

Victims' Routine Activities and Sex Offenders' Target Selection Scripts: A Latent Class Analysis

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Abstract

This study investigates target selection scripts of 72 serial sex offenders who have committed a total of 361 sex crimes on stranger victims. Using latent class analysis, three target selection scripts were identified based on the victim's activities prior to the crime, each presenting two different tracks: (1) the *Home* script, which includes the (a) *intrusion track* and the (b) *invited track*, (2) the *Outdoor* script, which includes the (a) *noncoercive track* and the (b) *coercive track*, and (3) the *Social* script, which includes the (a) *onsite track* and the (b) *off-site track*. The scripts identified appeared to be used by both sexual aggressors of children and sexual aggressors of adults. In addition, a high proportion of crime switching was found among the identified scripts, with half of the 72 offenders switching scripts at least once. The theoretical relevance of these target selection scripts and their practical implications for situational crime prevention strategies are discussed.

Keywords: script, rational choice, routine activities, target selection, sex offenders, situational crime prevention

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Approximately 20 years ago, a combination of factors, namely, the pressure from victim rights movement, the perceived inability to control sexual violence, and doubts regarding the impact of treatment programs for sex offenders, led to the emergence of the community protection model (Lieb, Quinsey, & Berliner, 1998; Petrunik, 2003). In an effort to prevent future sex crimes, both Canada and the United States have implemented reformed policies that increase the level of community supervision for offenders at high risk of recidivism. These policies include intensive supervision programs, 810 peace bonds, residence restrictions legislation, and the publicly accessible sex offender registry (Janus, 2003). Given the particularly heinous nature of sexual crimes, understanding where, when, how, against whom, and by whom these criminal activities are committed has become a central mission for both the criminal justice system and scholars (Lussier, Deslauriers-Varin, & Râtel, 2010; Tewksbury, Mustaine, & Stengel, 2008).

However, most criminological theories proposed over the years are theories of criminality rather than of crime and seek to understand and investigate the developmental and/or biological factors responsible for turning individuals into offenders. In the sexual offending empirical literature more specifically, the focus has largely been on the personal dimensions of the behavior (Smallbone, Marshall, & Wortley, 2008; Wortley & Smallbone, 2006). For example, most typologies of sex offenders proposed over the years (for a review, see Robertiello & Terry, 2007) are largely based on descriptive studies and focus on the offender's characteristics (such as personality, emotional state, social competencies, etc.), portraying the offender as internally driven, and usually classifying sex offenders based on the victim's age. Moreover, most of these typologies assume that an offender's offending process is stable, which clearly disregards the importance of situational factors on criminal behavior (Beauregard, Proulx, Rossmo, Leclerc, &

Allaire, 2007; Wortley & Smallbone, 2006) as well as the target and crime “switching” patterns of sex offenders (Lussier, Leclerc, Healey, & Proulx, 2007).

In contrast, the situational crime prevention approach focuses much less on the offender himself but rather on the criminal event. By making the crime the unit of analysis, the focus is shifted from the offenders and their deficits to the environment that structures, facilitates, and allows the crime to occur (Wortley & Smallbone, 2006). Criminal behaviors are seen as a product of the interaction between the offender’s characteristics, the victim, and the context in which the crime is committed. These choice-structuring aspects were often omitted in previous studies examining sexual offenses. Situational crime prevention also adopts a problem-solving approach that “targets specific form of crime in specific contexts” (Wortley & Smallbone, 2006, p. 8), focusing on potential interventions that are tailor-made for the particular problem or crime under investigation. The focus is thus on modifying environmental factors that create opportunities for the commission of a particular crime. Situational prevention is concerned with creating safe environments rather than safe individuals. As shown in previous studies (Beauregard et al., 2007; Cornish, 1994a; Cornish & Clarke, 1987), this shift in the unit of analysis is essential when it comes to understanding the offender’s somewhat rational decision-making process in committing a crime; the factors taken into consideration vary greatly among different types of crime and at different stages in the decision-making process. To assist and facilitate the investigation and modeling of the crime-commission process, the concept of crime scripts was proposed (Cornish, 1994a).

Crime as Script

Borrowed from the field of cognitive science, a script refers to a knowledge structure, or schema, that “organizes our knowledge of people and events in ways which guide our

understanding of other's people behaviors" (Cornish, 1994b, p. 32). Scripts are acquired through social learning and involve modeling and reinforcement.

When the behavior associated with a script has been used repeatedly and successfully in the past, it will be activated more readily. If strong enough, an activated script will be followed by the scripted action, unless there are strong inhibitory factors present. (Tedeschi & Felson, 1994, p. 181)

Scripts inform us about the procedural aspects and requirements of crime-commission sequences while identifying the decision processes and actions of offenders as well as the situational variables that play a role at each step of the specific crime committed. It is believed that the immediate environment provides "the potential offender with relevant information about the likely rewards and success associated with a contemplated crime" (Wortley & Smallbone, 2006, p. 9). Hence, the notion of script assumes that offenders, being rational decision makers, will structure and adapt their way of committing a crime, or script, based on choice-structuring factors, such as their current knowledge and experiences as well as information available to them (such as time constraints, ability, immediate environment, type of victim/target, location, payoffs, etc.), always seeking the greatest benefits possible using the least efforts (Clarke & Cornish, 1985; Cornish & Clarke, 1986). As such, implicit theories—traditionally termed cognitive distortions—focus on the personal internally driven psychological processes (cognitive and affective) of the offender leading to the commission of a sexual assault, overlooking the decision-making during the offense in interaction with the immediate situations encountered at the offense scene (Wortley & Smallbone, 2006). In other words, sex offenders make decisions and choose how to proceed with a particular victim not only according to personal factors (e.g., implicit

theories) but also according to the external environment (i.e., situational components of the crime such as victim's behavior). Moreover, because of his implicit theories, the offender may "misinterpret" the situational factors that are likely to affect the decision-making of offenders and ultimately, the unfolding of the sexual offense.

These flexible scripts can thus be seen as event sequences extended over time, where the early events in the sequence lead to or enable the occurrence of later events. During a particular course of action, for example, the offender may encounter the opportunity to perform another type of crime, and this crime will then be incorporated into a new script as an optional path (Cornish, 1994a). The concept of script, therefore, entails the notions of rationality, adaptability, and innovation. In response to a range of sometimes unwanted but foreseeable contingencies and obstacles, scripts will evolve and alternative scenes and actions within the general script may be developed or discovered by the offender (Cornish, 1994a). Consequently, related tracks are usually included within general scripts. Tracks refer to a variant of a more generic script and allow the offender to deal with differences in procedures under specific circumstances (e.g., witnesses or use of violence to control the victim; Cornish, 1994a). Scripts, and their related tracks, should thus be viewed as the routinization of the complete sequence of the criminal decision-making process (for a specific type of crime). As such, the identification of common patterns in sexual offending results in excellent targets for the development of prevention efforts (Kaufman, Mosher, Carter, & Estes, 2006). As discussed by Cornish (1999),

thinking of decision-making sequences as routinized procedures also gives a more realistic view of what it is to act rationally, by suggesting that rational choice may be evidenced as much by the utilization of successful instrumental routines developed by others as by innovative decision-making on the job. (p. 169)

