Sexual Homicide in France and Canada: An International Comparison

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Accepted Manuscript

Introduction

Despite sexual homicide (SH) being an unusual crime, it has a long tradition of research, going back to the pioneer work of Krafft Ebing (1886). Most early studies on SH were based on clinical observations, partly due to the low base rate of these crimes (James & Proulx, 2016), but also because of a general lack of interest from criminology to study extreme forms of violence (DeLisi & Wright, 2014). However, the field has slowly started to move away from the clinical tradition to a more data driven approach. Despite this progress, several of these studies – if not all – have been based on limited sample sizes. For instance, Chan and Heide (2009) compared 32 studies on SH from the mid-1980s to 2008 and noticed that there were only six studies which had samples of more than 50 cases and only one with more than 100 cases. The number of empirical studies using samples larger than 100 cases increased between 2008 and 2015, with 21 studies of the 48 identified by Chan (2017).

In recent years, a new generation of studies have emerged using larger datasets. For instance, the Canadian study by Beauregard and Martineau (2013) as well as the UK study by Stefanska, Higgs, Carter, and Beech (2017) were both based on 350 cases of SH, whereas Chan and Heide (2008) collected 3845 SH cases from the US Supplemental Homicide Reports (SHR). France has followed a similar trend with its research on SH. Historically, SH studies in France were based on clinical observations (Bénézech, 1995; Bénézech, Benayoun, & Hachouf, 2001; Bénézech, Le Bihan, & Bourgeois, 2003), however, more recently there has been a number of studies conducted with larger and detailed datasets. Some of this research has been based on data coming from the *Office Centrale de Répression des Violences aux Personnes* (Chopin & Beauregard, 2019b, 2019c, 2019d; Chopin, Caneppele, & Beauregard, 2019) as well as the *Gendarmerie Nationale,* more specifically the *Department des Sciences du Comportement* (see Higgs, James, & Proulx, 2019; James & Beauregard, 2018; James, Beauregard, & Proulx, 2019; James, Lussier, & Proulx, 2018; James, Proulx, & Lussier, 2018;

Langevin, James, Proulx, & Vuidard, 2018; Proulx, James, Siwic, & Beauregard, 2018). These last studies have opened a new chapter on the criminological knowledge of French SH. Although a considerable improvement over the clinical observation studies first published in France, the studies in collaboration with the *Gendarmerie Nationale* are based on a sample of approximately 100 cases. As mentioned by James, Proulx, et al. (2018), one of the possibilities of overcoming the limitations associated with small sample size, is to create an international dataset merging cases from different countries. To date, only a few studies have compared SH cases across countries (Darjee & Baron, 2013; James, Proulx, et al., 2018; Morton et al., 2010; Sea, Beauregard, & Martineau, 2019) but one of the obstacles to combining these cases in the same dataset is that they have not been collected using the same instrument, which may lead to methodological issues as discussed by James, Proulx, et al. (2018).

This study aims to describe and compare two samples of SH from France (n=412) and Canada (n=350) where data have been collected and coded with the same tool. The data include variables related to the crime, the offender, and the victim characteristics. The overarching goal is to further the knowledge about French SH and to assess the possibility of merging French and Canadian cases in order to create a cross-national database of 772 cases of SH.

International Comparison of Sexual Murderers

In the study by James, Proulx, et al. (2018) that compared a French sample of 56 cases of SH with a Canadian sample of 86 cases, the French sexual homicide offenders (SHOs) were on average, 30.6 years old at the time of their first homicide, similar to the Canadian cases who were an average age of 29.1 years old. In both samples, the majority of SHOs were White, single, and unemployed.

In terms of lifestyle characteristics, James, Proulx, et al. (2018) found that a majority of SHOs of both samples abused alcohol, but drug consumption was significantly more prevalent among Canadian SHOs. This difference was explained by the fact that drugs are

more accessible in Canada than in (James, Proulx, et al., 2018). They also found that sexual fantasies were less prevalent among Canadian SHOs and could be linked to the fact that French SHOs have a more pathological profile and are more sexually deviant. However, the reason for this difference in pathological profiles remains unclear (James, Proulx, et al., 2018).

In the research of Sea et al. (2019), the same Canadian sample used by Beauregard and Martineau (2013) was compared with a Korean sample of 107 SH's provided by the Crime Behavior Analysis Unit in the Korean National Agency (Sea et al., 2019). In terms of sociodemographic characteristics, findings were comparable to James, Proulx, et al., (2009). However, Sea et al. (2019) also showed that both Korean and Canadian SHOs had previous criminal convictions but the number of such prior convictions was greater for Canadian SHOs compared to Korean SHOs. SHOs convictions were more often related to sex offences among the Canadian sample, whereas violent offences convictions were more prevalent among the Korean sample (Sea et al., 2019). In their study, Sea et al. (2019) suggested that many of the differences found between the two samples were due to cultural specificities between Korea and Canada.

