

CHAPTER 2

Theoretical Foundations of Crime Analysis

The primary objective of crime analysis is to assist police in responding to and preventing everyday crime and disorder. Sociological and psychological theories that explain the root causes of criminal activity, pointing to factors such as social disorganization, personality disorders, and inadequate parenting, are not as useful for crime analysis because police have little influence over these root causes. Police and crime analysts deal with individuals who have already chosen to commit crime, so the focus is how and why crimes are occurring in particular situations in order to seek solutions for those immediate problems.

Consequently, crime analysts utilize theories to explain crime incidents that assume a motivated offender instead of those that try to explain why the individuals have become offenders in the first place. This chapter provides a concise introduction to this theoretical framework. Although this discussion refers primarily to crime, the concepts presented here are also applied to disorder and other types of problematic activity concerning the police and their communities.

ENVIRONMENTAL CRIMINOLOGY

Environmental criminology is different from traditional criminology because it does not explain why people become criminals or seek to understand the societal causes of crime (e.g., poverty, poor education, drug addiction). Instead, it focuses on understanding how crime incidents happen in the various aspects of the environment or “settings,” which are locations repeatedly used for a specific activity at common times (Felson, 2006). Every city, town, and rural area can be divided into settings in which particular behavior occurs. Think of a public park with picnic tables and a basketball

court versus a major retail store and its parking lot. Different people do common types of things in these settings (e.g., play sports, shop), and it is their routine behavior that creates opportunities for crimes to occur in systematic ways.

A crime occurs when the opportunity exists for that crime. A theft cannot occur if there is nothing to steal, and an assault cannot occur if there is only one person in the room! Specific settings and behavior result in specific opportunities, and routines shared by a large number of people result in more opportunities. Environmental criminology seeks to understand how and explain why opportunities are created to prevent future crimes (Andresen, 2020). Even further, the goal of environmental criminology is not to explain why one offender commits a crime in one situation but to understand patterns of crime that are predictable in order to devise ways of stopping a large number of them at once.

For example, a person's wallet was stolen while they were working out at the gym; it was taken from the center console of their car in the gym's parking lot. To prevent another crime like this, it is not helpful to understand the offender's background (e.g., bad parenting, poor education, drug addiction) or even why the victim left the wallet in the car that day. Rather, it is important to understand how it is the routine behavior of many people to leave a wallet in a parked car for several hours when they work out, how this creates an opportunity for a crime, and that offenders work out too so are fully aware of the opportunity.

Problem Analysis Triangle

There are many different routines people follow in different settings, which makes it nearly impossible to list them all. The same type of setting can elicit different routines depending on the weather, the city, and the age of the people, among other things. Think of the different routines college students, people in their 30s, and people in their 60s all have when they go to a bar to drink. A key part of a crime analyst applying environmental criminology concepts is understanding the specific nature of the settings within their jurisdiction.

The **problem analysis triangle** (Center for Problem-Oriented Policing, 2021) is a mechanism based on theory that is used to break down settings and understand how crime opportunities can occur and be prevented. [Figure 2.1](#) illustrates the problem analysis triangle which is actually two triangles. The small triangle represents a particular type of problematic activity, either criminal or a form of disorder such as unruly juveniles downtown or loud music at apartment complexes. On each of the three sides and on top of the smaller triangle are the four necessary components of a crime. An event occurs when an offender and a victim (i.e., person) or target (i.e., inanimate objects, like personal property, vehicles, or buildings) come together at a

FIGURE 2.1 The Problem Analysis Triangle



particular place at a particular time. Yet, even though these are necessary elements, crime does not always occur when all the elements are present.

The larger triangle illustrates how opportunities are influenced within the setting. On each side, the types of people or mechanisms can exhibit control over victims/targets, places, and offenders. *Guardians* are people who have the ability to protect victims/targets by watching over them or removing them from particular settings. For example, neighbors watch over other people's homes, and security guards watch over both people and property. Parents remove children from settings to protect them, and individuals conceal or remove their own property. Mechanisms, such as video surveillance cameras, are used to watch over public and semipublic places as well as private residences.

Managers are people who are responsible for places, such as hotels, retail stores, apartment buildings, and homes. They set rules and manage the places. The actual rules, how they are enforced, and the physical environment of the place all affect crime opportunities. Managers of public and semipublic places are extremely important because they normally have a span of control that affects a large number of people and subsequently many opportunities. For example, a bar owner with lax policies on underage drinking and overserving is increasing the opportunities for drunk driving, fights, and sexual assaults.

Finally, *handlers* are people who know potential offenders and are in positions that allow them to monitor and/or control potential offenders' actions. Parents and parole officers are examples of handlers who might discourage potential offenders from committing a crime by establishing a curfew; a friend is an example of a handler who might egg another person on to fight in a bar or get drunk and rowdy at a sporting event.

