addresses and evaluation research. I then identified from the population of studies all studies of burglary and robbery in general (i.e., not just studies of residential burglary and personal robbery specifically). To identify this subset of studies, I first reviewed study titles, abstracts and key word lists (if available) for the terms “robbery” or “burglary.” During this process, I also took note of studies in which it was not clear if burglary and robbery were examined (e.g., a study of “crime rates”). I later reviewed these studies in greater detail, usually focusing on the methods and results sections to determine if burglary or robbery were examined.

To be counted as a study of burglary or robbery, the study had to examine explicitly one of these crimes. I found delinquency that examined “strong-arming” or “entering a building for theft.” It is not clear if the researcher equates these crimes to burglary or robbery. If so, they are still not clearly distinguished from other similar offenses (e.g., assault, bullying or shoplifting). I did count these as of burglary and robbery. By contrast, some delinquency studies did use the terms burglary (Landsheer and Hart, 1999; Dembo et al., 2007) and robbery (Bemburg, Krohn,
I counted these as studies of burglary and robbery.

**Publication Bias**

Studies and study findings are the units of analysis in this dissertation. Whenever this is the case there is the potential for publication bias. That is, results depend on which research gets published in our field. For example, crime event findings for residential burglary might appear few but only because such manuscripts that contain them typically are not published. The findings exist but because of publication bias they will be absent from an assessment. Publication bias is not as clear in the field I am investigating as it is in other systematic reviews; for instance, reviews of crime prevention evaluations. With evaluations it can be reasonably assumed that the bias is toward publishing positive findings and suppressing negative findings. In my topic, there is no obvious positive or negative finding. Rather, publication bias may act to suppress *all* studies and findings about crime events. In sum, the final conclusion is that publication bias could exist in this dissertation, but its impact is not entirely clear.

**Selection of Crimes**

I cannot assess our knowledge of all crime events. So I assessed but only two crime events: residential burglary and personal robbery. But selecting these crimes makes sense for three reasons. First, they cover the two major offense categories: violent crime and property crime. Second, they considered common offenses. Personal robbery, for instance, represents a large portion of all reported robberies in the U.S. ([Uniform Crime Report, 2009](https://www.fbi.gov). By examining more common crimes, I can more confidently generalize my assessment results: if we know little about these then we likely know even less about more unconventional crimes. Third, these offenses have serious consequences. Burglary victimization results in both emotional stress and
tangible losses (Bernasco, in Tonry, 2009). Personal robbery is a source of fear and can result in severe injury or even death (Gale and Coupe, 2005; Cook, in Tonry, 2009). Clearly criminologists need to understand these offenses so it is important shed light on the current state of knowledge.

In closing, just because I did not assess a particular crime event in this dissertation does not preclude its importance. Consider assault, for instance. Recent evidence suggests that the rate of assault in the U.S. is greater than that of robbery (Rand, 2009). This suggests clearly that assault is an important crime. Accordingly, researchers should assess our knowledge of different types of assault. The assessment process outlined above is replicable so this is possible in the future.

**Summary**

I have described how I will assess crime event information for residential burglary and personal robbery. I began by introducing the assessment process and explaining its basic operation. I then described how I code crime event findings, studies and journals. Next, outlined my strategy for selecting journals and studies to review. Finally, I explained why it makes sense to assess residential burglary and personal robbery in this dissertation. In the next three chapters, I report the results of my analyses of the coded literature to address my three primary research questions.
CHAPTER 6: HOW MUCH DO CRIMINOLOGISTS KNOW?

In this chapter I answer the first research question: how much do criminologists know about residential burglary and personal robbery? But first I examine the population of studies I reviewed to shed light on criminologists’ general interest in burglary and robbery and to provide a context for understanding the analyses that follow. My analysis is purely descriptive: I use frequency counts and percentages as the primary reporting statistics. I do not attempt to examine causal relationships.

How Much Do Criminologists Study Burglary and Robbery in General?

The nine journals I reviewed, from 1980 to 2009, contained 5,713 original research studies. Table 6.1 shows the percent of studies in each journal. I divided the journals into two groups. The first six journals make up the conventional criminology group. These journals are usually older and tend to focus on issues of criminality and the causes of criminal behavior. The second group of three journals makes up the environmental criminology group. These journals are newer and tend to focus on crime events, patterns and methods to prevent crime. Naturally there is some overlap in the subjects these two groups cover, but conceptually this is a useful distinction. Over eighty percent of articles published came from the conventional criminology journals. The abbreviations for journals will be used in subsequent tables to save space.

Were burglary and robbery important topics in these journals? From Table 6.2 we see the answer is “no,” for either group of journals. There is a small difference between groups in how burglary and robbery are examined. Except for The British Journal of Criminology, there is a tendency for studies published in the conventional criminology group to examine burglary and robbery together. By contrast, the environmental criminology group tends to publish studies that examine these crimes separately.
Table 6.1: Percent of Total Studies Examined by Journal

<table>
<thead>
<tr>
<th>Journal</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conventional Criminology (4,656)</td>
<td>81.5</td>
</tr>
<tr>
<td><em>Criminal Justice &amp; Behavior</em> (CJ&amp;B)</td>
<td>18.0</td>
</tr>
<tr>
<td><em>Criminology</em></td>
<td>17.0</td>
</tr>
<tr>
<td><em>The British Journal of Criminology</em> (BJC)</td>
<td>16.7</td>
</tr>
<tr>
<td><em>Justice Quarterly</em> (JQ)</td>
<td>12.4</td>
</tr>
<tr>
<td><em>J of Research in Crime and Delinquency</em> (JRCD)</td>
<td>9.3</td>
</tr>
<tr>
<td><em>Journal of Quantitative Criminology</em> (JQC)</td>
<td>8.1</td>
</tr>
<tr>
<td>Environmental Criminology (1,057)</td>
<td>18.5</td>
</tr>
<tr>
<td><em>Security Journal</em> (SJ)</td>
<td>10.1</td>
</tr>
<tr>
<td><em>Crime Prevention Studies</em> (CPS)</td>
<td>4.2</td>
</tr>
<tr>
<td><em>Crime Prevention &amp; Community Safety</em> (CPCS)</td>
<td>4.1</td>
</tr>
<tr>
<td>Total (5,713)</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 6.2: Percent of Studies by Journal and Topic Area

<table>
<thead>
<tr>
<th></th>
<th>CJ&amp;B</th>
<th>CJ &amp; B</th>
<th>JQ</th>
<th>JRC&amp;D</th>
<th>JQC</th>
<th>SJ</th>
<th>CPS</th>
<th>CPCS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other</td>
<td>98.5</td>
<td>88.0</td>
<td>93.7</td>
<td>94.8</td>
<td>86.7</td>
<td>88.3</td>
<td>94.3</td>
<td>91.3</td>
</tr>
<tr>
<td>Burglary</td>
<td>0.4</td>
<td>1.4</td>
<td>3.2</td>
<td>0.8</td>
<td>2.2</td>
<td>3.5</td>
<td>2.1</td>
<td>4.5</td>
</tr>
<tr>
<td>Robbery</td>
<td>0.4</td>
<td>4.5</td>
<td>1.8</td>
<td>2.4</td>
<td>4.3</td>
<td>3.5</td>
<td>2.1</td>
<td>2.1</td>
</tr>
<tr>
<td>Both</td>
<td>0.6</td>
<td>6.0</td>
<td>1.3</td>
<td>2.0</td>
<td>6.7</td>
<td>4.8</td>
<td>1.6</td>
<td>2.1</td>
</tr>
<tr>
<td>Total (5,713)</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

So how much do criminologists study burglary and robbery in general? The answer is not much. By and large, studies published in both types of journals examine other topics.

**How Much Do Criminologists Know about Residential Burglary?**

Next, I examine crime event information for residential burglary. I examine only studies with crime event findings (i.e., an irrelevant, basic, contingent or other finding) for residential burglary. About five percent of the 5,713 studies reviewed examined burglary in general (279), either separately (115) or together with robbery (164). This means that researchers often focused on a topic other than burglary or robbery or another type of crime. Of these studies, about 24 percent (67) provided crime event findings for residential burglary. Put another way, over three quarters of the studies on burglary provided no findings about this crime-specific event. The 67
studies that did inform the analyses that follow. In most cases, coding findings from these studies was straightforward. However, some studies were structured differently and therefore require a brief mention below.

- Six studies that examined burglary and robbery together provided crime event findings for residential burglary but not for personal robbery (e.g., personal robbery was combined with another offense, like assault, personal theft or shop theft). Thus, I coded only the findings for residential burglary.

- One study provided single crime event findings for a combined group of street robbers and residential burglars. These findings were counted in analyses for both residential burglary and personal robbery.

- One study provided single crime event findings for a combined group of victims of street robbery and residential burglary. Again, these findings were counted in analyses for both residential burglary and personal robbery.

- One study provided separate crime event findings for each crime event (e.g., two findings for residential burglary and two findings for personal robbery).

For these reasons, analyses for residential burglary and personal robbery overlap: they share two studies and 10 specific crime event findings.

These 67 studies yielded 317 crime event findings for residential burglary, an average of 4.7 findings per study. Table 6.3 displays the distribution of crime event findings over individual studies. Studies typically produced a small number of findings. Most produced only two or three findings. Moreover, almost three-quarters of studies produced five or fewer findings. A smaller proportion of studies contained a large number of findings, with very few yielding 15 or more. The top-producing study contained 23 findings. The small proportion of studies with 15
or more findings, however, produced almost eighteen percent of all findings for residential burglary.

Table 6.3: Percent of Studies of Residential Burglary by Number of Crime Event Findings

<table>
<thead>
<tr>
<th>Number of findings</th>
<th>Percent of studies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>16.4 (11)</td>
</tr>
<tr>
<td>2–3</td>
<td>40.3 (27)</td>
</tr>
<tr>
<td>4–5</td>
<td>14.9 (10)</td>
</tr>
<tr>
<td>6–9</td>
<td>11.9 (8)</td>
</tr>
<tr>
<td>10–14</td>
<td>11.9 (8)</td>
</tr>
<tr>
<td>15 or more</td>
<td>4.5 (3)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100.0 (67)</strong></td>
</tr>
</tbody>
</table>

Table 6.4 displays the distribution of different types of crime event findings for residential burglary. Of the 317 findings, almost two-thirds were basic with none of the other major categories dominating. More than half of the basic findings described targets, and just less than a third described technique. Time and place were rarely described. These categories had the highest known-unknowns in the basic category.

Turning to contingent information, over a third of findings were offender/technique and about one quarter was time/target. Together, these two categories account for almost 60 percent of all contingent findings. Because contingent information is relatively rare, these two categories account for less than 10 percent of all crime event findings for residential burglary. Few of the remaining categories of contingent information contain a large number of findings (i.e., known-unknowns are high).

The two remaining categories of information, irrelevant and other, combine to account for just about 20 percent of crime event findings. Irrelevant findings comprise the smallest category of information. This information contributes the least because it does not describe offender choice, so it is heartening to see the smallest number of findings fall within this
category. Other findings also made up a relatively small proportion of findings. Because it is not readily apparent what other findings tells us about crime events I qualitatively examine them in the next chapter.

### Table 6.4: Crime Event Findings for Residential Burglary

<table>
<thead>
<tr>
<th>Category</th>
<th>Count (Percentage)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic</td>
<td></td>
</tr>
<tr>
<td>Target</td>
<td>56.7 (203)</td>
</tr>
<tr>
<td>Technique</td>
<td>30.0 (61)</td>
</tr>
<tr>
<td>Place</td>
<td>6.9 (14)</td>
</tr>
<tr>
<td>Time</td>
<td>6.4 (13)</td>
</tr>
<tr>
<td>Contingent</td>
<td></td>
</tr>
<tr>
<td>Offender/technique</td>
<td>34.6 (18)</td>
</tr>
<tr>
<td>Time/target</td>
<td>25.0 (13)</td>
</tr>
<tr>
<td>Technique/target</td>
<td>17.3 (9)</td>
</tr>
<tr>
<td>3+</td>
<td>11.5 (6)</td>
</tr>
<tr>
<td>Technique/time</td>
<td>5.8 (3)</td>
</tr>
<tr>
<td>Offender/time</td>
<td>1.9 (1)</td>
</tr>
<tr>
<td>Offender/target</td>
<td>1.9 (1)</td>
</tr>
<tr>
<td>Technique/place</td>
<td>1.9 (1)</td>
</tr>
<tr>
<td>Offender/place</td>
<td>0.0 (0)</td>
</tr>
<tr>
<td>Time/place</td>
<td>0.0 (0)</td>
</tr>
<tr>
<td>Place/target</td>
<td>0.0 (0)</td>
</tr>
<tr>
<td>Other</td>
<td>12.6 (40)</td>
</tr>
<tr>
<td>Irrelevant</td>
<td>6.9 (22)</td>
</tr>
<tr>
<td>Total</td>
<td>100.0 (317)</td>
</tr>
</tbody>
</table>

### Conclusion

There are six conclusions we can draw from this analysis:

1) Burglary in general is not studied much by criminologists. Just five percent of all studies published since 1980 examined it.

2) Studies of burglary are three times more likely to provide no findings about how residential burglars make choices. Consequently, most of what we know about this topic comes from relatively few studies.
3) A few residential burglary studies with crime event findings provide most of the findings: almost 56 percent of the findings come from less than a quarter of studies with findings.

4) Most findings were basic—describing a single variable.

5) The most common variable described was the target.

6) Contingent information—giving the most insight into how residential burglaries are committed is relatively rare.

If we think of this in terms of Rumsfeld’s typology, we know that contingent information is mostly unknown. I have not reported the substantive findings, but just the types. The fact that contingent information is scarce suggests that whatever the substantive findings are regarding residential burglary; these findings will be uncertain and will have substantial gaps.

**How Much Do Criminologists Know about Personal Robbery?**

In this section, I shift to examining crime event information for personal robbery. Of the 5,713 studies identified, five percent (304) examined robbery in general, either separately (140) or together with burglary (164). Fourteen percent of these (43) provided crime event findings for personal robbery. Compared to residential burglary, the “rate of return” is even lower for personal robbery—about 86 percent of studies have no findings. The 43 studies with findings yielded 304 crime event findings for personal robbery, an average of 7.1 findings per study.

Table 6.5 displays the distribution of crime event findings over individual studies. As was the case with residential burglary, the majority of studies produced just a small number of findings. Most studies contained two or three and over half contained three or less. A smaller proportion of studies contained more than 15 findings. But this small proportion of studies yielded 181 findings or well over half of all crime event findings for personal robbery.
The distribution of different types of crime event findings for personal robbery is shown in Table 6.6. Just over half of the findings were basic. Almost half of the basic findings described targets, and over a third described technique. Time and place were described much less frequently, especially time.

Almost a third of findings were contingent. Contingent information was dominated by 3+ findings, but offender/target, offender/technique and technique/target findings were also more prevalent. Very few findings described the remaining types of contingent information; in fact, none make up more than six percent of contingent findings.

A small percentage of findings were irrelevant. Again, this is promising since they contribute little to understanding crime events. Finally, a relatively small percentage of crime event findings were other. I will examine qualitatively these findings more closely in the next chapter.