International Comparison of Sexual Homicides Victims

In the study by James, Proulx, et al. (2018), most of the victims were female. Sea et al. (2019) also found a majority of females among SH victims, but they found that male victims were also more prevalent in Korea. At the time of offence, French and Canadian victims were 31 and 27.9 years old, respectively (James, Proulx, et al., 2018). Whereas Korean victims were much older than Canadians with an average age of 43.53 years (Sea et al., 2019). In the study by James, Proulx, et al. (2018), only a few significant differences in victim characteristics were observed. In both samples, victims were mostly White and living alone. In the French sample, unlike the Canadian sample of SHOs, none of the victims were sex trade workers, but they did

present physical handicap more often (James, Proulx, et al., 2018). Sea et al. (2019) found that Canadian victims were more often students, whereas Korean SH victims were employed. They also found more stranger relationships between offenders and victims in Korean cases. Finally, in terms of routine activities, Canadian victims were more often assaulted during domestic activities or while they were jogging/walking, whereas Korean victims were assaulted more often while they were working (Sea et al., 2019).

International Comparison of Sexual Homicides Modus Operandi

In case study analysis by Morton et al. (2010), comparisons between the two serial sexual murderers – one that occurred in Italy (i.e., the Ben Mohamed Ezzedine Sebai Case) and the other occurred in the U.S. (i.e., the Michael Darnell Harris Case) – showed in both circumstances the offender had targeted their victims prior to their assaults. James, Proulx, et al. (2018) showed that half of the French SHO sample and 40.5% of the Canadian sample targeted their victims. However, these differences were not significant.

James, Proulx, et al. (2018) found that French SHOs used more often a ruse and a surprise approach, while Canadian SHOs used the blitz approach. Darjee and Baron (2013), who compared 47 Scottish cases of SH (including 15 attempts) with the findings of Beauregard and Martineau (2013) based on a Canadian sample of 350 cases (250 solved and 100 unsolved cases), showed that Scottish SHOs used more often a surprise or blitz approach than Canadian SHOs. In the study of Morton et al. (2010), both of the SHOs used a blitz attack.

James, Proulx, et al. (2018) found no significant differences between the cause of death in the Canadian and the French samples. Strangulation was used in 46.5% and 50.7% of the cases respectively. In the study comparing one Italian SHO with an American SHO, Morton et al. (2010) showed that the Italian SHO inflicted stab wounds to the neck of the victims, whereas the American SHO preferred to use ligature and manual strangulation while

also occasionally using a knife. Korean SHOs used more often stabbing (45.8%), beating (38.3%) and strangulation (34.6%) during the attack, which differed significantly with the type of violence used by Canadian SHOs (with beating at 47.1%, strangulation at 41.7%, and stabbing at 22.3%; (Sea et al., 2019). James, Proulx, et al. (2018) showed that the level of weapon used was the same between French and Canadian SHOs, whereas French SHOs used more often restraints than the Canadians.

By comparing sexual acts committed by SHOs, Darjee and Baron (2013) found that Scottish SHOs more often perpetrated anal penetration, acts of foreplay, and ejaculation on the victims compared to Canadian SHOs. They also found that genital mutilations was more prevalent among the Scottish SHOs, whereas overkill and trophy collection were more prevalent among Canadian SHOs (Darjee & Baron, 2013). James, Proulx, et al. (2018) found that vaginal penetration with objects or fingers as well as anal penetration were more prevalent among French SHOs than the Canadian SHOs. Significant differences were also found between Korean and Canadian SHOs' sexual acts. Korean SHOs less often perpetrated sexual penetration (i.e., vaginal and anal) but ejaculated more often on the victims compared to Canadian SHOs (Sea et al., 2019). As to the unusual acts, overkill was significantly more prevalent among Canadian SHOs compared to Koreans SHOs (Sea et al., 2019).

Compared to Scottish SHOs, Canadian SHOs more often committed their crime at an outdoor location, whereas Scottish SHOs preferred to use an indoor location, more specifically the victim's residence (Darjee & Baron, 2013). These results are similar to the study of Sea et al. (2019) showing that both the contact and crime scene locations of Korean SHOs more often occurred in the victims' residences compared to Canadian SHOs. Finally, findings of this study showed that Korean SHOs were more forensically aware for each category tested (i.e., removing or destroying evidence, protecting offender's identity,

disposing of victim's body) than Canadian SHOs. Sea et al. (2019) suggested that Korean SHOs may involve a greater level of criminal sophistication than Canadian SHs.

Aim of Study

A review of the literature shows that several studies looking at SH were based on small samples, whereas larger samples are the exception. This could be explained by the fact that SH is an unusual crime and data are difficult to obtain for researchers. In order to increase the generalization of the findings, one possibility is to create a cross-national database based on representative national databases. Before creating such database however, it is important to consider several methodological issues, such as whether or not cases can be merged together. One way to answer this question is to conduct comparative studies between countries. As mentioned by Beauregard (2019) as well as Skott, Beauregard, and Darjee (2019), international comparisons are important for several reasons. They allow researchers to test to what extent theories and results are generalizable as well as identify the conditions under which such generalizations do and do not hold. This not only allows for a better understanding of SH offenses, but it also permits researchers to examine the impact of factors that differ between countries, such as cultural, demographic, legal, and environmental factors. Thus, the objectives of this study are twofold. First, this study aims to describe SHs that occurred in France since half of a century. Second, in order to create a France-Canada cross-national database, this study aims to investigate the differences observed between the two samples. To the best of our knowledge, this research is the first to compare data on SH collected with the same tool used by both French and Canadian police. Specifically, the study aims to answer the following two questions:

(1)   What are the characteristics of SHs investigated by the police in France?