The notion of crime scripts thus helps in the understanding of behavioral routines (i.e., criminal events) and their identifiable stages and decision-making processes; crime scripts also aid in investigations of the complete crime-commission sequence (Cornish, 1994a, 1999; Cornish & Clarke, 1987). However, previous studies applying crime scripts have mainly investigated and illustrated the crime-commission sequence of property crimes, such as robbery, burglary, check forgery, auto theft, resale of stolen vehicles, subway mugging, joy-riding, and tag-writing (see Cornish, 1994a, 1999; Lacoste & Tremblay, 2003; Tremblay, Talon, & Hurley, 2001). Crime scripts have been used much less often in the context of violent or predatory crimes, as these crimes have been seen as more “irrational.” More important, in looking at previous studies, the problem is that by focusing on the whole crime-commission process, most of the scripts proposed do not address the complexity of each stage of a particular crime. By leaving out important decisions and actions that occur during the commission of a crime, these scripts lack the necessary details to adequately describe offenders’ patterns (Kaufman et al., 2006). By examining the whole crime commission process, rather than by examining each specific stage, the role of situational factors that may be shaping the criminal act and its sequence is diminished. Given the multistage decisions and actions involved in the crime commission process of sexual crimes, scripts should first be developed by an extensive description of each specific phase in the process. As such, the target selection process will serve here as a framework for the identification of key variables in the development of a more general sex offense script for serial sex offenders of stranger victims.

Victims’ Routine Activities and Target Selection Process

As suggested by Clarke (1995), individuals’ lifestyles, as well as their routine activities, represent areas that may also be relevant for situational crime prevention. Crime, as explained by the routine activities theory, results from the convergence in time and space of three essential

elements: (a) a motivated offender, (b) a suitable target, and (c) the absence of a capable guardian (Cohen & Felson, 1979). If social context limits the presence of capable guardians while increasing the number of suitable targets, then the likelihood of a crime occurrence increases, even if the offender's motivation remains stable (Pino, 2005). Looking more specifically at the notion of suitable targets, the routine activities approach also assumes that criminal victimization is not randomly distributed in society and that actual crime-commission is a function of the convergence of lifestyles and criminal opportunity. Hence, daily activities and lifestyles nurture a criminal opportunity structure by enhancing the exposure and proximity of crime targets to motivated offenders (Felson & Cohen, 1980; Miethe & Meier, 1990; Mustaine & Tewksbury, 2002). When looking at victimization, studies have shown that it is the activities and lifestyles of individuals that carry them through contexts and interactions that will, in return, modify their likelihood of being victimized (Miethe & Meier, 1990; Mustaine & Tewksbury, 2002; Tewksbury & Mustaine, 2003). This is not to suggest that victims are responsible for their own victimization. Instead, lifestyle behaviors and characteristics, over and above proxies of lifestyle such as demographics and victim characteristics, are determinant in crime-commission and target selection (Tewksbury & Mustaine, 2003). As proposed by Kaufman et al. (2006), "opportunities are most directly influenced by the victim's situation (e.g., walking alone), target location (e.g., parks), and the involvement of facilitators" (p. 112). For example, studies have consistently shown that engaging in social activities away from home or spending a good proportion of time in places where strangers aggregate is associated with an increased risk of criminal victimization (Mustaine & Tewksbury, 2002; Tewksbury & Mustaine, 2003). Offenders are likely to decide on a suitable area in which to offend, based on the likelihood of finding suitable targets, the latter being a function of the number of potential targets in one location (Bernasco & Nieuwebeerta, 2005). However, because offenders exercise some degree of rational choice, the offender's

selection of a particular target over another, within a sociospatial context, will be determined by the subjective value of the target. Here again, when considering the subjective value of targets, most empirical research examining target selection processes have been carried out on burglars. While burglars and sex offenders have different types of targets (i.e., static vs. mobile), their target selection processes nonetheless share several similarities (Warr, 1988). Both offenders decide to select one target over another based on intelligence gathered from receiving tips or making observations of specific targets (Nee & Meenaghan, 2006), and/or based on a combination of different environmental cues that constitute “specialist knowledge” in target selection (Coupe & Blake, 2006; Logie, Wright, & Decker, 1992; Nee & Meenaghan, 2006; Wright, Logie, & Decker, 1995). Empirical studies have shown that the suitability of a particular target can be explained by numerous factors such as the anticipated success rate, potential “payoff” or high gain (Clarke & Cornish, 1985), ease of entry or physical accessibility (Bernasco & Nieuwebeerta, 2005; Cromwell & Olson, 2004), and level of guardianship (Miethe & Meier, 1990; Tewksbury & Mustaine, 2003). As such it is possible for the offender to find a suitable target that is too well guarded to merit an attempt. Previous studies have also demonstrated that offenders are likely to adapt the way they commit their crime based on the evolving environment in which their victim is located (Brantingham & Brantingham, 1993; Felson, 2002). More specifically, previous studies have shown that the target selection processes of sex offenders depend heavily on the social, physical, and geographic environment as well as the victim’s behaviors and location prior to the crime (Beauregard et al., 2007; Beauregard, Rossmo, & Proulx, 2007; Canter & Larkin, 1993; Rossmo, 1997). Consistent with the criminal career literature, persistent sex offenders are thus characterized by crime switching, especially in terms of their victim selection (Heil, Ahlmeyer, & Simons, 2003; Lussier et al., 2007; Lussier, Proulx, & Leblanc 2005; Smallbone & Wortley 2004; Weinrott & Saylor, 1991).

Aim of the study

With recent changes in the legal and judicial system aimed at increasing public safety by assisting the criminal justice system in supervising and managing the risk of sex offenders, an emerging need points to examinations of crime specificities, situational factors, and offender's decision-making, rather than offender characteristics. As scripts offer a way to match situational interventions to stages of the decision-making process, a situational perspective on a particular crime problem is more likely to provide a detailed understanding of opportunities for victimization. This understanding can lead to the development of effective countermeasures (Cornish, 1999). In the sexual offending empirical literature, however, the focus has largely been on personal dimensions of the behavior (Wortley & Smallbone, 2006). Current typologies of sex offenders have failed to look specifically at the target selection process and have neglected the geographic behavioral aspect of sexual offenses (Beauregard, Proulx, et al., 2007; Beauregard, Rossmo, et al., 2007). Moreover, behavioral (i.e., criminal method), victim's routine activity (i.e., activities and location prior to the crime), and situational variables associated with the crime have rarely been examined simultaneously. Finally, prior offender typologies identified are often not mutually exclusive because of the statistical methods employed in the analyses (Vaughn, DeLisi, Beaver, & Howard, 2008).