An important aspect of the effect of guardians, managers, and handlers is they have the ability to *both* discourage or reduce opportunities and encourage or increase the opportunities for crime. Not only is it important to understand what is currently happening in a particular crime setting that creates crime opportunities, but it is also important to understand how routine behavior can be changed to reduce future opportunities.

Returning to the example of the stolen wallet: the victim, a guardian of themselves and their property, has left the wallet unprotected in the vehicle. The place is the parking lot, and the place manager is the gym owner, who controls the lighting in the parking lot, the number of security guards, and the location of the parking spaces (e.g., in front of the gym vs. behind the gym where no one can see them). Finally, the offender is someone who may be alone or with a friend (a handler) and knows people often leave valuables in their cars while at the gym, so decides to take a chance, break into the car, and see what is there. This example illustrates a central concept that opportunities are highly specific and crime does not always occur when they are present. If the offender had walked through the parking lot while another gym patron was there or if there was a visible security camera in the parking lot, the offender may have decided not to take the wallet because it seemed too risky.

The problem analysis triangle has important application for crime analysts who use data to identify short- and long-term problems. It assists them in understanding the local opportunities for crime and disorder and seeks ways to prevent them. For instance, analysis of car break ins throughout the city may show cars are being victimized at gym parking lots as well as a certain area of a shopping mall parking lot in the evening hours. Analysis of the mall incidents reveals most of the crimes are near a movie theater where people often leave their recent purchases in their cars while they go to the movies. Measures to reduce opportunities in both settings would address better guardianship; however, they would be slightly different based on the immediate environment.

The problem analysis triangle provides a structured way of breaking down problems by victims, property, offenders, time, and place. There are other concepts within environmental criminology that also help crime analysts anticipate how offenders make choices and how they come together with victims at particular times in particular places through their routine behavior. These concepts provide insight into patterns of behavior at the individual level (rational choice perspective), the social interaction level (crime pattern theory), and the societal level (routine activity approach).

Rational Choice Perspective

According to **rational choice perspective**, offenders make choices about committing crimes based on anticipated risks and rewards. The theory suggests, if given a chance or the right “opportunity,” any person will commit a crime (Felson & Clarke, 1998). The motivation a drug abuser with no money has to

commit a robbery might be obvious, but it is more difficult to understand why seemingly noncriminal people commit crimes in certain circumstances; rational choice perspective explains their motivation.

A person who would normally not steal may decide to steal in a situation where the reward outweighs the risk of getting caught. For example, a person puts six items on the counter of a convenience store. When the clerk only charges for four items, the individual does not say anything and walks out of the store. In a split second, the individual weighs the reward of getting two items for free with the risk of getting caught by the clerk. In this case, the reward outweighed the risk, and the person committed a crime.

Rational choice perspective also suggests individuals will decide *not* to commit crimes when the risks are too high or the rewards are not adequate. For example, a group of teenagers may want to hang out and drink alcohol. One of them has a fake ID but if they hear the stores and police are cracking down, they may decide to hang out but not drink because the risk outweighs the reward. Understanding how individuals choose to commit crimes or choose *not* to commit crimes in particular circumstances can lead to developing strategies to prevent them.

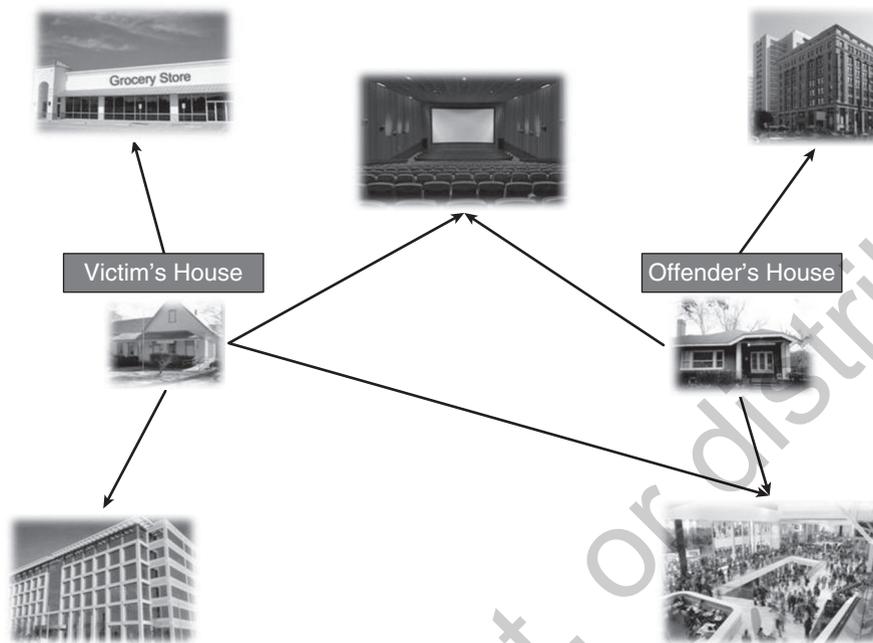
Crime analysts and police use these ideas to anticipate why individuals choose to commit crimes in particular settings within their jurisdiction. When the goal is to make an impact on a crime problem rather than solve one crime, it is important to determine patterns of behavior so opportunities for crime can be changed and offending deterred. For instance, again using the gym parking lot example, the crime analyst digs into the data and finds in the last year offenders target cars in the back row of the parking lot, farthest away from the gym's front doors to avoid being seen making the crime less risky. Based on the analysis, police could advise the manager of the gym to increase lighting or install video security cameras in the area to increase an offender's perceived risk of being caught.

