

Article

Elderly Sexual Abuse: An Examination of the Criminal Event

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Abstract

The current study investigates the modus operandi specificities for the sexual abuse against the elderly. A comparison between sex crimes against adult and elderly victims is conducted following the criminal event approach. The comparison is based on the precrime, crime, and postcrime phases of the modus operandi, operationalized through 53 variables. The sample comes from a French national police database including a total of 1,829 cases—including 130 cases of elderly sexual abuse and 1,699 cases of sexual abuse against victims aged between 18 and 45 years. Bivariate and multivariate analyses are performed to examine the differences in the two groups. Several differences are observed between the two modus operandi. Findings indicate that the precrime phase is the most important to explain these differences, and this phase of the criminal event affects the rest of the decisions taken during the crime and postcrime phases. Specifically, we have highlighted that sexual crimes against the elderly are more violent and occur more often in the victim's residence. This study suggests that offenders targeting the elderly use specific crime characteristics, and this allows to highlight practical implications in terms of investigation and offender management.

Keywords

modus operandi, rational choice, decision making, sexual abuse, criminal event, elderly victims

Introduction

Sexual violence research has often considered children to be the most vulnerable population. However, another population just as vulnerable to sexual abuse but often overlooked by researchers is the elderly. There exist several reasons as to why elderly

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victims should be the focus of more research. For instance, elderly victims are more likely to be attacked by strangers (e.g., Kennedy & Silverman, 1990), which complicates the investigation (see Beauregard & Martineau, 2017). Second, they are most likely to be victimized in their own homes (e.g., Muram, Miller, & Cutler, 1992), which combined with the fact that they are more likely to live alone, reduces the chance of someone interrupting or witnessing the assault. Third, due to a general difference in physical size and strength, elderly victims are usually less capable of resisting a physical attack compared with younger females (e.g., Nelsen & Huff-Corzine, 1998) and, therefore, are less likely to avoid injuries during an offense (Safarik, Jarvis, & Nussbaum, 2002). A fourth reason is brought on by the routine activities perspective (Cohen & Felson, 1979). According to this perspective, the risk of a crime occurring increases when there is convergence in time and space between a vulnerable target, a motivated offender, and the absence of appropriate guardianship. Thus, partly due to an increased risk of widowhood and longer life expectancy (Safarik et al., 2002), approximately 80% of elderly persons who live alone are females (Moen, 1996). This could be perceived by a motivated offender as more vulnerable, considering a greater lack of guardianship compared with younger women living with parents, boyfriends, or husbands. Finally, research on this group of individuals who have sexually assaulted elderly victims is of the utmost importance as demographic data have shown that the combined effect of greater life expectancy and the process of "baby boomers" getting older will naturally lead to an increase in the elderly population, where women are the majority.

Empirical Aspects of the Elderly Sexual Abuse

Victims and offenders characteristics. As shown in the review of Bows (2018), most of the elderly victims are usually females, and research conducted in different countries are convergent on this aspect (e.g., Ball & Fowler, 2008; Bows & Westmarland, 2017; Cannell, Manini, Spence-Almaguer, Maldonado-Molina, & Andresen, 2014; Soares et al., 2010). Bows (2018) noted that only the study of Teaster and colleagues (2007) has investigated the question of sexual abuse against older men. However, no consensus actually exists as to how the age of victims should be operationalized (Ball, 2005; Lea, Hunt, & Shaw, 2011). Some studies have used 50 years as the age cutoff for the elderly, whereas others have used a cutoff of over 80 years (Ball, 2005; Bows, 2018). Interestingly, some studies have shown that persons aged of 60 or 70 years are more at risk to be victimized than older people (e.g., aged 80 years or more; e.g., Baker, Sugar, & Eckert, 2009; Ball & Fowler, 2008; Jeary, 2005; Lea et al., 2011; O'Keeffe et al., 2007). However, as noted by Bows (2018), research findings show that when victims are living in care homes, the oldest are the ones more at risk to be victimized (Baker et al., 2009; Burgess, Dowdell, & Prentky, 2000; Teaster et al., 2007). Generally, studies have found that Caucasian victims are more likely to be assaulted than other ethnicity groups (Baker et al., 2009; Del Bove, Stermac, & Bainbridge, 2005; Lea et al., 2011; Sommers et al., 2006). However, in their study on a sample of hospitalized victims, Muram and colleagues (1992) found that Black victims were more likely to

be victimized than Caucasians. As explained by Bows (2018), this result could imply that minorities are more reluctant to report their victimization. Bows (2018) has also noted a lack of consistency concerning the marital status of victims. Some research has shown that older victims are more at risk to be assaulted when they are married (Cannell et al., 2014; O'Keeffe et al., 2007), whereas other research found that those who were single were at an increased risk of being assaulted (Brozowski & Hall, 2010). Several studies have also suggested that mental and physical disabilities are positively associated with a higher risk of victimization among the elderly (Brozowski & Hall, 2010; Del Bove et al., 2005; Ramsey-Klawsnik, Teaster, Mendiondo, Marcum, & Abner, 2008).

