3

Why crime happens: A situational action theory

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> The hallmark of modern science is the search for mechanisms behind facts, rather than the mindless search for data and statistical correlation among them.
> (Bunge, 2006: 119)

People do not commit crime because, for example, they are male, teenagers or belong to an ethnic minority. Being male, teenage or belonging to an ethnic minority does not move anyone, for example, to steal a CD from a shop, break into a car, burn down a school building or blow up an aircraft. Attributes cannot be causes (e.g. Holland, 1986; Bunge, 2001: 70). Neither do people commit crime because, for example, they are unemployed, have many siblings, a slow resting heart rate, a poor educational record, a particular gene, a mother who smoked during pregnancy, or grew up in public housing. None of these kinds of factors will move a person, for example, to vandalise a fence, sell stolen goods, fraudulently claim benefits or beat up a partner. These kinds of correlates, which appear in their hundreds, are, at best, markers of real causes, although some of them may be implicated when analysing the "causes of the causes" of people's crimes (Wikström, 2011a). It is easy to agree with the statement by Hedström (2005: 23) that "I do not believe that a view of theories and explanations as lists of statistically relevant factors is conducive to the development of a rigorous body of sociological theory" (see also Wikström, 2004).

Analytical Sociology: Actions and Networks, First Edition. Edited by Gianluca Manzo.

People commit acts of crime because they perceive and choose (habitually or after some deliberation) a particular kind of act of crime as an action alternative in response to a specific motivation (a temptation or a provocation). People are the source of their actions but the causes of their actions are situational. Particular combinations of kinds of people (personal propensities) and kinds of settings (environmental inducements) promote the perception of particular kinds of action alternatives and choices (some of which may result in actions that break the rules of the law) in response to particular motivations (temptations or provocations). For example, some people short of money who find a wallet full of money in an empty locker room see this as an opportunity to steal the money; others do not.

Insisting that the causes of action are situational does not imply that the role of social context (culture and structure) and social and human development is irrelevant in the explanation of action (such as acts of crime). On the contrary, it only purports that their role is indirect and that they should be analysed as "causes of the causes"[1] rather than causes of action; they help to explain why people become different (have different propensities), why environments become different (provide different environmental inducements), and why certain kinds of people are exposed to certain kinds of settings (environments) creating the situations to which their actions are a response. Understanding the role of social and developmental factors and processes in the explanation of action requires an understanding of how these factors and processes influence the situational factors and processes that move people to act in one way or another (e.g. to commit an act of crime). The argument is simple. Without a proper understanding of which situational factors and processes are causally relevant (as causes) it is difficult to identify with any certainty which social and development factors and processes are causally relevant (as causes of the causes) in the explanation of people's actions (such as acts of crime).[2]

3.1 Situational action theory

Crimes are moral actions. Any action that is guided by rules about what is the right or wrong thing to do or not to do may be considered a moral action. Crimes are acts that break rules of conduct stated in law. Explaining crime (or particular kinds of crime) is to explain why people follow and break rules of conduct stated in law (or particular rules of conduct stated in law).

Situational action theory (SAT) aims to explain why crime happens, and more broadly why people follow and break common rules of conduct (e.g. Wikström, 2006; 2010; 2011a; Wikström *et al*., 2012: 3–43). SAT proposes that the causes of human actions are situational (not individual or collective). People do what they do because of who they are and the features of the environments in which they take part. What kinds of people are in what kinds of settings explains what kinds of actions are likely to happen.

The theory further proposes that humans are *fundamentally* rule-guided actors (not self-interested actors) and that their responses to motivators (temptation and provocation) are

[1] Aphrase borrowed from Elster (1999: 30).

[2] On the problem of causation and explanation in the study of crime, see further Wikström (2011a).

essentially an outcome of the interaction between their moral propensities and the moral norms of the settings (environments) in which they take part. People are crime prone to the extent that their personal morals encourage them to see an act of crime as an action alternative, and settings are criminogenic to the extent that their moral norms encourage the breaking of some rule(s) of law. Acts of crime are most likely to happen when crime-prone people take part in criminogenic settings (environments).

According to SAT, explaining the role of social context and development in crime causation (or more broadly their role in why people follow and break common rules of conduct) is a question of (1) understanding the developmental processes (life-histories) that make people who they are (personal emergence), (2) the social (historical) processes that create particular kinds of environments (social emergence), and (3) the contemporaneous (social and self-)selection processes that place kinds of people in kinds of settings. These are not questions about what causes people to commit acts of crime (e.g. steal a bicycle), but rather questions of the "causes of the causes"; what makes people develop different crime propensities; what makes some environments become more criminogenic than others; and what makes crime-prone people be exposed to criminogenic settings.

3.2 Explaining crime

> The laws of the state are *prescriptive*. They lay down regulations for the conduct and intercourse of men. They have no truth-value. The aim is to influence behaviour.
>
> (von Wright, 1963: 2)

The law (law-making and its enforcement) may be regarded as the prime method of "social engineering". Somewhat ironically, many politicians and social commentators who voice a dislike of "social engineering" are at the same time strong advocates of the rule of law.

The *law* is a set of rules of conduct that states what is the right or wrong thing to do (or not to do) in particular circumstances (that may be quite general or quite specific). By prescribing for people what is the right or wrong thing to do (or not to do), the law has a clear moral content. In fact, the law may be regarded as a set of moral rules.

Laws are not necessarily moral norms; they are only a moral norm if they are shared among people in a jurisdiction (or people in a particular setting). Moral norms can vary in their strength. They can be more or less shared and enforced. People generally care more about some rules of conduct than others, and some rules of conduct are more contested than others. One important reason why people commit crime is that they disagree with or do not care much about a rule of conduct stated in law.

SAT conceptualizes morality as value-based rules about what is the right or wrong thing to do (or not to do) in particular circumstances. The law is just one of many sets of moral rules of conduct that guide people's action (e.g. Ehrlich, [1936] 2008). The law is no different from other sets of rules of conduct; in fact, the law may be regarded as a special case of rules of conduct more generally. Explaining why people follow and break the rules of law is, in principle, no different from explaining why people follow and break rules of conduct more generally.