Crime Pattern Theory

Crime pattern theory, also referred to as the “geometric theory of crime” (Andresen, 2020), seeks to explain how people come together in space and time within settings. According to this theory, criminal events will most likely occur in areas where the activity space of potential offenders overlaps with the activity space of potential victims/targets (Brantingham & Brantingham, 1993; Felson & Clarke, 1998). An individual's activity space is an area that becomes familiar through everyday activities, such as where the person lives, works, hangs out, commutes, and goes shopping.

Figure 2.2 illustrates a simple example of how certain areas within the activity space of offenders intersect with those of victims—for example, work, movies, and shopping areas. Crime pattern theory asserts a crime event

FIGURE 2.2 Offender and Victim Activity Space Example



involving specific offenders and victims can only occur within or stem from the intersection of their activity spaces. This is a relatively simple example, given individuals' actual activity spaces are vast. More broadly, crime pattern theory would suggest a downtown area with retail stores, restaurants, and live music venues would be worthy of crime analysis because many people share it as their activity space.

A crime analyst would use the problem analysis triangle to break down the settings into specific types of places, victims, targets, and potential offenders to understand why and how they come together. Such an area may have a problem with thefts from vehicles and auto thefts from parking lots because of the high volume of vehicle traffic. It may also have a problem with theft of phones because of the high number of potential victims putting their phones in their back pockets when attending concerts.

Crime pattern theory highlights how offenders develop a routine and pattern of behavior in small geographic areas. For example, most people go to bed, wake up, and go about their business at a particular time, shop at the same grocery store, and meet friends at the same places. Usually, they choose what is acceptable and most convenient, which typically is close to where they live. Offenders do the same thing, but as they go about their day, they take advantage of opportunities to commit crime. Figure 2.3 is a simple illustration

FIGURE 2.3 Offender's Activity Space and Crime



SOURCE: Google Earth.

of this idea. The explosions are crimes that are committed on the offender's way to a friend's house, hangouts, restaurants, and shopping areas (e.g., Hasty Tasty Pancake House and Eastown Shopping Center). There is even a pawn shop nearby to dispose of stolen goods.

A large body of research establishes offenders are more likely to commit crimes relatively close to where they live, and the farther they travel from where they live, the less likely they will commit crime (i.e., distance decay) (Bernasco, 2010; Bernasco, Johnson, & Ruiter, 2015). Offenders prefer to commit crimes in familiar neighborhoods where they move around without being seen as a stranger and where they have committed crimes before. Most research on residence-to-crime distances has found offenders' residences are within one mile of their crimes (Ackerman & Rossmo, 2015), but there is a buffer zone around the criminal's residence where they refrain from committing crimes (Rossmo, 2000). So, while offenders choose to commit crimes in areas where they are comfortable, they choose not to commit crimes too close to their own homes because of the risk of being recognized and caught.

More recently, researchers have looked at "edges" of activity spaces to see how they might impact how offenders commit crime. Song, Andresen, Brantingham, and Spicer (2017) find when residential areas bordered commercial areas, crime was likely to be higher at the boundaries between the two and there was less crime the farther away from where the different types of areas intersected.

The implications of the research are when analysts are identifying suspects for a particular crime series, they start by looking for individuals who live in or near the area and/or frequent the area during their routine activities. Or, the

analyst can use field contacts by police to determine if suspicious people were noted in the area, because offenders who are not familiar with a particular area may spend some time “causing” it to become familiar. The movie *Home Alone* is a good example when the character played by Joe Pesci shows his buddy exactly when each home’s Christmas lights will turn on.

International Crime Analyst Perspective

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Title: Analysis of risk factors for robbery of banks in the Novo Cangaço modality, using Land Risk Modeling

In 2006, a pattern of bank robberies was identified in Brazil committed by gangs made up of several hooded individuals and heavily armed with rifles, machine guns, and pistols. The suspects invaded the banks and forced customers as well as bank tellers to the entrance where they served as human shields. At the same time, they forced the bank branch manager to open the safe. They then took the money and ran away. The objective of this analysis was to produce a Land Risk Model with data from the bank robberies for the year 2011 and measure the risk factors that most contributed to this type of occurrence in the state of Mato Grosso. Terrain risk modeling was used and is a risk assessment technique and diagnostic method to identify the spatial attractors of criminal behavior and environmental factors conducive to crime. The following risk factors were used:

