

Cuyahoga County Sexual Assault Kit Pilot Research Project Patterns of Sexual Offending

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Introduction

This report describes patterns of sexual offending. The exploratory examination of the typology of offending helps describe different types of sexual assaults by providing context behind how these different types of sexual assaults occur and who the offenders may be. Guided by the scientific literature on sexual assaults and violence against women, we examined data on our sample of 243 Sexual Assault Kits (SAKs) to discern a pattern for four types of sexual assaults: sexual assaults that involve kidnapping, sexual assaults committed by strangers, sexual assaults committed by multiple offenders, and sexual assaults that involve captivity.

Definitions:

Kidnapping was conceptualized as a means of control—defined as how the offender was able to “get the upper hand” on the victim in order to attempt or complete the sexual assault. We defined kidnapping in general terms—*using force, threat, or deception to transport or detain a person against her/his will*. In Ohio, kidnapping is defined as engaging in sexual activity with a victim against her/his will; thus, by definition to sexually assault a person is also to kidnap a person. We did not code kidnapping in this manner. Instead, the definition of kidnapping used in this study conceptualized kidnapping as a separate (but obviously related) act/offense (e.g., non-allied) from the sexual assault.

Stranger sexual assaults were defined as any sexual assault where the offender was completely unknown to the victim. For example, if a victim did know the offender but was not entirely certain of who he was or where she/he knew him from, this was categorized as a non stranger. This conservative definition of sexual assaults committed by strangers is used to clearly distinguish between offenders who did not have any prior contact with the victim from those who did.

Multiple offender sexual assaults were defined as sexual assaults that involve the presence of more than one offender for the same sexual assault according to the police report (i.e., group or gang sexual assaults).

Captivity sexual assaults were defined as sexual assaults where the victim was detained by the offender for a period of time that exceeded that of what was required to complete the sexual assault.

Key Findings:

Sexual assaults that involved **kidnapping**

- were also often committed by strangers
- frequently involved weapons
- frequently involved vehicles as the means of approaching the victim and/or the site of the assault
- were frequently committed by offenders who have more extensive criminal histories compared to offenders who committed sexual assaults that did not involve kidnapping

Sexual assaults that involved **strangers**

- frequently involved the use of a firearm to threaten the victim
- were often committed outdoors or in a vehicle
- frequently involved vehicles as the means of approaching the victim by offering a ride or forcing the victim into the vehicle
- frequently involved an immediate attack on the victim
- were not more common in the evening/night hours compared to non stranger sexual assaults
- were frequently committed by offenders who had been arrested for another sexual assault

Sexual assaults that involved **multiple offenders**

- frequently involved a firearm to threaten the victim (when a weapon was used)
- were more frequently committed by strangers
- more frequently involved “transporting” or moving the victim
- often involved the use of a vehicle as the means of approaching the victim or the site of the assault
- were frequently committed by offenders who were less likely to have sexual assault arrests but more likely to have domestic violence and assault arrests

Sexual assaults that involved **captivity**

- were more frequently committed by strangers compared to non-captivity sexual assaults
- were more frequently committed in the offender’s residence
- often involved the offender offering or the victim requesting assistance

Data and Methodology

In August 2015, we began with a list of cases that had completed the investigative workflow (e.g., a series of investigative tasks in order to determine whether or not to prosecute a sexual assault) and had been closed by the Cuyahoga County Prosecutor’s Office and either (1) resulted in prosecution or (2) not pursued due to insufficient evidence.

From the case files we coded police and investigative reports, forensic lab reports, and criminal histories on a random sample of 210 cases representing 243 Sexual Assault Kits (SAKs). For the findings presented here (except those with multiple unsubmitted SAK hits), the same offender is represented more than once but for separate sexual assaults. These assaults were reported between March 1993 and May 2014; however, the majority of the assaults (74.1%) occurred between 1993 and 1997, which reflect the statute of limitation prioritization for prosecution at that time.

For a more complete description of the history of the unsubmitted SAKs in Cuyahoga County, the SAK Task Force, and a more detailed description of these data, see “The Cuyahoga County Sexual Assault Kit (SAK) Task Force: Describing the Process of Testing, Investigating, and Prosecuting Unsubmitted SAKs” and “The Cuyahoga County Sexual Assault Kit (SAK) Pilot Research Project: Data and Methodology.” (<http://begun.case.edu/sak/>)

Demographics

All of the offenders in our sample were male and all but three of the victims in our sample were females. The average age of the offenders in our sample was 29 (ranging from 14 to 56) and the average age of the victims in our sample was 26 (ranging from 2 to 70). The majority of the offenders in our sample were African-American/Black (86.8%), 11.5% were Caucasian/White, and 1.6% were Hispanic. Nearly 70% of the victims were African-American/Black, 27% were Caucasian/White, and the remaining 3% were Hispanic.