Crime is an act that breaks a rule of conduct stated in law. That is what all crimes, at all places, in all times, have in common.[3] Explaining crime is thus to explain why people act in breach of rules of conduct stated in law. Understanding the causes of crime is essentially about understanding the role of morality in human action. If we can explain why people follow and break rules of conduct more generally we will also be able to understand why they follow and break the rules of law.

Analysing crime as moral action does not imply a "moralistic" perspective in the explanation of crime. SAT does not address the question whether particular laws are inherently good or bad, but focuses instead on how moral rules guide human action. The theory does not imply that people who break a particular law are amoral, only that their views on what is right or wrong may differ from that particular law or that they may care less about adhering to that particular law (or, if they agree with and care about that law, that their crime is an outcome of a lack of ability to exercise self-control).

3.3 The situational model

The situational model of SAT aims to explicate the key situational factors that influence the process that moves people to engage in acts of crime (or rule-breaking more generally). The elements of the situational model are the *person* (his or her relevant propensities), the *setting* (its relevant inducements), the *situation* (the perception-choice process that arises from the exposure of a particular person to a particular setting), and *action* (bodily movements such as speaking, walking or hitting). A setting is defined as the part of the environment (objects, persons, events) that is directly accessible to the person through his or her senses (including any media present).

According to SAT, action is not a result of the person (propensities) or the setting (environmental inducements) but the situation (the perception-choice process that arises from the person-setting interaction). When a particular kind of person is exposed to a particular kind of setting, a particular situation (perception-choice process) arises that initiates and guide his or her actions in relation to the motivations he or she may experience. That is why the theory is called situational action theory. The situational model is illustrated in Figure 3.1.

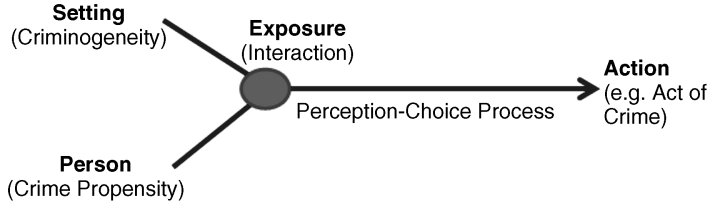

Figure 3.1 The situational model.

[3] It is, of course, possible in principle to have a law that makes it a crime to have a certain attribute (e.g. to belong to a particular ethnic group) or to have certain kinds of thoughts (e.g. lust for a married person). In these cases we can have rule-breaking with no action. However, most contemporary jurisdictions do not criminalise attributes and thoughts. Such examples of crimes are extremely rare and are not covered by SAT's explanation of crime as a moral *action*.

Applied to the explanation of crime, SAT proposes that people vary in their crime propensities and that settings vary in their criminogeneity. When crime-prone people are exposed to criminogenic settings, they may see crime as an action alternative (in relation to a particular motivation). People's crime propensity may vary depending on the crime in question (e.g. some people may be prone to theft but not to rape) and the criminogeneity of a setting may vary depending on the crime in question (e.g. some settings may encourage violence; others may encourage fraud).

SAT proposes that variations between people in their crime propensity is essentially a question of their law-relevant morality (the extent to which their personal morality corresponds to the various rules of conduct stated in the law) and their ability to exercise self-control (which depends on both dispositional characteristics such as executive functions and momentary influences such as intoxication and levels of stress – see further Wikström and Trieber, 2007). SAT further proposes that the criminogeneity of a setting depends on its moral norms (the extent to which they encourage or discourage the breaking of particular laws in relation to the opportunities a setting provides and the frictions it creates) and their level of enforcement (note that if a moral norm encourages the breaking of a particular law, a high degree of its enforcement will be criminogenic). Although people who have lived for some time in a cultural context are likely to generally have a good grasp of what moral norms apply in what settings, there is always a possibility that people may misunderstand what the shared rules of conduct are in a particular setting. The difference between a personal moral rule and a moral norm is thus that a personal moral rule is held and enforced (through the process of self-control) by the actor, and a moral norm is held and enforced (through the process of deterrence) by (significant) others. The correspondence between the personal moral rules an actor holds and the moral norms of a setting may be more or less strong.

3.4 The situational process

Perception (the information we get from our senses) is what links a person to his or her environment, and choice (the formation of an intention to act in one way or another) is what links a person to his or her actions. The perception-choice process, therefore, is crucial for understanding a person's actions (see further Wikström, 2006: 76–84).

According to SAT, the key situational factors in the perception-choice process can be described in the following manner:

1. *Motivation* initiates action processes.
2. *The moral filter* provides action alternatives to a particular motivation.
3. *Controls* influence the process of choice when there is conflicting rule-guidance regarding perceived action alternatives.

The action process applied to the explanation of crime is illustrated in Figure 3.2 and its key stages are described in some detail below.

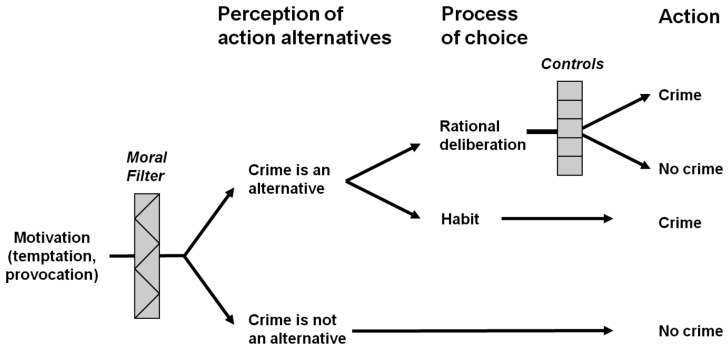

Figure 3.2 The situational process and key situational factors (applied to the explanation of crime). *Source:* Wikström P-O H. (2011). *Does everything matter? Addressing the problem of causation and explanation in the study of crime*. In J. McGloin, C. J. Sullivan, and L. W. Kennedy (eds.), When Crime Appears. The Role of Emergence (London. Routledge).

3.4.1 Motivation

Motivation is an outcome of the interaction between the person (preferences, commitments, sensitivities) and the setting (opportunities, frictions) and is defined as "goal-directed attention". According to SAT there are two main kinds of motivators:

1. *Temptations*, which are either the outcome of the interaction between
   a. a person's desires (wants, needs) and opportunities to satisfy a desire (want, need), or
   b. the outcome of the interaction between a person's commitments and opportunities to fulfil a commitment.[4]
2. *Provocations*, which occur when a friction (an unwanted external interference) causes anger or annoyance towards the perceived source of the friction or a substitute. People vary in their sensitivities to particular kinds of frictions (as a consequence of their cognitive–emotive functioning and life-history experiences).