Research has shown that when extrafamilial crimes are considered, major differences (sometimes over more than 40 years) are found between the age of victims and the offenders (Ball & Fowler, 2008; Bows & Westmarland, 2017; Pollock, 1988). In his study based on a sample of 52 cases of elderly sexual abuse, Jeary (2005) reported that the age of the offenders was between 16 and 70 years. He noted that youngest offenders (16-30 years of age) were responsible for two-thirds of the assaults. Several offenders had previous convictions at the time of the offense. Some had already committed prior sexual offenses, particularly against children, whereas the majority had previous convictions for crimes against property (Jeary, 2005; Lea et al., 2011) and consumed drugs and/or alcohol (Brozowski & Hall, 2010; Naughton et al., 2010).

Offenders and victims relationship. Studies also examined the relationship between offenders and victims at the time of the offense. In terms of extrafamilial assaults, research has not found such a clear trend. Some of the findings have highlighted an overrepresentation of sexual assaults perpetrated by stranger offenders (Burgess, Commons, Safarik, Looper, & Ross, 2007; Groth, 1978, 1979; Jeary, 2005; Safarik et al., 2002), whereas other studies have shown that perpetrators are acquaintance of the victims (Baker et al., 2009; Del Bove et al., 2005; Pollock, 1988; Ramsey-Klawsnik & colleagues, 2008; Soares et al., 2010; Teaster, Roberto, Duke, & Kim, 2001). These differences could be explained by the type of data used in these studies. Using data from Adult Protective Service, Teaster and colleagues (2001) have shown that elderly victims were assaulted in nursing home (70.9%), and in residences of the offender (14.6%) or the victim (12.2%). Their results have also shown that in the majority (76.2%) of cases, one person or more witnessed the assault (Teaster et al., 2001). In their study, Del Bove and colleagues (2005) found that 51.7% of the oldest victims were assaulted in their home, whereas only 15% were assaulted outside.

Crime characteristics. Another important area of research in elderly abuse concerns the crime characteristics. One of the main characteristics of sexual abuse against elderly victims is the high level of violence used by offenders (Burgess et al., 2007; Chopin & Beauregard, 2018a; Groth, 1978; Pollock, 1988; Safarik & Jarvis, 2005; Safarik et al., 2002), resulting in severe injuries to the victim. In his study, Pollock (1988) found that offenders with elderly victims used more violence than necessary to overcome the victim's resistance. Other studies have shown that a minority of offenders have brought

a weapon and/or used one to sexually assault elderly victims (Burgess et al., 2007; Chopin & Beauregard, 2018a; Jeary, 2005). In terms of victim injury, their age and level of vulnerability often play a key role. Muram and colleagues (1992) have explained for example that postmenopausal women are more at risk to suffer from genital injuries than younger women due to the reduction of estrogen. Number of sexual assaults against elderly victims result in a lethal outcome (Jeary, 2005). Safarik and colleagues (2002) found that death is mainly caused by strangulation (63%) and blunt force traumas (38%). The death can be intentional or due to injuries inflicted during the assault (Jeary, 2005). In their study, Chopin and Beauregard (2018a) classified cases of sexual assault against elderly people according to their motivations. They found four categories (i.e., sexual, opportunist, experimental, and angry/vindictive) and identified a relationship between motivation and crime characteristics used by each category of offenders.

However, other studies did not find sexual assaults against the elderly to be more violent than with other victims (Ball & Fowler, 2008; Lea et al., 2011). As to the sexual acts committed, findings have been mixed. In their study, Del Bove and colleagues (2005) have observed the occurrence of vaginal penetration in 65% of the cases, fondling in 15% of the cases, and anal penetration in 10% of the cases. In another study by Teaster and colleagues (2001), vaginal rape was reported in 5.8% of the cases, kissing and fondling in 48.2% of the cases, and digital penetration in 13.5% of the cases. Using the *Massachusetts Treatment Center: Rape 3* (MTC: R3) typology, Burgess and colleagues (2007) have explained that opportunist offenders performed sexual penetration less often compared with acts of fondling, kissing, and molestation. In the same study, researchers have noticed that sadistic offenders sexually humiliated the victim, for instance, by forcing her to perform oral sex on the offender (Burgess et al., 2007), whereas other offenders presenting a sexual motivation were only focusing on achieving sexual gratification (Burgess et al., 2007), involving more often sexual penetration.

Rational Choice Approach and the Criminal Event

The description and explanation of the different acts involved in a criminal event can be examined through the rational choice perspective (Cornish & Clarke, 1986, 1987). This approach assumes that crime is the product of an individual's rational choices during a specific situation (Cornish & Clarke, 1986, 2008). Crimes represent the outcomes of the choices made by the individual to meet a need. More specifically, these choices follow an economic analysis of the situation by the offender. Also known as the "costs-benefits analysis of crime," this approach suggests that offenders identify, consciously or not, advantages related to the commission of the crime. These advantages, or benefits, are counterbalanced by the risks involved in committing the crime. If the risks are considered to be higher than the benefits, offenders are faced with two choices: deciding not to commit the crime or acting to decrease the perceived risks. Clarke and Cornish (2000) qualified rationality as limited because it is only perceived from the point of view of the offender. The cost–benefit analysis is very subjective and can vary from one individual to another. In addition, information available to the