Sexual Assaults that Include Kidnapping

Of the 243 sexual assaults, 93 (38.3%) included kidnapping as a means of controlling the victim.

Over three-fourths (76.3%) of the sexual assaults that included kidnapping were committed by offenders who were not known to the victim (e.g., strangers). The offenders in kidnapping sexual assaults were statistically significantly older than offenders in non kidnapping sexual assaults, by an average of over 4 years.

Table 1 presents the characteristics of the sexual assaults that involved and did not involve kidnapping.

Table 1. Characteristics of Sexual Assaults that Involved vs. Did Not Involve Kidnapping

	Involved Kidnapping⁺ (n=93)	Did Not Involve⁺ Kidnapping (n=140)
Weapon		
% weapon used	46.2 [*]	25.4
% firearm used to threaten victim	25.8 [*]	15.9
Location		
% in a vehicle	41.3 [*]	13.9
% in victim's residence	3.3 [*]	34.3
Means of Approach		
% included vehicle	41.8 [*]	13.5
% immediate attack	31.9 [*]	16.5

⁺ Percentages are based on non missing data

^{*} Denotes statistically significant differences, Pearson Chi-square

Weapons

Sexual assaults that involved kidnapping (compared to sexual assaults that did not involve kidnapping) more frequently involved the use of a weapon (46.2% vs. 25.4%) and more frequently that weapon was a firearm used to threaten the victim (25.8% vs. 15.9%).

Location of the Sexual Assault

The most common location for a sexual assault that involved kidnapping was a vehicle (41.3% for kidnapping sexual assaults vs. 13.9% for non kidnapping sexual assaults). All of the sexual assaults that occurred in a garage (n=6) also involved kidnapping. Victims' residences were rarely the location of sexual assaults that involved kidnapping (3.3% for kidnapping sexual assaults vs. 34.3% for non kidnapping sexual assaults).

Means of Approach

Vehicles were more frequently involved in sexual assaults that included kidnapping compared to non kidnapping sexual assaults (41.8% vs. 13.5%).

An immediate attack on the victim was also more frequently associated with sexual assaults that involved kidnapping compared to non kidnapping sexual assaults (31.9% vs. 16.5%).

Criminal History

Table 2 presents criminal history for known offenders (as only known offenders have criminal history data) by whether or not the sexual assault included kidnapping. A criminal offense was defined as ever having any of the following charges at time of arrest.

Offenders involved in kidnapping sexual assaults had more extensive criminal histories compared to offenders involved in non kidnapping sexual assaults. More specifically, a larger percentage of offenders of sexual assaults that involved kidnapping had a history of *sexual assault* (65.1% vs. 41.2%), *felony assault* (57.1% vs. 40.2%), and *domestic violence* (49.2% vs. 30.9%) compared to offenders in non kidnapping sexual assaults. A higher proportion of offenders involved in sexual assaults that did not involve kidnapping were arrested for murder; however, the total number of murder arrests are small and are not statistically significantly different.

Table 2. Criminal History for Offenders in Sexual Assaults that Involved vs. Did Not Involve Kidnapping

	Involved Kidnapping⁺ (n=63)	Did Not Involve Kidnapping⁺ (n=97)
Murder	6.3% (n=4)	8.2% (n=8)
Sexual assault	65.1% (n=41)*	41.2% (n=40)
Felony Assault	57.1% (n=36)*	40.2% (n=39)
Robbery	33.3% (n=21)	40.2% (n=39)
Burglary	39.7% (n=25)	36.1% (n=35)
Domestic Violence	49.2% (n=31)*	30.9% (n=30)
Felony Drug Offense	50.8% (n=32)	57.7% (n=56)

⁺Total n=160 known offenders have criminal history data and a kidnapping vs. non kidnapping status

*Denotes statistically significant differences, Pearson Chi-square

Stranger vs. Non stranger Sexual Assaults

We compared sexual assaults committed by strangers to those committed by non strangers, according to the initial police report.

Sexual assaults committed by strangers comprised more than half of the cases (56.0%; n=130), where the relationship between the victim and the offender could be discerned from the information provided in the police report (a total of 11 police reports did not provide these details). In stranger sexual assaults the offenders were statistically significantly older than the offenders in the non stranger sexual assaults by an average of 3 years. The victims in stranger sexual assaults were also statistically significantly older than victims in non stranger sexual assaults by an average of 3 ½ years.

Table 3 below compares the sexual assaults that involved strangers vs. non strangers.