Motivation initiates the action process. However, motivation does not explain why a person behaves as he or she does. Motivation is a necessary but not sufficient factor in the explanation of why people act in one way or another. People respond differently to the same kind of motivation. For example, while many young people may want to have a particular popular commodity (such as a pair of expensive Nike trainers), not all of them see an act of theft as a course of action to get this commodity, and while many people may get provoked by a person who jumps a queue, not all of them see punching the queue jumper in the face as a viable action alternative. What makes people see particular action alternatives in relation to a particular motivation is an outcome of the interplay between their personal morals and the (perceived) moral norms of the setting in which they take part.

[4] Note that opportunities may be legal and/or illegal (e.g. the opportunity to buy or steal a CD from a shop).

3.4.2 Perception of action alternatives: The moral filter

A person's moral engagement with the moral context of a setting in response to a particular motivation creates a moral filter. The *moral filter* is defined as "the moral rule-induced selective perception of action alternatives in relation to a particular motivation". The motivations (temptations or provocations) a person experiences determine which personal moral rules and which moral norms of the setting are relevant influences on what action alternatives he or she perceives.

People's personal morals and the (perceived) moral norms of the setting may encourage or discourage breaking the rules of conduct stated in law when acting upon a particular motivation. For example, if a person gets angry with another person, his or her personal moral rules relevant to the use of violence in the particular circumstance and the (perceived) moral norms of the setting relevant to the use of violence in the particular circumstance will influence whether or not violence is perceived as an action alternative (adequate response). If a person's morals and the (perceived) moral norms of the setting both encourage the use of violence, the person is likely to see the use of violence as an action alternative. If a person's morals and the (perceived) moral norms of the setting both discourage the use of violence, the person is unlikely to see the use of violence as an action alternative. In sum, when personal morals and the moral norms of the setting both encourage (or both discourage) a particular action in response to a motivation, that action is likely (or unlikely). In SAT this is referred to as *the principle of moral correspondence*.

The action alternatives a person perceives as an outcome of the moral filter applied to a particular motivation may, or may not, involve action alternatives that constitute a crime. When a person does not see crime as an action alternative there will be no crime. In this case the process of choice plays no part in the explanation of why that person refrained from crime because he or she did not perceive crime as an option and, hence, did not choose to refrain from crime. He or she simply did not see an act of crime as an option. Most action theories seem to focus on how people make choices between action alternatives and largely ignore why they perceive some and not other action alternatives (e.g. why some people perceive crime as an action alternative and others do not in the same setting). According to SAT, perception of action alternatives precedes the process of choice. Perception of action alternatives is, therefore, more fundamental in the explanation of people's actions (such as acts of crime) than the process of choice. A major reason why people do not commit crime (particular kinds of crime) is that they do not see crime (a particular kind of crime) as an action alternative, and not that they choose not to commit crime (a particular kind of crime). In fact, most people, most of the time, do not see most kinds of crime as an action alternative. For example, most people who cannot afford but want a BMW and walk past an unsupervised BMW with the door open and the key in the ignition do not see this as an opportunity to steal the car.

3.4.3 The process of choice: Habits and deliberation

People make choices among the action alternatives they perceive. If people do not see crime as an option there will be no crime. The process of choice is irrelevant. However, if crime is among the perceived action alternatives the process of choice will determine whether or not the person will commit (or attempt) an act of crime. *Choice* is defined as "the formation of an intention to act in one way or another".

SAT asserts that people exercise *agency* (defined as "powers to make things happen") within the constraints of rule-guided choice. The theory acknowledges that there are elements of predictability and "free will" in people's choices and proposes that people, depending on the circumstances, apply one of two basic kinds of choice processes: automated or deliberative processes of choice.[5] However, in prolonged action sequences the action guidance may drift between deliberative and habitual influences.

When people act out of (moral) habit in response to a motivation they do what they normally do in the circumstance without giving it much thought. In this case the person only sees *one* causally effective alternative (although he or she is likely to be loosely aware "in the back of his or her mind" that there are other alternatives) and automatically (without much thought) chooses this course of action. If the perceived action alternative constitutes an act of crime the person will commit (or attempt) such an act. He or she will commit (or attempt) an act of crime out of habit.

When people act out of habit, they essentially react (in a stimulus–response fashion) to environmental cues. Habits are a result of a person's repeated exposure to particular circumstances (generally on automaticity in action, see e.g. Bargh, 1997; Wood and Quinn, 2005). They are oriented towards the past as they involve drawing upon prior experiences to guide current (automated) choices (i.e. drawing upon the cumulative experience of previous successes and failures and observed consequences of actions and inactions in the circumstance). Habitual choices are most likely when people are in well-known circumstances with congruent rule-guidance. In addition, high levels of stress and strong emotions tend to promote habitual reactions even in unfamiliar settings (e.g. Carver and Scheier, 1998). When people act out of habit, rationality does not come into play because there is no weighing of pros and cons among several action alternatives (to choose *the best* alternative requires that a genuine choice among alternatives is made). Habitual action may even be *irrational*: that is, people may act in ways they would not consider in their best interest had they deliberated.

When a person sees *several* potent action alternatives[6] in response to a motivation (temptation, provocation), the process of choice will be rational deliberative. There is no predetermined alternative so he or she has to make a judgement by assessing the pros and cons of the perceived action alternatives. Deliberations are future oriented and consider potential outcomes and consequences of different perceived courses of action, and people generally choose the best option (as they come to see it) among the action alternatives they perceive. What is seen as the best option, according to SAT, is not primarily a question of self-interest (personal advantage) but largely an assessment of what is a morally acceptable way to satisfy a desire, honour a commitment or respond to a provocation (based on personal morals and the perceived moral norms of the setting).[7] Such deliberations may be more or less elaborate depending on the importance the actor attaches to the choice and its possible consequences. Action guidance by rational deliberation is most common when people operate in less common or less familiar circumstances and/or there is conflicting rule-guidance.