offenders and used for the cost—benefit analysis is also partial and does not allow to consider all the risks. Cornish and Clarke (1986) identified two levels of rational decision. The first, more general, concerns the choice to commit or not a criminal act. The second, more specific, permits to analyze the decisions taken by offenders during the various steps of the crime. Kennedy and Gibbs Van Brunschot (2001) explained that a crime is a set of decisions taken by an offender. These decisions are made on the basis of various parameters like the context of the crime, past experience, future expectations, and assessment of current interaction. Thus, the criminal event process is a tool that may be used to explore and describe the multiple acts composing the criminal event (Sacco & Kennedy, 1996). To describe the criminal event, we follow the classical structure with the precrime, crime, and postcrime phases (see, for example, Beauregard & Leclerc, 2007; Beauregard & Martineau, 2013; Beauregard & Proulx, 2002; Beauregard, Stone, Proulx, & Michaud, 2008; Chopin & Beauregard, 2018b; Proulx, Perreault, & Ouimet, 1999).

Aim of Study

Several studies have produced empirical findings on crime characteristics of adult sexual abuse (e.g., Beauregard & Leclerc, 2007, 2014; Beauregard, Proulx, Rossmo, Leclerc, & Allaire, 2007; Beauregard, Rossmo, & Proulx, 2007; Deslauriers-Varin & Beauregard, 2010) and child abuse (Leclerc, Smallbone, & Wortley, 2014; Leclerc, Wortley, & Smallbone, 2011; Proulx, Ouimet, & Lachaîne, 1995). However, to the best of our knowledge, no study has investigated the specific question of elderly sexual abuse using a criminal event perspective. Considering the scarcity of research on this vulnerable population and the specific aspects associated with these crimes (i.e., risks associated with the elderly, vulnerabilities, increasing potential victims), the aim of this study is to investigate the differences existing between elderly sexual abuse and sexual abuse of adult victims. To conduct the comparisons and provide a better understanding of the entire crime-commission process involved in elderly sexual abuse, a criminal event perspective is used. Specifically, the current study examines the following two research questions:

Research Question 1: Are elderly sexual abuse criminal events different from those of (younger) adult victims?

Research Question 2: Is there a phase of the criminal event that is more important to account for the differences between the elderly sexual abuse and (younger) adult sexual abuse?

Method

Research Data

Sample. This research is based on a sample of 1,829 cases of extrafamilial sexual assaults. Information comes from a French national police database. All the cases have

occurred on the French Territory (metropolitan and overseas) between 1979 and 2014 and have been solved by the police. Specifically, 1.26% (n=23) of the cases occurred between 1979 and 1989, 14.65% (n=268) of the cases occurred between 1990 and 1999, 74.74% (n=1,367) of the cases occurred between 2000 and 2009 (n=171), and 9.35% of the cases occurred between 2010 and 2014. This operational database is compiled from criminal investigation files. Information included in these files are mainly filled out by police officers but also by other experts who can be involved in the investigative process (coroner, psychologist, etc.).

As discussed in the literature (Ball, 2005; Lea et al., 2011), operationalization of what constitutes an elderly victim is still debated and many variations of the age cutoff are found across studies (Ball, 2005; Davis & Brody, 1979; Muram et al., 1992). In the current study, we have followed the methodological choice of Lea and colleagues (2011) suggesting to consider the age of retirement due to the associated significant changes in terms of lifestyle, routine activities, and, therefore, risk exposure. Thus, we have considered the age of 65 years and more for the elderly (in France, the legal age of retirement is between 62 to 67 years). To increase the comparability between the group of elderly and the other group of victims, we have made several methodological decisions. First, we have excluded minor victims due to the fact that many studies suggest major differences in the modus operandi used by individuals who have been adjudicated for sex offense against children (e.g., Chopin, 2017; Chopin & Caneppele, 2019; Ciavaldini, 1999; Gravier, Mezzo, Abbiati, Spagnoli, & Waeny, 2010). Second, it appears in the literature that the middle-aged people (46-64 years) can be defined both as elderly victims as well as adults. As mentioned previously, there is no clear consensus in the previous studies as to how to operationalize elderly victims. As suggested by Muram and colleagues (1992), these victims could be considered as elderly people, especially for women, due to the postmenopausal period as well as certain physiological changes. People aged between 46 to 65 years are closer to adult victims as to their routine activities (e.g., work, social activities). To avoid possible contamination between our control group and our group of interest, we have decided to restrict the group of adult victims. Such a strategy allows to compare groups that are more homogeneous and thus limits the noise that could be introduced. Third, cases with more than one victim and/or more than one offenders have not been considered. Therefore, we have compared 130 cases of elderly sexual abuses and 1,699 cases of sexual assaults against women. Data related to offenders have also been included.

Participants. Elderly victims from the sample are mostly females (98.50%) and are aged on average of 76.9 years (SD = 7.93; 65-94 years) at the time of their aggression. The majority of them were single (90%). Adult victims are also females in a large majority (95.8%) and were aged on average of 26.6 years (SD = 7.53; 18-45 years) at the time of their aggression. Slightly less than half of them (48.1%) were single, whereas the majority (57.80%) were not living with their parents at the time of aggression.