In an attempt to overcome these shortcomings, the current study uses latent class analysis (LCA), a relatively new statistical technique in the social sciences, to investigate mutually independent subtypes of target selection scripts in a sample of serial sex offenders. In other words, we are interested in determining whether there is a latent structure that adequately represents the heterogeneity of target selection among serial sex offenders. Using variables compatible with the concept of target selection—that is, behavioral, victims' routine activities, and geographic variables—we believe that mutually exclusive target selection scripts and related

tracks can be identified. Moreover, congruent with the notion of script, target and crime switching are investigated to test for sex offenders' adaptability to different contexts. Finally, situational crime prevention strategies are suggested and are mapped onto the identified scripts in an effort to address deterrence of sex offenders.

Method

Participants

The initial sample frame for the study consisted of all male sex offenders convicted of a sentence of 2 years or more between 1995 and 2004 in the province of Quebec, Canada. This list of more than 1,000 offenders was examined to identify all serial sex offenders of stranger victims. In all, 92 individuals matched the criteria, and 72 of these agreed to participate in the study. Together, these men were responsible for a total of 361 sexual assaults (ranging from 2 to 37 sexual assaults each) for which they were charged and convicted. Among the 20 excluded participants, 9 refused to participate; the remaining 11 were unavailable because of their mental state, disciplinary problems, or transfer to another institution. The participants were all incarcerated in a Correctional Service of Canada penitentiary (an institution that houses inmates serving a sentence of 2 years or more) located in the province of Quebec. The sample included individuals who had committed two or more sexual assaults or other sex-related crimes (e.g., sexual homicide) involving a victim of any age and any gender with whom he had no personal relationship prior to the day the offense was committed. Serial sex offenders were specifically targeted for the sample as they are more likely to face a variety of situations and, accordingly, are more likely to make a variety of choices during the decision-making process of each crime committed (Beauregard, Proulx, et al., 2007; Beauregard, Rossmo, et al., 2007). Offenders included in this study had sexually assaulted adult women ($n = 33$), children ($n = 17$), or both ($n = 22$), and 80% ($n = 291$) of the victims were female. The majority of the offenders were White

(91.3%; $n = 63$), and the average age at the beginning of the crime series was 30.7 years ($SD = 9.4$). Almost half (46.4%; $n = 32$) of the offenders were married or in a relationship at the beginning of their series of crimes. Among the participants, 39.6% ($n = 28$) were unemployed, and 89.9% ($n = 62$) had a prior criminal record before the onset of their series of sexual crimes. Participants with a prior criminal record had an average of 2.9 charges ($SD = 6.3$) for violent sexual crimes, 1.0 charge ($SD = 3.1$) for nonviolent sexual crimes, 2.5 charges ($SD = 4.4$) for violent nonsexual crimes, and 11.9 charges ($SD = 19.6$) for nonsexual nonviolent crimes.

Procedures

An instrument was developed to collect information from police investigation reports and to guide in-depth, semistructured interviews with offenders. The instrument was developed by the second author using preexisting questionnaires (Violent Crime Linkage System [ViCLAS], Violent Criminal Apprehension Program [VICAP], Computerized Questionnaire on Sexual Aggressors (St-Yves, Proulx, & McKibben, 1994). Moreover, the instrument used Rossmo's (1995) coding scheme for his doctoral dissertation as well as the published literature on environmental criminology. This instrument includes five sections that allow for the collection of information on precrime factors, target selection processes, modus operandi, postcrime factors, and geographic behavior. Data, especially on the behavioral and geographic components of the target selection process, were collected from the police reports and coded in the instrument. The reliability of responses in our study was monitored by checking for and questioning inconsistencies. In the case of any discrepancies between the offender's account and the police report, the information from the police report was used¹. Interviews were conducted by the second author in a private office, isolated from correctional staff and other inmates. They lasted

¹Participants were also asked about "unofficial" victims. However, this information was not analyzed in the current study because of the inability to check for inconsistencies with official reports.

from 2 to 12 hours, depending on the number of crimes committed and the participants' verbosity. Owing to the sensitive nature of the conversations, permission was not requested to tape-record the interviews, although extensive verbatim notes were taken whenever possible. No participant was paid for participating in the study. All participants signed a consent form after being explained the purpose of the study².

Statistical Analyses

LCA was performed using PROC LCA, an add-on for SAS 9.1 for Windows (Lanza, Collins, Lemmon, & Schafer, 2007). Although the application of LCA has been primarily restricted to medical, educational, psychological, and sociological domains, LCA has been increasingly used in behavioral research, particularly in criminology, over the past few years (see Dayton, 2008; Lanza et al., 2007; McGloin, Sullivan, & Piquero, 2008). The technique assumes that discrete latent variables³ underlie a specific population and helps to identify underlying patterns in data or subgroups of individuals who share important characteristics or behaviors (Lanza et al., 2007). Latent classes can thus be seen as "a classification system for groups of individuals when we are classifying individuals according to some construct that is not directly measurable" (Lanza, Flaherty, & Collins, 2003, p. 665). More specifically, LCA predicts subjects' subgroup membership based on their responses to a set of observed categorical variables and produces mutually exclusive and exhaustive (nonoverlapping) latent classes of individuals (Dayton, 2008; Goodman, 1974; Lanza et al., 2007). LCA is particularly valuable when the theoretical construct of interest is made up of qualitatively different groups of individuals, but the group membership of individuals is unknown and must therefore be inferred

²To minimize response distortion, offenders were promised complete anonymity and confidentiality, and a guarantee that their information provided could not be used in any way against them by the Correctional Service of Canada. Inmates, however, were told that if during the course of the interview, the name of a potential victim or someone who is in danger was brought up, the interviewer would have an obligation to inform the concerned authorities.

³These variables cannot be observed directly and must be inferred from observed items preselected by the researcher (Lanza et al., 2007).

from the data (Lanza et al., 2003). LCA is based on two critical assumptions. First, it assumes that all individuals in a latent class have the same conditional response probabilities for the items. Second, as mentioned previously, there is an assumption of conditional independence of the latent classes identified (Lanza et al., 2003). Following the LCA, additional chi-square analyses were carried out between the scripts and some modus operandi variables to test the external validity of the LCA solution.

Variables

Table 1 presents frequency data for the variables included in the study. In total, 12 dichotomous variables were included in the analyses, divided into three main categories: (a) behavioral, (b) victim's routine activities, and (c) geographic variables.

---Insert Table 1---

Behavioral variables. The study included five dichotomous variables related to the offender's behaviors and target selection process: Type of victim selection (1 = random/unpatterned; 2 = non-random/patterned)⁴; Offender looks in specific places to find victim (1 = no; 2 = yes); Method to approach victim (1 = non-coercive; 2 = coercive); Method to bring victim to the crime site (1 = non-coercive; 2 = coercive)⁵; and Offender broke into victim's house (1 = no; 2 = yes).

Victim's routine activity variables. The study included four dichotomous variables (1 = no; 2 = yes) related to the victim's routine activities prior to crime: Victim at home, Victim

⁴The victim selection was coded as "non-random/patterned" if the victim was chosen because of any group categorizations, selection processes, or hunting tactics used by the offender (e.g., picking up prostitutes, taking in boarders, placing personal ads in newspapers, etc.). In other words, the victim must have been part of a certain group, expressed unique class characteristics, or engaged in specific actions that were not part of the routine activities of the majority of society. Otherwise, the victim selection was coded as "random/nonpatterned" (Rossmo, 1995).