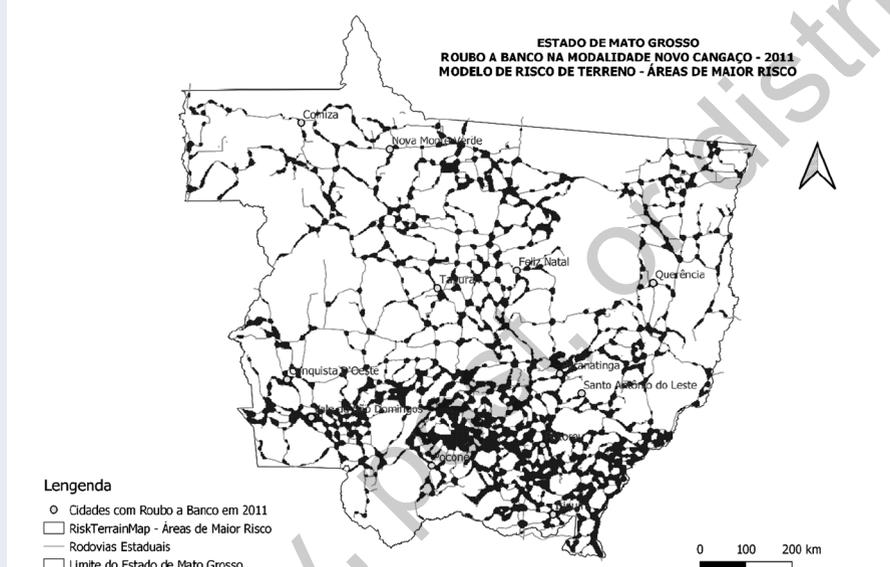
1. Location of the police force in the municipalities where the robbery occurred;
2. State highways that facilitated escape after the robbery;
3. Federal highways that facilitated escape after the robbery;
4. Airports and airstrip near the seat of the municipality that facilitated the escape;
5. Indigenous reserves that facilitated escape and made it difficult for police actions because they had large extensions of forests;
6. Areas of dense forest and indigenous reserves that facilitated escape and hindered police actions;
7. Rivers that passed near the cities where thefts occurred as an escape route and also served as a blockade when criminals set fire to vehicles on top of bridges, preventing and/or hindering police pursuit;
8. Banking Agencies in municipalities;

Based on the eight variables initially proposed for analysis and after exhaustive tests of these variables in the RTMDx by the operationalization methods of “Proximity” and

"Density" and using various influence radii, we conclude that the variables 3, 5, 6 and 7 did not present significant risk factors that would influence the action of bank robberies. Item 1 was spatially analyzed in the QGIS Geographic Information System software.

Fatores de Risco	Operacionalização	Influência Espacial (m)	Valor do Risco Relativo
Rodovias Estaduais	Densidade	8000	99.953
Agências Bancárias	Densidade	20000	51.837
Aeroporto e pista de pouso de avião	Proximidade	6069	23.067

Tabela 02 – fatores de risco das variáveis calculado pelo RTMDx



Given the final result of this work, the Terrain Risk Modeling technique was able to measure which risk factors most contribute to the occurrence of bank robbery in the modality "Novo Cangaço" in the state of Mato Grosso. The application of this technique to the country's Public Security problems will enable police forces that currently employ the reactive police model in their actions to act proactively, thus beginning a new cycle in Public Security, since this technique has been used in many other countries and for different types of crimes, as well as for other applications far beyond public security.

Routine Activity Approach

Routine activity approach focuses on how opportunities change based on behavior at the societal level. For example, Felson and Eckert (2018) discuss how significant changes in Americans' routine activities were responsible for

increases in crime rates in the United States in the mid to late 19th century. They note the number of Americans who routinely left their homes on a daily basis to go to work increased during that time. Guardianship over homes decreased, increasing opportunities for residential burglary. With more people out and about, increasing the numbers of people, cars, and personal property resulted in more robbery, rape, and vehicle crime.

Looking again at the example of the stolen wallet, routine activity approach explains opportunities were created when working out at a gym became popular and when gym patrons developed the habit of leaving their wallets in their cars. Similar opportunities result when people leave their wallets in their cars when going to dog parks or using hiking trailhead parking lots. What is important about these and other types of settings is there are a large number of people sharing the same behavior which creates a large number of opportunities offenders also know about.

In recent years, the most significant example of a change in routine activity on a societal level is the use of smartphones. The fact almost every person in the United States and many people around the world use a smartphone has created many more opportunities for certain types of crimes. Smartphones are like mini computers with much of the same functionality. Because people carry them around and use them nearly all day, every day, there are more opportunities for identity theft, dissemination of computer viruses, cyber bullying, distribution of pornographic material, and theft of the phone. Yet, routine activity approach also suggests societal changes in behavior can decrease opportunities as well. For example, many states have made wearing a helmet mandatory when riding a motorcycle to reduce injuries. This also reduced the opportunities for motorcycle theft because a thief has to bring a helmet to steal a motorcycle or risk being stopped, not for the theft but for the helmet violation.