Offenders that have assaulted elderly victims are aged on average of 33.3 years. At the time of the offense, the majority of them were single (60%). Approximately, one-third (31.2%) lived with their parents. Some of these offenders presented a paraphilic

behavior (40.8%) and sexual dysfunctions (3.2%). As to their lifestyle prior to the assault, 36.8% have consumed psychoactive substances, 16.8% were socially isolated, 13.6% were frequently engaged in criminal activities, and 12% had no fixed address. Offenders who have assaulted a victim aged between 18 and 45 years were aged on average of 31.4 years. Approximately, half of them were single (51.0%) and about a quarter (24.0%) lived with their parents at the time of the offense. Approximately, a quarter (25.7%) presented paraphilic behaviors and 5.4% reported sexual dysfunctions. At the time of the offense, 34.6% have consumed psychoactive substances, 15.4% were frequently engaged in criminal activities, and 12.7% were socially isolated. The only one significant difference between the two groups of offenders is related to the paraphilic behavior, which is more prevalent in offenders assaulting elderly victims (Cramer's V = .09, $p \le .001$).

Measure

Dependent variable. The dependent variable of the current study is a dichotomous variable. This variable describes categories to which the victims belong to $(1 = adult \ victims; 2 = elderly \ victims)$.

Independent variables. A total of 39 dichotomous independent variables have been used to describe the crime process. In the precrime phase (see Table 1), four variables describe the victim's lifestyle. These variables describe not only behavior of the victims at the time of offense but also their life habits. These variables are as follows: victims have consumed psychoactive substances (i.e., consumption of alcohol and/or drugs), victims like to socialize/party (i.e., participates in social situations and attends events where other people, including acquaintances and strangers, gather), victims are loners (i.e., Victims have a loner lifestyle with few social interactions), and victims are physically or psychologically disabled. The three following variables are related to the victims' routine activities at the time of the offense. These variables are as follows: victims were assaulted during domestic activities (correspond to home activities such as watching TV, cleaning home, cooking, etc.), victims were assaulted when they were sleeping, and victims were assaulted when they were jogging or walking. The five following variables are related to precrime parameters: offender and victim are strangers (i.e., implies that victims have never seen his offender before to be assaulted. On the contrary, the status is acquaintances. Familial relationship are not include in this research), victim targeted by the offender, offender used a con approach (e.g., befriended the victim, posed as an authority figure, offered assistance, etc.), offender used surprise approach (e.g., lay in wait inside a building, grabbed the victim, etc.), and offender-used blitz approach (e.g., offender grabbed and immediately chocked the victim, offender immediately overpowered the victim, offender immediately hit the victim, offender immediately stabbed or shot the victim). Last type of variables included in the precrime phase are related to parameters of the crime location: crime scene is a deserted place (i.e., nobody can see and/or interrupt the crime), witnesses saw the crime, crime occurred indoor, offender was familiar with the crime location,

Table 1. Descriptive and Bivariate Statistics of the Precrime Phase According to the Age of Victims (N = 1,829).

	Victim yea n =	ars	у	m > 65 ears = 130	C
Variables	n	%	n	%	Cramer's V/phi
Precrime phase					
Victim's lifestyle					
Victims have consumed psychoactive substances	199	11.71	2	1.54	.08***
Victims like to socialize/party	264	15.54	4	3.08	.09***
Victim is a loner	51	3.00	8	6.15	.05*
Victim is physically or psychologically disabled	141	8.30	27	20.77	.11***
Victim's routine activities					
Offenders have assaulted victims during domestic activities	203	11.95	47	36.15	.18***
Offenders have assaulted victims when she slept	126	7.42	40	30.77	.21***
Offenders have assaulted victims while jogging/walking	775	45.62	35	26.92	.10***
Offender-victim relationship					
Stranger	1,340	78.87	97	74.62	.03
Victim targeted by the offender	499	29.37	57	43.85	****80.
Type of approach					
Con	897	52.80	53	40.77	.06**
Surprise	544	32.02	41	31.54	.00
Blitz	350	20.60	50	38.46	.11***
Parameters of the place of aggression					
Deserted place	630	37.08	69	53.08	.09***
Witnesses saw	764	44.97	35	26.92	.0 9 ***
Inside	772	45.44	95	73.08	.14***
Familiar	856	50.38	56	43.08	.04
Residence	709	41.73	93	71.54	.15***
Business location	173	10.18	8	6.15	.04
Transportation-related location	252	14.83	14	10.77	.03
Public area	128	7.53	10	7.69	.00

 $^{^{\}dagger}p \leq .1. *p \leq .05. **p \leq .01. ***p \leq .001.$

crime occurred in a residence (i.e., correspond to a living place or common part of a living place), crime occurred at a business location, crime occurred at a transportation related location, and crime occurred in a public area.

The crime phase (see Table 2) corresponds to the commission of the crime. In this phase, information related to the type of sexual acts performed are divided into four

Table 2. Descriptive	and Bivariate Statistics	of the Crime Phase	e According to the Age of
Victims ($N = 1,829$).			