⁵"Noncoercive," includes strategies such as seduction/persuasion, giving money/gifts, games, con, using drugs/alcohol, whereas "coercive" includes the use of physical violence or threats.

outdoors (e.g., jogging, hitchhiking, prostitution), Victim involved in recreational/ social activities (e.g., visiting friends, social event, night club), and Victim alone.

Geographic variables. The study also included three dichotomous variables related to the geographic aspect of the crime and target selection process: Encounter site, which refers to the location where the offender first comes into contact with the victim (1 = inside; 2 = outside); Attack site, which refers to the location where the offender first attacks the victim (1 = inside; 2 = outside); and Target's mobility, which designates if the actions (i.e., encounter, attack, and crime) occurred all at the same location or in different places (1 = all at same location; 2 = multiple locations).

Results

Identification of Latent Subgroups

A six-class solution provided the best overall fit to the data (see Table 2). The Bayesian information criterion (BIC; Schwarz, 1978) and Akaike's information criterion (AIC; Akaike, 1974) are penalized log-likelihood model information criteria that can be used to compare competing models fit to the same data (i.e., models with different numbers of latent classes). A smaller BIC and AIC for a particular model suggest that the trade off between fit and parsimony was achieved. As shown by the decreasing BIC and AIC, up to six classes, the addition of classes provides no improvement in model fit. An inspection of the parameter estimates from the six-class model also suggests that the target selection scripts are distinguishable and non-trivial (i.e., no class with a near-zero probability of membership), and that meaningful labels can be assigned to each class found. The estimation was repeated using a different seed to test different sets of starting values, as recommended by Lanza et al., (2007). The six-class model was identified as the dominant solution that was obtained most frequently among the various sets of starting values.

---Insert Table 2---

The likelihood ratio G2 statistic was used to compare which six-model solution was the most stable among the different starting values used. The final six-class model selected presented high classification accuracy (entropy) based on posterior probabilities⁶, confirming its stability and relevance⁷.

Group labels were assigned based on the victim's routine activities prior to the crime, which was where the most distinctive differences among scripts of target selection were found. Looking at the six target selection patterns, it was possible to group them into three main target selection scripts, each presenting two tracks. Table 3 shows, for each script, the assigned label and probability of membership as well as the item-response probabilities for endorsing each item. The item-response probabilities vary from 0 to 1.00; an item-response probability closer to 1.00 indicates the presence of the item for the class. Item-response probabilities falling between .45 and .65 were interpreted as a somewhat arbitrary presence of the item.

---Insert Table 3---

The first main target selection script, the Home script, presents two tracks: the intrusion and the invited tracks. Both tracks are used with victims that were at home prior to the crime and represent 17% and 7% of the 361 offenses committed. Offenders using the intrusion target selection track look at specific places to find and select their target (.82) and most likely break into the victim's home (.68) while she is alone (.83). They do not necessarily use coercion to approach the victim (.57) but almost always use it to bring the victim to the crime site (.92),

⁶Average assignment probabilities based on posterior probabilities for the six-model solution ranged from .998 (.928-1.00) to .873 (.533-1.00).

⁷Latent class analyses were also performed leaving out the variable *Victim was outside*, as this variable was identified as a redundant item based on preliminary bivariate analyses conducted (i.e., the variable was associated with four other variables used to create the subgroups when performing c2). However, the number and characteristics of latent classes found when leaving out this item were the same as those when the item was included. As such, the item was kept in the final model as this variable showed theoretical relevance (i.e., represents an aspect of the victim's routine activities).

which is most likely inside the victim's residence (.93). Once approached by the offender, the victim is not taken to another location, meaning that the crime event will be committed all in one location (.09). Compared with the intrusion track, the invited track implies that offenders have easy access to the victim's home and do not need to commit a break and enter to approach their victims (.00). Neither do they have to use violence to approach (.00) or bring their victim to the crime site (.00). Most of the time, offenders meet (.20) and attack their victim indoors (.12), usually in the victim's home (.75) and almost half of the time change locations throughout the commission of the crime (.48).

The Outdoors script shows two tracks, the non-coercive and the coercive, and is used with victims who were outdoors prior to the crime (e.g., jogging, commuting, prostitution, at a park, etc.). Each of these two tracks represents about 25% of the offenses included in our sample and discriminates between offenders who use coercion to approach and bring the victim to the crime site and those who do not. The offenders using the non-coercive track, half the time select their victims in a non-random patterned way (.47), most often looking in specific places to find their target (.66). They never use violence or coercion to either approach (.00) or bring their victim to the crime site (.00). The encounter site is most likely outside (.78) whereas the attack site is often inside (.26). Offenders using the coercive track also tend to nonrandomly select their victims (.64) and look in specific places to find their target (.71). However, they most often use coercion to approach their victim (.66) while always using coercion to bring their victim to the crime site (1.00). Also, while the offender using the coercive track approaches (.77) and attacks the victim outside (.90), the victim is usually moved to a different location for the crime (.91).

The last target selection script identified, the Social script, again presents two different tracks: the onsite track and the off-site track, respectively representing about 20% and 8% of the offenses. This script is used with victims who are involved in social or recreational activities

prior to the crime (e.g., at a bar, concert, pool, shopping mall, etc.). Although offenders using both tracks tend to randomly select their victim, they nonetheless look in specific places to find their target. Offenders using the onsite track approach (.01) and attack (.20) their victim while he or she is inside (.00), surrounded by other people (.16). In contrast, offenders using the off-site track always approach (1.00) and attack their victim outside (1.00), while she or he is alone (.74), moving the victim to a different location for the commission of the crime (1.00). Most of the time offenders from the off-site track use coercion to bring their victim to the crime site (.83). Moreover, their victims are involved in outdoors social activities prior to the crime (1.00).

Additional Analyses With Modus Operandi Variables

To test the external validity of the LCA solution, the three scripts were put in relationship with five modus operandi variables: (a) use of a weapon (yes/no), (b) offender's level of risk during the sexual assault (undressed/not undressed), (c) kidnap style attack (yes/no), (d) type of sexual acts committed (sexual contacts/penetration/sexual contacts and penetration/sexual without contact), and (e) level of force used by the offender (no force/minimal/more than necessary). Interestingly, only the offender's level of force did not reach statistical significance in distinguishing the three scripts. This is an important finding suggesting that the target selection process is independent from the level of force used during the crime.

Serial sex offenders using a home script are significantly more likely to use a weapon when committing the crime. This is congruent with the fact that for the home intrusion track for instance, offenders are likely to use some kind of object to break and enter into the victim's residence. This object may later serve as a weapon. Moreover, these offenders are more likely to take more risk, getting completely undressed during the sexual assault. This is also consistent with the fact that the location of the crime (i.e., victim's residence) provides a safe environment for the offender who arguably is less likely to be interrupted by a third party. Furthermore, this

could also explain why offenders using a home script are more likely to commit both sexual contacts and penetrate the victim during the sexual assault. Having more time with the victim allows them to complete the sexual assault. However, kidnapping the victim is more typical of the outdoor script. Although this significant difference makes sense theoretically, it is also possible that the significant statistical difference was due to the fact that in none of the home script events, the victim was kidnapped.