[5] There is plenty of evidence for the existence of a dual process of human reasoning of this kind (see e.g. Evans and Frankish, 2009; Kahneman, 2011).

[6] Of which one kind of choice is to do, or not to do, a particular action.

[7] However, the alternative that maximises personal advantage may be the actor's morally preferred alternative (based on his or her personal morals and the perceived moral norms of the setting). Whether or not the actor sees maximizing personal advantage as the best option is basically a question of the actor's moral judgement.

When deliberating, people may be thought of as exercising "free will" (since there are no predetermined action alternatives) but, importantly, it is "free will" constrained by the action alternatives they perceive. In cases where the perceived action alternatives include crime, whether or not the actor will commit (or attempt) an act of crime will depend on the outcome of his or her (rational) deliberations and (in the case of conflicting rule-guidance) the efficacy of controls.

3.4.4 Controls: Self-control and deterrence

When people deliberate and there is conflicting rule-guidance controls play a role for the outcome. Control is conceptualised in SAT as a situational process and is defined as "the process by which a person manages conflicting rule-guidance in his or her choice of action in relation to a particular motivation". Control processes may be internal (self-control) or external (deterrence) in origin. Self-control helps people comply with their personal moral rules and deterrence impels people to comply with the moral norms of a setting when there is conflicting rule-guidance.

Self-control is defined as "the process by which a person succeeds in adhering to a personal moral rule when it conflicts with the (perceived) moral norm of a setting". The typical example here is withstanding peer pressure to act against one's own personal morals. *Deterrence* is defined as "the process by which the (perceived) enforcement of a setting's (perceived) moral norms (by creating concern or fear of consequences) succeeds in making a person adhere to the moral norms of the setting even though they conflict with his or her personal moral rules". The typical example here is when people refrain from crime because environmental cues (such as the presence of police officers, guard dogs or CCTV cameras) create concern or fear of the consequences. Note that if the moral norms of the setting are in conflict with the rules of conduct stated in law a high level of deterrence is criminogenic (e.g. as may be the case in certain gangland settings).

A person's *ability* to exercise self-control is a personal characteristic and a setting's *capacity* to enforce its moral norms is a setting characteristic. People's ability to exercise self-control depends on their executive functions and training, and may be temporarily weakened by intoxication or high levels of emotion or stress. A setting's capacity to uphold its moral norms depends on the perceived efficacy of its informal and formal enforcements (which largely depends on its objective efficacy of formal and informal enforcements). If people have a strong ability to exercise self-control they are likely to adhere to their personal morals when challenged by the moral norms of a setting. If a setting has strong deterrent features it is likely to make people adhere to its moral norms when it conflicts with their personal morals.

Controls *only* become relevant in the explanation of crime when a person deliberates between several potent action alternatives, of which at least one includes committing an act of crime, and there is conflicting rule-guidance regarding whether or not to act upon an alternative that constitutes an act of crime. In SAT this is referred to as *the principle of the conditional relevance of controls*.

3.5 The social model

SAT insists that the causes of crime are situational and best analysed in terms of perception-choice processes, and that the social causes of crime (the causes of the causes) are best

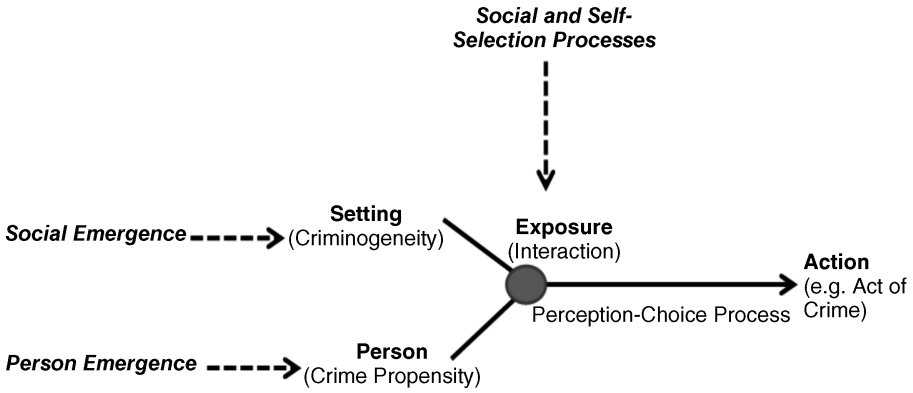

Figure 3.3 The social model.

analysed in terms of emergence and selection processes. The social model of SAT (Figure 3.3) focuses on the role of historical processes of emergence in the creation of criminogenic environments (social emergence) and crime-prone people (personal emergence) and contemporaneous processes of self- and social selection that bring together crime-prone people and criminogenic settings (creating the situations to which people may respond to motivators by committing acts of crime).

The concept of *emergence* refers to how something becomes as it is (e.g. Bunge, 2003). For example, how people acquire a certain crime propensity (personal emergence) or environments acquire a certain criminogeneity (social emergence) as an outcome of social interactions.

SAT proposes that personal morals and the ability to exercise self-control are the key individual characteristics that affect a person's crime propensity and, therefore, psychosocial processes of moral education and cognitive nurturing are of central interest in the explanation of why people develop specific and different crime propensities (i.e. tendencies to see and choose particular crimes as an action alternative) (see further Wikström *et al*., 2012: 31–32).

According to SAT, the features most relevant to a setting's criminogeneity (the extent to which it encourages particular kinds of crime) are its moral context (its moral norms and their levels of enforcement or lack of enforcement) in relation to the opportunities and frictions it presents and, therefore, socio-ecological processes (e.g. processes of segregation and their social consequences) become of particular interest in the explanation of why particular kinds of moral contexts emerge in particular places at particular times (see further Wikström *et al*., 2012: 32–37).

Psychosocial and socio-ecological processes of emergence take place in, and therefore are dependent on, the wider political and economical context and its changes (hence its role in crime causation, so to speak, may be thought of as an analysis of the causes of the causes of the causes). The key question is what aspects of the political and economical context of a jurisdiction influence relevant psychosocial (moral education and cognitive nurturing) and socio-ecological (segregation) processes.[8] This is a complex question that I will not address further in this short chapter.

[8] Psychosocial and socio-ecological processes are not unrelated since human development and change always occur in, and are dependent on, features of the social context.