Table 3. Characteristics of Stranger vs Non stranger Sexual Assaults

	Stranger Sexual Assaults⁺ (n=130)	Non stranger Sexual Assaults⁺ (n=102)
Weapon		
% weapon used	46.9*	9.2
Location		
% outdoors	24.8*	8.2
% in a vehicle	38.5*	7.1
% in victim's residence	8.5*	40.8
% in offender's residence	6.2*	20.4
Means of Approach		
% offered ride	23.2*	5.3
% forced into vehicle	16.0*	0.0
% immediate attack	31.2*	10.5

⁺ Percentages are based on non missing data

* Denotes statistically significant differences, Pearson Chi-square

Weapons

Weapons are more frequently involved in stranger sexual assaults compared to non stranger sexual assaults (46.9% vs. 9.2%). More specifically, firearms were extremely common with stranger sexual assaults. *Of the 45 sexual assaults that included firearms used for threatening the victim, 43 were stranger sexual assaults.*

Location of the Sexual Assault

Sexual assaults involving strangers were commonly committed outdoors or in a vehicle. A quarter (24.6%) of stranger sexual assaults occurred *outdoors* compared to 8.2% of non stranger sexual assaults, and 38.5% of stranger sexual assaults occurred *in a vehicle* compared to 7.1% of non stranger sexual assaults.

Sexual assaults involving non strangers were more commonly committed in the victim’s residence or the offender’s residence. For example, 40.8% of non stranger sexual assaults were committed in the victim’s residence compared to 8.5% of stranger sexual assaults. Additionally, 20.4% of non stranger sexual assaults occurred in the offender’s residence compared to 6.2% of stranger sexual assaults.

Means of Approach

Vehicle were frequently involved as a means of approaching the victim in stranger sexual assaults. For nearly a quarter of stranger sexual assaults, the offender’s means of approaching the victim was to offer a ride (23.2% vs. 5.3%) and in 16.0% of stranger sexual assault cases, the victim was forced into a vehicle (none of the non stranger sexual assaults involved the victim being forced into a vehicle).

Immediate attacks on victims were more common in stranger sexual assaults than non stranger sexual assaults (31.2% vs. 10.5%).

Time of Day

Over three quarters of all of the sexual assaults (77%) occurred in the evening/night hours (6pm and 6am). However, stranger sexual assaults are not more commonly committed in the evening/night compared to non stranger sexual assaults.

Criminal History

Criminal histories are comparable for stranger and non stranger sexual assaults, as illustrated in Table 4, with two notable exceptions. *The percentage of offenders involved in stranger sexual assaults who had a history of sexual assaults arrests was nearly double that of non stranger sexual assaults (64.1% vs. 32.8%).*

Additionally, a larger percentage of offenders involved in non stranger sexual assaults had a history of *domestic violence* compared to stranger sexual assaults (46.3% vs. 30.4%).

Table 4. Criminal History for Offenders Involved in Stranger vs Non stranger Sexual Assaults

	Stranger ⁺ (n = 92)	Non stranger ⁺ (n = 67)
Murder	7.6% (n = 7)	7.5% (n = 5)
Sexual assault	64.1% (n = 59) [*]	32.8% (n = 22)
Felony Assault	45.7% (n = 42)	47.8% (n = 32)
Robbery	38.0% (n = 35)	38.8% (n = 26)
Burglary	38.0% (n = 35)	37.3% (n = 25)
Domestic Violence	30.4% (n = 28) [*]	46.3% (n = 31)
Felony Drug Offense	54.3% (n = 50)	53.7% (n = 36)

⁺Total n=159 known offenders have criminal history data and a known stranger vs. non stranger status

^{*}Denotes statistically significant differences, Pearson Chi-square

Multiple Offender Sexual Assaults

We compared the characteristics of the assault and the criminal history of offenders involved in multiple offender sexual assaults (e.g., group or gang sexual assaults) to those involved as single offenders. *Multiple offender sexual assaults occurred in 17.3% (n=42) of the sexual assaults.*

Multiple offender sexual assaults were more commonly committed by strangers compared to single offender sexual assaults (68.3% vs. 53.4%). The offenders in multiple offender sexual assaults were statistically *younger* than offenders in single offender sexual assaults by an average of almost 5 years.

Table 5 compares the characteristics of sexual assaults that involved multiple offenders compared to those that did not.

Table 5. Characteristics of Sexual Assaults that Involved Multiple Offenders vs. Single Offenders

	Multiple Offenders ⁺ (n=42)	Single Offenders ⁺ (n=201)
Weapon		
% firearm used to threaten victim	33.3*	16.7
Location		
% site of contact, site of assault, site of release the same	27.0*	44.7
% involved a vehicle	37.5**	22.6
% third party residence	26.2*	11.5
% victim's residence	2.4*	26.6
Means of Approach		
% forced in vehicle	25.0*	5.4

⁺ Percentages are based on non missing data

* Denotes statistically significant differences, Pearson Chi-square

**p=.054

Weapons

While sexual assaults involving single offenders were equally as likely to involve some kind of weapon, when a weapon was used, multiple offender sexual assaults more frequently involved a firearm used to threaten the victim compared to single offender sexual assaults (33.3% vs. 16.7%).