Victim Profile by Target Selection Script

The identified target selection scripts and their related tracks were then compared based on the victims' sociodemographic profiles (i.e., age and gender). This allowed an assessment of whether or not a typical victim profile could be associated with each of the target selection scripts. This step is particularly relevant, as prior sex offender typologies have stressed the importance of distinguishing between offenders against children and offenders against adults. Table 4 shows that the mean age of the victims varies from 10 years ($SD = 1.8$) for the off-site track, to 27 years ($SD = 8.9$) for the intrusion track. The non-coercive track also shows a relatively young mean age, with the victim being approximately 14 years old. The mean age for the three other tracks (i.e., invited, coercive, and onsite) is around 20 years old. When looking at the victim's age distribution, it is possible to draw a more accurate portrait of the victims associated with each track. Although offenders using the off-site and the intrusion tracks appear to target victims of specific ages (93% of the victims of the former group being in their mid-/late childhood (6-12 years old) and 83% of the latter group being adults (18 years and older), offenders using the other four tracks appear to indiscriminately target victims of varying ages. Looking at the victim's gender, with the exception of the invited track, all other tracks tend to involve a female victim, ranging from 98% for the coercive to 71% of the offenses for the onsite

tracks. The only distinctive track, in this regard, is the invited track, where female and male victims are present in equal proportions (50% each).

Crime Switching by Target Selection Script

Table 4 also presents information regarding crime switching among the three main target selection scripts and related tracks. Among the 72 offenders included in our sample, half of them ($n = 37$; 51%) changed at least once in the way they were targeting their victim. For the six target selection tracks identified, the majority of the offenders responsible for the crime events were “switchers” (i.e., did not use the same pattern of target selection for each of their crime). More specifically, although only five offenders (7%) were responsible for the 29 crime events failing into the off-site track, these offenders were all switchers, meaning that none of them made this target selection track their preferred pattern. When taking into account the actual number of offenders responsible for the offenses committed under each track, more recurrent target selection scripts appear. Hence, offenders using the intrusion, the coercive, and the onsite tracks to select their victim used such tracks approximately three times on average. Offenders using the off-site target selection track committed a mean number of six crimes each using this specific track.

---Insert Table 4---

Discussion

This study explored the use of the crime scripts perspective combined with multivariate LCA in the identification of target selection processes of serial sex offenders. Three main target selection scripts were identified, each including two tracks. The first script, the Home script, includes the intrusion and the invited tracks. This target selection script and its related tracks are primarily used with victims who were at home prior to the crime. The non-coercive and the coercive tracks, included under the Outdoors script, are characterized by victims who were outside when approached by the offender. Finally, the Social script, including the onsite and the

off-site tracks, is used by offenders who find and approach their victims while she or he is involved in social or recreational activities. The three scripts identified demonstrate the importance of the victim's activities prior to the crime when it comes to target selection. The theoretical relevance of these target selection scripts and their practical implications for situational crime prevention strategies are discussed.

The Home Script

The intrusion track is similar, in nature and prevalence, to the findings of Beauregard, Proulx, et al. (2007) in their script analysis of the hunting process of sex offenders. This script was also found by Warr (1988) in his study of the offending process of burglars, in which the home intrusion pattern was defined as a hybrid offense, which combined a violent crime with the opportunity structure of a property crime. In the current study, the offenders using this target selection track (17%) often break into the victim's home and sexually assault an adult female victim while she is alone. Previous research has suggested that this track is related to knowledge and experience in nonsexual crime and a higher motivation for sexual crime, as it is associated with high risk taking (e.g., offender is unfamiliar with the crime site, possibility of leaving evidence; Beauregard, Proulx, et al., 2007; Warren et al., 1998). However, this target selection pattern also provides great benefits to the offender, as the crime is committed inside, lowering the risk of apprehension. It allows the offender to have more time to commit the actual crime because witnesses or guardians, as proposed by the routine activities approach, are less likely to interfere (Felson, 2002). This type of target selection can thus be seen as more "rational" as the benefits will normally outweigh the risks associated with the commission of the crime (Clarke & Cornish, 1985). The following case illustrates the different steps involved in the home-intrusion track.

Tom has committed several sexual assaults at intervals over the years. To commit certain sexual assaults, he rides his bicycle around his own neighborhood, taking the time to observe houses which provide a clear view of their occupants. His targets of choice are single-family residences, given that they offer easy access. Paul does his best to confirm that the targeted house is occupied by a woman alone or a woman with children. He considers a variety of indicators: the home's decoration, whether a handbag is in view, the presence of a single vehicle, movements of the woman observed through the home's windows. He often waits until the very early hours of the morning to commit the assault, hoping to find the victim in a deep sleep. He enters at the back, through a window. Once inside, he goes directly to the master bedroom. He immediately uses physical violence to overpower the victim and prevent her from crying out. He often finds it necessary to threaten the woman to lead her to wherever he wants to attack her. He explains that, if a woman resists, he is capable of hitting her or strangling her until she loses consciousness. After attacking her sexually, he leaves the scene, saying nothing. On at least two occasions, he has also abused children.

The invited track (7%), although mainly used with victims (children or adults) who are not necessarily alone, is related to even less risk of apprehension. In fact, offenders using this track benefit from a context that gives them the opportunity to be in the presence of potential victims and to establish a more "intimate" relationship. It appears that offenders using this target selection track most likely become acquainted with a family, specifically targeting vulnerable victims or women living alone with children, by, for example, offering helpful services. This is also exemplified in the study by Smallbone and Wortley (2000) who found that 45% of extrafamilial offenders against children established friendships with the parents of a child; 35%

helped the parents around the house, and 23% offered to babysit to gain access to a potential victim. In doing so, the offenders create opportunities to gain the victim's trust and open the door to a favorable context for sexual activity. This target selection track thus stresses the importance of the role of situation and opportunity in offending (Cornish & Clarke, 1986). The following case illustrates the home-invited track.

John has attacked seven victims. He contended that single-parent families, where the mother lives with children, constitute a pool of potential victims who are accessible and very vulnerable. In one instance, he was working as the superintendent in a public-housing apartment building. While undertaking work in an apartment, he became acquainted with the mother of two boys. John was friendly and helpful to the woman, demanding nothing in return. He even offered to look after her children while she worked. John explained that, by discussing the mother's children with her, he overcame her fears about him and seemed as though he were a family friend. A few days later, on the pretext that he was looking after other children in any event, John again offered to look after the tenant's children. He claimed that the mention of other children under his care reassured the woman. The mother went out and John took the two boys home with him. John quickly asked the boys if they wanted to look at comic books. The boys followed him into his bedroom, where John showed them comics and said he would give the comics to them if they would do something for him. John then touched them sexually and performed fellatio on them.