Historical processes of emergence in a jurisdiction (e.g. a nation, region or city) explain how it acquires (1) its particular mosaic of different kinds of human-made environments that provide particular opportunities and frictions in particular moral contexts (processes of social emergence), and (2) its particular mix of kinds of people with particular preferences (desires, commitments, sensitivities), personal morals and abilities to exercise self-control (processes of personal emergence). The particular constellation of environments and people in a jurisdiction sets the stage for the operation of processes of selection.

The concept of *selection* refers to the contemporaneous socio-ecological processes responsible for introducing particular kinds of people to particular kinds of settings (and thus creating the situations to which people's actions are a response). Social selection refers to the social forces (dependent on systems of formal and informal rules and differential distribution of personal and institutional resources in a particular jurisdiction) that encourage or compel, or discourage or bar, particular kinds of people from taking part in particular kinds of time- and place-based activities. Self-selection refers to the preference-based choices people make to attend particular time- and place-based activities within the constraints of the forces of social selection. What particular preferences people have developed may be seen as an outcome of their life-history experiences. Depending on the circumstances, social or self-selection can be more influential in explaining why a particular person takes part in a particular setting (see further Wikström *et al*., 2012: 37–41).

3.6 Integrating the social and situational models

SAT advocates a mechanistic explanation of human action. The theory is based on four key propositions:

1. Action is ultimately an outcome of a perception-choice process.
2. This perception-choice process is initiated and guided by relevant aspects of the person–environment interaction.
3. Processes of social and self-selection place kinds of people in kinds of settings (creating particular kinds of interactions).
4. What kinds of people and what kinds of environments (settings) are present in a jurisdiction is the result of historical processes of personal and social emergence.

Propositions 1 and 2 refer to the situational model, and propositions 3 and 4 to the social model, of SAT. Figure 3.4 illustrates how the social and situational models are linked.[9] SAT proposes that the causes of action (such as acts of crime) are situational (propositions 1 and 2) and that the social factors affecting people's actions such as acts of crime (i.e. factors influencing processes of emergence and selection) are best analysed as causes of the causes (propositions 3 and 4).

[9] The figure is a version of what is sometimes called a Coleman diagram (or a "Coleman boat") and based on a particularly useful approach developed by Coleman (1990: 1–23) and Boudon (1986: 29–60) to analyse the macro–micro problem. Although the illustration presented in the diagram is partly inspired by the analytical approach of Coleman and Boudon, it should be noted that the terminology and content differ significantly.

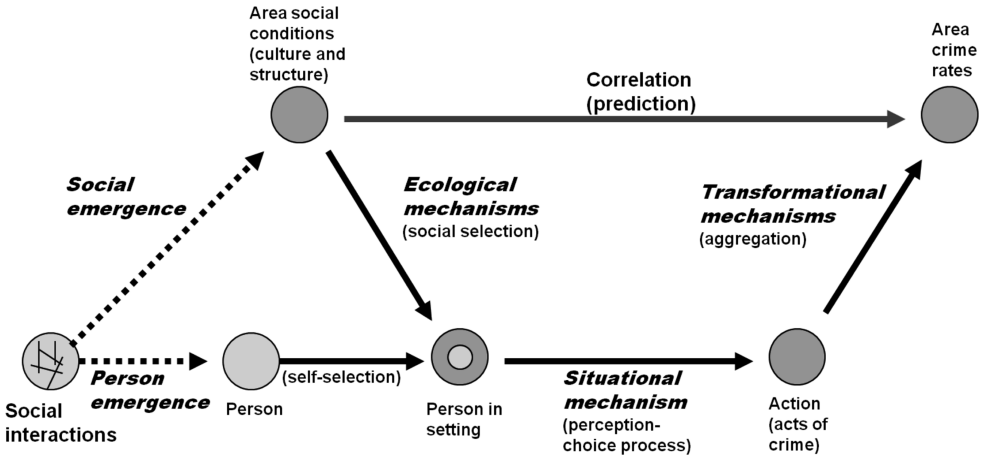

Figure 3.4 The social and situational models of SAT integrated. *Source:* Wikström P-O H. (2011). *Does everything matter? Addressing the problem of causation and explanation in the study of crime*. In J. McGloin, C. J. Sullivan, and L. W. Kennedy (eds.), When Crime Appears. The Role of Emergence (London. Routledge).

3.7 Testing SAT

SAT is a relatively new theory but some of its core assumptions have already been tested and supported in a number of recent studies (e.g. Haar and Wikström, 2010; Oberwittler and Wikström, 2008; Wikström, 2009; 2011b; Wikström, Tseloni and Karlis, 2011; Wikström and Svensson, 2008; 2010; Wikström *et al*. 2010; Wikström, Tseloni and Karlis, 2011; Wikström *et al*., 2012). I will conclude this chapter by presenting some selected findings from our research that illustrate the importance of the interaction between crime propensity and criminogenic exposure in crime causation, and that crime concentrations in space and time (so-called hot spots) are an outcome of the rate of the spatio-temporal convergence of crime-prone people and criminogenic settings.

3.7.1 The Peterborough Adolescent and Young Adult Development Study

The Peterborough Adolescent and Young Adult Development Study (PADS+) is specifically designed to test some of the core assumptions of SAT. PADS+ is a longitudinal study that has followed a random sample of 716 young people (who were living in the city of Peterborough in 2002) since 2003 (when they were aged 12), through adolescence and now into young adulthood. Interview data from these young people, which includes data from an extensive interviewer-led questionnaire (with in-depth data on personal, family, school and, for the older of the studied ages, work characteristics and experiences), cognitive measures, randomized scenarios and a space–time budget, was collected annually between 2004 and 2008 and again in 2010 and 2012 (ongoing). This followed an initial wave of data collection from participants' parents in 2003, which collected in-depth data about the social situations of

the families of participants at the time of their enrolment in the study and retrospective information on their childhood experiences and critical life events via a structured interview. The study currently has an exceptional retention rate of 97% up to the 2010 wave (data collection for the 2012 wave is currently ongoing). In addition to data collected in these interviews, data has also been collected from criminal justice agencies (e.g. participants' police records) as well as other official sources (e.g. land use and census data) and through two special small-area community surveys carried out in 2005 and 2012 (e.g. data about small-area social cohesion and informal social control), each with independent samples of around 6000 randomly selected Peterborough residents aged 18 or older[10] (for a detailed presentation of the PADS+ design, sampling, methodologies and comprehensive data, see Wikström *et al*., 2012: 44–106). The data presented in this chapter is taken from the first five waves (ages 13 to 17)[11] of data collection from the cohort members (from the annual interview-led questionnaires and the annual space–time budget) and the first small-area community survey (2005). The area-level analysis also includes population data from the 2001 census, land use data and data about the location of all young people's police-recorded crimes.