Crime analysts utilize this theory by asking questions about general patterns of behavior and the impacts of those patterns on crime opportunities. Understanding local patterns of behavior is also important for crime analysts because they some are likely unique to the jurisdiction, such as the influx of a specific drug or teenagers drinking and driving as their primary form of entertainment on weekends.

LAW OF CRIME CONCENTRATION

An important theoretical concept for crime analysts is the “place” side of the problem analysis triangle. Research over the last 40 years has established proactive crime reduction strategies that focus on “place” that are more effective than those that focus on people (Weisburd & Majmundar, 2018), which has resulted in a new “law” within criminology. A criminological law is a definitive conclusion made about the “way the world works” based on facts and comprehensive research findings. They do not apply to individual

situations, but to broader patterns of crime and behavior. One such law established through many years of research is the age-crime curve which states offenders' criminality is not consistent and stable throughout their lives, but most individuals "age out" of crime (Laub & Sampson, 2003). There are very few "laws" in criminology since much of its research lacks consistent and definitive answers to criminological questions.

In 2014, Professor David Weisburd established the "law of crime concentration" as follows: "For a defined measure of crime at a specific microgeographic unit, the concentration of crime will fall within a narrow bandwidth of percentages for a defined cumulative proportion of crime" (Weisburd, 2015, p. 138). This means that not only do crime incidents cluster by place but these clusters can be narrowly defined, are stable, and are predictable over time. This law enforces the importance of place in all the concepts discussed thus far and the everyday work of crime analysts.

What does this mean for crime analysts? It means crime analysts focus on and spend a large amount of time examining crime at places. While understanding offenders' behavior and choices are important, they are fluid in their criminality and are mobile. Places do not move and their routine behaviors and purposes are stable as well. Thus, analyzing, understanding, and responding to problems at place is the most promising strategy for police and, by extension, crime analysts.

REPEAT VICTIMIZATION, NEAR REPEATS, AND THE 80/20 RULE

Repeat victimization is the recurrence of crime in the same places or against the same people. A major research finding on repeat victimization is people and places that have been victimized have a higher likelihood of being victimized again than do people and places that have never been victimized (Farrell & Pease, 1993). The best predictor for victimization is the person or place that has been victimized in the past (Grove, Farrell, Farrington, & Johnson, 2012). This is important for crime analysis, not only because repeat victimization is common but also because it provides a framework for examining opportunity.

When crime analysts identify groups of people and types of locations or targets who are repeatedly victimized in specific settings, they can focus on the common factors and help determine why. The phenomenon of repeat victimization also provides a focus for prevention since those who have been repeatedly victimized should be at the top of the list for crime reduction strategies. This helps police because they have limited resources and have to prioritize their crime prevention efforts. Chapter 3 discusses more about how police have the most impact on crime when they focus their efforts toward particular problems, places, victims, and so on.

Repeat victimization is broken down into the following four types (Weisel, 2005):

1. **True repeat victims:** These are the exact same individuals or places that were previously victimized. For example, the same residents are living in the same house, which is burglarized twice.
2. **Near victims:** Individuals or places physically close to and share characteristics with the original victim. Burglary of several single-family homes along the same street is an example.
3. **Virtual repeats:** Individuals or places virtually identical to the original victim and share some of the same characteristics. For example, electronics retail stores of the same name that are victimized because they have similar, if not identical, store layouts, policies, and types of property. Also, new occupants (e.g., owners of a store or residents of a home) in places victimized in the past are considered virtual repeats.
4. **Chronic victims:** Individuals or places repeatedly victimized over time by various offenders for various types of crimes. This is also called *multiple victimization*.

Repeat victimization is also related to other ways in which crime clusters:

- **Repeat offenders:** Individuals or types of individuals who commit multiple crimes.
- **Hot spots:** Areas that suffer from a disproportionate amount of crime compared to surrounding areas.
- **Risky facilities:** Common types of locations of that attract or generate a disproportionate amount of crime, for example, a low-budget motel, convenience stores, public parks.
- **Hot products:** Property types repeatedly targeted or, as Clarke (1999) puts it, “those consumer items that are most attractive to thieves” (p. 23) and are “concealable, removable, available, valuable, enjoyable, and disposable” (p. 25). Examples include precious metals, smartphones and tablets, and handguns.

Near repeat victimization is particularly important for crime analysis. Near repeats are defined as nonvictimized places near places that have been victimized (Bowers & Johnson, 2005). Clusters of near repeat crimes have been identified by crime analysts for decades to assist police in their short-term crime reduction strategies. In the last 20 years or so, research has provided insight that guides crime analysis. The following are research findings important for crime analysts (Bernasco et al., 2015; Johnson, 2010):

- Near repeats occur regularly and have been shown to occur rapidly (i.e., one right after another).