		65 years 1,699		> 65 years = 130	Cramer's	
Variables	n	%	n	%	V/phi	
Crime phase						
Type of sexual acts performe	ed					
Vaginal intercourse	760	44.73	74	56.92	.06**	
Anal intercourse	309	18.19	26	20.00	.01	
Foreplay	963	56.68	72	55.38	.01	
Fondling	978	57.56	57	43.85	.07**	
Type of violence						
Beating	362	21.31	39	30.00	.06*	
Stabbing/cutting	49	2.88	4	3.08	.00	
Asphyxiation	200	11.77	21	16.15	.04	
Any presence of weapon	505	29.72	24	18.46	.06**	
Injuries						
Neither	591	34.79	45	34.62	.00	
Severe	151	8.89	25	19.23	.09***	

 $^{100. \}ge q^{***}$, $10. \ge q^{**}$, $10. \ge q^{\dagger}$

variables: vaginal intercourse, anal intercourse, foreplay, and fondling. Variables measuring the violence inflicted to the victim are beating, stabbing/cutting, and asphyxiation. One variable measures the presence of weapon. Finally, two variables are used to describe the level of injuries: none or severe. Although the injury variable also included the "minimal" and "moderate" levels, a decision was made to exclude them based on the previous literature suggesting that crimes against elderly are the most violent. The postcrime phase (see Table 3) corresponds to the decisions made by offenders after the crime commission. A first set of seven variables related to forensic awareness strategies is considered: destroying or removing evidence, protecting his identity, acting on victim and/or the environment, weapon not found, weapon recovered by police in another place, and trace of semen found by police. Finally, three variables related to the end of the assault are included: victim has been intentionally released, victim has escaped, and victim has been saved by a third party.

Analytical Strategy

The first level of analysis consists of determining at the bivariate level (i.e., chi-square analysis and analysis of variance [ANOVA]) if the two victim groups (elderly vs. adult victims) differ significantly across the different phases of the criminal event. The second level of analysis consists of integrating the significant independent variables at the bivariate level in a multivariate analysis, using sequential logistic regression. This

Table 3. Descriptive and Bivariate Statistics of the Postcrime Phase According to the Age of Victims (N = 1.829).

	Victim yea n = I	ırs	Victim > 65 years n = 130		Cramer's
Variables	n	%	n	%	V/phi
Postcrime phase					
Forensic awareness strategies	834	49.09	69	53.08	.02
Destroying or removing evidence	98	5.77	11	8.46	.03
Protecting his identity	352	20.72	29	22.31	.01
Acting on victim and/or the environment	568	33.43	52	40.00	.04
Weapon not found	214	12.60	7	5.38	.06**
Weapon recovered by police in another place	158	9.30	5	3.85	.05*
Trace of semen found by police	1,223	71.98	106	81.54	.06**
End of aggression					
Victims have been intentionally released	949	55.86	84	64.62	.05*
Victim has escaped	378	22.25	21	16.15	.04
Victim has been saved by a third party	253	14.89	15	11.54	.02

 $^{^{\}dagger}p \leq .1. *p \leq .05. **p \leq .01. ***p \leq .001.$

analysis is a binary logistic regression where clusters of variables are inserted separately in several steps. This multivariate model is particularly interesting in an exploratory context because it permits to evaluate which clusters of variables are the most explanatory (Desjardins, 2005). Moreover, such technique allows for the sequence of events to be modeled as they usually happen in a sexual assault, similar to what the criminal event perspective requires. The goal here was to test the weight of precrime, crime, and postcrime phases of the criminal event and the significant offender characteristics. To test the implication of the unbalanced samples, we have conducted the same analyses with a random subsample (n = 200) of the adult victim cases. Results follow a similar trend, and only insignificant changes of the odds ratios are observed. We report how we determined our sample size, all data exclusions (if any), all manipulations, and all measures in the study.

Findings

Results of bivariate analyses related to the precrime phase of the criminal event are presented in the Table 1. The elderly victims are more often assaulted because they are socially isolated (Cramer's V=.05, $p\leq.05$) or physically/psychologically disabled (Cramer's V=.11, $p\leq.001$). However, their assault is less frequently related to the consumption of psychoactive substances (Cramer's V=.08, $p\leq.001$) or to an active social life (Cramer's V=.09, $p\leq.001$). As to their routine activities, elderly victims are mostly assaulted during domestic activities (Cramer's V=.18, $p\leq.001$) or when

they are asleep (Cramer's $V=.21, p \le .001$). However, they are less at risk to be assaulted during a trip (Cramer's $V=.07, p \le .01$), while they are walking/jogging (Cramer's $V=.10, p \le .001$). Findings also indicate that offenders have more often targeted elderly victims than younger victims (Cramer's $V=.08, p \le .001$). Finally, we can see that offenders assaulting the elderly more often approach their victim using coercion (Cramer's $V=.11, p \le .001$) than deception (Cramer's $V=.06, p \le .01$). They also choose a deserted location (Cramer's $V=.09, p \le .00$) more often than an indoor location (Cramer's $V=.14, p \le .001$), and without the possibility that witnesses (Cramer's $V=.09, p \le .001$) can interfere with the assault. Offenders who target elderly victims more often choose a residence to commit their crime compared with the other offenders (Cramer's $V=.15, p \le .001$).

Table 2 presents findings related to the crime phase of the criminal event. Concerning the type of sexual acts that are performed against elderly victims, we can see that vaginal intercourse (Cramer's V=.06, $p\leq.01$) and fondling (Cramer's V=.07, $p\leq.01$) are more prevalent. We can also note that elderly victims are more often beaten (Cramer's V=.06, $p\leq.05$). Offenders of elderly victims are less likely to use weapons (Cramer's V=.06, $p\leq.01$) during the assault. Finally, injuries inflicted during assaults are more severe for elderly than younger victims (Cramer's V=.09, $p\leq.001$).