Compared to residential burglary, the personal robbery findings were more likely to be contingent and fewer contingent categories were without a finding (one for personal robbery and three for residential burglary). The 3+ category was two and a third times greater for personal robbery than residential burglary.
Table 6.6: Crime Event Findings for Personal Robbery

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Basic</td>
<td>Contingent</td>
</tr>
<tr>
<td></td>
<td>Target</td>
<td>Technique</td>
</tr>
<tr>
<td></td>
<td>49.1 (78)</td>
<td>37.1 (59)</td>
</tr>
<tr>
<td></td>
<td>Place</td>
<td>Technique</td>
</tr>
<tr>
<td></td>
<td>26.9 (25)</td>
<td>25.8 (24)</td>
</tr>
<tr>
<td></td>
<td>Time/place</td>
<td>Place/target</td>
</tr>
<tr>
<td></td>
<td>5.4 (5)</td>
<td>3.2 (3)</td>
</tr>
<tr>
<td></td>
<td>Technique/place</td>
<td>Technique/target</td>
</tr>
<tr>
<td></td>
<td>1.1 (1)</td>
<td>1.1 (1)</td>
</tr>
<tr>
<td></td>
<td>Technique/time</td>
<td>Offender/place</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>1.1 (1)</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>Total</td>
</tr>
<tr>
<td></td>
<td>100.0 (304)</td>
<td></td>
</tr>
</tbody>
</table>

Conclusion

There are six conclusions we can draw from this analysis of personal robbery studies.

1) Like burglary, robbery in general is not studied much by criminologists—again, only about five percent of all studies published since 1980 examine this crime.

2) Studies of robbery are unlikely to provide any findings about how personal robbers make decisions. Consequently, most of what we know on this topic comes from relatively few studies—even fewer than is the case for residential burglary.

3) A few personal robbery studies with findings, provided most of the findings—about 67 percent of the findings come from less than a quarter of the studies with findings.

4) About half of the findings were basic—describing a single variable.
5) The most common variables described were the target and technique.

6) Though less common than basic, about 30 percent of crime event findings are contingent—considerably higher than was the case for residential burglary.

In short, compared to residential burglary, we have more known-knowns in the contingent category but this information is built on a smaller foundation of studies.

Supplemental Results

To this point, I have tallied study findings in order to determine how much we know about each crime event. However, study findings could be analyzed in a number of other ways. In this section, I provide a few examples of how this could be done. Specifically, I examine more closely modal categories of crime event information, “other” crime event findings and studies that produce 3+ findings. I describe how each of these factors could affect the final assessment outcome. These examples are not meant to be exhaustive but instead show that initial quantitative results can be examined further. The analyses that follow are based on substantive findings rather than coded categories. Each finding is listed in Appendices 3 and 4.

Modal Categories of Crime Event Information

Frequency counts alone can inflate the true amount of crime event information. A large number of findings in a particular category imply that much is known about this category of information. But this category could conceal a number of duplicate findings. This problem is especially relevant for modal categories. These categories show areas where it appears we know a lot. Accordingly, they can influence an assessment outcome. For example, having most findings on targets suggests that some is known about the crime event. But this is not true if the findings are repetitive, nor if they are contradictory. Below, I examine more closely the modal category for each crime event.
Target is the modal category for residential burglary. However, a quick review of these findings shows that most relate to just two particular areas. First, almost 41 percent of findings describe how the risk of residential burglary is related to a demographic characteristic of targets, either individuals or households (e.g., age, race, income/affluence, employment, education, marital status). In some cases, the findings were the same. At least six studies demonstrated a negative relationship between target age and victimization risk. Some findings were different, however. For example, there was some disagreement over the effect of being non-white on the risk of residential burglary. Second, about 17 percent of findings described how the risk of residential burglary is related to the occupancy of households. Most suggested that unoccupied households and those with fewer members had an increased risk of victimization.

So well over half of the target findings for residential burglary describe target demographics and household occupancy. Therefore, it might be necessary to qualify the initial assessment outcome. It appears that we know less than initially appears—many findings cover the same area and are substantively the same or contradictory. This is also the case for personal robbery. Again, target is the modal category but over a third of findings were related to victim demographics.

“Other” Crime Event Findings

Enough “other” findings could alter an assessment outcome or even change the assessment process itself. Some clear patterns emerged in “other” findings for both residential burglary and personal robbery. For residential burglary, well over half of the findings described an offender’s degree of involvement in the crime event. For example, some described the number of residential burglaries overall and per offender, specialization in residential burglary and the extent of repeat and multiple victimization. This suggests that residential burglary is a
choice that some offenders continually make but it is not clear why from these findings. It is not known if any of these patterns are related to a particular element of crime (e.g., repeat offenders prefer certain targets at specific times). Thus, there is potential to know more about residential burglary—more research is needed to transform “other” findings to basic or contingent.

Well over half of “other” findings for personal robbery relate to victim resistance and retaliation. Often they describe how different resistance methods influence robbery outcomes. Thus, victim action (i.e., victim choice) clearly can help us better understand crime events so excluding it will likely underestimate how much is known about crime events. Victims (i.e., “targets”) are included in the assessment process but only in terms of how offenders perceive them. In the future, therefore, it might be necessary to treat victim choice more directly in the assessment process, perhaps as a separate category. Assessment outcomes could then be twofold: how much do we know about crime events from offender choice and victim choice. More work is needed to determine if subcategories of victim choice are needed and how they might rank in importance according to theory (in order to create a continuum of assessment outcomes).

**Studies with 3+ Findings**

What does it mean if we possess a large number of 3+ findings? Having many does not necessarily mean that criminologists have made a concerted effort to produce the most useful possible type of crime event information. Instead, a large proportion of them could come from only a handful of studies. Here I examine whether or not 3+ findings are the result of a rigorous research agenda in criminology or just a rigorous study or two.

There were only six 3+ findings for residential burglary. Two studies produced them—one contained two findings and the other had four. Thus, we lack 3+ information on residential
burglary probably because few criminologists look for it. By contrast, there were 25 3+ findings for personal robbery. However, most of them were produced by just two studies. One contained 14 findings and the other had eight. Three other studies each had just one. Despite the quantity of findings, very few criminologists have produced 3+ information for personal robbery. So despite the large range in 3+ findings for residential burglary and personal robbery, they are seldom investigated for either crime event.

Conclusion

Assessment data can be examined in a number of ways beyond tallying categories of crime event information. In this section, I provided a few examples of how this can be done. Modal categories of crime event information suggested that sometimes less is known substantively than initially appears. Closer examination of “other” findings might lead to the creation of additional categories of crime event information. And finally the quantity of 3+ findings masks how much attention criminologists have actually paid to this category.

Summary

Until now, crime event information has never been categorized and summarized quantitatively. In this chapter, I field-tested the process to measure crime event information for residential burglary and personal robbery. It worked as proposed. I was able to code study findings into mutually exclusive categories of crime event information. Accordingly, I could tabulate descriptive statistics for each type in order to reach assessment outcomes.

Results suggest that we know some about residential burglary. That is, most crime event findings are basic. However, known-unknowns are still high for basic information for time and place. A smaller proportion of findings are contingent and known-unknowns were high or at the maximum for most categories. We know somewhere in between some and much about personal
robbery. Most crime event findings are basic but almost of third are contingent. Moreover, 3+
findings dominated contingent information and known-unknowns were at the maximum for only
one category. However, supplemental analyses suggested that these outcomes be qualified.

Residential burglary and personal robbery are relatively common iconic crimes. For
these reasons we would expect the discipline of criminology to have produced, over the last 30
years, a solid foundation of knowledge about them. It has not. Burglary and robbery in general
are seldom studied, and when studied the research often produces no crime event findings on
residential burglary or personal robbery. The findings that are produced are usually basic. The
most revealing findings are not only rare but from a handful of studies. These findings about
findings not only describe what criminologists know, but more importantly what they do not
know. In the next chapter I will look at where residential burglary and street robbery research is
published.
CHAPTER 7: WHERE ARE CRIME EVENT FINDINGS PUBLISHED?

In this chapter, I describe where crime event studies and crime event findings for residential burglary and personal robbery are published. I try to determine if particular journals are more useful for learning about these crime events. I show that some journals and journal groups are more likely to contribute crime event information than others.

Where Can We Learn about Residential Burglary?

Table 7.1 shows which journals have published the most crime event studies (i.e., a study with crime event findings for a specific event) on residential burglary since 1980. The conventional criminology group has published the most but this is because there are more journals in this group. Also they have been publishing longer (all started in or before 1985: the British Journal of Criminology in 1960; the Journal of Research in Crime and Delinquency in 1964; Criminology in 1970 but since 1963 under Criminologica; Criminal Justice and Behavior in 1974; Justice Quarterly in 1984; the Journal of Quantitative Criminology in 1985) than the environmental criminology group (all started in 1989 or after: Security Journal in 1989; Crime Prevention Studies in 1993; Crime Prevention & Community Safety in 1999). The range in the number of studies across journal is large (i.e., from one study to sixteen). The British Journal of Criminology, Crime Prevention Studies and Criminology have published the most.

Do certain journals publish a large proportion of all its studies on residential burglary events? Table 7.1 suggests this is not the case. Regardless of journal or journal group, studies with crime event findings for residential burglary make up only a very small proportion of all published studies. For example, the British Journal of Criminology published the most crime event studies of residential burglary but these represented less than two percent of all its publications since 1980.
Table 7.1: All Studies Since 1980 (N=5,713) with Crime Event
Findings for Residential Burglary

<table>
<thead>
<tr>
<th>Field</th>
<th>Count (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conventional Criminology (4,656)</td>
<td>1.0 (47)</td>
</tr>
<tr>
<td>Journal of Quantitative Criminology (461)</td>
<td>2.0 (9)</td>
</tr>
<tr>
<td>British Journal of Criminology (955)</td>
<td>1.7 (16)</td>
</tr>
<tr>
<td>Journal of Research in Crime and Delinquency (534)</td>
<td>1.5 (8)</td>
</tr>
<tr>
<td>Criminology (969)</td>
<td>1.0 (10)</td>
</tr>
<tr>
<td>Justice Quarterly (706)</td>
<td>0.4 (3)</td>
</tr>
<tr>
<td>Criminal Justice &amp; Behavior (1,031)</td>
<td>0.0 (1)</td>
</tr>
<tr>
<td>Environmental Criminology (1,057)</td>
<td>1.9 (20)</td>
</tr>
<tr>
<td>Crime Prevention Studies (242)</td>
<td>4.5 (11)</td>
</tr>
<tr>
<td>Crime Prevention &amp; Community Safety (236)</td>
<td>2.1 (5)</td>
</tr>
<tr>
<td>Security Journal (579)</td>
<td>0.7 (4)</td>
</tr>
</tbody>
</table>

Table 7.2: Burglary Studies Since 1980 (N=279) with Crime Event
Findings for Residential Burglary

<table>
<thead>
<tr>
<th>Field</th>
<th>Count (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conventional Criminology (231)</td>
<td>20.3 (47)</td>
</tr>
<tr>
<td>British Journal of Criminology (43)</td>
<td>37.2 (16)</td>
</tr>
<tr>
<td>Journal of Quantitative Criminology (38)</td>
<td>23.7 (9)</td>
</tr>
<tr>
<td>Journal of Research in Crime and Delinquency (48)</td>
<td>16.7 (8)</td>
</tr>
<tr>
<td>Justice Quarterly (20)</td>
<td>15.0 (3)</td>
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<tr>
<td>Criminology (72)</td>
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<tr>
<td>Criminal Justice &amp; Behavior (10)</td>
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<td>Environmental Criminology (48)</td>
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<td>Crime Prevention Studies (16)</td>
<td>68.8 (11)</td>
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<tr>
<td>Crime Prevention &amp; Community Safety (11)</td>
<td>45.5 (5)</td>
</tr>
<tr>
<td>Security Journal (21)</td>
<td>19.0 (4)</td>
</tr>
</tbody>
</table>

Related, of studies of burglary in general (including studies of both burglary and robbery), do certain journals publish a large proportion of them on residential burglary events? Table 7.2 shows that the proportion varies by individual journal and journal group. Over two-thirds of studies of burglary in Crime Prevention Studies contained crime event findings for residential burglary, almost half did in Crime Prevention & Community Safety and over a third did in the British Journal of Criminology. In general, when burglary is examined, the environmental criminology group had a higher rate of publishing crime event studies on
residential burglary than did the conventional criminology journals. There are only two possible exceptions to this pattern: the British Journal of Criminology and the Journal of Quantitative Criminology.

Which journals have published the most crime event findings for residential burglary? While the proportion of crime event studies for residential burglary is highest in environmental criminology journals, the large number of studies in conventional criminology journals means that more findings are likely found in this group. This can be seen in Table 7.3. Criminology published the most crime event findings overall. It also lead in contingent findings and was the only journal to publish any 3+ findings. Clearly, Criminology ranks highly on both the quantity and quality of crime event information for residential burglary, but probably only because of the volume of studies it publishes. Similarly, the British Journal of Criminology published the second most crime event findings but also the most crime event studies.

Which group of journals has published the most crime event findings for residential burglary? Drawing from Table 7.3, the conventional criminology group published 233 crime event findings, almost three-quarters of them. This suggests initially it is superior to the environmental criminology group, but this group is newer and has therefore published fewer since 1980.

To compensate, I create average rates for crime event findings per number of published studies. The conventional criminology group published 233 findings in 4,656 studies since 1980, for a rate of .05 findings per study. The environmental criminology group published 84 findings and 1,057 studies since 1980, a rate of .08 findings per study. Though the environmental criminology group is producing residential burglary findings at a higher rate, the rate of
production of findings for this crime event is low. In short, we should not expect a substantial increase in our understanding of residential burglary any time soon.

### Table 7.3: Crime Event Findings for Residential Burglary by Journal

<table>
<thead>
<tr>
<th></th>
<th>Crim</th>
<th>BJC</th>
<th>JRCD</th>
<th>JQC</th>
<th>SJ</th>
<th>CPS</th>
<th>CPCS</th>
<th>JQ</th>
<th>CJ &amp; B</th>
</tr>
</thead>
<tbody>
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<td>Basic</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
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<td>11</td>
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<td>Offender/place</td>
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<td>0</td>
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<td>0</td>
<td>4</td>
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<tr>
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<td>Place/target</td>
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<td>0</td>
<td>0</td>
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<td>0</td>
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<tr>
<td>Other</td>
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<td>9</td>
<td>9</td>
<td>10</td>
<td>0</td>
<td>5</td>
<td>1</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>70</td>
<td>65</td>
<td>39</td>
<td>38</td>
<td>34</td>
<td>28</td>
<td>22</td>
<td>16</td>
<td>5</td>
</tr>
</tbody>
</table>

**Conclusion**

I have described in which journals crime event studies and crime event findings for residential burglary are published. There are four conclusions that follow from these analyses:

1) Crime event studies on residential burglary are rare across journals and journal groups.

2) *Criminology* produced the most residential burglary event findings and contingent findings, the most useful type of crime event information.

3) Conventional criminology journals have published more crime event findings but the newer environmental criminology group produces these findings at a greater rate.
Since 1980, the rate of production of findings for residential burglary is just .06 per study across all journals, suggesting knowledge accumulation is sluggish.