(2)   Are there significant differences between French and Canadian representative samples of SHs?

Method

Sample

The sample includes 772 cases of extra familial (strangers or acquaintance) SH, wherein 412 cases are from France and 350 from Canada and have all occurred between 1948 and 2018.

This sample may be divided into solved (n = 672) and cases that, at the time of entry in the database, were still unsolved (n = 100). Unsolved cases include SH where an offender has not been identified by investigators, whereas solved cases are those in which police investigators identified and charged a suspect (see Chopin, Beauregard, Bitzer, & Reale, 2019).

This sample can be considered as representative (see Aebi, 2006; Gerville-Réache & Couallie, 2011; Killias, Aebi, & Kuhn, 2012) of non-serial SHs that occurred in France and Canada as it corresponds to all cases known by authorities for more than half of a century. While we cannot exclude the possibility that some cases of SHs are never reported to police authorities (or even identified), Aebi and Linde (2012) found that the dark number of homicide (including SHs) is very limited in occidental countries.

Cases from both countries are collected by French and Canadian crime analysts, experts in coding violent crime information, with the same tool. This suggests that the transnational database constituted for this research is based on the same indicators and the same coding scheme. Operationalization of SH is based on the definition proposed by Ressler, Burgess, and Douglas (1988), which states that to be considered as sexual, a homicide has to present at least one of these observable criteria: Victim's attire or lack of attire; exposure of the sexual parts of the victim's body; sexual positioning of the victim's body; insertion of foreign objects into the victim's body cavities; evidence of sexual intercourse; evidence of substitute sexual activity, interest, or sadistic fantasy.

Measure

Data included in this police database focus mainly on offenders, victims, and modus operandi characteristics. This research is based on 126 variables, all dichotomous (0-1), except three which are continuous (i.e., age of victim, age of offender, number of sexual committed).

Offenders characteristics are measured using 16 variables related to socio-demographic, physical, sexual behavior, and lifestyle characteristics (e.g., age, black, white, physical build: Large (stocky), marital status: Single, offender has a sexual collection, evidence of paraphilic behavior, frequently engaged in social activities, frequently engages in criminal activities, etc.). Victim characteristics are measured using 29 variables related to socio-demographic, lifestyle, and routine activities (e.g., age, victim is a female, black, white, victim abuses alcohol, victim likes to socialize/party, victim is a sex trade worker, victim was involved in domestic activities, routine activities, victim was sleeping, victim was playing, victim was jogging/walking, victim was on a date, etc.). The crime scene characteristics includes 24 variables (i.e., victim's residence, business location, transportation related location, entertainment location, public building/place, parking location, water location, outdoors place), while a total of 30 variables describe the modus operandi characteristics (e.g., strategies used by offenders, the violence used, the use of restraints, weapon, and the type of unusual acts committed during the assault). The sexual acts performed during the aggression are measured with 15 variables (e.g., vaginal intercourse, anal intercourse, fellatio, cunnilingus, penetration with fingers, masturbation, fondling, sucking breasts, etc.), while 12 variables measure the various forensic awareness strategies used by sexual murders to avoid police detection (e.g., destroying or removing evidence, protecting his identity, number of forensic awareness strategies used, body moved, etc.).

Analytical Strategy

The goals of this study are to provide an overview of SH in France and to compare these cases with cases from Canada. As a first step, descriptive statistics are provided on the offender,

victim, and modus operandi characteristics of the French cases. As a second step, using bivariate analyses (χ^2 and Mann-Whitney U test[1]), comparisons between our sample and the Canadian sample of Beauregard and Martineau (2013) are performed. As sample size may have a strong influence on the P-value of a statistical test (Kim, 2015), it was decided that in order to avoid potential type-1 errors (i.e., detection of differences between the two samples whereas they do not exist), only significant differences of less than 1% were considered.

Results

Offenders characteristics are described in Table 1. French offenders were on average, 31.65 years old. French SHOs are mainly White (68.69%) and have a thin (19.42%) or average physical build (64.81%). In the majority of cases, they are not in a relationship (57.77%). In some cases, offenders have a sexual collection (10.68%) and 24.03% presented paraphilic behavior. In 48.06% of the cases, offenders have consumed alcohol and/or drugs prior to committing their offenses. Approximately a quarter (27.67%) have difficulties socializing. In 27.43% of the cases, offenders were reported as frequently engaging in criminal activities.

Compared to the French sample, Canadian sexual murderers are more often single (X^2=13.97, p<0.001) and collectors of sexual material (X^2=13.77, p<0.001). They are more often engaged in social activities (X^2=52.15, p<0.001) and are less frequently reporting problems with socialization (X^2=25.05, p<0.001).

[Please insert Table 1 here]

Victimology characteristics are presented in Table 2. French victims are on average, 33.56 years old, and in most cases, they are White (78.16%). Approximately one quarter had an active social life and 17.96% have consumed alcohol prior to the offense. Victims were

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[1] We used non-parametric test because continuous variables do not follow a normal distribution

mostly assaulted while they were traveling to or from somewhere (30.83%), or while involved in domestic activities (30.83%).