Table 3 presents the bivariate analyses of the postcrime phase. During this phase, if offenders have brought a weapon with them, it is more likely to be found by the police (Cramer's V = .06, $p \le .01$) with elderly victims. Traces of semen are also more likely to be found at the crime scene with elderly victims (Cramer's V = .06, $p \le .01$). Finally, elderly victims are more often intentionally released than the younger victims (Cramer's V = .05, $p \le .05$).

Findings of the binomial sequential regressions are presented in Table 4. Model 1 includes only the significant variables of the precrime phase. Findings indicate that targeting a disabled (physically/psychologically) victim is 3.12 times more likely to occur with elderly victims (OR = 3.12, p < .001). Similarly, being assaulted during domestic activities (OR = 1.75, p < .001) or while they were sleeping (OR = 7.16, p < .001) are respectively 1.75 and 7.16 times more likely to occur with elderly victims. However, cases where victims' lifestyle is characterized by consumption of psychoactive substances (OR = 1/0.09, p < .001) and/or having an active social life (OR = 1/0.26, p < .01) are respectively 11.11 and 3.85 times less likely to be associated with cases involving elderly victims. For assaults against the elderly, offenders are 2.49 times more likely to use a blitz approach (OR = 2.49, p < .001). Crime locations are 1.81 times more likely to be a deserted location (OR = 1.81, p < .01).

Model 2 includes the significant variables of the precrime and crime phases. All the variables included in the Model 1 remained significant in Model 2. Concerning the crime phase, the presence of blows (OR = 1.82, p < .01) and severe injuries (OR = 3.68, p < .05) are respectively 1.82 and 3.68 times more likely to be positively associated with sexual assaults against the elderly. However, fondling (OR = 1/0.63, p < .05) and bringing a weapon at the crime scene (OR = 1/0.40, p < .001) are 1.59 and 2.50 times more likely to be negatively associated with elderly sexual assaults.

Table 4. Sequential Binomial Logistic Regression for the Elderly Sexual Assaults Using the Modus Operandi and Offenders' Characteristics (N = 1,829).

	Model	_	Model 2	2	Model 3	
Variables	β (SE)	Exp (β)	β (SE)	Exp (β)	β (SE)	Exp (β)
Precrime phase						
Victims have consumed psychoactive substances	-2.39 (0.75)	0.09***	-2.65 (0.76)	0.07	-2.65 (0.76)	0.07
Victims like to socialize/party	-1.34 (0.48)	0.26**	-1.35 (0.45)	0.26**	-1.35 (0.45)	0.26**
Victim is physically or psychologically disabled	1.14 (0.27)	3.12***	1.08 (0.27)	2.95***	1.08 (0.27)	2.95***
Offenders have assaulted victims during domestic activities	1.75 (0.22)	5.74***	1.74 (0.22)	5.70	1.74 (0.22)	5.70
Offenders have assaulted victims while she was sleeping	1.97 (0.24)	7.16***	2.01 (0.24)	7.41***	2.01 (0.24)	7.41***
Blitz	0.92 (0.21)	2.49***	0.93 (0.21)	2.53***	0.93 (0.21)	2.53***
Deserted place	0.59 (0.20)	<u></u> ₩.	0.61 (0.20)	1.83*	0.61 (0.20)	1.83*
Crime phase						
Fondling			-0.46 (0.20)	0.63*	-0.46 (0.20)	0.63*
Beating			0.60 (0.23)	1.82**	0.60 (0.23)	1.82**
Weapon			-0.93 (0.25)	0.40***	-0.93 (0.25)	0.40
Severe (injuries)			1.30 (0.68)	3.68*	1.30 (0.68)	3.68*
Postcrime phase						
End of aggression						
Victims have been intentionally released					0.43 (0.21)	1.53†
Constant	-3.79 (0.19)	0.02	-3.35 (0.24)	2.13***	-3.58 (0.24)	0.03
Pseudo-Nagelkerke R ²	.2	.25	.29		.30	
-2*log likelihood	776.51		744.62		744.62	
Percentage of classification	92.9		93		93	

 $^{\dagger}p \leq .1. *p \leq .05. *^{*p} \leq .01. *^{**p} \leq .001.$

Model 3 includes the significant variables of the precrime, crime, and postcrime phases. Only the variable of the intentional release of the victim is significant at the multivariate level. Elderly victims are 1.53 times more likely to be intentionally released by their offenders than the other victims (OR = 1.53, p < .1).

Discussion

This study aimed to explore the criminal event of elderly sexual abuse. Specifically, the goal was to determine if the crime-commission process used by offenders assaulting elderly was different from the one used by offenders assaulting adult women. Therefore, we have compared sexual abuse against victims aged between 18 and 45 years with victims aged 65 years or more.