3.7.2 Measuring crime, crime propensity and criminogenic exposure

Crime is conceptualised in SAT as breaches of rules of conduct stated in law. To measure their level of crime involvement, participants were asked a battery of questions annually (in the interview-led questionnaire) about whether they had committed, and, if so, how many times they had committed, crimes of theft (shoplifting, theft from a person, residential and non-residential burglary, theft of and from cars), vandalism (including arson) and violence (assault and robbery) (see Wikström *et al*., 2012: 107–117, for details of PADS+ self-reported crimes and their measurement).[12]

According to SAT people vary in their crime propensity depending on their personal morals and ability to exercise self-control. To measure young people's generalised[13] *crime propensity* an index of two scales was created based on PADS+ data from the interviewer-led questionnaire: one scale measured generalised (law-relevant) personal morality (including 16 items ranging from an evaluation of how wrong it is to "steal a pencil from a classmate" to "use a weapon or force to steal money from another person"); and the other scale measured the generalised ability to exercise self-control (including eight items asking how much participants agree with statements such as "I never think about what will happen to me in the future" or "I often act on the spur of the moment without stopping to think"). Low values on the crime propensity index imply a strong law-relevant morality and a strong ability to exercise self-control, while high values imply a weak law-relevant morality and poor ability to exercise self-control (for details of the scales, and how they were merged into a combined measure of generalized crime propensity, see Wikström *et al*., 2012: 132–140).

[10] Random samples of inhabitants 18 years and older are drawn from each of Peterborough's 518 output areas (with an oversampling in disadvantaged areas) to ensure the coverage of, and enough observations in, each output area.

[11] Since the questions on self-reported crime are retrospective (last year) they refer to ages 12–16 (or, more precisely, the years in which participants turned 12, 13, 14, etc.).

[12] PADS+ also studies participants' police-recorded criminality but this data is not used in this chapter.

[13] I use the concept of generalised because the measure is based on people's reports of how they would generally respond. The assumption is that their generalised response has some bearing on how they act in real-life situations.

SAT proposes that a setting's criminogeneity depends on its moral context, which involves the moral norms of the environment and personal morals of significant others present (such as peers). The construct of people's generalised *criminogenic exposure* is based on an index of two scales, one measuring time spent in criminogenic places and the other association with criminogenic people (peers). The measure of exposure to criminogenic places (based on geographically matched data from the space–time budget, the small-area community survey and land use data) is the number of hours spent unsupervised with peers in residential areas with poor collective efficacy[14] or in the city or local centres[15] (for details of this measure, see Wikström *et al*., 2012: 147–151). The assumption is that being unsupervised with peers in environments with weak (law-relevant) moral contexts has criminogenic potential, and that residential areas with poor collective efficacy and city and local centres are the key city environments that generally have a weaker moral context (see Wikström *et al*., 2012: 141–147). The measure of exposure to criminogenic people is based on data from the annual interviewer-led questionnaires about peers' involvement in crime and delinquency, such as their alcohol and drug use, shoplifting, vandalism and assault (for further details of the measure of criminogenic people and the rationale for combining the place and people measures, see Wikström *et al*., 2012: 151–154). Low values of criminogenic exposure mean that a person spends little time in criminogenic places with criminogenic people, while a high value means a person spends a lot of time in criminogenic places with criminogenic people.

3.7.3 Crime involvement by crime propensity and criminogenic exposure

SAT proposes that people with a weak law-relevant personal morality and weak ability to exercise self-control are more likely to engage in acts of crime because they are more likely to see and choose crime as an option. The findings clearly support this assumption. The zero-order correlation between crime propensity and crime (logged) is very strong ($r = 0.70$, prob. $= 0.000$, $N = 682$). In a comparison of the participants divided into five equal-sized groups by their level of crime propensity (Table 3.1), the findings show that although people in all groups have committed crimes, nearly all in the fifth with the highest propensity have committed a crime (95%) while less than a third (31%) in the fifth with the lowest propensity have committed a crime. If we bring in the participants' crime frequency the differences between the groups become much more dramatic. The fifth of participants with the highest crime propensity were responsible for 61% of all crimes (the offenders in this group having committed, on average, 69 crimes each) compared with the fifth with the lowest crime

[14] Collective efficacy is a measure created by Sampson and colleagues (e.g. Sampson, Raudenbush and Earls, 1997) that combines an area's level of social cohesion and informal social control and is assumed to measure residents' willingness to intervene for the common good, such as preventing crime. For this study an area with poor collective efficacy is defined as an area among the 25% of output areas with the weakest score for collective efficacy.

[15] A drawback with the collective efficacy measure is that it is based on residents' observations of other residents' social cohesion and willingness to intervene. The measure of poor collective efficacy therefore does not capture the weak (law-relevant) moral contexts that emerge because of the presence of large numbers of temporary visitors who are strangers to each other and generally have a low investment in an area, and who, as a consequence, are likely to be less socially cohesive and willing to intervene in cases of disorder and crime. We propose that city and local centres are such environments (and more so at some times of the day than other times depending on the kinds of activities that take place) and therefore use city and local centre land use as a marker for environments with a weaker (law-relevant) moral context.

Table 3.1 Crime involvement ages 12–16 by participants' crime propensity and criminogenic exposure (divided into five equal classes).