Where Can We Learn about Personal Robbery?

Table 7.4 shows which journals have published the most crime event studies on personal robbery since 1980. The conventional criminology group has published the most for the same reasons it published the most residential burglary findings. As was the case with residential burglary, the range in the number of studies across journals is large and spanned from only one study to sixteen. *Criminology* published the most studies: four times the median.

Do certain journals publish a large proportion of all its studies on personal robbery events? Table 7.4 shows this not to be the case. Regardless of journal or journal group, studies with crime event findings for personal robbery comprise just a very small proportion of all published studies. *Criminology*, for instance, published the most of crime event studies but these accounted for less than two percent of all its publications since 1980.

<table>
<thead>
<tr>
<th>Table 7.4: All Studies Since 1980 (N=5,713) with Crime Event Findings for Personal Robbery</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Conventional Criminology (4,656)</strong></td>
</tr>
<tr>
<td><em>Criminology</em> (969)</td>
</tr>
<tr>
<td><em>Journal of Quantitative Criminology</em> (461)</td>
</tr>
<tr>
<td><em>Journal of Research in Crime and Delinquency</em> (534)</td>
</tr>
<tr>
<td><em>British Journal of Criminology</em> (955)</td>
</tr>
<tr>
<td><em>Justice Quarterly</em> (706)</td>
</tr>
<tr>
<td><em>Criminal Justice &amp; Behavior</em> (1,031)</td>
</tr>
<tr>
<td><strong>Environmental Criminology (1,057)</strong></td>
</tr>
<tr>
<td><em>Crime Prevention Studies</em> (242)</td>
</tr>
<tr>
<td><em>Security Journal</em> (579)</td>
</tr>
<tr>
<td><em>Crime Prevention &amp; Community Safety</em> (236)</td>
</tr>
</tbody>
</table>

Considering just studies of robbery in general (including studies of both robbery and burglary), do certain journals publish a large proportion of them on personal robbery events?
Similar to residential burglary, the proportion varies by journal and journal group. As seen in Table 7.5, over a third of studies of robbery in *Crime Prevention & Community Safety* had crime event findings for personal robbery, almost a third did in *Crime Prevention Studies* and over a quarter did in *Security Journal*. These journals make up the entire environmental criminology group. Overall, about thirty percent of the robbery studies in the environmental criminology group produced personal robbery findings, compared to 12 for the conventional criminology group.

| Table 7.5: Robbery Studies Since 1980 (N=304) with Crime Event Findings for Personal Robbery |
| Conventional Criminology (270) | 12.2 (33) |
| *Criminal Justice & Behavior* (11) | 18.2 (2) |
| *Criminology* (102) | 15.7 (16) |
| *British Journal of Criminology* (29) | 13.8 (4) |
| *Journal of Quantitative Criminology* (38) | 10.5 (4) |
| *Journal of Research in Crime and Delinquency* (59) | 8.5 (5) |
| *Justice Quarterly* (31) | 6.5 (2) |
| Environmental Criminology (34) | 29.4 (10) |
| *Crime Prevention & Community Safety* (3) | 33.3 (1) |
| *Crime Prevention Studies* (10) | 30.0 (3) |
| *Security Journal* (21) | 28.6 (6) |

Which journals have published the most crime event findings for personal robbery events? Again, environmental criminology journals publish a larger proportion of crime event studies but conventional criminology journals typically published a larger number of findings. Table 7.6 highlights this pattern. *Criminology* published the most findings overall. However, *Criminology* and the *Journal of Research in Crime and Delinquency* tied for the most contingent findings. The *British Journal of Criminology* published the most 3+ findings which dominated its contingent information. Thus, this journal provided the most of the most useful kind of information for personal robbery. The most productive environmental criminology journal
overall, *Crime Prevention & Community Safety*, published just 27 total findings, about eighty percent less than *Criminology* and about half of the *Journal of Research of Crime and Delinquency*.

Table 7.6: Crime Event Findings for Personal Robbery by Journal

<table>
<thead>
<tr>
<th></th>
<th>Crim</th>
<th>JRC</th>
<th>BJC</th>
<th>JQC</th>
<th>CPSC</th>
<th>SJ</th>
<th>CPS</th>
<th>JQ</th>
<th>CJ &amp; B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic</td>
<td></td>
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<td></td>
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<tr>
<td>Technique</td>
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<td>2</td>
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<td>Offender/target</td>
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<td><strong>27</strong></td>
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<td><strong>9</strong></td>
<td><strong>6</strong></td>
<td><strong>2</strong></td>
</tr>
</tbody>
</table>

Which journal group has published the most crime event findings for personal robbery?

Drawing from Table 7.6, the conventional criminology group published the most at 258, almost eighty-five percent. Recall, however, average rates must be calculated to account for differences in the number of studies published between groups. The conventional criminology group has published findings at a rate of .06 per study and the environmental criminology group at a rate of .04. Thus, the conventional criminology group produced most crime event findings and at a
greater rate over time. These rates of production are even lower than we saw for residential burglary.

Conclusion

In this section, I described where crime event studies and findings for personal robbery are published. There are four conclusions that follow from these analyses:

1) Crime event studies on personal robbery are rare across journals and journal groups.

2) *Criminology* produced the most crime event findings overall. The most useful crime event information (i.e., contingent findings) is most prevalent in *Criminology*, the *Journal of Research in Crime and Delinquency* and the *British Journal of Criminology*.

3) Conventional criminology journals have published more crime event findings and at a greater rate than environmental criminology journals.

4) Since 1980, the rate of production of findings for personal robbery is just .05 findings per studies across all journals, a lackluster rate of knowledge accumulation.

Summary

Overall, crime event studies on residential burglary and personal robbery have seldom been published since 1980. These studies account for no more than five percent of all studies published in any journal or either journal group. But when burglary and robbery are examined, environmental criminology journals are more likely to publish crime event studies for each. Conventional criminology journals have published the most crime event findings for both residential burglary and personal robbery. However, environmental criminology journals have published crime event findings for residential burglary at greater rate, but not for personal robbery. The rate of findings production per studies published is very low. Given how little is
known about either crime event (see Chapter 6) at this rate the number of known-unknowns will shrink at a glacial pace.
CHAPTER 8: DO CRIMINOLOGISTS STUDY SPECIFIC BURGLARY AND ROBBERY EVENTS?

So far I have examined residential burglary and personal robbery findings and where these findings are published. I based my results on a subset of studies on burglary and robbery in general. There were 279 studies on burglary (115 focused on burglary only and another 164 examined both burglary and robbery) of which 67 produced 317 residential burglary findings. There were 304 studies on robbery (140 examined robbery only plus the 164 on both crimes) of which 43 produced 304 personal robbery findings. In this chapter, I turn to examining whether or not there is evidence of a shift in research from crime-obscure/non-event studies to crime-specific/event studies. In this chapter I will be looking at all forms of burglary and all forms of robbery. And because I am now asking a different research question, I had to change the way I coded studies. Consequently, the number of studies examined in this chapter is different from the number I studied in previous chapters.

Studies that examine burglary and robbery usually do not differentiate between them. Instead, the crimes are often aggregated. I coded such studies once as a single type; crime-obscure/non-event. However, eleven studies that examined burglary and robbery treated each crime separately. For example, one study provided crime event findings for residential burglary and robbery combined with other violent crimes. I did not code this as a single study type. Instead, I coded it as two separate studies: crime-specific/event for burglary but crime-obscure/event for robbery.

I excluded six studies from my analyses. These studies were either conceptual or provided a review a research (i.e., they contained no original research findings). I also excluded a study that examined the perception of burglary opportunities among a sample of college
students. These findings did not describe choices made by real residential burglars or the process of actual residential burglaries. In all, four of the excluded studies examined burglary only and two examined burglary and robbery together.

The 424 studies analyzed below were derived as follows:

- Burglary: There were 115 studies from the earlier analysis plus the eleven just mentioned. Four of these were excluded, producing 122 studies of burglary (115 + 11 – 4 = 122).

- Robbery: There were 140 studies from the earlier analysis plus the eleven just described. No studies need to be excluded. This yielded 151 studies of robbery (140 + 11 = 151).

- Burglary and robbery: There were 164 studies from the earlier analysis. But in eleven I was able to extract separate study types for burglary and robbery, so these studies are not included here. As mentioned, two more studies were also excluded. This gave me 151 studies that combined burglary and robbery (164 – 11 – 2 = 151).

Finally, three of the burglary studies and twelve robbery studies examined other specific forms of these crimes besides residential burglary and personal robbery (e.g., burglaries at hotels, bank robbery, robbery at convenience stores and burglary and robbery at fast-food restaurants).

Because I am interested in trends in how criminologists study crime, in the analyses that follow I examine trends in the publication of studies only, not findings. I showed in the previous chapter that finding production is very slow, so there is little to be gained to again examine findings trends. But findings are the result of studies, so if we want to see how findings are produced, I have to look at publications.

**How Do Criminologists Study Burglary and Robbery?**

Since 1980, how frequently have criminologists examined specific burglary and robbery events? The next five tables present cross-sectional results. Table 8.1 shows that 70
percent of the studies were either not crime-specific or did not describe events, and over half of the studies were crime-obscure/non-event (i.e., the study examined crime generally and provided no crime event findings). By contrast, less than 30 percent of studies were crime-specific/event (i.e., the study examined a specific crime event and provided crime event findings). Very few studies were crime-specific/non-event or crime-obscure/event. Overall, it appears initially that criminologists typically do not examine specific burglary and robbery events.

Table 8.1: Percent of Burglary and Robbery Studies by Study Type
(N=424)

<table>
<thead>
<tr>
<th></th>
<th>Specific</th>
<th>Obscure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Event</td>
<td>29.5</td>
<td>9.7</td>
</tr>
<tr>
<td>Non-event</td>
<td>9.7</td>
<td>51.2</td>
</tr>
</tbody>
</table>

However, Table 8.2 suggests that criminologists study burglary and robbery differently. When criminologists study burglary they tend to examine crime-specific events—well over half of the burglary studies were crime-specific/event. A much smaller proportion was crime-obscure/non-event. By contrast, criminologists focus less on specific robbery events. Just over half of the robbery studies were crime-obscure/non-event but only a third was crime-specific/event. Finally, when criminologists study burglary and robbery together they seldom examine crime-specific events. Over three-quarters of these studies are crime-obscure/non-event.

Table 8.2: Percent of Studies by Crime and by Study Type

<table>
<thead>
<tr>
<th></th>
<th>Crime-specific/event</th>
<th>Crime-specific/non-event</th>
<th>Crime-obscure/event</th>
<th>Crime-obscure/non-event</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burglary</td>
<td>55.7 (68)</td>
<td>16.4 (20)</td>
<td>7.4 (9)</td>
<td>20.5 (25)</td>
<td>100.0 (122)</td>
</tr>
<tr>
<td>Robbery</td>
<td>33.8 (51)</td>
<td>5.3 (8)</td>
<td>9.9 (15)</td>
<td>51.0 (77)</td>
<td>100.0 (151)</td>
</tr>
<tr>
<td>Both</td>
<td>4.0 (6)</td>
<td>8.6 (13)</td>
<td>11.3 (17)</td>
<td>76.2 (115)</td>
<td>100.0 (151)</td>
</tr>
</tbody>
</table>
Do the two types of journals publish different types of burglary and robbery research? The next three tables suggest that they do. Table 8.3 describes burglary. Crime-specific/event studies were the most prevalent type of study in both journal groups, though environmental criminology journals were far more likely than conventional criminology journals to contain these studies. Importantly, environmental criminology journals did not publish any crime-obscure/non-event studies of burglary, but over a quarter of burglary studies in conventional criminology journals were of this type.

Table 8.3: Percent of Burglary Studies by Study Type and Journal Group

<table>
<thead>
<tr>
<th></th>
<th>Crime-specific/ event</th>
<th>Crime-specific/ non-event</th>
<th>Crime-obscure/ event</th>
<th>Crime-obscure/ non-event</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conventional Criminology</td>
<td>51.1 (47)</td>
<td>13.0 (12)</td>
<td>8.7 (8)</td>
<td>27.2 (25)</td>
<td>100.0 (92)</td>
</tr>
<tr>
<td>Environmental Criminology</td>
<td>70.0 (21)</td>
<td>26.7 (8)</td>
<td>3.3 (1)</td>
<td>0.0 (0)</td>
<td>100.0 (30)</td>
</tr>
</tbody>
</table>

The two journal groups clearly differ in how robbery is examined (Table 8.4). Most robbery studies in conventional criminology journals are crime-obscure/non-event. By contrast, nearly all robbery research in environmental criminology journals is crime-specific/event.

Table 8.4: Percent of Robbery Studies by Study Type and Journal Group

<table>
<thead>
<tr>
<th></th>
<th>Crime-specific/ event</th>
<th>Crime-specific/ non-event</th>
<th>Crime-obscure/ event</th>
<th>Crime-obscure/ non-event</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conventional Criminology</td>
<td>26.0 (34)</td>
<td>6.1 (8)</td>
<td>10.7 (14)</td>
<td>57.3 (75)</td>
<td>100.0 (131)</td>
</tr>
<tr>
<td>Environmental Criminology</td>
<td>85.0 (17)</td>
<td>0.0 (0)</td>
<td>5.0 (1)</td>
<td>10.0 (2)</td>
<td>100.0 (20)</td>
</tr>
</tbody>
</table>

Conventional criminology journals are far more likely than environmental criminology journals to publish studies that examine burglary and robbery together (Table 8.5). However, regardless of journal group, very few studies of these studies are crime-specific/event.
Table 8.5: Percent of Studies of Burglary and Robbery by Study Type and Journal Group

<table>
<thead>
<tr>
<th></th>
<th>Crime-specific/ event</th>
<th>Crime-specific/ non-event</th>
<th>Crime-obscure/ event</th>
<th>Crime-obscure/ non-event</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conventional Criminology</td>
<td>2.2 (3)</td>
<td>4.3 (6)</td>
<td>10.9 (15)</td>
<td>82.6 (114)</td>
<td>100.0 (138)</td>
</tr>
<tr>
<td>Environmental Criminology</td>
<td>23.1 (3)</td>
<td>53.8 (7)</td>
<td>15.4 (2)</td>
<td>7.7 (1)</td>
<td>100.0 (13)</td>
</tr>
</tbody>
</table>

Conclusion

This section examined the extent to which criminologists study specific burglary and robbery events. There are three conclusions that follow these analyses:

1) Relatively little research examines crime-specific events. Most studies are not crime-specific or not event-based.

2) Studies of burglary, more than robbery, are likely to be crime-specific/event.

3) Journal groups study burglary and robbery differently. Environmental criminology journals are more likely than conventional criminology journals to examine crime-specific events, especially in robbery research.

Have Criminologists Changed How They Study Burglary and Robbery?

To answer this question, I examine the publication of each study type over time. There are relatively few studies of burglary or robbery in a given year, so year-to-year changes in the number of studies are subject to large variations that may be due to random factors. To reduce this noise and focus on the trends, I use a three-year moving average of study frequency to answer this question. Even with this smoothing, there is still considerable variation, as I will show below. Because I calculate a moving average of three years, there are a total of 28 time points in the distribution.