Although crimes occurring in domestic settings are the most difficult to deter through situational prevention, the home being by definition a private space (Smallbone, Marshall, & Wortley, 2008), these two tracks still have practical implication in terms of situational crime

prevention. On the one hand, the intrusion track suggests that offenders look for any physical cues that could help them identify the home occupant's identity. As proposed by Beauregard and colleagues (Beauregard, Proulx, et al., 2007; Beauregard, Rossmo, et al., 2007), contrary to the common view that women are safer when they are at home, (single) women should be aware of how to reduce their potential victimization risks when at home (e.g., closing curtains at night, avoiding name plates that inform about their gender and marital status, lock their windows and doors, etc.). Reducing these environmental cues increases the risks associated with the use of this target selection track, thus helping to prevent its occurrence as offenders might be less interested in taking the risk of entering into a home without prior knowledge of whom the occupants are. On the other hand, the invited track suggests that parents may play a preventive role and that it is important to maximize protection within families. For example, as proposed by Wortley and Smallbone (2006), public education programs can be put in place to sensitize parents or caregivers to the need for effective supervision of children in their care. Parents and caregivers should also be informed about how to recognize a potentially dangerous situation, such as a purportedly helpful individual's repeated attempts to be alone with a child or another potential victim.

The Outdoors Script

The next two target selection tracks, the non-coercive (25%) and the coercive (22%), both suggest a substantial amount of time spent by the offenders in preparing their crime and selecting their victims (children or adults). These types of target selection patterns were also identified by Cornish and Clarke (2003) and were referred as mundane or opportunist offenders who likely offend simply because they can. Although both tracks present higher risks of apprehension compared with the Home script, the risk is even more noticeable for the coercive pattern. Contrary to the coercive track, the offender using the non-coercive track approaches and attacks

the victim without having to use violence. The offenders meet with their victim while outdoors and then gain their trust, allowing them to bring the victim inside, in a consensual way, to commit the crime (e.g., a sex offender targeting a prostitute). Again, the crime is committed away from guardians and witnesses. The following is a case illustrating the outdoors–noncoercive track.

James has committed three sexual assaults in a single month. He often wanders around a neighborhood where prostitutes ply their trade. Although adult prostitutes work the area, it is also known to harbor young male prostitutes. While driving through the area one weekday afternoon, James noticed two young boys attempting to get into a truck parked in an alleyway. He stopped to ask the boys—whom one would have expected to be in school at the time—what they were doing. After having asked the boys several questions, James learned that they lived in a shelter from which they had run away. Promising not to report them, he offered to take them for something to eat, an offer the boys quickly accepted. Once in the restaurant, James explained to the boys that, to keep police from finding them, it now seemed to him more prudent for them to come to his apartment and order food to eat there. The group ate pizza at his apartment. Then James told the boys he needed to shower and invited them to do the same. The boys agreed, taking advantage of his hospitality. However, after they all had showered, James began playing around with the boys, who were dressed only in towels. He was highly aroused sexually, and was ready to have sexual relations with the boys, particularly as they seemed willing. He began talking about sexuality and showing them how to masturbate. To persuade them to commit sexual acts, he offered them 10 dollars apiece to participate in group masturbation. In need of money, the boys agreed. After ejaculating, James drove the victims to a public place so as not to be further associated with the young runaways.

In the case of the coercive track, however, the offender waits outside for an opportunity and then jumps on the victim, using coercion to bring her/him to another outside location where the crime is committed. This track shows higher risk-taking as the crime is committed outside and the victim's reaction and resistance may alert potential witnesses. This track is illustrated by the case below.

Ben is a sexual aggressor who has wreaked havoc for about 2 years, during which he has attacked 12 women. One of his victims was 14 years old. When he experiences the desire to sexually assault a woman, he drives around in his car searching for a potential victim. This "hunt" can take place day or night. When he identifies his victim, he parks his car some distance away. Then he follows the woman. Once she arrives at a place convenient for his attack (an area with trees to provide cover, an alleyway), he grabs the victim from behind. While strangling and threatening her, he leads her away, and usually his attack lasts only a short time. He demands fellatio or has forcible intercourse with the victim.

Because of the apparent opportunistic nature of the Outdoors script, reducing temptations may be effective in preventing the commission of a sex crime, with minimal danger of displacement to other targets (Wortley & Smallbone, 2006). Offenders usually select targets and commit crimes that require the least effort or that guarantee a certain success rate. Different strategies might then be put in place to increase the effort that offenders must deploy or the risks they must take in order to successfully commit the crime. This is especially true for the coercive target selection track. Public settings often offer the greatest potential for control over the environment as authorities can design or restructure these public places accordingly (Wortley & Smallbone, 2006). Such strategies could be as simple as extending guardianship or increasing the

natural surveillance of outdoor public places. As proposed by the routine activities approach, efforts at extending guardianship and natural surveillance seek to encourage individuals to become aware of crimes that may occur within their informal spheres of influence (i.e., informal social control). This can be achieved by removing blind spots and natural obstacles, trimming bushes in parks or public spaces that can reduce informal surveillance, or by making sure public spaces have appropriate lighting. As explained by Johnson (2005), “improved lighting in problem areas reduces their attractiveness as trysting locations because the lighting reduces perceived privacy levels” (p. 23). Implementing or increasing the frequency of police routine patrol or other types of surveillance teams (e.g., neighborhood watch, safetyhouse programs, etc.), are other methods of extending guardianship and creating the illusion of surveillance and higher risk of apprehension.

The Social Script

Finally, the Social script includes two target selection tracks: the onsite (21%) and the off-site (8%) tracks. This script is used with targets who are involved in social or recreational activities prior to the crime. Offenders using this script will normally go to specific recreational locations (e.g., bars, shopping malls, pools) to identify suitable targets, without planning their crime or selecting their victims ahead of time. Similar to offenders using the coercive track, these offenders will usually act directly on a victim, without initial interaction, simply waiting for an available opportunity to present. As suggested by Leclerc, Carpentier, and Proulx (2006), this type of crime is spontaneous and unsophisticated, often compared with a “hit-and-run” attack. The onsite target selection track is associated with a low risk of apprehension compared with the off-site track, because of the indoor location of the crime. The following case illustrates the social–onsite track.

Alan had attacked 17 victims, 8 of them during a 2-week period. During that time he consumed a great deal of alcohol and drugs. He frequented various drinking establishments. When sexually aroused, he entered the women's washrooms and, when the opportunity presented itself, sexually assaulted (more or less intrusively) a young woman just leaving a stall. He used no violence or particular strategy in these crimes.

Because the off-site target selection track is characterized by an encounter and attack locations that are outdoors, it forces the offender to act quickly and, as observed for the coercive track, to often use coercion to control the victim and commit the crime. As reported by Leclerc et al. (2006), strategies such as physical force and violence are mostly used when the target is resisting and the offender wants to proceed further or enhance his chances of successful crime completion. This demonstrates that the target selection process is highly dependent on the physical environment and context in which the crime is committed (Canter & Larkin, 1993). The social-off-site track is illustrated by the case below.