	Prevalence[a]	Frequency[b]	No. of crimes		N^c
			Number	Percent	
Crime propensity					
Highest	94.7	68.9	8619	61.1	132 (125)
High	90.5	26.0	3223	22.8	137 (124)
Medium	78.7	13.8	1479	10.5	136 (107)
Low	58.1	8.1	641	4.5	136 (79)
Lowest	30.7	3.9	162	1.1	137 (42)
All	*70.4*	*29.5*	*14 124*	*100*	*678 (477)*
Criminogenic exposure					
Highest	99.2	75.8	9784	70.6	130 (129)
High	89.5	18.6	2210	15.9	131 (119)
Medium	78.1	10.9	1086	7.8	128 (100)
Low	51.1	8.9	597	4.3	133 (67)
Lowest	31.5	4.6	188	1.4	130 (41)
All	*69.9*	*31.2*	*13 865*	*100*	*652 (456)*

[a] Percentage with at least one crime.
[b] Crimes per offender.
[c] Total participants and, within brackets, number of offenders.

propensity, who committed only 1% of the crimes (the offenders in this group having committed, on average, four crimes each).

SAT also proposes that people's level of exposure to settings with a moral context that encourages crime (in response to the opportunities and frictions they provide) plays an important part in crime causation. Findings support this assumption. The zero-order correlation between criminogenic exposure and crime (logged) is very strong ($r = 0.71$, prob. = 0.000, $N = 652$). In a comparison of participants divided into five equal groups by their level of criminogenic exposure (Table 3.1), the findings show that practically all in the fifth with the highest criminogenic exposure have committed crimes (99%) while this only applies to less than a third of the fifth with the lowest level of criminogenic exposure. The fifth with the highest criminogenic exposure were responsible for 71% of all crimes (the offenders in this group having committed, on average, 76 crimes) while the group with the lowest exposure were only responsible for 1% of the crimes (the offenders in this group having, on average, committed five crimes). In other words, a person's crime propensity, as well as his or her criminogenic exposure, predicts their crime involvement.

3.7.4 The impact of criminogenic exposure on crime for groups with different levels of crime propensity

The crucial assumption of SAT is that crime is an outcome of the *interaction* of propensity and exposure and, therefore, we would expect that those with a higher crime propensity are much more strongly influenced by criminogenic exposure than those with a lower crime propensity.

Table 3.2 Crime frequency (including those with zero crimes) by criminogenic exposure estimated for different groups by their level of crime propensity. Unstandardised regression coefficients, *t*-values and probabilities.

	b	*t*-value	Prob.	*N*
Crime propensity				
Highest	8.3	4.03	0.000	124
High	4.1	4.43	0.000	126
Medium	2.3	5.75	0.000	127
Low	1.4	4.10	0.000	131
Lowest	0.5	2.87	0.006	129

Findings clearly support this to be the case: the higher a person's crime propensity, the greater the effect of this person's level of criminogenic exposure on his or her crime involvement (Table 3.2). For example, those in the group with the highest crime propensity, on average, commit about 16 times more crime per unit increase in criminogenic exposure than those with the lowest crime propensity. The impact on crime by criminogenic exposure is thus clearly dependent on a person's level of crime propensity (i.e. his or her personal morals and ability to exercise self-control). The effect of criminogenic exposure on crime is particularly low for those with the lowest crime propensity (in fact, for the half with the lowest scores in the group with the lowest crime propensity, the effect of criminogenic exposure on crime is effectively zero, $b = 0.08$, t-value $= 0.81$, prob. $= 0.419$, $N = 63$). Some people are clearly crime averse while others are crime prone, and, arguably, what defines a crime-averse person is that he or she is largely resistant to environmental inducements to engage in crime, while crime-prone people are vulnerable to such inducements.

One possible objection to these findings is that they do not conclusively show that crime-prone people actually are in a criminogenic setting when they commit an act of crime (a problem that all correlation analysis of this kind faces). However, due to the unique character of PADS+ data it is possible to test whether this generally is the case. The space–time budget methodology (which includes the reporting of crimes committed while in a particular setting),[16] combined with matched data from the small-area community survey (and a land use database) and the interviewer-led questionnaire, make it possible to analyse to what extent crime-prone people commit their acts of crime when in criminogenic settings. The findings of these analyses showed that crime-prone people offended most frequently when they were in criminogenic settings and that crime-averse young people did not offend even if they were in a criminogenic setting.[17] For example, the most crime-prone people committed

[16] This is a different source of data on self-reported crime then the data used for the analyses presented in Tables 3.1 and 3.2. It comprises data of all crimes committed by the participants during the 20 days covered by the space–time budget (4 days for each wave of data collection) for the ages 13–17. This crime data is directly linked in time and space to all other information collected in the space–time budget, for example information about what the participants were doing, with whom, at what place and in what circumstances.

[17] In these analyses the participants were divided into three groups defined by their crime propensity, where the high propensity group were defined as those with a value of 1 STD (Standard Deviation) or higher than the mean and the low crime propensity group as those with a value of 1 STD or lower than the mean. Criminogenic exposure was defined as being in a residential area with poor collective efficacy or in the city or a local centre.

11 crimes per 1000 hours they spent awake in areas with poor collective efficacy or the city or local centre engaged in peer-oriented activities, compared with 2 crimes per 1000 hours they spent awake in any other setting. The least crime-prone people did not commit any crime regardless of the setting they took part in (for details of these analyses and the findings, see Wikström *et al*., 2012: 323–363).

SAT proposes that the reason why the interaction between a person's crime propensity (based on relevant personal morals and ability to exercise self-control) and exposure to a criminogenic setting (its perceived moral norms and their enforcement in relation to particular motivations) influences his or her crime is that it affects whether or not the person sees and chooses crime as an action alternative. Some support for this perception-choice mechanism comes from PADS+ analyses of randomised violence scenarios[18] showing that crime-prone participants are much more likely to report that they would respond to frictions with acts of violence than are those who are crime averse. In fact, those with a high crime propensity were more likely to see violence as an action alternative even in the least criminogenic scenarios, while those with a low crime propensity rarely saw violence as an alternative even in the most criminogenic scenarios (for details of the scenarios, analyses and the findings, see Wikström *et al*., 2012: 364–402)

3.8 Explaining crime concentrations (hot spots)

Crime is not randomly distributed in time and place but concentrated in certain locations at certain times[19] (e.g. Baldwin and Bottoms, 1976; Wikström, 1991; Weisburd, Morris and Groff, 2009). SAT proposes that such concentrations (hot spots) are a result of processes of social and self-selection that bring together (in time and space) crime-prone people and criminogenic settings, creating the situations to which those people may respond with acts of crime (see Figure 3.4).