- Houses next to a burglarized home have been found to be at a substantially higher risk of being burglarized.
- Most near repeats occur within one week of the original incident.
- Offenders often return to the area of a prior successful crime.
- Short-term clusters of crime occur within, but also outside of, long-term clusters. Only examining crime in the long term can make it seem that stable clusters exist and ignores crime flare-ups that occur in isolation.
- Offenders are tightly coupled to place and are likely to commit crimes that require the least amount of effort and energy by choosing targets most convenient to them.
- Most of the research make these conclusions about residential burglary, theft from vehicle, and robbery which are a significant concern for crime analysts.

The implications of near repeat research are (1) crime analysts look for more incidents nearby soon after one burglary, theft from vehicle, or robbery occurs; (2) crime analysts look for short-term clusters within long-term concentrations as well as in areas with less crime, and (3) crime analysts consider the same offender is committing the crimes within a cluster of near repeats.

The **80/20 rule** (also called the *Pareto principle*) is another important concept related to repeat victimization. This concept comes from the observation that 80% of some kinds of outcomes are the result of only 20% of the related causes. This is true in many phenomena in nature; for example, a small proportion of the earthquakes are responsible for a very large proportion of damage to property. The same is true for phenomena examined by crime analysts: A sizable proportion of victimizations are suffered by small groups of people, small numbers of locations account for large numbers of crime events, and a small proportion of offenders accounts for a sizable proportion of offenses (Clarke & Eck, 2005).

An 80/20 analysis (covered in Chapter 14) is a broad examination of how repeat victimization or repeat offending is taking place. The numbers 80 and 20 represent “large” and “small” amounts conceptually, so the actual proportions are different in each analysis. The 80/20 rule suggests by identifying small proportion of areas, victims, and offenders where a large amount of activity is concentrated, police get the most out of their crime prevention efforts (i.e., by addressing crimes in specific areas—say, 20% of the community—they can address 80% of the crime problem).

SITUATIONAL CRIME PREVENTION

Situational crime prevention, a practice initiated in England in the 1980s, is based on environmental criminology concepts and seeks prevention solutions

that are specific to settings and “situations” (Cornish & Clarke, 1986, 2003). It provides actions police and others can take to address and change opportunities. Table 2.1 is the situational crime prevention classification system.

The first category is made up of techniques that prevent crime by increasing the offender’s *perceived effort* to commit crime. These techniques make crimes more difficult or make the offender “think” the crimes are more difficult to commit: (a) target hardening (e.g., deadbolts, pass codes); (b) controlling access to facilities (e.g., reducing entrances/exits, ID check); (c) screening exits (e.g., electronic merchandise tags, ticket for parking lot exit); (d) deflecting offenders (e.g., closing streets); and (e) controlling tools/weapons (e.g., restricting sales of spray paint).

The second category consists of techniques that increase the offender’s *perceived risk* in committing crime. These techniques make offenders “think twice” about whether they might be caught: (a) extending guardianship (e.g., not walking home alone from a bar); (b) assisting natural surveillance (e.g., street lighting, trimmed landscaping); (c) reducing anonymity (e.g., school uniforms, Uber/Lift drivers’ pictures on app); (d) utilizing place managers (e.g., two clerks at convenience stores); and (e) using formal surveillance (e.g., doorbell cameras).

The third category comprises techniques that reduce the offender’s *anticipated rewards* from committing crime. These techniques change the actual value or the offender’s judgment of the crime’s value: (a) concealing targets (e.g., vehicles in a garage not on the street, valuables in the vehicle trunk); (b) removing targets (e.g., taking wallet out of the car); (c) identifying property

TABLE 2.1 25 Techniques of Situational Prevention

INCREASE THE EFFORT	INCREASE THE RISKS	REDUCE THE REWARDS	REDUCE PROVOCATIONS	REMOVE EXCUSES
1. Harden targets	6. Extend guardianship	11. Conceal targets	16. Reduce frustrations and stress	21. Set rules
2. Control access to facilities	7. Assist natural surveillance	12. Remove targets	17. Avoid disputes	22. Post instructions
3. Screen exits	8. Reduce anonymity	13. Identify property	18. Reduce emotional arousal	23. Alert conscience
4. Deflect offenders	9. Use place managers	14. Disrupt markets	19. Neutralize peer pressure	24. Assist compliance
5. Control tools/weapons	10. Strengthen formal surveillance	15. Deny benefits	20. Discourage imitation	25. Control drugs and alcohol

(e.g., licensing bicycles, car's vehicle identification number on car parts); (d) disrupting markets (e.g., careful monitoring of swap meets, pawn shops, scrap yards); and (e) denying benefits (e.g., ink tags on retail clothing, stolen phone erased and unusable).

The fourth category is made up of techniques that reduce the offender's *provocations* for committing crime. These techniques aim to change social and environmental conditions in ways that will diminish stress, conflict, and temptation to offend: (a) reducing frustrations and stress (e.g., managing lines efficiently, providing comfortable seating and entertainment for people waiting); (b) avoiding disputes (e.g., no crowding in bars, fixed cab fares); (c) reducing emotional arousal (e.g., control alcohol sales); (d) neutralizing peer pressure (e.g., dispersing groups at sporting events); and (e) discouraging imitation (e.g., repairing vandalized property quickly).