Trends in burglary research are shown in Figure 8.1. Up until 2003 there was some evidence for a shift toward crime-specific events. After that, crime-specific/event studies
declined sharply. There was no meaningful pattern for the other types of studies. These studies remained low across the entire distribution (never exceeding more than three in a given year).

Figure 8.1: Moving Average for Burglary Studies by Study Type (N=122)

![Graph showing moving average for burglary studies by study type.](image)

Figure 8.2 describes robbery research. There was a modest trend toward crime-specific events to about 2003, but then the trend reversed. Unlike burglary, there has been a resurgence in crime-specific/event studies after 2006. Crime-obscure/non-event studies remained relatively constant until the turn of the century. The other two types of studies remained at low-level across the entire distribution.

The trend is clear for studies that examine burglary and robbery together (Figure 8.3). The publication of crime-obscure/non-event studies is a bit erratic but this type of study dominates the other types. There were too few other types of studies so no trends are visible.
Figure 8.2: Moving Average for Robbery Studies by Study Type (N=151)

Figure 8.3: Moving Average for Studies on Burglary and Robbery by Study Type (N=151)
How do the two types of journals compare with regard to trends in publishing crime-specific/event studies? To answer this question I exclude the 151 studies that combine burglary and robbery. We already know that most of these are crime-obscure/non-event studies published in conventional criminology journals. I also exclude crime-specific/non-event and crime-obscure/event studies because so few are published. So again the number of studies examined below differs from the number examined in previous sections.

I first examine burglary research in environmental criminology journals (Figure 8.4). There is no trend line for crime-obscure/non-event studies since none were published in this group. Research on specific burglary events emerged in the 1990’s, during which time the rate of publication was stable, but low. But the first environmental criminology journal did not start publishing until 1989 (Security Journal) and the rest began in the 1990’s. Crime-specific/event studies surged in the early 2000’s, but then fell off. The publication of these studies appears to have regressed back to its pre-2000 rate of about .47 studies per year (calculated for 1990-1999 only).

Figure 8.5 shows burglary research in conventional criminology journals. There seems to be a slightly upward trend in crime-specific/event studies, at least through 2004. Crime-obscure/non-event studies also seem to have increased over this time period; peaking around 2000 and then falling off.
Figure 8.4: Moving Average for Burglary Studies in Environmental Criminology Journals (N=21)

Figure 8.5: Moving Average for Burglary Studies in Conventional Criminology Journals (N=72)
In the next two figures I examine trends in robbery research in each journal group. Figure 8.6 first shows trends for environmental criminology journals. There were only two crime-obscure/non-event studies so I did not plot them. Though there is oscillation in the number of crime-specific/event studies published per year, there is no obvious trend.

Criminologists typically do not examine specific robbery events in conventional criminology journals (Figure 8.7). The number of crime-specific/event studies in this group is low, and despite some variation, stays low until the early 2000’s. The number of crime-obscure/non-event was also low for most of the distribution except for a passing growth between 2002 and 2005.
Conclusion

In this section, I examined whether or not over time criminological research has shifted toward crime-specific events. Considering all journals:

1) The evidence was strongest for burglary research. However, this trend is ebbing.

2) The evidence for robbery research was modest, at best.

3) There has been no shift in studies that examine burglary and robbery together. These studies are predominately crime-obscure/non-event.

It was difficult to discern any clear publication trends in the two types of journals. There is far too little variation in the number of published studies in each group. Recently, however, there was a surge in crime-obscure/non-event robbery research in conventional criminology journals, but this is expected for this group. Finally, despite constant fluctuation, there was a gradual but steady increase in the publication of crime-specific/event studies of burglary. But in
2008 the number of these studies dropped off to its lowest point in almost 15 years. So although there is some evidence of a shift in burglary research in conventional criminology journals, the evidence is not compelling.

**Summary**

There is relatively little research on specific burglary and robbery events. But environmental criminologists are more likely to publish crime-specific/event studies of these crimes than conventional criminologists. However, the low number of studies makes it difficult to detect any meaningful trends over time. So while there is no clear shift toward crime-specific events in conventional criminology journals, it appears that environmental criminology journals are carving out at least a small niche for this type of research.
CHAPTER 9: CONCLUSION

In this dissertation I have tried to describe the state of crime event knowledge for residential burglary and personal robbery. Increasingly, some criminologists have pointed to the utility of understanding crime events for understanding both offenders and how crime can be prevented. Nevertheless, there remains today a strong bias toward studying offenders in criminology even though research indicates that criminological knowledge of the causes of criminality is highly problematic (Weisburd and Piquero, 2008). So there is reason to suspect that criminologists may also know little about crime events. A handful of studies have tried to shed light on this suspicion, but these studies are limited. To directly assess this concern, I developed an assessment process that is systematic, replicable and theory-driven to measure what we do and do not know about crime-specific events.

I used this process to review studies of residential burglary and personal robbery from nine journals over 30 years to answer three research questions. I first asked how much do criminologists know about these crime events. I divided findings by whether they were basic (describe a single variable associated with offender choice) or contingent (describe how offender choice is based on the situation). The answer is that criminologists do not know much about these crime events and what they do know is basic. Contingent findings are much less prevalent. So in the terminology of this dissertation, we know some about these crime events. Supplementary analyses, however, revealed that this may be an overly optimistic conclusion.

Next I asked if certain journals are more useful for understanding residential burglary and personal robbery. Environmental criminology journals are more likely than conventional criminology journals to publish research on crime-specific events. Though most findings come from conventional criminology journals, there were more of this type of journal in my study than...
environmental criminology journals, and conventional criminology journals have been publishing longer. When the rate of crime event findings is examined, the environment criminology journals are more productive for residential burglary and not far behind for personal robbery.

Finally, I asked to what extent criminologists study specific burglary and robbery events. This type of research is relatively rare. The number of studies with these findings fluctuates considerably over time, and there seems to be no discernable growth in production of these studies. This is true for both crime events studied and for both types of journals.

Criminological research should lead to evidence-based crime policy. But it can only do so if it improves our understanding of the processes that create crime. Weisburd and Piquero’s (2008) findings that the explanatory power of criminological research is both low and not improving suggests that criminologists are not producing useful knowledge. One reason maybe that they know so little about crime events. Felson (2002) demonstrates that there are basic features of crime events that have important implications for understanding criminality. So if criminologists do not understand crime, it is not surprising that they do not understand criminals.

So what do criminologists contribute to crime prevention? Based on my results for the two crime events examined in this dissertation, the initial evidence suggests very little. The reason is simple: it appears that criminologists rarely study crime. And when they do, they usually study aggregations of very different crimes. Consequently, they have not produced the kind of knowledge that describes how specific crime events occur. According to environmental criminology, this knowledge is critical for identifying intervention points during the process of crime where situational crime prevention could be applied.
However, there is a small group of environmental criminologists who do study specific crime events. They are more prone to ask the questions that capture information on the process of crime events while distinguishing among the different types of crime. Their research is not prevalent but does demonstrate that criminology has at least the capacity to improve its understanding of crime events. So there is still potential in our field for evidence-based crime prevention. Nevertheless, environmental criminologists are a distinct minority and have few journal outlets. So the population of these researchers needs to grow, along with a growth in the outlets for their research. Though some environmental criminologists find outlets in traditional criminological journals, there is no indication that this is changing the rate of crime specific event production in these journals.

This state of affairs is consistent with Thomas Kuhn’s (1970) thesis that scientists on either side of a paradigm shift find it difficult to communicate. Though the boundaries between criminologists and environmental criminologists are not water tight, there is little evidence of conventional criminologists shifting to an environmental criminological perspective. Rather, based on my findings, I would predict that environmental criminologists will continue to develop a separate field. And if my prediction is correct, and criminologists continue to fail to take crime event findings into account, the policy irrelevance of conventional criminology will continue (for another discussion see Clarke, 2004).

Limitations

This simple overview, of course, leaves out some important qualifications. First, I have reviewed a relatively limited number of journals. Would conclusions have changed substantially had I reviewed more journals? This seems unlikely, for several reasons. First, few environmental criminology journals were not included: the major exception is the relatively new
online journal *Crime Patterns and Analysis*. Second, I have reviewed the most prominent criminological journals so others might not contribute as many findings. In sum, I would likely identify a few more findings but probably not enough (or the right type) to change the assessment outcome. Though I suspect that reviewing more journals is unlikely to change the conclusions, someone should pursue this line of research to verify my suspicions.

Second, I reviewed only journal articles in this dissertation. Are there consequences for excluding other types of publications, like books or government reports? If findings in books are strongly correlated with findings in journal articles, then including books would not change my conclusions. Further, journals are the primary source of new findings, so books (both authored and edited volumes) are likely to have a lower crime specific event findings production rate.

Excluding government reports might have a greater impact. I did not review the reports of the Bureau of Justice Statistics (BJS) or Federal Bureau of Investigations (FBI). Both of these Federal agencies have produced many reports over the last 30 years describing crime events. It is possible, that criminologists rely on these reports for crime event information, more than they rely on their own journals. If this is the case, then my results underestimate what we know about residential burglary and personal robbery. However, if the Federal agencies are the source of this vital information, then academic criminological researchers are still not very policy relevant: the source of expertise is in the Federal (and to a much lesser extent, state and local) government. There is a good reason to believe that government reports are not likely to change my conclusions. That is, most government reports describe relatively simple descriptions of crime frequency and crime characteristics. Consequently, most of the findings are likely to be basic, not continent. Nevertheless, replicating my study using government reports seems much more promising than expanding the journals examined.
I also did not examine Problem-oriented Policing (POP) Projects, Goldstein Award nominees or Tilley Award nominees. These reports examine how different communities have tried to address specific crime events. In doing so, they also describe what is known about the crime event under review. One POP project, for instance, examined burglary of single-family houses in Savannah, Georgia (i.e., residential burglary). It contains six crime event findings but none were contingent. So it would have added findings to the assessment of residential burglary but would not change the conclusion. Altogether there are almost 175 of these reports so they merit further investigation. The advantage of assessment process proposed here is that it is replicable. In the future researchers could examine if this group of publications is superior to journals in terms of findings production.

Third, I reviewed only studies published in the last 30 years. The concept of the crime event did not emerge in mainstream criminology until the early 1980’s. Some topics included the elements of the crime event (Cohen and Felson, 1979; Cohen, Felson and Land, 1980; Cohen, Kluegel and Land, 1980), offender decision-making (Clarke and Cornish, 1985) and situational crime prevention (Clarke, 1980; 1983). So studies published before 1980 would likely yield few new findings (i.e., crime-specific/event studies are probably too few). My results would change very little had I extended my literature search back another 10 or 20 years.

Fourth, I have assessed but only two crime events. Can I generalize my findings to other crime events? This probably depends on the type of crime. Some crimes have their own specific journal, like homicide (Homicide Studies) and domestic violence (Family Violence Prevention & Health Practice). So there might be more findings for these crimes. There is not a special journal for burglary or robbery but residential burglary and personal robbery are relatively common. So if the analysis was done for other specific crimes—such as retail theft, gun
assaults, drug dealing in open-air markets, street prostitution, internet auction fraud, mail bombings and child pornography—very similar results should follow. In fact, known-unknowns would probably be higher for other less common crimes.

Fifth, I have looked at crime from the perspective of offender choice. It is possible that criminologists have a large body of research on decision making by victims, guardians and others that I have not assessed. I have shown, for instance, that over half of “other” findings for personal robbery describe victim resistance and retaliation. This too is an avenue for further enquiry. However, it is unlikely that criminologists know more about victim choice than they do offender choice, for the simple reason that most criminologists consider the offender first, foremost, and exclusively.

Sixth, I did not account for the methodological quality of the research I examined. This amounts to a tacit assumption that the studies reviewed are of relatively equal quality, and the quality is good. However, we know from systematic reviews of evaluations that studies vary greatly in terms of quality, and that high-quality evaluations are often rare relative to low-quality evaluations. Guerette and Bowers (2009), for instance, found that just one out of 102 evaluations of situationally-focused crime prevention (in which displacement and diffusion effects were observed) used a random control design. And Welsh and Farrington (2002) excluded just over half of the evaluations in their review of the crime prevention effects of CCTV because of low methodological quality (e.g., no controls or comparable control areas were used or no crime data were reported for experimental or control areas).

If the studies I reviewed here have a similar distribution as evaluations, then most of the studies I reviewed may be of poor quality. Consequently, my conclusions about how much we know about residential burglary and personal robbery may be overestimates. It is possible that
even less is known than I have described: known-unknowns are greater and known-knowns are less. But this is only speculative so future research on the state of crime event knowledge should examine methodological quality.

Finally, I did not identify crime-specific/event studies for crimes other than burglary and robbery. Recall that this type of research is more prevalent in environmental criminology journals compared to the conventional criminology group. Therefore, it is reasonable to expect that the environmental criminology group would also more publish crime-specific/event studies on other types of crime, like assault or theft. Had I examined the publication of these studies for all crimes, I may have found that environmental criminologists are even more likely to publish crime-specific/event research. And there may be stronger evidence that environmental criminology journals over time have shifted toward publishing these studies. This too is a topic that future research should examine.

In summary, there are several important limitations to my conclusions: number of journals examined; types of publications studied; years of research scanned; types of crimes looked at; the perspective taken; assumptions about the quality of research; and, overlooking other specific crime events in environmental criminology journals. While each has some merit, there are strong reasons to believe that even if future researchers replicate my study and account for these deficiencies, they will come to findings similar to mine. This is, of course, a conjecture. And the only way to examine its validity is for others to carry out this research.

Implications for Research

Do the results of this dissertation have implications for future research on crime events, or even criminality? To better clarify this, I start by placing the results in the context of broader disciplinary perspectives. First, have we made progress toward scientific realism in
criminology? At best, progress has been modest. Realism demands that we understand how crime occurs. Most studies contribute nothing to this; they are crime-obscure/non-event. Studies that do help contribute very little. Our crime-specific/event studies typically describe just a single variable, not how they interact. So known-unknowns are greatest where the most progress toward realism could be made.

Second, has there been a paradigm shift in criminological research? Research on crime-specific events has not taken precedence in criminology, no less studies that produce contingent findings. This research is more prevalent in a minority of environmental criminology journals but overall criminologists continue to examine crime generally and overlook the crime event. And it does not look like this will change anytime soon.

But Kuhn (1970) predicted that a paradigm shift should be marked not by the gradual winning over of scientists from an old to a new paradigm. Rather he claimed that the shift would be evident by a split among scientists in a discipline, and that communications across this split would be difficult and rare. This seems to be the state of affairs in criminology: there is a split between those who study crime events and those who study criminals. So a paradigm shift has occurred in criminology in view of the Kuhnian perspective. The existence of two types of journals, with different rates of publication of crime event findings is one piece of evidence in support of this conclusion.

Kuhn’s perspective stands in contrast to the steady progress of science view point favored by Karl Popper (1959). According to Kuhn (1965), Popper’s position is that science progresses when scientists replace a once-accepted intellectual paradigm with one that is new and presumably better. This has not occurred in criminology: there is a lack of change in the
conventional criminology journals. That is, conventional criminologists have not abandoned the study of criminals in favor of specific crime events, and show few signs of doing so.