Compared to the victims of the French sample, Canadian victims were less often White (X^2=21.57, p<0.001) and more often from other origins (X^2=39.65, p<0.001). Victims from the Canadian sample were more often found to consume alcohol (X^2=38.40, p<0.001) and/or drugs (X^2=57, p<0.001) prior to being assaulted. They also more often had an active social life (X^2=17.68, p<0.001) and were less often considered as loners (X^2=12.99, p<0.001). Finally, victims were more often sex trade workers in the Canadian sample (X^2=28.10, p<0.001). As to their routine activities at the time of the offense, Canadian victims were less often traveling to somewhere (X^2=57.28, p<0.001) and more often partying (X^2=21.95, p<0.001) or hitchhiking (X^2=33.17, p<0.001), compared to the French cases.

[Please insert Table 2 here]

French SHOs, it is more typical for the offender to have met their victim at outdoor locations (29.61%), at the victim's residence (26.21%) and, to a lesser extent, at transportation-related locations (12.86%). Crimes occurred mostly in the victims' residences (33.01%), however, in 29.85% of cases, crimes occurred at an outdoor location (e.g. access pathway, green space, hiking trails, residence front). Other common places included business locations (8.98%) and transportation-related locations (9.71%). Finally, victims' bodies were found at outdoor locations (33.25%), victims' residences (28.40%) and, to a lesser extent, in water (8.25%).

Our findings show that compared to French SHOs, Canadian SHOs more often met their victims at a business location (X^2=23.70, p<0.001) and less often at an entertainment location (X^2=27.04, p<0.001). Crimes also less frequently occurred in the victims' residences (X^2=12.68, p<0.001) and the victims' bodies in the Canadian sample were more often found at outdoor locations (X^2=60.46, p<0.001).

[Please insert Table 3 here]

Approximately one third of French offenders (37.62%) targeted their victim. The approach strategies more frequently chosen were, a ruse (61.41%), followed by a blitz approach (19.66%). During the crime, victims were most often beaten (41.75%) and strangled (38.35%). In approximately one quarter of the cases (23.79%), offenders used restraints. In the majority of the cases (67.23%), offenders used a weapon (i.e., mainly knife or blunt instruments) during the crime and mainly brought the weapon to the crime scene. As to the unusual acts committed by offenders during the crime, in 22.85% evidence of overkill was identified (used more violence than necessary to kill the victim), and in 38.83% of the cases, offenders took an item belonging to the victim. In 13.60% of the cases, evidence of foreign object insertion was identified, whereas in 19.17% of the crimes postmortem sexual activities have been found. Finally, 14.81% of the victims were found partially or totally dismembered.

Canadian cases also present some differences in the modus operandi characteristics. Canadian offenders less often target their victims prior to the offense (X^2=32.35, p<0.001) and less often used a ruse to approach the victim (X^2=32.90, p<0.001). The use of restraints is less frequent in Canadian cases (X^2=22.21, p<0.001), while knives are more frequently used in the French cases (X^2=37.06, p<0.001). Canadian offenders more often used ligature (X^2=23.43, p<0.001) and had evidence of overkill (X^2=14.51, p<0.001). While sexual postmortem activities (X^2=10.85, p<0.001) and bodies dismemberment were less frequent (X^2=14.15, p<0.001) compared to the French cases.

[Please insert Table 4 here]

Table 5 presents the different types of sexual acts that have been committed during the crime. In half of the cases (51.70%), vaginal intercourse with the penis was committed. This is the most common sexual act perpetrated by SHOs in France. In one quarter (25.97%) of the cases, anal penetration with the penis was committed and in the same proportion (24.27%) as

acts of fondling. These sexual acts are followed by digital penetration (16.75%), fellatio (15.53%) and masturbation (13.35%). In less than 5% of the cases, vaginal (2.43%) or anal fisting (1.21%) have been observed, as well as urinating on the victim (0.24%).

Compared to the French cases, Canadian sexual murderers less often perpetrated digital penetration (X^2=37.25, p<0.001), masturbation (X^2=34.78, p<0.001), fondling (X^2=30.24, p<0.001) and ejaculation on the victim (X^2=14.10, p<0.001) compared to the French sexual murderers.

[Please insert Table 5 here]

Table 6 reports the forensic awareness strategies used by offenders in order to avoid police detection. A description of how the body was discovered is also reported in this Table. The precaution most commonly used by French SHOs is to destroy or remove evidence (30.58%), followed by acting on the victim or the environment of the crime (e.g., using police scanners, disabling an alarm system). In less than half of the French cases, police did not detected any forensic awareness strategies, whereas in 31.80% of the cases one strategy has been detected, in 15.05% of the cases two have been detected, and in 10.19% of the cases three or more has been detected. In more than one quarter (27.18%) of the crimes, semen has been found at the crime and offenders have moved the body to a different location than the crime scene.

Conversely, Canadian SHOs less often protected their identities (X^2=20.94, p<0.001), acted on victims and/or the environment (X^2=35.73, p<0.001), and staged the crime scene (X^2=17.97, p<0.001) compared to the French sexual murderers.