Martin sexually assaulted three victims during the summer, which were all at social events. In one case, Martin was attending a concert in a park in the hope of finding a vulnerable victim. At some point, he spotted a young woman, who clearly was intoxicated, who appeared to be looking for something. He introduced himself to her offering her some help. The victim explained that she was looking for the restrooms. The offender showed her the way and decided to accompany her. Once isolated from the crowd, the offender grabbed her by behind and threw her on the ground behind bushes. He sexually forced himself on her and left the crime scene after the sexual assault was completed.

Here again, the same situational prevention principles proposed for the Outdoors script can be applied. In fact, as the victim is found and approached while in an inside public setting, improvement of surveillance and guardianship appears even more feasible and relevant with this script. For example, as proposed by Wortley and Smallbone (2006), increasing the risks associated with the crime-commission may require greater surveillance of offending hot spots by using place managers. Individuals in charge of security in these establishments could be made aware of potential sexual offenders' modus operandi and their ways of selecting targets to better monitor for suspicious behaviors. Also, the physical design of these facilities can be altered to increase success in preventing this type of crime from occurring. For example, Smallbone and Wortley (2000) found that 13% of extrafamilial offenders had selected their targets in public bathrooms. Relocating public bathrooms to high-activity areas, modifying public facilities with secluded and concealed entrances, and improving lighting are ways to increase the natural surveillance of these facilities (Johnson, 2005; Wortley & Smallbone, 2006). Also, as is the case in most European cities, the addition of a permanent janitor in public bathrooms can act as a constant guardianship. As the offenders using this script appears to be quite spontaneous and opportunistic, altering the context facilitating the commission of the crime will likely diminish opportunities and should be sufficient to deter these offenders.

Victim Profile and Crime Switching

The current study also looked at the sociodemographic profiles of the victims (age and gender) in association with the scripts and tracks identified. When looking more specifically at the victim's gender, it is noteworthy to mention that, with the exception of the invited track, the scripts and tracks identified were predominantly used with female victims. It is of interest for prevention purposes to highlight that male victims were most likely targeted by offenders having easy access to them, such as a family acquaintance or a new neighbor. Also, with the exception of

the intrusion and the off-site tracks, the four other target selection tracks presented a wide diversity in terms of the victim's age. Offenders using the intrusion and the off-site tracks seemed to target older and younger victims respectively, but looking at the three scripts identified, it appears as though there were not any specific scripts for either aggressors of children or aggressors of adults. Such findings clearly indicate the adaptability of sex offenders to the context of the crime and the opportunities that arise. However, our findings also show that certain tracks are more typical with adult victims than with child victims (e.g., home intrusion). Because different victim types are likely to produce different offending contexts, sex offenders adapt their scripts accordingly. This finding could have important implications for research on sex offenders, as most of the typologies developed based on the offender's profile have treated sexual aggressors of children and adults separately. Our findings, consistent with research on victim crossover (see, e.g., Heil et al., 2003; Lussier et al., 2007), show that sex offenders may target different types of victims and will adapt their target selection patterns to that particular type of victim.

Finally, crime switching was investigated among the three target selection scripts identified. Whereas half of the 72 offenders included in our sample presented an exclusive pattern of target selection, the other half appears to be quite versatile, changing patterns according to different victims' routine activities. As proposed by Wortley and Smallbone (2006), offenders are not restricted to one type of situational category or, in this instance, script. This tendency appears to be particularly true for prolific offenders who offend across the situational spectrum. Looking at our results, this was specially the case for offenders using the off-site target selection track, which were all "switchers." Hence, although 8% of the crime events analyzed in the current study fit into this category, no offender specialized in this track. This track could thus be seen as an "on-the-side" target selection pattern, offenders using it only when an opportunity presents itself.

These findings highlight the importance of looking at the crime event when examining target selection scripts, as this track would not have been found had we focused on the offenders themselves. Indeed, as no offender defined his way of selecting the targets specifically by the off-site track, this track would have likely been “lost” in the data.

Conclusion

This study shows the importance of using an integrative approach when looking at behavioral, routine activities, and geographic aspects of the crime in the investigation of offending patterns. Using the rational choice approach and seeing crime as a script makes it easier to understand the way offenders think, the risks they are willing to take, as well the way in which they select their victims and commit their crimes. The scripts identified demonstrate that the target selection stage is highly influenced by the victim’s routine activities and the physical environment in which the crime takes place. As proposed by Beauregard and colleagues (Beauregard, Proulx, et al., 2007; Beauregard, Rossmo, et al., 2007), the type of location has a strong impact on the types of strategies an offender will use to offend. The type of locations where the offender and the victim meet can also trigger some strategies. Where the victim is and what she is doing will then influence the course of the crime. If the victim is outside, the offender might have to act faster and use violence to control the victim and reduce the risk of apprehension. This interaction between the behavioral and the geographic aspect of the crime demonstrates the relevance of the rational choice perspective when it comes to understanding offending patterns, as it helps to illustrate the interactional and adaptive nature of human behavior. Even when taking risks, the offender always tries to reduce, as much as possible, the costs associated with the commission of the crime by adapting his target selection and offending patterns to the specific context in place. Also, as proposed by the script approach, by breaking down a specific crime into smaller problems or single steps of the crime-commission process

(such as focusing on target selection), it becomes easier to identify a broader range of policy options and possible points for intervention (Clarke & Cornish, 1985).

This study also highlighted the importance of focusing on the crime event, rather than the offender, when investigating the target selection of sex offenders of stranger victims. Previous typologies looking at the offender have stressed that aggressors of children and aggressors of adults are too different in terms of their personality and the types of crime committed and should thus be looked at separately. The current study shows that when focusing on the crime event and target selection process, treating these two groups separately appears less relevant. Also, by focusing on the crime event and the way in which offenders select their victims, uncommon or less prevalent scripts and tracks were found, increasing our knowledge of target selection strategies. Finally, by looking at crime events, crime switching among scripts and their related tracks could be explored. This allowed for our finding that a good proportion of offenders are versatile when it comes to the manner in which they select their victim and commit their crime. This result could have a significant impact on situational crime prevention strategies. As discussed by Clarke and Cornish (1985), as each form of crime appears to require specific remedies, shifting the focus from the offender to the offense brings a range of options and interventions that were previously neglected into the policy and situational prevention arenas.

Moreover, it is interesting to note that situational crime prevention strategies could be put in place to prevent more than one script at a time. For instance, the strategies aiming at increasing surveillance in certain location would make it harder for offenders to use the outdoors or social script to target potential victims. Although displacement is always a concern with situational crime prevention, it should be remembered that certain scripts, such as the home-intrusion track, require skills and knowledge not available to all sex offenders. Thus, the design of appropriate prevention measures could lead to a “diffusion of benefits” instead of “crime displacement”.