So what should researchers do? First, researchers should use the assessment process developed here to measure our knowledge of other specific crime events. Over time, they could inventory the known-unknowns for different crime events in order to guide future research. For example, perhaps we need more offender/target information for assaults in bars and time information for bicycle theft. By filling such gaps in knowledge, we can make further progress toward scientific realism in criminology.

Second, researchers should also extend the assessment process if necessary. For example, should victim choice have a more direct role? In sum, a major contribution of this dissertation is the substantive assessment of residential burglary and personal robbery. But another major contribution is the assessment process itself. It provides criminologists a practical first step toward better understanding crime events.

Does this dissertation have implications for understanding criminality? It does according to Weisburd and Piquero (2008). They showed that we have not learned much about criminality by studying offenders (i.e., motivation) but could by instead studying specific crime events. To move research in this direction, I have identified known-unknowns about offender choice. If it turns out that we can learn more about offending though offender choice, perhaps it should replace offender motivation as the “new criminality” in criminology. The offender is still critical in criminology but in a fundamentally different way.

**Implications for Crime Prevention**

We must understand crime events in order to prevent them. So the gaps in knowledge I have identified have implications for creating evidence-based crime policy. In particular, it will
be difficult to use situational crime prevention without event-based knowledge. Criminologists struggle to describe crime events so intervention points where others could apply opportunity-reducing techniques are less apparent than they could be.

Should practitioners pay attention to criminologists? The evidence I present suggests a qualified “no.” Most criminologists will be little or no help if they rely on their discipline’s knowledge base. Environmental criminologists should be more helpful, but not because their knowledge of crime events is greater. It is because they are used to thinking about crime events and understand how to study them so that prevention can be useful. They are more likely to have process knowledge that is useful to practitioners than they are to have factual knowledge. This process knowledge is particularly useful to action research frameworks such as Situational Crime Prevention (Clarke, 1995) and Problem-Oriented Policing (Goldstein, 1990).

I could have argued that the major implication of the findings for policy is that not much can be done to prevent crime. This might be true but it suggests all policymakers can do is wait on criminologists for help. This is not productive. I could have also used what crime event information we do possess to recommend responses that might work. But this is potentially misleading as there are too many critical gaps in our knowledge. Instead, the major implication for policy is that criminologists do not “corner the market” on crime prevention expertise. We need crime event information to prevent crime but we should not depend on criminologists to provide it. I recommend that stakeholders consider more seriously using problem-solving. I encourage them to become their own crime expert.

**Concluding Remarks**

In closing, I have tried to describe the state of crime event knowledge in criminology. I began with Rumsfeld’s knowledge-typology so it is useful to conclude with it.
1) What do we know we know (known-knowns)? Very little. This study suggests that criminologists know very little, as compared to what theory would expect them to know.

2) What do we know we do not know (known-unknowns)? A great deal. This research has demonstrated that theory describes vast areas about which criminologists have few facts.

3) What do we know, but not realize we know (unknown-knowns)? There is little I can say here. This study was not designed to assess this question. However, drawing from the list of limitations to my research, it may be that these unknown-knowns can be found among studies of victim and other non-offender choice.

4) What do we not know that we do not know (unknown-unknowns)? Before this study, criminologists may have believed they knew more about crime than they did. This study, building on Weisburd and Piquero (2008), suggests that this may be the biggest category of knowledge for criminologists—they do not know what they do not know.

Unfortunately, there is no indication that criminologists will start anytime soon publishing more research on crime-specific events. So policymakers and practitioners should not depend on criminologists for crime prevention. Instead, they should use action research (such as Situational Crime Prevention and Problem-Oriented Policing) to learn about crime events and crime prevention on their own.
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# Appendix 1: What is Known about Crime in Tonry (2009)

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APPENDIX 2: CODING FOR SPSS DATABASE

1) Variable: Study number
   a. Variable field: ID
   b. Variable description: Each study is assigned a unique numeric identifier
   c. Coding: 1 to n

2) Variable: Crime type
   a. Variable field: Crime_type
   b. Variable description: The crime examined in the study
   c. Coding: robbery ‘1’; burglary ‘2’; both ‘3’

3) Variable: Journal name
   a. Variable field: Journ_nm
   b. Variable description: The journal in which the study was published
   c. Coding: Criminology ‘1’; Journal of Research in Crime and Delinquency ‘2’;
      Criminal Justice and Behavior ‘3’; Justice Quarterly ‘4’; Journal of Quantitative
      Criminology ‘5’; British Journal of Criminology ‘6’; Security Journal ‘7’; Crime
      Prevention Studies ‘8’; Crime Prevention and Community Safety: An
      International Journal ‘9’

4) Variable: Journal type
   a. Variable field: Journ_tp
   b. Variable description: The journal type in which the study was published
   c. Coding: conventional criminology journal ‘1’; environmental criminology journal
      ‘2’

5) Variable: Year of publication
a. Variable field: Yr_pub
b. Variable description: Year in which the study was published
c. Coding: Numerically coded (e.g., “1980” to “2009”)

6) Variable: Study type
   a. Variable field: Std_type
   b. Variable description: The type of study in terms of being event-based or crime-specific

7) Variable: Crime event information
   a. Variable field: Each type has its own field (e.g., basic/target = B_targ)
   b. Variable description: The frequency of each type per study
      Coding: 1 to n (e.g., “13 B_targ” = 13 findings of basic/target information)
## APPENDIX 3: CRIME EVENT FINDINGS FOR RESIDENTIAL BURGLARY

<table>
<thead>
<tr>
<th>Study</th>
<th>Finding</th>
<th>Type</th>
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<tbody>
<tr>
<td>Booth (1981)</td>
<td>Outdoor features of the built environment do not facilitate or impede burglary. The worse the ability to observe activities in public areas, the less chance of being a burglary victim.</td>
<td>Place</td>
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<tr>
<td>Stenross (1984)</td>
<td>69.7% of residential burglaries were forced-entry. Percentage of items taken in residential burglaries. Percentage of victim race in residential burglaries.</td>
<td>Technique</td>
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<tr>
<td>Decker et al. (1993)</td>
<td>47% of offenders reported specializing in residential burglary. The mean age of burglars sampled was 27. The burglars sampled consisted of 32 black males, 8 black females, 5 white males, 3 white females. Magnitude of gain did not affect decisions of burglars. An increase in potential gain increased (gaining more than they had originally thought possible) a burglars willingness to offend.</td>
<td>Target</td>
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<td>Wilcox et al. (1994)</td>
<td>Being an older resident reduced burglary risk. Being non-white decreased burglary risk. Unoccupied homes increased burglary risk. Higher family income increases burglary risk. Having more expensive goods present increases burglary risk. Number of busy places in neighborhood had no effect on burglary risk.</td>
<td>Target</td>
</tr>
<tr>
<td>Rengert et al. (1999)</td>
<td>Not all burglars start the target search at their residence. Not all burglars exhibit clear distance decay in target selection. Burglars tend to commit crimes closer to home than far away.</td>
<td>Technique</td>
</tr>
<tr>
<td>Hochstetler (2001)</td>
<td>The size of robbery and burglary offending groups changes. Robbers and burglars showed little concern for consequences by committing crimes in which they'd likely be suspects (e.g., used valid ID, robbed people they knew, allowed themselves to be photographed during the offense). Robbers and burglars often build confidence by &quot;gassing&quot; up each other. Some robbery/burglary groups do not discuss crime because they did not set out to commit one, but when an attractive target appeared, talk was not necessary. In some robbery/burglary groups, a member provides drugs and alcohol to reduce fear. Most robbers/burglars said that at least one group member took some preparation for the crime before the group assembled. Some robbery/burglary group members will step up to commit the crime when others are hesitant.</td>
<td>Technique</td>
</tr>
<tr>
<td>Velez (2001)</td>
<td>Individuals who have exposure to motivated offenders have increased risk of burglary victimization. Individuals who have high family incomes have increased risk of burglary victimization. Individuals who live alone have increased risk of burglary victimization.</td>
<td>Target</td>
</tr>
<tr>
<td>Mullins &amp; Wright (2003)</td>
<td>Percentage of residential burglars by race. Number of residential burglars by sex. Age groups of residential burglars. Male or female, most burglars committed their first burglary with friends, relatives, and street associates.</td>
<td>Irrelevant</td>
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</table>
Many female burglars said they did not know their boyfriends were planning a burglary until they arrived at the would-be crime scene (when it was too late to back out).

Both male and female burglars preferred dwellings that were unoccupied and contained something valuable.

Many male burglars had jobs that allowed them to scout potential burglary targets without attracting suspicion, but no females did.

Female burglars obtained target information from other males.

Female burglars used sex or appearance to gain access to the homes of gullible men.

Sometimes female burglars use sex or appearance to lure men out of residences and then a male co-offender would commit the burglary.

None of the female burglars wanted to work alone.

Women participate little in planning burglaries in mixed-gender crews.

Women in mixed-gender crews focus on taking "women's items" during the crime.

Many male burglars admitted to performing functions similar to women during burglaries only under certain conditions (e.g., no females present or early in their career).

Bernasco & Luykx (2003) Most of the variation in burglary rates is explained by its relative proximity to burglars' homes and proximity to central business district.

If all neighborhoods were equally affluent, burglars would burgle in neighborhoods of low territoriality, and if all neighborhoods had the same level of territoriality they would prefer affluent areas. However, affluent tend to have higher territoriality and poor neighborhoods have less. Burglars must balance attractiveness and opportunity.

Coupe & Blake (2006) The weekend burglary rate was only two-thirds of the weekday rate, and variation across each weekday was marked, with the first quarter of the day seeing very few and the rest of the day seeing many. These contrasts relate directly to occupancy and the risk of being spotted. Occupancy rates tended to be low during daylight on weekdays and high in the evenings and nights and on weekends. Rates at night were twice those of the day, and weekend occupancy was high in daylight and darkness, so that there were few daylight incidents on weekends. As a result, burglars were much more prepared to risk working in the daylight during the week. From an offender perspective, there was a choice between the safety of darkness and the higher risk of choosing an occupied dwelling.

Daylight burglars target properties with better cover and typically entered from the front (where cover was thicker).

The front door was one of the two most popular means of entry for burglary, and was especially favored in daylight.

Townhouses were popular after dark for burglary.

More nighttime burglary targets had available rear access and entry was thus more often from there, with windows the most popular.

Although half the burglaries were committed in daylight, only a quarter of those involved occupied dwellings.

Many offenders opted for nighttime burglary, despite the risk of selecting an occupied target, because guardianship is lower (residents could only hear but not see the burglar).

Burglary rewards were higher on weekends.

Burglary rewards were higher at more expensive dwellings.

Daylight and weekday burglars are younger.

Distraction burglars, who deceive or trick the victim to gain access, specifically selected daylight targets and were not only strikingly older than most daylight offenders, but also far older than even nighttime offenders.
Older burglars targeted dwellings when victims were at home, outside the working day.

Daylight-weekday targets were farther from burglars’ homes, and cars tended to be used more.

Lone offenders at daytime-weekday burglaries, including distraction burglars, stood out by traveling farthest.

Burglars working in groups of two to four tended to be younger and targeted more separated dwellings.

Households at daytime burglary targets had fewer unemployed household heads.

Despite more valuable houses, more owner-occupiers and fewer renters were weekday burglary targets.

Retired households proved to be both a threat to and an opportunity for different daytime burglars.

Weekday burglary targets were located in areas with fewer minorities, fewer unemployed, more detached and semi-detached dwellings, fewer townhouses, fewer unskilled and semi-skilled males, and less deprivation.

Weekday nighttime and weekend targets had more unemployed household heads (31 percent cf. 21 percent), and fewer possessions, rented property, and poverty factors may have contributed to poorer security.

The lifestyle activities of employed burglary victims weakened guardianship in better residential areas on weekdays.

Empty property quadrupled, and better front cover doubled the odds of daylight selection for burglary.

Low density of front cover decreased the chances of daylight burglary targeting, indicating the role of vegetation, rather than walls or fencing, as cover.

As the age of the head of household increases, burglary risk decreases.

Cohen & Cantor (1981)

The lowest and highest income categories face the greatest risk of burglary victimization.

Those ages 16 to 29 have the greatest burglary risk.

Nonwhites have a greater than average risk of burglary.

Residents of central cities have a greater than average risk of burglary.

Less occupied households have a greater than average risk of burglary.

Age and income interact to increase or decrease risk of burglary.

Miethe & Meier (1990)

High levels of proximity and exposure to offenders increased risk of burglary.

Living alone increase risk of burglary.

69% of the residential burglars were black and 31% were white.

17% of the residential burglars were female.

26% of the residential burglars were juveniles.

More than half the sample admitted to committing over 50 residential burglaries (41 of these individuals committed at least 100 burglaries).

68% of residential burglars averaged about 10 or fewer burglaries per year over their offending career.

Wright et al. (1992)

The offender were heavily involved in residential burglary (ranging from 4 to 900 break-ins; mean of 148).

The mean age of burglars was about 26.

33 of the burglars were black males and 6 were black females. Five were white males and three were white females.

Controls were significantly less willing than the burglars to respond positively to a crime neutral house.
Controls were significantly less willing than the burglars to respond positively to a house fitted with an extra lock.
The presence of a car in the driveway significantly reduces positive responses from burglars.
The presence of a "beware of dog sign" did not reduce target attractiveness.
Unoccupied and accessible homes were attractive to burglars.
Indicators of wealth did not affect target attractiveness.
Property marking does not reduce burglary risk.
Residential burglars were significantly better than non-offenders at recognizing "burglary relevant" environmental changes.

Wittebrood & Nieuwbeerta (2000)  
Almost 78% of individuals were not victims of burglary; about 17% were victims once; about 3% were victims twice; and, almost 1% were victims more than two times.
The odds of being a burglary victim versus not being a victim in any given year is about 1.7 times higher for individuals who have been previously victimized than for individuals who have not.
Occupational status had a small negative link with risk of burglary.
Persons engaged in property crime have a risk twice as large of being burgled.
The majority of residential burglaries occur in locations with average opportunity scores or higher.
All of the repeat burglary locations were in areas the model classified as having an average or above-average opportunity score.
All burglary cold spots had an absence of substandard housing or vacant lots.
About 80% of burglary cold spots were free of nuisance violations, street lighting, adjacency to a vacant lot and proximity to a likely offender.
36% of burglary cold spots were renter occupied.
37% of burglary cold spots were near a bus stop.

Groff & Lavigne (2001)  
Robbery and burglary victims gather information from offenders (e.g., voice, clothing, etc.) that can be used for identification and later retaliation.
Burglary and robbery victims also gather information about offenders from other individuals that can be used for identification and later retaliation.
Retaliation by robbery and burglary victims sometimes occurs months after the offense.

Jacobs (2004)  
Age and race of household head negatively affects burglary risk (i.e., younger households headed by blacks had highest risk).
More stable households were at higher risk of burglary.
Household size was positively related to burglary risk.
Households headed by women had a lower risk of burglary than those headed by men.
Frequent visits outside the neighborhood increased burglary risk.

Capowich (2003)  
43 of the offenders committed 5,011 self-reported residential burglaries.