The different crime characteristics have been organized according to the criminal event perspective. Three phases have been investigated: Precrime phase, crime phase, and postcrime phase. By examining the influence of each phase of the crime, we have found interesting results. The first noteworthy finding is that the most explanatory phase of the crime is the precrime phase. During this phase, offenders analyze what are the situational vulnerabilities that will make the crime possible (lack of guardians; victim vulnerability factors), the strategies to approach their target, and the parameters of the crime to increase the benefits and reduce the risks (e.g., location choice). This is suggesting that the type of target and the context in which this target is found will largely influence the unfolding of the crime. Thus, to provide a good understanding of the entire crime-commission process, the event must also include the victim and context-specific characteristics. However, the analysis of the entire criminal event should not be considered as three separate sections (i.e., precrime, crime, and postcrime phases) but as a continuum with strong and rational relationships between each phase. Each component of the crime is a decision (Cornish & Clarke, 1986, 1987) that appears rational for the offender. Therefore, decisions made by offenders at the beginning of their crimes will inevitably affect the following decisions.

In the precrime phase, we observed that elderly victims are more often assaulted by strangers than by acquaintances, which is similar to previous studies (Burgess et al., 2007; Groth, 1978, 1979; Jeary, 2005; Safarik and colleagues, 2002). However, no significant differences were found with the adult victim population, which contrasts with some of the existing research (Baker et al., 2009; Del Bove et al., 2005; Pollock, 1988; Ramsey-Klawsnik & colleagues, 2008; Soares et al., 2010; Teaster et al., 2001). One possible explanation for this discrepancy could be the fact that data used in this study come from a national police database focusing mainly on nonfamilial cases of sexual assaults, which contrasts drastically with previous research looking at cases occurring at specific places (e.g., nursing homes, hospitals).

More Violence With More Fragile Victims?

Offenders who sexually assault elderly people have used more violence than the ones assaulting adult victims. Our analyses showed that a coercive approach (e.g., blitz) is

more often used by offenders assaulting elderly victims, whereas a con approach is significantly less prevalent. Moreover, we have identified that severe injuries are also more prevalent in elderly victims. These findings are in line with previous findings (Burgess et al., 2007; Groth, 1978; Pollock, 1988; Safarik & Jarvis, 2005; Safarik et al., 2002). In addition, results showed that weapons are less commonly used in cases of elderly victims. There are at least three explanations for such finding. First, as mentioned in some research (e.g., Burgess et al., 2007; Groth, 1978, 1979), some elderly sexual abuse are mainly motivated by a feeling of anger against their mothers (due mainly to specific experiences during their childhood) and aggression against older people represents a way to exert revenge. Assaults perpetrated by these types of offenders are known for being especially violent, whereas sexual gratification is often less important (Burgess et al., 2007; Chopin & Beauregard, 2018aa). The quasiabsence of weapon can suggest that offenders are deterred by the victims' likelihood of resistance and estimate that the elderly are physically weak enough to be controlled easily.

Second, older people are physically more fragile as mentioned in the study by Muram and colleagues (1992). Thus, violence can have different consequences in terms of injuries depending on the age of the victim and the capacity of their bodies to resist the attack (e.g., women in menopause being more vulnerable to some type of injuries). Finally, a third possibility to account for the absence of weapon and the high level of violence among elderly sexual abuse is the seemingly random victim selection method. Consequently, these crimes are less premeditated and the attacks are more impulsive, involving more violence due to a lack of control during the event, as suggested by Beauregard, Leclerc, and Lussier (2012).

Home as a Major Locus of Rape

Elderly victims are assaulted significantly more often at indoor deserted locations, especially in their own residence where witnesses are less often present compared with adult victims. These results are congruent with the victim's routine activities and exposure to risks. In line with the lifestyle theory (Hindelang, Gottfredson, & Garofalo, 1978), victims' age affects their routine activities and consequently their risk exposure. Elderly victims do not have the same vulnerabilities as younger ones. Results showed that social isolation and mental and/or physical disabilities are more frequent in the elderly population. Moreover, congruent with the routine activities theory (Cohen & Felson, 1979), we observed that the victim's age affects their daily activities, showing that elderly victims are generally more often assaulted at a deserted location and especially in their own residence during domestic activities or while they are sleeping. This situation may appear as a paradox according to the rational choice perspective (Cornish & Clarke, 1986). What our findings are showing is that offenders targeting the elderly also assault more vulnerable victims in places harder to access compared with those who target younger victims (e.g., outside places, public places). This situation is similar, in some ways, to child abuse. In both cases, offenders assault vulnerable victims that are not typically associated with sexual activities at locations less easily accessible (e.g., victim's residence). The rational choice perspective suggests that there is a trade-off between the risks of the assault and the benefits associated with it. In this particular case, although the choice of the victim's residence to commit the sexual assault may involve some risks (e.g., alerting the victim while breaking and entering, offender's unfamiliarity with the location, leaving evidence such as fingerprints at the crime scene), it is also generally associated with a lower risk for the offender (i.e., lower risk of being interrupted by a third party, lower risk of detection due to the absence of moving the victim during the assault) as well as greater benefits (i.e., rape completion ratio or repeated completions; Chopin & Caneppele, 2018; Warr, 1988). This is in fact confirmed by our findings, as acts of sexual penetration are more prevalent in cases of elderly victims than for younger ones, whereas fondling acts are significantly less likely to occur in cases where victims are older—as shown in the study of Del Bove and colleagues (2005). Thus, as suggested by Warr (1988), these "home intrusion rapes" (Beauregard, Proulx, et al., 2007) resemble a hybrid offense—that is, a violent crime with the opportunity structure of a property crime. Hence, the same characteristics that make a dwelling attractive to a burglar (e.g., easy access, easy escape, clear view inside the home) are also likely to make it attractive to individuals wanting to commit a sex offense. Arguably, the victim's residence generates criminal opportunities for the offender to commit both a sexual assault and a burglary offense, making these locations a beneficial choice for offenders who want to commit both types of offenses (Ensslen, Beauregard, & Pedneault, 2018). As Jeary (2005) showed, this is often the case, in that offenders targeting elderly people often commit the rape during the course of the burglary (or vice versa). As suggested in the research (e.g., Beauregard, Proulx, et al., 2007; Chopin & Caneppele, 2018), the common view that women are safe from rape at home and in danger outside the home is a misreading of the evidence. "Instead, the home should be regarded as a major locus, and perhaps the major locus, of rape" (Warr, 1988, p. 286).