[Please insert Table 6 here]

Discussion

Sexual Homicide Across Countries Are Similar

It is important to begin our discussion by acknowledging the fact that SHOs from France and Canada share more similarities than differences. Among the 126 variables included in our comparative analysis, 31 (24.60%) presented significant differences between the two samples. More specifically, for offender and victim characteristics, respectively 25% and 27.59% of the variables presented significant differences between the two samples, whereas only 16.67% of the crime scene variables were significantly different. As to the modus operandi, 23.33% of variables showed significant differences, whereas for sexual acts and forensic awareness strategies differences were observed for 33.33% and 25% of the variables respectively. This indicates that despite coming from two different countries – even two different continents – individuals committing SHs are very similar, not only as it relates to their personal characteristics but also as to the way they commit their crimes. This finding is not surprising when considering previous comparative studies on SH. The study from James, Proulx, et al. (2018) came to the same conclusion when comparing a sample of SHOs from France and Canada. Moreover, even when Western and non-Western countries are compared, as in the study by Sea et al. (2019) who compared cases of SH from South Korea to Canada, the results are similar, showing that cases from different countries share more similarities than differences.

This finding of similarities between SH from different countries is congruent with the research undertaken on typologies of SH. As discussed by Proulx and Beauregard (2009), although in theory there is an infinite number of pathways to SH, previous studies have consistently identified four major types. Typologies of SH have all identified two main types similar to the organized/disorganized types originally suggested by the FBI: the angry and sadistic types (see Beauregard & Proulx, 2002). These two types – although presented under different labels – have been identified in all existing typologies. The other types commonly mentioned in other typologies and identified by Proulx and Beauregard (2009) are the opportunistic and the compensatory types. In addition to confirm the heterogeneity of SHOs,

the work on typologies has allowed to show a certain consistency across studies from different countries, giving weight to the current findings of the similarities between countries. However, due to the same heterogeneity, this may explain why in some cases, differences across countries are observed.

Differences Due to the Specific Context?

Although SHOs and the crimes they commit appear more similar than different across countries, some differences still emerged between France and Canada, even after using a very stringent level of significance. This suggests that despite their overall comparability, SHs may vary according to various aspects related to the specific context of a given country (Beauregard, 2019). For instance, some police forces do not receive the same amount of training related to some specific crimes, such as SH. In the current study, our findings showed that French SHOs were less often in possession of pornographic material and sexual paraphernalia than Canadian SHOs. It is possible that French investigators, who may not have extensive experience working on SH cases, do not recognize the sexual nature of the homicide and therefore do not pay as much attention to collecting information about the sexual collection of offenders.

The racial/ethnicity composition of a specific country can also have an impact on the differences observed between two countries. As to the victims' race, our findings showed some discrepancies with the findings from James, Proulx, et al. (2018). These differences can be partially explained by the fact that the two samples used by James, Proulx, et al. (2018) were not as representative as the samples used in the current study. The Canadian sample used in the study by James, Proulx, et al. (2018) was based on data originating from the province of Quebec, which has a weak representation of aboriginal victims compared to the national sample used in this research. National statistics show that this category of the population is underrepresented in the province of Quebec compared to the western provinces (Statistics Canada, 2013). This statistic also translate to the current study as there was an over-

representation of aboriginal victims in the Canadian sample, which could explain the differences of proportion observed with French White victims.

This last point may also be related to the difference observed as to the alcohol/drug consumption. Our results have shown that Canadian victims have consumed significantly more alcohol and drugs prior to the attack, compared to French victims. In their study, James, Proulx, et al. (2018) suggested that drugs are more accessible in Canada than in France. Moreover, differences between levels of alcohol consumption could be explained by the fact that Aboriginals have been found to drink more often and more heavily than the rest of the Canadian population (Public Health Agency of Canada, 2016) and are overrepresented among victims of SH.

Another aspect that may play a role in the differences identified between countries is related to the legal context of each country. For instance, Canadian SHOs tend to target sex trade workers more often when compared to French SHOs. Such difference could be explained – at least in part – by the fact that prostitution is illegal in France. Prostitution in Canada is not illegal – only soliciting is. Therefore, it is possible that French police encounters more difficulty identifying victims involved in sex trade work compared to Canada. Interestingly, the study by James, Proulx, et al. (2018) found a similar situation, although none of the victims of SH were involved in prostitution, which once more suggest that maybe some cases were not captured in their study.

The environment specific to a country may also influence the offenders' behavior and explain some of the differences across countries (Beauregard, 2019). Our findings have showed that the locations associated with each stage of the crime (i.e., encounter, crime, and body dumping) were mainly the victim's residence as well as outdoor locations, similar to the Scottish and Korean SHOs (Darjee & Baron, 2013; Sea et al., 2019). However, our results also showed that Canadian SHOs meet their victims in various environments and less often choose

the victims' residence to commit their crime compared to French SHOs. Canadian SHOs more often chose outdoor locations to dump the victim's body, whereas French SHOs more often chose other locations. Canada is a big country with lots of space, especially in comparison to European countries such as France. Therefore, it is possible that the availability of space for Canadian SHOs influenced their decision to dump the victim's body outdoor, whereas for French SHOs, maybe this alternative is not as convenient. Sea et al. (2019) have noticed a similar pattern with Korean SHOs who also were more likely to dismember the victim's body. It was hypothesized that such decision was largely influenced by the physical environment, characterized by very little space and people living in large apartment towers. It was then suggested that in order to dump the victim's body, Korean SHOs had to cut it in smaller pieces to get it out of the apartment building without raising any suspicions from their neighbors.