Tunnell (1990)  
Garofalo & Clark (1992)  
Burglary entry attempts were more successful in unoccupied houses.
About two-thirds of burglars attempted to gain entry through doors (67% were successful).
Burglars were more successful when entering through a window (76% were successful).
All attempts to enter through a second floor window were successful, but this technique was rarely chosen.
Female residential burglars mean age was 26.
Female burglars reported little involvement in other types of crime.
34% of male burglars reported and 42% of females reported they committed only residential burglaries in the last 6 months.

79% of male burglars and ALL female burglars reported burglarizing with others.

Female burglars more frequently work with others compared to males.

The majority of male and female burglars who were drug users said addiction was a factor in their burglaries (most used drugs before committing the burglary).

Most female and male burglars reported drinking before committing the burglary.

Six of the female burglars were "accomplices" (a subservient role alongside males usually as lookouts or drivers; little say in target selection and planning).

Twelve of the female burglars were "partners" (played an equal role with co-offending males; participated in target selection, planning, gaining entry, searching the house, carrying goods outside).

"Partners" sometimes engaged in spontaneous burglaries

Hough (1987) Poor homes are burgled only marginally less than those with average incomes, but the "better-off" homes are more vulnerable.

The risk of burglary increases as level of occupancy decreases.

The majority of successful burglaries were carried out in empty houses.

Almost 60% of the victims of attempted burglaries were home when the crime took place.

Houses were more vulnerable at the rear or side than front, where only a third of burglary entries occurred.

Two-thirds of burgled flats were entered through the front door.

Burglars got in through doors in 60% of incidents and through windows 40%.

When time of occurrence was known, almost half of burglaries occurred during the daytime (6am-6pm).

Most burglaries were committed on weekdays.

Two-fifths of burglaries end in failure to gain entry.

Sampson & Wooldredge (1987) The odds of burglary are significantly greater for those living in single-adult households than those in households with two or more people.

Owning a VCR had no influence on burglary risk.

Miethe et al. (1990) Households with heads who maintained high levels of nighttime activity outside of the home had the highest relative odds of burglary victimization.

Household heads who increased their daytime activity outside the dwelling had the highest relative risk for serial burglary victimization.

Hesseling (1992) 8% of residential burglaries are committed in the inner city by out-of-towners.

17% of residential burglaries are committed in the inner city by in-towners.

46% of residential burglars committed the offense within a radius of activity of 1km.

Mesch (1997) Victims of burglary in Israel tended to reside in larger apartments than non-victims.

Burglarized households in Israel tended to have a larger number of residents Israel.

Percentages of burglary victims by age in Israel.

Percentages of burglary victims by marital status in Israel.

Percentages of burglary victims by education in Israel.

Percentages of burglary victims by sex in Israel.

Percentages of burglary victims by ethnicity in Israel.

Percentages of burglary victims by employment status in Israel.

Odds of burglary victimization in Israel were 45% higher for males than females.
Odds of burglary victimization in Israel were 43% higher for singles than marrieds.

Osborn & Tseloni (1998)  
Distribution of household burglary by number of crimes committed (e.g., 0-greater than 13).  
Being a prior burglary victim nearly doubles the predicted mean number of burglaries in the current period.  
Single adult households are significantly more prone to burglary than those with 2 or 3 adults.  
Being an affluent household with three cars increases burglary risk.

Ratcliffe (2002)  
Start and end/date times are not effective measures of any temporal trends in residential burglary.

Johnson et al. (2009)  
Descriptives for the number of residential burglaries committed per offender.  
Descriptives for the number of offenders per each residential burglary.  
There is clear evidence of space-time clustering for residential burglary (e.g., more burglaries occur near to each other in space and time than would be expected if there were no relationship between when and where they took place).  
For repeat burglary victimization, detected events were almost always cleared to the same offender.  
Burglary events that occurred closest to each other in space and time were those most likely to involve one or more of the same offenders (e.g., events which occurred within 100 m and 14 days of each other were massively more likely to have been committed by the same offender(s) than more distant events).

Short et al. (2009)  
There are temporal correlations between burglary events and that offenders do preferentially return to previously victimized homes within a short period of time after an initial burglary.

Smith (1982)  
Residential burglary had the third highest probability of multiple victimization out of 7 crime types.

Taylor & Nee (1988)  
Simulated "House 5" (i.e., a detached house in substantial well-tended gardens, well-endowed with vegetation cover, attractive décor, neighborhood surveillability, open window, letters in letter box, rear access and window boxes) was rate most likely to be burgled by burglars and householders.  
Simulated "House 2" (i.e., a centre terrace house) was rated lead vulnerable to burglary by burglars and householders.  
"House 4" was attractive to burglars because of its position, ease of rear escape and absence of security cues (open windows).  
Householders and burglars differed in simulated routes taken. Most burglars chose to jump over a rear fence and explore the house from the rear first.  
Householders were more erratic in their routes.

Farrell & Pease (1994)  
Calls to domestic burglary are consistently higher in the first four months each year than in subsequent months.  
The low point for residential burglary occurs in July and August.  
Residential burglary is at its highest in February and March.

Hirschfield & Bowers (1997)  
Each burglary hotspot had similar population sizes, although one (Birkenhead) had significantly higher daytime population and a larger built-up area.  
7% of residential burglaries committed on Merseyside were incidents of repeat victimization.  
The majority of households (85.2%) that experienced repeat victimized were burgled twice (i.e., they suffered one incident of repeat victimization).  
Burgled households are far more densely packed in the hotspots than they are, on average, for the whole of Merseyside.  
The number of repeatedly burgled households is higher in hotspots than on average in Merseyside.
<table>
<thead>
<tr>
<th>Source</th>
<th>Text</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strangeland (1998)</td>
<td>The risk of repeat burglary victimization is greatest immediately following the incident. In one out of three incidents, in Malaga, the robber threatened with a weapon (most often a knife). One out of four victims, in Malaga, was injured (8% needed medical attention). Most burglars in Malaga are local offenders. Burglary on the coast is predominately committed by outsiders.</td>
<td>Time</td>
</tr>
<tr>
<td>Robinson (1998)</td>
<td>Most burglary revictimizations within a week of the initial victimization (risk diminishes as time passes).</td>
<td>Other</td>
</tr>
<tr>
<td>Ratcliffe &amp; McCullagh (1998)</td>
<td>Burglary revictimization risk is highest in the period immediately after the initial burglary.</td>
<td>Time</td>
</tr>
<tr>
<td>Tseloni et al. (2002)</td>
<td>Affluent households are more frequently burgled. Lone parents are more vulnerable to burglary victimization. The hypothetical elderly widow is estimated to be more frequently burgled than elderly couples. For households with no prior victimizations as against those who suffered a prior burglary, incident increases by about 45% and prevalence increases by at least 26%.</td>
<td>Target</td>
</tr>
<tr>
<td>Townsley et al. (2003)</td>
<td>There was strong evidence of the existence of near repeat burglaries (mainly in suburbs homogenous housing). Little or no housing diversity (e.g., physical construction and general appearance of dwelling) restricts the extent of repeat burglary victimization.</td>
<td>Target</td>
</tr>
<tr>
<td>Johnson &amp; Bowers (2004)</td>
<td>Close pairs of burglaries tend to occur in spates (i.e., they occur in large numbers at particular locations for a limited time period) and progress in a slippery nature; moving to other nearby locations. That is, offending targeting patterns change over time.</td>
<td>Other</td>
</tr>
<tr>
<td>Tseloni et al. (2004)</td>
<td>A terrace/row house in the Netherlands has only a 76% of the expected burglaries of a detached or semi-detached house. A terrace/row house in the UK could expect 3.3% more burglaries than a detached or semi-detached house. Lone parent households are burgled more frequently than otherwise similar houses in the US, UK and the Netherlands. Homes which are more often empty have greater risk of burglary. Affluent households faced less risk of burglary in the US but greater risk in the UK. Poor homes were especially vulnerable to burglary in the US but the effect of being poor had no effect in the UK. Greater educational level increased the risk of burglary. Houses with three or more cars in the Netherlands had greater risk of burglary. Renters experience 50% more burglaries in the UK but 14% fewer in the Netherlands. Respondent age reduces the risk of burglary.</td>
<td>Target</td>
</tr>
<tr>
<td>Bernasco &amp; Nieuwbeerta (2005)</td>
<td>Percentage of residential burglars by age.</td>
<td>Irrelevant</td>
</tr>
<tr>
<td>Wellsmith &amp; Burrell (2005)</td>
<td>Descriptives of categories of property stolen in domestic burglaries in Sandwell from June 1997 to September 2003. Burglaries involving at least one of the defined &quot;hot products&quot; accounted for 79% of all burglaries with loss.</td>
<td>Technique</td>
</tr>
</tbody>
</table>
There was an increase in the percentage of burglaries in which cash was stolen during the study period. Audio visual equipment was the most frequently stolen of the subset of items. The percentage of burglaries involving the theft of mobile phones has increased over time. There was a statistically significant increase in burglaries involving theft of computer equipment. Most residential burglars made the decision to commit a burglary away from the scene of the crime then searched around in a suitable area until they found a target ("searching" was the most common form of target selection). A few residential burglars were "planners" (i.e., having some prior knowledge about the target, its occupants, potential profits). Only two of these burglars, however, meticulously prepared for burglaries for a number of weeks. The most common features of attractive burglary targets included: general upkeep and décor; visible/expensive items; type of car parked outside. Certain layout cues also make targets more attractive for burglary: degree of cover; access to getaway routes; etc. Burglars prefer unoccupied dwellings and had several checks to ensure nobody was home: knocking on doors or ringing doorbells, checking for lights, checking for cars in the driveway, checking for milk on the doorstep. All burglars stole cash, jewelry and documents among a variety of other goods. Two-thirds of the burglars "always" or "usually" worked alone. Twenty burglars liked daytime, 23 darkness and seven had no preference. Methods of entry varied (e.g., forcing a vulnerable door or window; getting through an open door or window; and dismantling patio doors or windows). Once inside the dwelling, nearly half of the burglars locked the front door. Most of the burglars used the same pattern to search the target; others varied slightly depending on the property or to prevent the police from linking their crimes. Most burglars searched the master bedroom first followed by any other adult bedrooms then the living area, including living room, dining room, study and kitchen. Most offenders avoided children’s bedrooms. About half of the burglars started searching drawers in each room then searched "everywhere." Most burglars spent 20 minutes or less in the target. Most burglars decided to leave the property once they determined they had gotten "enough," or they felt they had gotten everything of value. Most burglars sold their goods immediately after the burglary, but others waited to sell them and some hid the items at home. Households with high incomes are more attractive burglary targets. The sample of burglars included 27 males and 3 females. The sample of burglars included equal numbers of whites, blacks and Hispanics. The mean age of sampled burglars was 25. Over 75% of the burglaries were opportunistic (few burglars planned). Burglaries often followed three patterns: a) the burglar happened by the burglary site when occupants were clearly absent and the target appeared vulnerable (e.g., open garage door, windows, etc.); b) the site had been previously visited by the burglar for a legitimate purpose (e.g., as a guest, worker, etc.); c) the site was chosen after "cruising" neighborhoods and detecting an overt or subtle cue that signaled vulnerability.
Burglars chose sites based on level of affluence of the neighborhood where the target was located.

Burglars conduct cursory assessment of gain cues (i.e., rewards) at the specific target.

Surveillability was considered by burglars as a key factor in target selection (e.g., neighbors present, location of point of entry, etc.).

The burglars rated occupancy as the most important cue in target selection (e.g., cars in driveway, visible residents, etc.).

The burglars rated accessibility cues as important for target selection.

The sample of burglars ranged from 14 to 22 with most under age 18.

After the burglary, some teenage burglars called their parents to pick them up from the site, some called taxis and some walked home.

Some teenage burglars contacted offices of professionals to inquire about vacation schedules.

Some teenage burglars encouraged girlfriends to baby-sit so she can check for valuables in the house.

The teenage burglars planned less as they gained experience.

Most of the teenage burglars worked with others.

Most of the teenage burglars committed the offense unarmed.

The burglars perceived some detached, semi-detached, terraced and low-rise houses positively but other negatively in terms of defensible space. Burglars perceived "run down" dwellings as better targets; private/well-maintained dwellings were less attractive/more defensible.

All 86 burglars sampled were males.

The mean age of sampled burglars was 21.

89% of the sampled burglars were white.

Thick vegetation around the house was the best option for burglars.

Factors that many burglars said made targets unattractive included knowing the occupants were home, knowing the occupants, house CCTV, window bars, alarms, shutters, and highly visible house location.

Just over one-third of burglars stated the layout of the house was important for target choice.

The presence of concealed approach at the rear of the house was important for choosing burglary targets.

About one-third of burglars selected a house because it had a similar layout as a previous target.

The majority of burglars checked for occupancy before entering the house (usually by knocking the door).

The best options for entry were a ground floor rear window or a back door.

The least liked methods of entry pretending to be an official, an upstairs window, front door, or ground floor front window.

Of those that plan, most burglars watch their target beforehand to learn their routines.

Of those that had a preference, a third of burglars preferred offending in the morning and a third after dark.

Most burglars offended in their home area (most were familiar with the area in which they burgled).

38% of burglars returned to offend at the same place.

As the accessibility of street segments increases, so does the number of reported burglaries.

Blocks with both high accessibility and high street flow have a disproportionate number of burglaries.

Biron & Ladouceur (1991)

Cozens et al. (2001)

Palmer et al. (2002)

Beavon et al. (1994)
<table>
<thead>
<tr>
<th>Author</th>
<th>Source</th>
<th>Text</th>
<th>Type</th>
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</thead>
<tbody>
<tr>
<td>Indermaur (1996)</td>
<td></td>
<td>When one burglar became frustrated after not being able to find money and raped a woman occupant. He claimed &quot;If I can't get any money I will have sex.&quot;</td>
<td>Other</td>
</tr>
<tr>
<td>Canter (1998)</td>
<td></td>
<td>The distribution of residential burglary incidents within a community located in northwest Baltimore County showed they were occurring within a relatively short time period, involved a particular modus operandi, and were located within close proximity of each other. There is a strong statistical correlation (0.675, n=524) between the number of residential burglaries and the number of residential dwelling units within Census block groups.</td>
<td>Technique</td>
</tr>
<tr>
<td>Kleemans (2001)</td>
<td></td>
<td>Repeat burglary in the city of Enschede is substantial 9.4% of the repeat burglaries occur within one month of the preceding burglary, 29.6% within six months, 47.9% within one year, and 69.8% within two years. There is a much greater chance of a repeat burglary in the period immediately after the first burglary and that the magnitude of this risk declines with time. The chance that a burglar will commit a burglary by selecting a particular neighborhood and a particular target decreases, as the distance to his residence increases, as the distance to major traffic arteries increases, and as the distance to the city centre increases.</td>
<td>Other Time Technique</td>
</tr>
<tr>
<td>Mawby (2001)</td>
<td></td>
<td>Repeat victims more likely to be single (17%) or separated /divorced (16%) than first-time victims (12% and 11%, respectively) and were more likely to be poor. Repeat victims are more likely than first-timers to leave the home unoccupied in the daytime for at least six hours.</td>
<td>Target</td>
</tr>
<tr>
<td>Morgan (2001)</td>
<td></td>
<td>Distribution of burglaries by dwelling type. Burglary victims are at increased risk of later burglary compared to non-victims.  The risk of a repeat burglary is elevated in the first month and usually decline thereafter.</td>
<td>Target Other Time</td>
</tr>
<tr>
<td>Clarke et al. (2001)</td>
<td></td>
<td>Of the 172 repeat burglaries, 114 were single-family homes, 44 were apartments and 14 were duplexes (or semi-detached houses). Burglars sometimes return to steal replacement items.</td>
<td>Target</td>
</tr>
<tr>
<td>Everson &amp; Pease (2001)</td>
<td></td>
<td>Most burglars (6 out of 8) who specialize in &quot;burglary by deception&quot; return at least once. Offenders very often commit repeat burglaries on the same street.</td>
<td>Technique Place</td>
</tr>
<tr>
<td>Townsley &amp; Pease (2002)</td>
<td></td>
<td>Households with head of household between 16-24 have a burglary risk 2.71 times the national average (England). Households with one adult living with children have a burglary risk 2 times the national average (England). Households with a single head of household have a burglary risk 1.73 times the national average (England). Households with head of household separated have a burglary risk 1.63 times the national average (England). Households with Asian respondents have a burglary risk 1.77 times the national average (England). Households with unemployed head of household have a burglary risk 1.8 times the national average (England). Household respondents that are residents for less than one year have 1.75 times the national average (England).</td>
<td>Target</td>
</tr>
<tr>
<td>Farrell &amp; Pease (2003)</td>
<td></td>
<td>There were nine times more repeat burglaries than expected randomly.</td>
<td>Other</td>
</tr>
</tbody>
</table>
The likelihood of further burglary increases dramatically after each burglary against a particular target (e.g., risk increases by 18.5% after the first; 33.9% after the second; 44.4% after the third; 54.9% after the fourth).