The final category consists of techniques that address the offender's motivation by focusing on *removing excuses* for crime. These techniques are intended to change social practices as a way to encourage compliance with the law: (a) setting rules (e.g., written rental agreements, ID and credit card for hotel check in); (b) posting instructions (e.g., "No Parking" or "No Trespassing/Private Property"); (c) alerting conscience (e.g., roadside speed display); (d) assisting compliance (e.g., separate containers for recyclables); and (e) controlling drugs and alcohol (e.g., drink tickets/bracelets, no serving alcohol to drunk individuals).

Situational crime prevention provides measures directly related to immediate crime settings, and just as the opportunities are unique, measures are as well. A particular crime prevention action can address more than one opportunity, so the goal is selecting solutions with the most impact. For example, implementing a curfew for juveniles both increases the perceived risk of being caught after curfew but also removes potential victims (e.g., of assault and/or rape) during that time. Even though crime analysts do not implement crime prevention measures themselves, they make recommendations as part of their analysis results and then often evaluate their effectiveness. For more discussion and examples of situational crime prevention techniques, see the Center for Problem-Oriented Policing website.

DISPLACEMENT AND DIFFUSION OF BENEFITS

It is important for crime analysts to understand how crime phenomena change because they are often tasked to explain such changes on a regular basis (e.g., an increase in crime in a particular area) and to evaluate specific crime prevention responses. A crime phenomenon can change by being moved to another time or place or can take on another form; this is called **displacement**. There are four types of displacement that can occur when crime

or other types of activity shift to other forms, times, and locales instead of being eliminated (Clarke & Eck, 2005):

1. **Spatial displacement** is the shifting of an activity in one area to another. For example, when the police address prostitution in one area, the activity moves to another area of the city.
2. **Temporal displacement** is the shifting of an activity from one time to another. This can include changes in the time of day, day of the week, and season of the year. For example, if police routinely patrol a particular area between 8:00 p.m. and 10:00 p.m. looking for unruly juveniles hanging out on the street, the youth may shift their behavior and hang out in the area either later or earlier in the day.
3. **Target displacement** is the shifting of the choice of one victim/target to a more vulnerable victim/target. When place managers harden or remove one type of target, offenders may focus on other types of targets. For instance, juveniles switch from stealing cars and motorcycles because of the more sophisticated antilock devices to stealing electric scooters that are placed around the city for rent and have less sophisticated locking devices.
4. **Tactical displacement** is the shifting of tactics by offenders. This can happen when offenders find their usual methods no longer work or they become more confident and reckless in committing crime. Offenders might shift from stealing out of unlocked cars to breaking the windows to get in.

Spatial displacement is the most important type for crime analysts to consider in their work. Research has consistently found while it does not happen often, when it does happen it is rarely one for one (Johnson, Guerette, & Bowers, 2014) Think about a group of offenders who commit a set number of crimes in an area. An effective prevention response in a particular area can result in either the offenders no longer committing crime, staying in the area and committing fewer crimes, or leaving the area altogether. Any of these three outcomes results in fewer crime incidents without moving the same amount of crime to a different area.

When a problem is prevented either fully or partially, the action can affect other problem types as well. This is called **diffusion of benefits** (Clarke & Weisburd, 1994). For example, when police reduce crime and disorder at a motel that has served as a hub for prostitution and drug dealing, reductions in the surrounding area might include fewer robberies and thefts by drug users who do so to get money and property to buy drugs and traffic problems caused when customers drive slowly past the motel as they seek prostitutes.

Because displacement is always possible, crime analysts consider it and diffusion when evaluating the impact crime prevention strategies. For example, analysts examining the impact of the responses on the motel might look for increases and decreases of certain activity occurring within 500 to 1,000 feet of the property. For more discussion, see Chapter 15.

OPPORTUNITY

Opportunity is the overarching theme of this chapter's discussion of how crime analysts understand and address patterns, clusters, and concentrations of crime events. To synthesize the theoretical and practical concepts, Felson and Clarke (1998, pp. v and vi), two of the original thinkers in this area, lay out 10 key points related to opportunity and crime:

1. Opportunities play a role in causing all crime.
2. Crime opportunities are highly specific.
3. Crime opportunities are concentrated in time and space.
4. Crime opportunities depend on everyday movements of activity.
5. One crime produces opportunities for another.
6. Some products offer more tempting crime opportunities than do others.
7. Social and technological changes produce new crime opportunities.
8. Crime can be prevented through the reduction of opportunities.
9. Reducing opportunities does not usually result in the displacement of crime.
10. Focused opportunity reduction can produce wider declines in crime.

SUMMARY POINTS

Criminological theories that deal with immediate situational causes of crime are more relevant to crime analysis than theories that seek to explain the underlying sociological and psychological causes of crime or why people become criminals.