Finally, another factor that could potentially explain some of the differences observed between Canadian and French SHOs is related to the culture. For instance, our findings showed that French SHOs more often targeted their victims, used a con approach, used restraints, and had post-mortem sexual activities with their victim compared to Canadian SHOs. In their study, James, Proulx, et al. (2018) came up with an interesting hypothesis to explain such differences. They suggested that French SHOs were more sexually deviant, whereas Canadian SHOs were exhibiting more antisocial tendencies. Thus, the small number of differences suggested that a higher degree of childhood dysfunction, substance misuse, criminality, impulsivity and anger characterized the Canadian cases, as opposed to a higher degree of sexual problems and sexually deviance in the French cases. These discrepancies between countries were perhaps due to differences between their family environment, or perhaps influenced by cultural differences.

Diversity

The current study compared and analyzed the similarities and differences of victims,

offenders and modus operandi characteristics of SH between France and Canada. To limit the

methodological bias, all cases included in our database were coded with the same coding scheme by both Canadian and French crime analysts. Our findings show that cases from Canada and France are comparable, which suggests that sexual homicide across countries are similar. Although other comparisons with various countries will be necessary, these preliminary findings suggest that sexual homicide are similar across countries.

Conclusion

The aim of this exploratory study was to describe and compare two international samples of SHs. However, the distinctiveness of the current study is that information about the two samples have been collected with the same police tool, using the same questionnaire. To the best of our knowledge, this is the first study using this research design in the field of SH research. Previous studies have compared different types of data (e.g., files data vs interview data) or different sources of data (e.g., police vs clinical setting). The methodology used in our study considerably reduce the pitfalls and the methodological biases inherent to comparative studies (e.g., coding scheme, availability of all the same variables).

Our results showed that French and Canadian SHs are similar. Of the 126 variables examined, only 31 presented significant differences between the two samples. As discussed previously, most of these differences can be attributed to the specific context of each country. This constitutes a very interesting finding, especially in light of the desire to build international databases on SH. This suggests that the creation of an international database on SH is a viable option, as not only the same tool was used to collect the data, but the findings revealed that when using representative samples from two countries like France and Canada, the offenders and the crimes they commit are very similar. This also suggests that findings based on representative samples could be generalized to other countries as well, especially these countries where research on SH has been non-existent or has been modest. The few contextual differences observed do not constitute an obstacle to the creation of that

international database; it only offers an opportunity to describe a broader spectrum of behavior in SH (Beauregard, 2019).

Despite these interesting findings, this research is not without limitations. First, information used in the current study is based on police data, which include only cases known to the police (Aebi, 2006). Moreover, the findings of this study concern only cases identified as SH by the police. Despite the fact that the dark number of homicide is very low in Europe (Aebi & Linde, 2012) we cannot exclude the possibility that some of these crimes are never reported to authorities (e.g., cases of missing person never reported, homicide victim where the body is never recovered). Second, as SH does not have a legal definition (Roberts & Grossman, 1993), it is possible that some cases of SH have not been identified as such. Third, due to the nature of police data, the information available about the offender was limited. For instance, studies based on review of case files (e.g., James, Proulx, et al., 2018) or offender interviews (e.g., DeLisi & Beauregard, 2018) present richer information related to the offender, such as information on his personality, his developmental factors, and his everyday life (see James et al., 2019). Finally, although the two samples used in this study have been collected from the same tool, it is not impossible that some differences exist between the two databases. Considering the number of people involved in the coding of this information, some variations may exist between countries, despite the variables being operationalized the same way. As mentioned by Martineau and Corey (2008) as well as Snook, Luther, House, Bennell, and Taylor (2012) the inter-rater reliability of crime analysts coding violent crime cases can vary. Nevertheless, it was not possible to measure this variation in this study. It is also possible that investigative practices vary between the two countries, which could have implications on the data collection and the prevalence of some of the items collected (e.g., forensic expertise availability may vary across countries, which could influence elements observed and analyzed at the crime scene, such as blood or semen).

The international database created for this study — SHIelD: Sexual Homicide International Database — should be used in the future to replicate several findings. To the best of our knowledge, this database constitutes one of the most complete databases in the field of SH. First, this database includes 772 cases, coded with the same tool from two countries. Second, the number of variables (i.e., 126 variables) as well as the type of variables (i.e., victim, offender and crime characteristics) make of this database an interesting source of data to increase the knowledge focusing on the crime-commission process and the factors associated with it. For instance, there is a need to test the existing typologies and evaluate their relevance with a much larger sample. Moreover, new typologies based on crime process information could be identified in order to help the police with their investigation. Finally, more advanced analyses could be performed with under-studied victims of SH, such as children, men, and elderly people. Until now, knowledge on these specific types of victims was limited due to their relatively small number. However, preliminary studies have already shown that individuals specifically targeting children, men, and elderly people present significant differences with those who target adult females (Beauregard & Proulx, 2007; Chopin & Beauregard, 2018, 2019a, 2019b, 2019d). Finally, with a larger database of comparable cases, it becomes now possible to test various hypotheses that were not possible to test before due to the low frequency of some specific behaviors (e.g., mutilations, foreign object insertion).