Hope (2007)  
In affluent areas, poorer households have lower than average risk of burglary while unoccupied homes and homes with desirable property have higher risk. In more deprived areas, renters and lone parent households have a heightened risk of burglary.

Ratcliffe & McCullagh (1999)  
Households in more deprived areas are more likely to be targets of repeat burglary than those in affluent areas.

Sugden (1999)  
33 of the 40 farms were victims of theft, including seven that had their main residence burgled; seven had a farm building broken into; three had a disused residence broken into.
There were two incidents where burglars used farm fields as vehicular access for non-farm related crime.

Gray (2000)  
The incidence of burglary decreases as the percentage of terraced housing increases.
The proportion of Asians in an area is related to higher incidence of burglary. As the proportion of Asians in an area increase, the levels of repeat burglary victimization decrease.

Bowers et al. (2005)  
Terraced and semi-detached houses suffered the greatest number of burglary incidents.
When rates are considered, the properties most at-risk for burglary are flats and semi-detached houses, followed closely by terraced properties.
Detached houses, in general, are at less risk for burglary.
Terraced houses and flats are most likely to be revictimized by burglary than other types of housing.
Most properties suffered only one revictimization within each year.
All types of property are more at risk for burglary in more deprived areas (this pattern is far more pronounced in detached and semi-detached houses).
There was a higher risk of repeat victimization for properties located in more deprived areas.
Properties located within the more deprived quantiles were more likely to experience multiple repeat victimization than those in more affluent areas.
Within the most affluent areas, burgled terrace houses are most at risk of a subsequent burglary.
In the most deprived areas, detached houses that have been burgled are more at risk of being revictimized.
With the exception of flats, the point of entry most frequently used by burglars is the ground-floor rear window.
The number of entry points used by burglars varied by property type (e.g., relative to flats and terrace houses, for detached and semi-detached houses burglars used a greater number of access points and also frequently used ‘other’ entry points such as side windows, patio doors and skylights; in contrast, entry to flats was gained most frequently via the front door).

Thornton et al. (2005)  
111 respondents (3.3% of sample) reported someone trying to trick their way into their house (i.e., distraction burglary).
Men and women reported being targeted or falling victim to distraction burglary at similar rates.
Older age groups were more likely than younger groups to be targeted or fall victim to distraction burglary.
There were few differences across socio-economic groups in either being targeted or falling victim to distraction burglary.

Technique
## APPENDIX 4: CRIME EVENT FINDINGS FOR PERSONAL ROBBERY

<table>
<thead>
<tr>
<th>Study</th>
<th>Finding</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lindquist &amp; Duke (1982)</td>
<td>Overall, some elderly groups have higher robbery victimization rates than some younger age groups. Individuals aged 20-24 have the high robbery victimization rates.</td>
<td>Target</td>
</tr>
<tr>
<td>Sampson (1983)</td>
<td>Young black males living in highly dense neighborhoods have especially high robbery victimization rates.</td>
<td>Target</td>
</tr>
<tr>
<td>Ziegenhagen &amp; Brosnan (1985)</td>
<td>Victim resistance to robbery varies by situational characteristics.</td>
<td>Other</td>
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<tr>
<td></td>
<td>The modal robbery outcome is property loss/no injury. Resistance by robbery victims is positively related to avoiding property loss/injury. Robberies where offenders have guns usually result in property loss/no injury. Victim sex and race are weakly related to robbery outcome. No resistance by robbery victims usually results in property loss/no injury. Trying to convince robber to cease attack is not successful for victims. Leaving robbery scene is successful for victims.</td>
<td>Technique</td>
</tr>
<tr>
<td>Kennedy &amp; Forde (1990)</td>
<td>Young unmarried males who frequent bars and who are out walking around are more likely to be robbed.</td>
<td>Target</td>
</tr>
<tr>
<td>Lauritsen et al. (1991)</td>
<td>Males are more likely to report robbery victimization than women. Involvement in delinquent activities predicts robbery victimization.</td>
<td>Other</td>
</tr>
<tr>
<td>Miller (1998)</td>
<td>Men and women choose robbery over other crimes because it is perceived as &quot;easiest.&quot; Robbers prefer targets that are unlikely to go to police and likely to have desirable items. Robbers target &quot;showboats&quot; because they deserve it. Most male robbers use physical violence and/or a gun to attack. Male robbers often target other men involved in street life. All the male robbers here have used guns, but not every time. Many robbers use some form of physical assault even when they have a gun to show they are serious. Most male robbers spot a target, swiftly run up to them and physically confront them, and make a verbal command Physical confrontation robberies are usually committed with partners. Some offenders gain compliance by just placing the gun on the victim. Male robbers typically do not use violence against female victims unless they resist. Male robbers view women as easy targets but as a rule are not typically targeted. Some robbers use strong-arm methods when they do not have weapons. Female robbers often target female victims and use physical confrontation. Female robbers target male victims by appearing sexually available. Female robbers often work with male robbers. Female on female robbery usually involve no weapon or a knife. It is rare for female robbers to stab female victims. Female-on-female robberies occur in and around clubs, in addition to streets. Most female robbers are young and target other young women. Female robbers that use sex target men at clubs that appear to have a lot of money.</td>
<td>Target</td>
</tr>
</tbody>
</table>
In most sex-based robberies, the victim knows he has been set up b/c the female participates in the robbery but sometimes a male accomplice participates too. Male and female robbers typically do not rob women together but do rob males. Some female robbers describe their boyfriends as the robbery decision-makers (the let males take the lead because of fear and they feel less culpable).

Robbers that committed other types of crime were typically prompted by a chance encounter with an especially vulnerable target. Robbers see that robbery is a better choice than other crimes for several reasons (e.g., easy, quick, cash loot, safer). Robbers steer away from drug dealing because their strong craving for drugs makes their merchandise too tempting.

Jacobs & Wright (1999)

Jacobs et al. (2000)

Drug robbers choose dealers unlikely to retaliate.

Drug robbers perceive street corner dealers to be "softer" than dealers who sells from homes.

Drug robbers use physical methods to appear to be as menacing/trigger-happy as possible to present their "hardness" and lessen the drive for target retaliation (e.g., pistol-whipping, warning shots).

Drug robbers target strangers to keep anonymity and avoid retaliation (they avoid acquaintances no matter how distant).

Other

Drug robbers would target dealers they knew if they were a good target by having a fellow offender commit the crime.

Robbers choose not to target acquaintances based on the consequences of others that have done so.

Drug robbers typically do not rob the same stranger-dealer twice.

Drug robbers do not like offending in or around their neighborhood.

Drug robbers avoided taking personal items from victim (e.g., a necklace) that could later identify them and set them up for retaliation.

Drug robbers will not take all the "booty" so their victims see the robbery as part of the "game" and will not retaliate.

Drug robbers typically do not boast post-robbery.

Drug robbers often wore masks to maintain anonymity (most often a ski-mask)

Drug robbers also used nighttime as disguise.

Drug robbers take measures to minimize post-offense contact with a victim for up to months after the robbery to avoid retaliation.

The threat of post-offense victim contact affected where, when and how to return to the actual offense site or nearby location.

Given their lifestyle, drug and alcohol can hinder drug robbers' decision-making.

Because the threat of retaliation, drug robbers seldom resided in the same area for long periods of time.

Because of the threat of retaliation, drug robbers typically carry guns.

The more people residing on a face block, the less street robberies that occurred.

The more places per street block, the more street robberies that occurred.

Distance from the city results in a reduction in street robberies by about 2% per mile.

The number of motels/hotels is strongly positively related to street robbery.

Each bar, restaurant and gas station increased street robbery (by 5%).

The number of stores, vacant/parking lots and commercial establishments increased robbery (by 1-2%).

Each owner-occupied house reduced street robbery (by .2%).

Proximity of residences of likely motivated offenders with motels, hotels, bars, restaurants, or gas stations resulted in a non-additive effect on street robbery.
Distance from center city reduces the criminogenic effect of multifamily residences, bars, restaurants, gas stations and vacant/parking lots.  

**Hochstetler (2001)**  
The size of robbery and burglary offending groups changes.  
Robbers and burglars showed little concern for consequences by committing crimes in which they'd likely be suspects (e.g., used valid ID, robbed people they knew, allowed themselves to be photographed during the offense).  
Robbers and burglars often build confidence by "gassing" up each other.  
Some robbery/burglary groups do not discuss crime because they did not set out to commit one, but when an attractive target appeared, talk was not necessary.  
In some robbery/burglary groups, a member provides drugs and alcohol to reduce fear.  
Most robbers/burglars said that at least one group member took some preparation for the crime before the group assembled.  
Some robbery/burglary group members will step up to commit the crime when others are hesitant.  

**Baumer (2002)**  
Percentage of robbery victims by sex.  
Percentage of robbery victims by race.  
Percentage of robbery victims by age.  
Percentage of robbery victims by marital status.  
Household income of robbery victims.  
Educational status of robbery victims.  
Percentage of robbers by sex.  
Percentage of robbers by race.  
Percentage of robbers by age.  
Percentage of robberies involving multiple offenders.  
Percentage of robberies against family members.  
Percentage of robberies against strangers.  
Percentage of robberies against acquaintances.  
Percentage of weapon carrying by robbers.  
Percentage of injury among robbery victims.  
Percentage of completed robberies.  
Median financial loss of robbery incidents.  

**Baumer et al. (2003)**  
Percentage of weapon carrying by robbers.  
Percentage of robbery victim resistance.  
Percentage of robbery victim injury.  
Percentage of robbery victims by race.  
Percentage of robbery victims by sex.  
Percentage of robbery victims by age.  
Percentage of robbery victims by marital status.  
Household income of robbery victims.  
Educational status of robbery victims.  
Percentage of robbers by age.  
Percentage of robbers by race.  
Percentage of robberies involving multiple offenders.  
Percentage of robberies against family members.  
Percentage of robberies against strangers.  
Percentage of robberies against acquaintances.  
Although robbery victims from disadvantaged neighborhoods are significantly more likely to be robbed by an offender with a gun, they are not at higher risk of being robbed with other weapons.
Victims from disadvantaged neighborhoods are not more likely to experience non-fatal injuries.

Victims in disadvantaged neighborhoods are more likely to be attacked by a stranger and experience a completed robbery.

Incidents in disadvantaged neighborhoods are not significantly more likely to involve an armed offender than in affluent areas (offender/victim characteristics and their relationship account for the difference in gun use).

Blacks are more likely to use guns than whites.

Offenders are more likely to use guns when they rob blacks.

Offenders are more likely to use knives on victims who have low family incomes.

**Dugan & Apel (2003)**

Robbery victimization rates were higher for black females compared to whites and Hispanics.

Native American women had the highest robbery victimization rate.

Asian American women were most likely to be victims of impersonal violent crimes, including robbery.

**Tark & Kleck (2004)**

Number/percentages of robberies that result in injury, injury after self-protection and serious injury after self-protection by different types of self-protection strategies.

The most effect methods to reduce property loss in robbery involved armed resistance.

The injury-preventing effects of armed resistance by robbery victims are greater than all other protective actions, but not statistically significant.

**Bernasco & Block (2009)**

Age groups of robbers.

Racial groups of robbers.

48% of robberies involved more than one offender.

The odds for a robber choosing to offend in a tract of residence is 822 times the odds of a distance tract that is five or more borders away from the tract of residence.

For an adjacent tract (i.e., one border away from the tract of residence), the odds of being chosen are still 99 times the odds of a distant tract.

Gang territorial barrier reduces robbery travel slightly more if the barrier is between pairs of census tracts with high levels of gang activity than between pairs that suffer less gang-related incidents.

The presence of allegedly attractive targets in a tract increases the odds that the tract is chosen for robbery (e.g., drug dealers and their customers, prostitutes and their customers, high-school students, and number of employees of retail establishments).

Distance is more limiting for juvenile robbers.

Adults, and not juveniles, are more likely to commit a robbery in the tract where they live.

**Hipp et al. (2009)**

Blacks are more likely to commit robbery.

Latinos show a consistent tendency toward intragroup robberies.

The highest rates of robbery in racially mixed tracts are Black-on-Latino, but the second highest is black-on-black robberies.

**Smith (1987)**

There has been a substantial increase in robbery victimization of females, especially robberies without injury.

**Sommers & Baskin (1993)**

The female robbers did not specialize in robbery.

The female robbers had a "virtually consistent possession of weapons."

51% of robbery events involved no planning by female robbers.
49% of robbery events involved planning by female robbers, but 66% of these events involved only "minor" planning (where and who to rob).

Low level planning usually occurred on the same day or even hours before the robbery by females.

The remaining 33% of planned robberies by women following an existing pattern.

Robbery victims of female robbers were most often strangers.

Victims of female robbers were as likely to be males as females.

Women robbers were more likely to rob women when weapons were not used.

Female robbers also chose victims through watching or neighborhood gossip.

Only 9% of robberies by females involved a personal relationship between the victim/offender. 19% involved a drug partnership.

Female robbers preferred targets that were convenient, appeared to have money and low-risk.

60% of robberies by females occurred in public areas including streets, parks and subways (32% occurred in quasi-public spaces and 8% in commercial places).

Female robbers used weapons to minimize resistance.

Female robbers occasionally used violence to gain victim "cooperation."

63% of robberies by females were committed with accomplices. 37% were committed alone.

60% of co-offenses of female-perpetrated robberies involved female co-offenders.