This study, however, suffers from certain limitations. First, the sample only included crimes committed by incarcerated offenders and for which the offenders were charged and convicted of. Therefore, the results of the current study might only reflect the target selection scripts of offenders who were not able to avoid detection and were thus apprehended by the police. Hence, it may well be that the riskiest scripts have resulted in greater risks of apprehension and thus may explain, in part, their higher prevalence. Indeed, those estimated to be at highest risk (the coercive and non-coercive tracks) are the most prevalent in the sample. Moreover, this study is based on self-reported information gathered during semistructured interviews with the offenders, which might only reflect the offender's perception of the crime. Safeguarding against this concern, it is important to emphasize the fact that self-reported information was compared with official data (i.e., police reports) and that, in the case of a discrepancy, information from the official police data was used. Also, a different number of crimes per individual was used in the analyses, the number of crimes per offender ranging from 2 to 37. This might have had an influence on the results. More specifically, assuming stability in an offender's target selection script, the prevalence of each script found might be the result of our decision to count an uneven number of crimes per offender. However, the high proportion of crime switching identified in our data lessens the impact that this approach may have had on the results found. Finally, some of the findings may not be generalized to all sex offenders as only a few cases matched certain tracks identified (e.g., only five events in the off-site track). Future studies should further investigate the prevalence of crime switching among target selection scripts using appropriate statistical analyses, such as latent transition analysis. Moreover, as offenders do not offend every time a potential victim has been targeted and the environmental risks are low, future research should investigate the motivation of offenders in various situations.

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Table 1. Frequencies of Behavioral, Victims' Routine Activities, and Geographic Variables

Variables	Categories	Frequencies, % (n)
Behavioral		
Type of victim selection	Random/nonpatterned	49.9 (180)
	Nonrandom/patterned	50.1 (181)
Offender looks in specific places	No	28.8 (104)
	Yes	71.2 (257)
Method to approach victim	Noncoercive	75.3 (272)
	Coercive	24.7 (89)
Method to bring victim to crime site	Noncoercive	51.5 (186)
	Coercive	48.5 (175)
Broke into house	No	88.1 (318)
	Yes	11.9 (43)
Victims' routine activities		
Victim at home	No	77.8 (281)
	Yes	22.2 (80)
Victim outdoor	No	45.4 (164)
	Yes	54.6 (197)
Victim doing social activities	No	66.2 (239)
	Yes	33.8 (122)
Victim alone	No	42.4 (153)
	Yes	57.6 (208)
Geographic		
Encounter site	Inside	54.0 (195)
	Outside	46.0 (166)
Attack site	Inside	65.1 (235)
	Outside	34.9 (126)
Target's mobility	All at the same location	43.5 (157)
	Multiple locations (two or more)	56.5 (204)

Table 2. Comparison of Baseline Models

No. Of Classes	Likelihood Ratio, G^2	Degrees of Freedom	AIC	BIC
2	1580.9	4070	1630.9	1728.1
3	1193.0	4057	1269.0	1416.8
4	994.3	4044	1096.3	1294.6
5	905.0	4031	1033.0	1281.9
6	813.0	4018	967.0	1266.4
7	811.2	4005	991.2	1341.2
8	696.5	39992	902.5	1303.0

Boldface type indicates the selected model. AIC = Akaike information criterion (Akaike, 1974); BIC = Bayesian information criterion (Schwarz, 1978).

Table 3. Item-Response for Six-Class Model Based on Probability of Endorsing Item Given Latent Class

Item	Group					
	Home Script		Outdoors Script		Social Script	
	Intrusion	Invited	Noncoercive	Coercive	Onsite	Offsite
Type of victim selection (non-random)	.69	.72	.47	.64	.34	.02
Offender looks specific places	.82	.43	.66	.71	.68	1.00
Method to approach victim (coercive)	.57	.00	.00	.66	.01	.00
Method to bring victim to crime site (coercive)	.92	.00	.00	1.00	.20	.83
Broke into house	.68	.00	.00	.01	.00	.00
Victim at home	.93	.75	.00	.04	.00	.00
Victim outdoors	.00	.00	.99	.93	.10	1.00
Victim doing social activities	.00	.00	.40	.05	.72	1.00
Victim alone	.83	.24	.47	.95	.16	.74
Encounter site (outdoors)	.05	.20	.78	.77	.00	1.00
Attack site (outdoors)	.00	.12	.26	.90	.00	1.00
Target's mobility (multiple locations)	.09	.48	.85	.91	.14	1.00

Table 4. Victim Profile, Scripts Frequency, and Crime Switching Patterns

Item	Group						
	Home Script		Outdoors Script		Social Script		
	Intrusion 17.2% (60)	Invited 7.1% (26)	Noncoercive 24.6% (88)	Coercive 22.2% (80)	Onsite 21.4% (78)	Offsite 7.5% (29)	
Victim							
Age of victim ^a	Mean (SD)	27.3 (8.9)	16.2 (14.7)	14.2 (6.9)	22.5 (6.5)	17.5 (8.7)	10.0 (1.8)
	Range	14-55	4-68	6-34	10-40	4-48	7-16
Category of victim ^b , % (n)							
Early childhood (0-5 years)		0.0 (0)	15.4 (4)	0.0 (0)	0.0 (0)	6.4 (5)	0.0 (0)
Middle/late childhood (6-12 years)		0.0 (0)	38.5 (10)	43.2 (38)	5.0 (4)	16.7 (13)	93.1 (27)
Adolescence (13-17 years)		16.7 (10)	19.2 (5)	31.8 (28)	21.3 (17)	43.6 (34)	6.9 (2)
Adulthood (18+ years)		83.3 (50)	26.9 (7)	25.0 (22)	73.8 (59)	33.3 (26)	0.0 (0)
Sex of victim ^c , % (n)							
Male (n = 70)		3.3 (2)	50.0 (13)	27.3 (24)	2.5 (2)	29.5 (23)	20.7 (6)
Female (n = 291)		96.7 (58)	50.0 (13)	72.7 (64)	97.5 (78)	70.5 (55)	79.3 (23)
Crime							
Offending frequency (all)	Mean (SD)	0.8 (2.8)	0.4 (0.8)	1.2 (1.9)	1.1 (3.7)	1.3 (3.0)	0.2 (0.8)
	Range	0-19	0-4	0-12	0-29	0-18	0-6
Prevalence of offenders, % (n)		23.6 (17)	19.4 (14)	50.0 (36)	29.2 (21)	36.1 (26)	6.9 (5)
Crime switching ^d , % (n)							
No (n = 35)		29.4 (5)	35.7 (5)	36.1 (13)	19.0 (4)	34.6 (9)	0.0 (0)
Yes (n = 37)		70.6 (12)	64.3 (9)	63.9 (23)	81.0 (17)	65.4 (17)	100.0 (5)
Offending frequency (mean for offender who have committed the crime)		3.5	1.9	2.4	3.8	3.0	5.8

^aWelch (3, 130,34) = 84.42, $p > .01$.

^b $\chi^2(15) = 199.99, p > .01$, Cramer's $V = .43$.

^c $\chi^2(5) = 48.70, p > .01$, Cramer's $V = .37$.

^d $\chi^2(5) = 19.44, p > .01$, Cramer's $V = .52$.