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Tables

Table 1.

Characteristics of Sexual Murderers

Variables	French data (n=412)		Canadian data (n=250)		χ^2/ Mann-Whitney U (Z)
	n	%	n	%	
Offenders Characteristics					
Age	31.65[a]	10.76[b]	28.4[a]	9.0[b]	-3.146
Race of Offender					
Black	20	4.85%	1	0.40%	10.05
White	283	68.69%	165	66.00%	0.51
Asian	0	0.00%	1	0.40%	1.65
Other	109[c]	26.45%	83[d]	33.20%	3.44
Physical build					
Small (thin)	80	19.42%	54	21.60%	0.46
Medium (average)	267	64.81%	146	58.40%	2.72
Large (stocky)	63	15.29%	46	18.40%	1.09
Obese	2	0.49%	4	1.60%	2.15
Marital status				0.00%	
Single	174	42.23%	143	57.20%	13.97***
Sexual behavior					
Offender has a sexual collection	44	10.68%	53	21.20%	13.77***
Evidence of paraphilic behavior	99	24.03%	59	23.60%	0.02
Lifestyle					
Frequently engaged in social activities	41	9.95%	81	32.40%	52.15***
Avoids social contact with other people	114	27.67%	28	11.20%	25.05***
Has no fixed address	45	10.92%	20	8.00%	1.50
Frequently engages in criminal activities	113	27.43%	95	38.00%	8.07

Diff sig.: *** $p \leq 0.001$

[a] Represents the mean

[b] Represents the standard deviation

[c] Include mainly North Africans and Hispanics

[d] Include mainly Aboriginal

Table 2.

Characteristics of Victims

Variables	French data (N=412)		Canadian data (N=350)		χ^2/ Mann-Whitney U (Z)
	n	%	n	%	
Victim Characteristics					
Age	33.56[a]	19.92[b]	27.2[a]	15.0 b	-3.984***
Victim is a female	343	83.25%	314	89.71%	6.65
Race of victim					
Black	14	3.40%	3	0.86%	5.60
White	322	78.16%	220	62.86%	21.57***
Asian	15	3.64%	7	2.00%	1.82
Other	61[c]	14.80%	120[d]	34.28%	39.65***
Lifestyle					
Victim abuses alcohol	74	17.96%	133	38.00%	38.40***
Victim abuses drugs	25	6.07%	90	25.71%	57.00***
Victim likes to socialize/party	93	22.57%	112	32.00%	17.68
Victim is a loner	38	9.22%	10	2.86%	12.99
Victim has no fixed address	20	4.85%	39	11.14%	10.47
Victim is a sex trade worker	23	5.58%	62	17.71%	28.10***
Routine activities					
Domestic activities	93	22.57%	71	20.29%	0.58
Sleeping	25	6.07%	25	7.14%	0.35
Babysitting	1	0.22%	1	0.29%	0.01
Playing	23	5.58%	9	2.57%	4.26
Dining	0	0.00%	4	1.14%	0.00
Shopping	3	0.73%	3	0.86%	0.04
Travelling to or from somewhere	22	5.34%	30	8.57%	8.33
Being in a lot parking	14	3.40%	6	1.71%	2.09
Sports activities	27	6.55%	19	5.43%	0.42
Jogging/walking	125	30.33%	60	17.14%	17.93***
Hitchhiking	8	1.94%	34	9.71%	21.95
Socializing in a bar	40	9.71%	34	9.71%	0.00
Visiting friends or relatives	16	3.88%	22	6.29%	2.30
On a date	18	4.37%	5	1.43%	5.58
Partying	6	1.46%	40	11.43%	33.17***
Working	27	6.55%	9	2.57%	6.62
Working as a sex trade worker	21	5.10%	29	8.29%	3.13

Diff sig.: *** p≤0.001

[a] Represents the mean

[b] Represents the standard deviation

[c] Include mainly North Africans and Hispanics

[d] Include mainly Aboriginal

Table 3.

Characteristics of the Scene of Crime

Variables	French data (n=412)		Canadian data (n=350)		χ^2
	n	%	n	%	
Contact Scene					
Victim's residence	108	26.21%	75	21.43%	4.67
Business location	14	3.40%	23	6.57%	23.70***
Transportation related location	53	12.86%	25	7.14%	3.16
Entertainment location	12	2.91%	3	0.86%	27.04***
Public building/Place	28	6.80%	13	3.71%	5.20
Parking location	19	4.61%	8	2.29%	1.07
Water location	17	4.13%	12	3.43%	4.91
Outdoors place	122	29.61%	127	36.29%	0.01
Offense scene					
Victim's residence	136	33.01%	75	21.43%	12.68***
Business location	37	8.98%	23	6.57%	1.51
Transportation related location	40	9.71%	25	7.14%	1.59
Entertainment location	10	2.43%	3	0.86%	2.78
Public building/Place	10	2.43%	13	3.71%	1.07
Parking location	15	3.64%	8	2.29%	1.19
Water location	22	5.34%	12	3.43%	1.62
Outdoors place	123	29.85%	127	36.29%	3.55
Body recovery scene					
Victim's residence	117	28.40%	71	20.29%	6.70
Business location	27	6.55%	17	4.86%	1.00
Transportation related location	30	7.28%	19	5.43%	1.08
Entertainment location	14	3.40%	3	0.86%	5.60
Public building/Place	8	1.94%	14	4.00%	2.85
Parking location	12	2.91%	5	1.43%	1.91
Water location	34	8.25%	38	10.86%	1.50
Outdoors place	137	33.25%	215	61.43%	60.46***

Diff sig.: *** $p \leq 0.001$

Table 4.