Conclusion

This research aimed to investigate the criminal event of extrafamilial sexual assaults against the elderly. The various components of the criminal event have been organized under three phases: the precrime, crime, and postcrime phases. The first question asked in this research was to know whether differences existed in the offending process of individuals who have been adjudicated for sex crime according to the age of victims (i.e., elderly vs. adult victims). To answer this question, we have compared a sample of cases of elderly sexual abuse (65 years of age and more) to a control group of cases of adult sexual abuse (18-45 years of age). Our findings indicated that elderly victims were more often assaulted when they were at home, vaginal intercourse was committed in the majority of cases, and physical violence was more prevalent, compared with younger victims. We have also tried to identify which phase of the crime held the most explanatory power for the differences between the two groups. Our results showed that without a doubt, the precrime phase was the most important stage to explain the offending process involved in elderly sexual abuse. It appears that the major differences in terms of lifestyle and routine activities of victims have a great

influence on the crime characteristics, and these variables should be considered as a set of logical decisions acting as an interconnected system. However, considering the cross-sectional nature of our study, it is not possible to identify whether offenders targeting the elderly are acting differently because of the age of the victim (i.e., they adapt their behavior to the victim) or because they present a different motivation when approaching the victim.

This research is not without limitations and findings should be considered in light of these. Data used in this research come from a police database and suffer from the inherent methodological limitations usually involved in official data (see Aebi, 2006; Chopin & Aebi, 2017, 2018). The sample considered in this research includes only cases known and solved by the police. Results cannot be generalized to the entire population of extrafamilial sexual offenses against elderly but only to the ones known by the authorities. Moreover, considering the relative rarity of cases of elderly sexual abuse, it was not possible to have two groups of the same size.

Nonetheless, findings highlighted in this research provide further practical implications at different levels of the criminal justice process. First, the findings could be useful in terms of crime prevention. The majority of elderly victims have been assaulted in their residence during typical daily activities (i.e., domestic activities, while they were sleeping). As mentioned by Jeary (2005), elderly people are not aware that they can be targeted by sexual offenders. In applying some situational crime prevention principles based on the characteristics of the criminal event, small changes in the victims' habits can reduce the risks of being assaulted in their own residence by a stranger. Following the situational crime prevention approach from Clarke and Eck (2005), it is possible to aid in prevention by increasing the efforts and the risks of committing this crime. For instance, increasing the efforts required for a specific crime can be accomplished by securing the house of elderly people and sensitizing this population to the risks of being sexually victimized. Strengthening the relationships between people of the same neighborhood can also promote informal control, increasing the risk for the offender to be seen while trying to break into the victims' homes. The analysis of the criminal event can also have practical implications in terms of criminal investigations. The examination of the crime as an event allows for a complete picture of the crime and of the decisions that were made in a chronological order. Therefore, this may facilitate the work of the police when trying to reconstruct what happened at the crime scene, especially if the victim is unable to provide useful information. Finally, in terms of intervention, our analysis can also be of value. As mentioned by Burgess and colleagues (2007) as well as Chopin and Beauregard (2018a), motivations of offenders and the offending process are intimately related. From the study of crime characteristics, it is possible to infer their motivations (see Chopin & Beauregard, 2018a) and to adapt the type of intervention they would need while incarcerated. Offenders motivated by anger should not have the same therapeutic approach as opportunistic offenders or even sadistic offenders.

Considering some resemblance between elderly and child victims of sexual abuse, future studies should investigate further the decision making involved when targeting these two vulnerable populations. Such study could permit a better understanding of

the choices (rational or not) involved in these seemingly "irrational" crimes. Moreover, such study could allow further exploration of this apparent paradox with the routine activity theory where very vulnerable groups (i.e., children, elderly) are targeted despite being less exposed to criminal opportunities (i.e., less at risk due to their routine activities). Finally, in line with the criminal event perspective, future studies should look into the possibilities of detailing the entire script involved in elderly sexual abuse, using a similar approach as Leclerc and colleagues on child sexual abuse (see, for example, Leclerc et al., 2014; Leclerc et al., 2011).

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Statistical significance statement

The authors take responsibility for the integrity of the data and the accuracy of the data analyses and have made every effort to avoid inflating statistically significant results.

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