Environmental criminology focuses on patterns of motivation for offenders, opportunities that exist for crime, and levels of protection of victims within the criminal event as well as the environment in which it occurs.

The goal of environmental criminology is not to explain why a specific offender commits a specific crime, but to understand the various aspects of a criminal event in order to identify patterns of behavior and environmental factors that create opportunities for crime.

The problem analysis triangle illustrates the relationships among the elements that create crime opportunities: the offender's motivation, the vulnerability of the target/victim, the time and place of the crime event, and the lack of oversight/protection.

Guardians are people who have the ability to protect victims/targets by watching over them or removing them from particular settings.

Managers are people who are responsible for places. They set rules and manage the places.

Handlers are people who know the potential offenders and are in positions that allow them to monitor and/or control potential offenders' actions.

Three theoretical perspectives help crime analysts understand and anticipate patterns of behavior that create opportunities for crime: rational choice perspective (offender choices), crime pattern theory (activity/space), and routine activity approach (general patterns of behavior).

Rational choice perspective states that offenders make choices about committing crimes based on opportunities and anticipated rewards. It suggests that if given a chance or the right "opportunity," any person will commit a crime. It also suggests that a person will decide not to commit crimes when the risks are too high or the rewards are not adequate.

Crime pattern theory helps to explain the nature of the immediate situation in which a crime occurs. According to this theory, criminal events are most likely to occur in areas where the activity spaces of offenders overlap with the activity spaces of potential victims/targets. Offenders tend to commit crimes in areas with which they are familiar.

Routine activity approach focuses on how opportunities for crime change based on changes in behavior on a societal level. The widespread use of the Internet is an example of a change in society that has created opportunities for crime.

The law of crime concentration says that not only do we know that crime clusters by place but also that these clusters can be narrowly defined and are stable and predictable over time.

Repeat victimization is the recurrence of crime in the same places or against the same people. People and places that have been victimized in the past have a higher likelihood of being victimized again than do people and places that have not been victimized.

Repeat victimization is broken down into four types: true repeat victims, near victims, virtual repeats, and chronic victims.

Near repeat victimization is a very specific type of repeat victimization. Near repeats are defined as nonvictimized places near places that have been victimized.

Findings from near repeat research have concluded that (1) houses next to a burgled home have a higher risk of being burglarized; (2) most near repeats occur within one week; (3) the increased risk is caused by offenders returning

after a successful burglary; (4) short-term clusters of crime occur within and outside long-term clusters, and (5) offenders are tightly coupled to place.

The 80/20 rule comes from the observation that 80% of some kinds of outcomes are the result of only 20% of the related causes which suggests that by focusing efforts on repeat victims or areas that account for a large amount of crime, police can maximize the impacts of a crime prevention strategy.

Situational crime prevention is a practice based on the components of the crime triangle and specifies five types of crime prevention techniques—(1) increasing the offender's perceived effort, (2) increasing the offender's perceived risk, (3) reducing the offender's anticipated rewards, (4) reducing provocations for committing crime, and (5) removing excuses for committing crime.

Displacement occurs when activity shifts to other forms, times, or locales instead of being eliminated.

Research has shown the successful elimination of targeted problems may also reduce other problems; this process is called the diffusion of benefits.

DISCUSSION EXERCISES

Exercise 1:

Break down one or more of following problems using the problem analysis triangle. To complete the exercise, write out your answers based on the example provided after the list. *Optional: For each component, write a brief paragraph explaining what you have listed and why.*

1. Theft or and from student backpacks in a coffee shop on campus
2. Shoplifting in a large retail store
3. Robbery on the street in an area with a lot of bars and nightclubs
4. Theft from vehicles from parking lots on campus
5. Parties and underage drinking in a dorm

Problem Selected: Fights in Bars with Dancing (night club)

- *Crime: Aggravated assault or simple assault*
- *Potential Offender(s): Patrons of the bar, employees of the bar; more likely males*
- *Potential Victim(s): Patrons of the bar, employees of the bar; more likely males*

- *Place(s): Inside the bar, likely on the dance floor, in walk ways, near where drinks are served*
- *Time(s): Likely at the end of the night, right before closing when people are most intoxicated*
- *Potential Handler(s): Friends, spouse, bar security, bartender, wait staff*
- *Potential Guardian(s): Friends, patrons in the bar, employees of the bar, security, video cameras*
- *Potential Manager(s): Bar manager or owner, bartenders, wait staff, bar security*

Exercise 2:

For one or more of the problems below, describe one crime prevention technique from each of the five general situation crime prevention categories. To complete the exercise, label each discussion of the five techniques with the general category and which technique your example falls under. Example: “Increase the Effort, Harden Targets” or “Reduce the Rewards, Deny Benefits.”

1. Assaults at high schools
2. Robbery at pharmacies
3. Graffiti on residential fences along a major roadway
4. Prostitution in a city park
5. Drug sales outside a convenience store