Modus Operandi Characteristics

Variables	French data (n=412)		Canadian data (n=350)		χ^2
	n	%	n	%	
Modus operandi					
Offender targeted the victim	155	37.62%	66	18.86%	32.35***
Type of approach					
Con	253	61.41%	142	40.57%	32.90***
Surprise	55	13.35%	25	7.14%	7.75
Blitz	81	19.66%	43	12.29%	7.55
Type of violence					
Beating	172	41.75%	165	47.14%	2.23
Stabbing	82	19.90%	78	22.29%	0.64
Cutting	50	12.14%	45	12.86%	0.09
Stomping	10	2.43%	19	5.43%	4.65
Crushing	3	0.73%	15	4.29%	10.38
Burning	29	7.04%	12	3.43%	4.84
Strangulation	158	38.35%	146	41.71%	1.22
Asphyxiation	42	10.19%	45	12.86%	1.32
Drowning	20	4.85%	14	4.00%	0.32
Gunshot	16	3.88%	16	4.57%	0.22
Any use of restrains	98	23.79%	38	10.86%	22.21***
Any use of weapon	277	67.23%	212	60.57%	3.65
Weapon has been recovered by police officers[1]					
Not recovered	69	24.91%	80	22.86%	4.49
How offender obtained weapon					
Brought to the scene	149[1]	53.79%	81	23.14%	15.28
Found at the scene	77[1]	27.80%	68	19.43%	4.21
Type of weapon used[1]					
Knife	171	61.73%	73	20.86%	37.06***
Blunt	82	29.60%	50	14.29%	4.16
Firearm	23	8.30%	15	4.29%	0.67
Ligature	1	0.36%	40	11.43%	23.43
Unusual act					
Foreign objects inserted into the victim	56	13.60%	40	11.43%	0.80
Mutilation of genitalia	27	6.55%	19	5.43%	0.42
Offender bit the victim	11	2.67%	26	7.43%	9.24
Overkill	123	29.85%	151	43.14%	14.51***
Offender took any items from victim/offense	160	38.83%	132	37.71%	0.10
Post-mortem sexual activity	79	19.17%	37	10.57%	10.85***
Dismemberment of the body	61	14.81%	22	6.29%	14.15***

Diff sig.: *** p≤0.001

[1] Correspond to n=277 weapons

Table 5.

Description of Sexual Acts Committed

Variables	French data (n=412)		Canadian data (n=350)		χ^2/ Mann-Withney U (Z)
	n	%	n	%	
Vaginal intercourse	213	51.70%	162	46.29%	2.21
Anal intercourse	107	25.97%	57	16.29%	10.50
Fellatio	64	15.53%	30	8.57%	8.48
Cunnilingus	7	1.70%	3	0.86%	1.01
Penetration with fingers	69	16.75%	11	3.14%	37.25***
Masturbation	55	13.35%	6	1.71%	34.78***
Fondling	100	24.27%	32	9.14%	30.24***
Sucking breasts	10	2.43%	3	0.86%	2.78
Ejaculation on victim	22	5.34%	2	0.57%	14.10***
Inanimate object penetration	42	10.19%	28	8.00%	1.09
Vaginal fisting	10	2.43%	3	0.86%	2.78
Anal fisting	5	1.21%	1	0.29%	2.08
Urinating on victim	1	0.24%	1	0.29%	0.01
Defecating on victim	0	0.00%	1	0.29%	0.00
Number of sexual acts committed	1.93[a]	1.639[b]	1.05[a]	1.173[b]	-8.486***

Diff sig.: *** p≤0.001

[a] Represents the mean

[b] Represents the standard deviation

Table 6.

Description of Forensic Awareness Strategies Used by Sexual Murderers

Variables	French data (n=412)		Canadian data (n=350)		χ^2
	n	%	n	%	
Precaution used by offender					
Destroying or removing evidence	126	30.58%	107	30.57%	0.00
Protecting his identity	58	14.08%	15	4.29%	20.94***
Acting on victim and/or the environment	120	29.13%	40	11.43%	35.73***
Staging the crime scene	29	7.04%	3	0.86%	17.97
Disposing of victim's body	7	1.70%	39	11.14%	29.75***
Other precautions	50	12.14%	42	12.00%	0.00
Number of forensic awareness strategies used					
0	177	42.96%	190	54.29%	9.72
1	131	31.80%	87	24.86%	4.46
2	62	15.05%	41	11.71%	1.79
3 or more	42	10.19%	32	9.14%	0.24
Any semen located	114	27.67%	97	27.71%	0.00
Body moved	112	27.18%	119	34.00%	4.16

Diff sig.: *** p≤0.001