The findings presented so far are based on studies of individual and situational-level relationships between young people's crime, crime propensity and criminogenic exposure. To explore and test whether area concentrations of crime (aggregations) are a consequence of the convergence of crime-prone people and criminogenic settings, path analyses were conducted at the small-area (output area)[20] level in Peterborough (Wikström *et al*., 2012). The crime data in this analysis refers to police-recorded crimes by all young people aged 13–17 (and, hence, is not based on self-reports or restricted to crimes committed by PADS+ participants). Figure 3.5 shows the results for the path model predicting young people's crime counts.

The path model uses negative binomial regression to predict crime counts.[21] The time use variables for the different propensity groups are log-transformed. All other predictor variables

[18] One scenario was administered to participants at age 13 and the other at age 15. Both produced similar findings. Participants were randomly allocated to one of four different scenario conditions: low friction and low monitoring (assumed to be the least criminogenic), low friction and high monitoring, high friction and low monitoring, and high friction and high monitoring (assumed to be the most criminogenic). In the age 13 scenario monitoring was measured as the presence or absence of a school teacher (events took place in school), and in the age 15 scenario as the presence or absence of a police officer (events took place in a public place).

[19] The location and times of such concentrations may vary depending on the nature of the crime.

[20] The average output area in Peterborough is 12.3 hectares (which roughly corresponds to an average **radius of 200 metres)** with an average residential population of 296 people (and an average of 124 households).

[21] The model was also tested using logged resident population as a control variable, which had no significant effect on the coefficients.

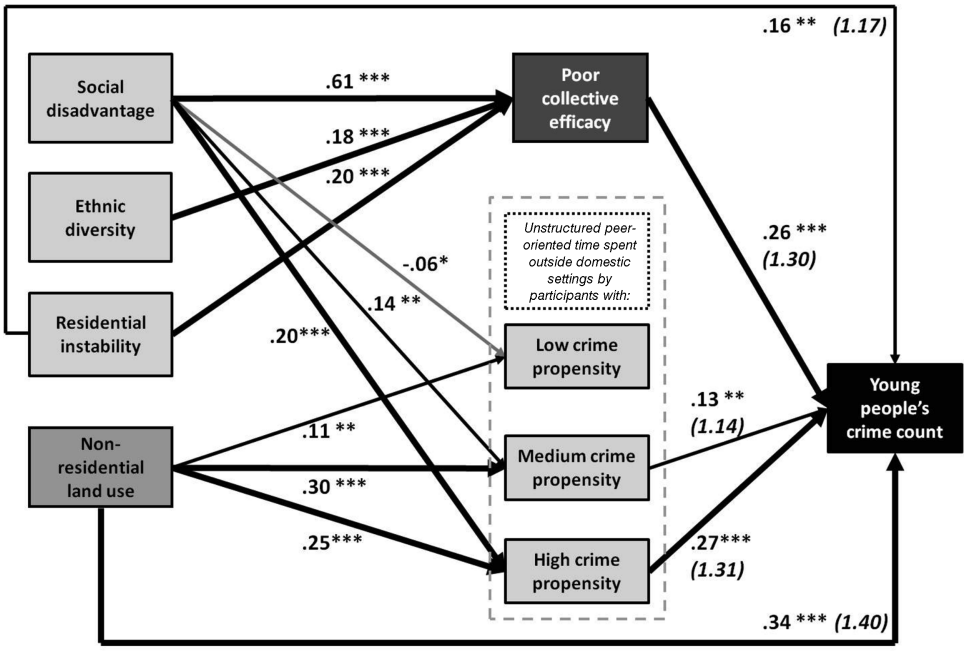

Figure 3.5 Mplus path model of area structural variables, land use and young people's time spent in area (by their crime propensity) predicting young people's police-recorded crime. **Source:** Wikström P-O H., Oberwittler D., Treiber K. and Hardie B. (2012). *Breaking Rules. The Social and Situational Dynamics of Young People's Urban Crime*. Oxford. Oxford University Press.

are *z*-transformed, while the dependent variable – crime counts – remains untransformed. For interpretation, a one-unit change in the area predictor variables (disadvantage, ethnic diversity, residential instability, non-residential land use, and poor collective efficacy) represents a change of one standard deviation, while a one-unit change in time use variables represents a proportional increase of hours spent in unstructured peer-oriented activities. The odds ratios reported within brackets in Figure 3.5 express proportional changes in crime associated with standard deviation increases of area characteristics, and, likewise, proportional changes in crime associated with a proportional increase of the hours young people with a certain crime propensity spend in the area (for further details, see Wikström *et al*., 2012: 200–202 and 312–314).

The findings of the path model (Figure 3.5) show, as predicted, that young people's crime counts are highest where crime-prone young people spend time with peers in unstructured activities in residential areas with poor collective efficacy or in areas with high non-residential land use[22] (the latter serving as a marker for city and local centre environments of commerce and entertainment activities). The findings also show that the presence of crime-averse young people in an area has no effect whatsoever on the crime counts regardless of the criminogenic

[22] The unique PADS+ data makes it possible to calculate how much time people spend in different kinds of areas and circumstances by their level of crime propensity. High, medium and low crime propensity are defined for this analysis as described in note 16.

features of the environment. In other words, the area-level analyses provide additional support for the importance of the interaction between people's crime propensity and environments' criminogenic features in causing acts of crime – this time, aggregates of acts of crime.

The path analysis also demonstrates that area population disadvantage and non-residential land use (commerce and entertainment activities) predict the presence of crime-prone people in an area. Area population composition (particularly population disadvantage), but not land use, predicts poor collective efficacy. It is possible to interpret these findings as partly reflecting socio-ecologically based selection processes (for further details of the path analyses and their findings, see Wikström *et al*., 2012: 312–319).

3.9 Coda

A cornerstone of analytical sociology is to explain by "detailing in clear and precise ways the mechanisms through which the social facts under consideration are brought about" (Hedström and Bearman, 2009: 3–4). In this chapter I have introduced situational action theory (SAT) and presented some key findings from our research into crime causation that support the theory's key assumptions. Although SAT was initially developed to explain why crime happens, there are no strong reasons why the theory cannot be applied to explain human action more generally. In fact, I believe there are good reasons to argue that human action essentially is moral action and, therefore, best analysed and studied as such.

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Further reading

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