Tremblay & Tremblay (1998) 73% of personal robberies involved a white offender and white victim; almost 6% were black-on-black; almost 2% involved a white offender and black victim; and, about 19% involved a black offender and white victim.

Felson et al. (2000) 34.8% of robberies in the NCVS between 1992 and 1995 involved acquaintances.

The most common acquaintance category of robbery victimization comprised people outside the family.

The typical robber was a young black male acting alone.

The typical robbery victim was a single white male age 30 or older.

In most robbery incidents, the victim was not injured and lost less than $500.

The overall risk of robbery is greater for persons who are young, poor, non-white, unmarried, and male, and who live in more heavily populated areas.

Percentages of victim-offender relationship in robberies (e.g., stranger, family members, etc.).

Percentages of weapon use by robbers.

Poor, black, and unmarried individuals are significantly more likely than their counterparts to be robbed by strangers, sight-only acquaintances and non-family acquaintances.

Unmarried individuals are significantly more likely to be robbed by family members.

School-aged youths are much more vulnerable to robbery by sight-only and non-family acquaintances.

School-aged youths are no more vulnerable to stranger robbery and less vulnerable to family robbery than older people.

Overall robbery risk is almost twice as high for men, but this differential reverses for robberies by family members.

As population size of the victim's community increases, so does the risk of stranger and sight-only acquaintances.

Young adult offenders are less likely than older offenders to commit acquaintance robberies than stranger robberies.
Female robbers are much more likely than male robbers to rob acquaintances than strangers.

Blacks are much less likely than whites to target family members and non-family acquaintances.

Lone offenders are more likely than multiple offenders to rob non-family and family acquaintances.

Youths younger than 18 are more likely to be robbed by non-family acquaintances and people they know by sight-only.

Female victims are much more likely than males to be robbed by a family member.

Blacks face a higher risk of acquaintance robbery than whites.

Poor victims are more likely to be robbed by non-family acquaintances and people they know only by sight.

Unmarried people have higher risk of robbery by family and non-family acquaintances.

Persons robbed by acquaintances are more likely to be injured than those robbed by strangers, and victims who are family members are particularly likely to be injured.

Youths are less likely to be injured than older victims.

Injuries are less likely when offenders use guns.

Jacobs (2004)

Robbery and burglary victims gather information from offenders (e.g., voice, clothing, etc.) that can be used for identification and later retaliation.

Burglary and robbery victims also gather information about offenders from other individuals that can be used for identification and later retaliation.

Retaliation by robbery and burglary victims sometimes occurs months after the offense.

Silbert & Pines (1981)

45% of prostitutes reported being victims of robbery.

Reid & Sullivan (2009)

Youths placed in the "victims of bullying" category had only a slightly higher likelihood of being victimized by conventional crimes, including robbery.

Distribution of robberies by setting in Tianjin, China (e.g., on the street; public area).

Distribution of robberies by victim/offender relationship in Tianjin, China (e.g., stranger, family member). It is mostly a "stranger crime."

Young people and those with higher education are at greater risk of robbery.

The largest percentage of robbery incidents involving juvenile victims occurs during school hours.

Robberies against juvenile victims are equally prominent during school and weekend hours.

Net of number of hours in each time period, robbery incidents against juvenile victims are most elevated during after-school hours.

Robberies are significantly less likely to be completed when victims resist.

Armed resistance by robbery victims was more frequently successful than unarmed resistance and the most successful method of all was resistance with a gun.

Armed robbers are more likely than unarmed robbers to complete their robberies and those armed with guns are more likely to complete the robbery than other armed robbers.

Robbers are more likely to complete a robbery when they injure a victim.

If a victim has a weapon (and the robber does not) the robbery is usually successfully disrupted.

If a robber has a weapon (and the victim does not) the robbery is usually completed.
Victim resistance provokes robbers to attack for two forms of self-protection (e.g., attracting attention or unarmed physical force). Using physical force and attracting attention were the two forms of self-protection positively related to victim injury. Armed robbers are less likely to hurt their victims than unarmed robbers. Robbers with guns are least likely to hurt their victims. When robbery victims are attacked and injured, they are more likely to resist. Distribution of gun use by robbers by robbery location (gun use was most prevalent in public street locations). Of incidents where victims were attacked and injured, two-thirds of the robberies had the sequence of either resistance-provokes-attack or resistance provokes injury.

Lauritsen & Quinet (1995) Distribution of juvenile robbery victimizations by number of times victimization (0-5 or more). There is a tendency to become a non-victim over time for robbery. There is a significant negative relationship between age and robbery victimization risk. There was more support for persistent heterogeneity than a state dependence effect for juvenile robbery victimizations.


Lauritsen & Heimer (2008) Robbery incidents are dominated by offenders who are strangers to the victim. The gender gap in robbery victimization has remained stable over time. There has been little change in the gender gaps for stranger or non-stranger robbery.

McClintock & Wikstrom (1992) Descriptives of personal robbery by context (e.g., in public places) and target (e.g., acquaintances, someone at work, strangers). Robberies were highly concentrated in city centres.

Topalli et al. (2002) The drug dealer/robbery victims had a mean age of 28.8. All the drug dealer/robbery victims were black males. Drug dealer/robbery victims, unable to recoup their losses from the person who robbed them often resort to robbing another drug dealer.

Wright et al. (2006) 25 of the sampled UK street robbers were male and two were female. The modal age of sampled UK street robbers was 25. Most of the sampled UK street robbers described themselves as white, Welsh or English (one was Asian; one was Afro-Caribbean; one was from the Middle-East). The level of violence used by UK robbers was far more than what was needed to gain victim compliance.

Brookman et al. (2007) The sample of robbers included 24 women and 31 men.
The average age of female robbers was 23 and the average age of male robbers was 25.

76% of the robbers were white; 11% black; 1% Asian; 12% mixed-race.

When men robbed other men, they usually chose targets based on perceived personal or status challenges or the perception of a target being "easy" or having something of value.

In 34 of 40 male-on-male robberies, the offender targeted strangers.

In the majority of male-on-male robberies, the offender either walked or ran up to the victim and proceeded with the robbery. In most of these cases, the robber calmly walked up to the victim and announced the robbery or rushed the victim and used violence.

The second most common method for male-on-male robberies was ambushing the victim. A variety of ambushes were used (e.g., robbing clients of prostitutes while they were occupied; a groups of robbers waited for a suitable target at a bus stop; ambushing a pre-identified shopkeeper).

When it came to male-on-male robberies, the men interviewed here relied heavily upon either a quick display of physical force or strong intimidation to establish control of the robbery situation.

In other incidents (male-male robbery), male offenders sought to avoid physical violence, instead using intimidation to coerce victims into compliance. In roughly one third of the robberies committed by men, some sort of weapon was used. Most of these robberies involved lone men robbing lone men.

Among the 10 robberies carried out by gangs of men (three or more), only one involved weapons.

Three cases of male-on-male robbery involved the pre-emptive use of a weapon to discourage victim resistance.

Some of the male-on-male robberies involved much more force than was necessary to generate compliance, with the offenders reporting that they often beat victims for long periods of time.

In contrast to work done with street robbers in the United States, the offenders here (UK) are decidedly not trying to create an ‘illusion of impending death’ (see Wright and Decker 1997: 96) to establish control of the social interaction.

There were three cases in the sample in which men worked directly or indirectly with women to enact a street robbery. All of these cases involved a male robbing ‘punters’, as the clients of sex workers are known in the United Kingdom.

Overall, the men in our sample tended not to target women, or, if they did, they did not admit it.

Half of the robbery incidents described by the British women in our sample involved a male victim. A weapon, usually a knife, was used in eight of these 15 cases.

The majority of the female-on-male robberies involved strangers.

All of the male victims who were robbed by women were alone at the time.

The modal way in which women robbed men was in partnership with another man or woman (eight cases).

Some of the same cues that guided males to suitable targets clearly influenced target selection for females, too (such as visible goods, general opportunity and, as already mentioned, informal justice). However, women were much less likely to target males simply because they saw them as ‘easy’ or ‘vulnerable.’

While women also sometimes walked or ran towards their male targets, they were much more likely to be with their victims already or to follow them.

The women never ambushed their targets in the way that the men described.
The women used several of the same strategies as men when robbing males, deploying debilitating violence from the outset and/or to overcome resistance. Generally speaking, weapons were brandished more often in female-on-male robberies than they were in male-on-male robberies. Unlike their male counterparts, females reported robbing women as often as they did robbing men. Female victims, who overwhelmingly were strangers, were most likely to be selected by female robbers because they were perceived to represent an ‘easy’ or ‘vulnerable’ target. Female targets were often selected by the female robbers because they appeared to have something worth taking or cash on their person. Consistent with the dynamics of stranger robberies, the most usual way in which women approached their female targets was to walk or run towards them.

Sherman (1989) In two robbery cases victims saw a gun; in two other cases they felt a hard object pushed against their body; in three cases robbers were unarmed. In no robbery cases were victims injured.

Technique

Cook et al. (1993) Two business travelers reported being robbed.

Target


Target

Potter (2001) Descriptive of robbery and attempted robbery against female college students. Both robberies against female college students occurred off-campus.

Target

Block et al. (2007) 29.4 per cent of personal robberies took place at or within a short walk from the offender’s home.

Technique

Groff (2008) When target agents have no constraints on their travel or when they have only temporal constraints, the number of street robberies increases as the target agents spend more time away from home.

Other

Clarke et al. (1996) Subway robbery seems more likely to be committed when few people are present.

Place

Block & Davis (1996) The risk of street robbery was much higher in areas immediately adjacent to a rapid transit station than in the surrounding community. Transit passenger volume at stations and number of street robberies were unrelated (at Northeast Side).

Place

Robberies at transit stations do not peak during the morning and evening rush hours, but are concentrated late at night (11:00 to 12:00 p.m.) and in the early morning (at Northeast side). Twenty-five percent of street robberies within two blocks of an elevated station occurred between midnight and 4:00 a.m. This figure corresponds closely to the percentages of incidents occurring at other locations: 24% of those two to four blocks away and 21% at a greater distance occurred during that period (at Northeast side).

Time/place

In the West Side transit districts, intensity of risk of street robbery varied by intensity of use of street. Each major street was a focus for street robbery. Secondary streets were secondary foci of street robbery. All other streets are tertiary, and are mostly residential. These streets had a lesser, but still high, risk of street robbery. Street robbery was much more evenly spread over the day in the west side than in the northeasterly districts. The number of street robberies increased earlier in the day than in the northeastern districts and basically remained at a stable peak from 3:00 p.m. to 11:00 p.m., declining steeply thereafter.
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<th>Source</th>
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<td>Canter (1998)</td>
<td>In the Towson area of central Baltimore County during August 1995, a large number of robberies involved either a black male or pair of black males using a blue steel automatic handgun. Most of these cases occurred along major arterials, and were close to the city-county line. Robberies clustered in proximity to a known drug market located in a low-income apartment complex in northwest Baltimore County.</td>
<td>Place</td>
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<td>Deakin et al. (2007)</td>
<td>18 of the 20 street robbers were male. All street robbers were aged between 14 and 30 years old. Contrary to the popular impression of the offence that occurs after dark most of the street robbers were active at various times of the day. Analysis of the police data revealed that reported robberies were most likely to happen between 1 p.m. and 2 a.m., with a slight increase between 5 p.m. and 8 p.m. For many of the younger respondents the timing of a robbery was related to feeling bored on the street with friends. One young street robber told us that their gang would target suitable victims while truanting, after school when there was nothing else to do, and particularly at weekends or during the school holidays. Most street robbers had a preferred “patch” where they knew there would be suitable victims. In their patch they knew where the CCTV cameras were, they shared the registration numbers of unmarked police cars with allies and accomplices, and they had a good knowledge of the alleyways and escape routes. Students were highlighted by street robbers as the archetypal easy victim. Most were able to identify students by their clothes, location and manner on the street. Many of the respondents reported that students make easy targets because they frequently hand over all their possessions without resistance and can be easily intimidated. In addition, students are believed to have available money in cash-card accounts and the latest desirable gear – laptops, mobile phones, MP3 players and mountain bikes. The fact that they are often not from the area and seen as being in a privileged position attending university made students a target of resentment among many of the younger street robbers, which they saw as providing a justification for the crime. Consequently, the majority of respondents had traveled to student areas with the aim of robbing from students they encountered in the street. Several of the respondents talked about the ease with which students could be robbed at the beginning of the academic year in September and October while they are still “clueless.” At this time of the year students are often seen with property visible making it easy to snatch laptops, bikes, bags, phones and wallets. Interestingly, over the summer months when the student population decreases dramatically many of the respondents claimed to experience a fallow period. This is supported by the police data analyzed in this study, showing a drop in the number of street robberies over the summer, although there does seem to be some displacement towards local residents. A minority of street robbers said that they tended to prey on people who were also involved in criminal activity. Street robbers in the study who targeted criminal victims were highly likely to carry a weapon and to use violence during the robbery. Customers who knew when the dealer was carrying quantities of drugs or money sometimes targeted drug dealers on the street for robbery.</td>
<td>Offender/time, Place, Time, Target, Target/time, Tech/target, Target</td>
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However, robberies against drug dealers were seen to be risky. Since these groups rarely report incidents to the police they see themselves as responsible for their own protection and delivering their own justice. Thus, perpetrators concealed their identities as much as possible using hoods, scarves and balaclavas in order to avoid any form of street justice.

Men looking for prostitutes were viewed as “ideal victims” by some street robbers as they carried large amounts of cash (particularly on arrival in the red light district), they were very unlikely to report the incident to the police or to retaliate (as physical injury may require explanation), they are distracted in their search for a prostitute, and are often driving slowly or parked.

Robbing other street robbers or “jacking” seemed to be a common practice. Again, this is a type of victim that is unlikely to report an incident to the police. Most of the young street robbers were insistent that they would not target women, girls or old people (although several admitted to having broken the “women rule” on occasions of desperation).

In principle drug-using street robbers also shared this moral view of women and older people as unacceptable targets but sometimes broke the rule when their need for a fix outweighed their moral conscience.

Solo street robber scenarios are more likely in snatchtheft from persons. Many of the younger street robbers of our interviews worked in pairs or groups of up to six people.

Some offenders, either working alone or in groups, used distraction techniques to wrongfoot the victim and cause a momentary lapse in their awareness of their surroundings.

Furthermore, victims may be targeted at a time when they are distracted by an external stimulus such as talking on a mobile phone, using an Automated Teller Machine (ATM) or looking for something in a bag, providing the offender with an opportunity to catch them off guard.

Several street robbers said they had learnt to be more violent on first contact with the victim as a way of achieving a favourable outcome.

Some respondents chose to begin a street robbery by punching the victim, believing that this will shock and intimidate the victim into immediately handing over their possessions.

Although most of the street robbers who carried a weapon had used it to threaten and not to injure, many said they would use their weapon if necessary. Violence frequently seems to be used in cases where the victim refused to cooperate.

Some respondents used threats or showed a weapon before resorting to violence but others punched or pushed to the ground any victim who did not immediately comply.

The interview data revealed that in most robbery situations non-compliance leads to escalation of violence to overcome the victim’s resistance. But there were situations in which this was not the case.