Location of the Sexual Assault

We coded the site of contact between the offender and victim, the site of the sexual assault, and the site where the offender “released” the victim. In single offender sexual assaults, these three sites were more frequently the same compared to multiple offender sexual assaults (44.7% vs. 27.0%).

We further explored what these sites were and found that *multiple offender sexual assaults compared to single offender sexual assaults more frequently involved a vehicle* (e.g., point of contact, site of the offense, or method of release) (37.5% vs. 22.6%) and more frequently occurred in a *third party residence* (26.2% vs. 11.5%). A third party residence is defined as a residence that is not owned, rented, or otherwise occupied by either the victim or any of the offenders.

Single offender sexual assaults more frequently occurred in the victim’s residence compared to multiple offender sexual assaults (26.6% vs. 2.4%).

Means of Approach

Again, vehicles seem to be frequently involved in multiple offender sexual assaults. A quarter of victims (25.0%) in multiple offender sexual assaults were forced into a vehicle compared to 5.4% of single offender sexual assaults.

Criminal History

As shown in Table 6, a larger percentage of offenders involved in multiple offender sexual assaults had a history of *felony assault* (60.0% vs. 44.8%) and *domestic violence* (45.0% vs. 37.1%) compared to offenders involved in single offender sexual assaults although these differences were not statistically significant.

However, the percentage of offenders involved in single offender offenses with a history of *sexual assault* is more than double that of multiple offender offenses (54.5% vs. 25.0%), which is a statistically significant difference. *Thus, offenders involved in multiple single offender sexual assaults are less frequently (known) serial sexual offenders.*

Table 6. Criminal History for Offenders Involved in Multiple vs Single Offender Sexual Assaults

	Multiple Offender ⁺ (n = 20)	Single Offender ⁺ (n = 143)
Murder	15.0% (n = 3)	6.3% (n = 9)
Sexual assault	25.0% (n = 5) [*]	54.5% (n = 78)
Felony Assault	60.0% (n = 12)	44.8% (n = 64)
Robbery	40.0% (n = 8)	37.8% (n = 54)
Burglary	30.0% (n = 6)	38.5% (n = 55)
Domestic Violence	45.0% (n = 9)	37.1% (n = 53)
Felony Drug Offense	50.0% (n = 10)	55.2% (n = 79)

⁺Total n=163 known offenders have criminal history data and a multiple or single offender status

^{*}Denotes statistically significant differences, Pearson Chi-square

Captivity Sexual Assaults

We compared the characteristics of the sexual assaults and criminal history of offenders involved in sexual assaults that included captivity to those that did not include captivity. *Captivity sexual assaults occurred in 7.4% (n=18) of the 243 sexual assaults.* The duration of the captivity ranged from 1½ hours to 3 ½ days. The offenders in captivity sexual assaults were statistically older than offenders in non captivity sexual assaults by an average of almost 6 years.

As shown in Table 7, while the number of captivity sexual assaults is relatively small, captivity sexual assaults appear to differ from non captivity in a number of notable ways.

Table 7. Characteristics for Offenders Involved in Captivity Sexual Assaults vs. Non captivity Sexual Assaults

	Involved Captivity⁺ (n=18)	Did Not Involve Captivity⁺ (n=225)
Weapon		
% stranger	66.7	55.1
% causal acquaintance	5.6*	15.5
Location		
% offender's residence	33.3*	12.0
Means of Approach		
% offender offering/victim requesting assistance	23.5*	3.8
% immediate attack	23.9	5.9

⁺Percentages are based on non missing data

*Denotes statistically significant differences, Pearson Chi-square

Relationship to the Offender

Captivity sexual assaults compared to non captivity sexual assaults were more frequently committed by offenders who were strangers to the victims (66.7% vs. 55.1%) and less frequently casual acquaintances (defined as someone the victim knew something about [“around the neighborhood”] but did not know very well) (5.6% vs. 15.5%).

Location of the Sexual Assault

Captivity sexual assaults compared to non captivity sexual assaults more frequently occurred in the offender's residence (33.3% vs. 12.0%).

Means of Approach

The means of approach for captivity sexual assaults compared to non captivity sexual assaults more frequently involved the offender offering or the victim requesting assistance (23.5% vs. 3.8%) and less frequently involved an immediate attack (5.9% vs. 23.9%).

Criminal History

Table 8 shows possible differences in the criminal histories of offenders who committed sexual assaults that involved captivity compared to those not involved in captivity sexual assaults. While there are differences in criminal histories for these offenders, the total number of offenders who were involved in captivity sexual assaults that also had criminal histories is small and therefore, it is hard to draw conclusions about possible differences in criminal histories. None of these differences were statistically significant.

Table 8. Criminal History for Offenders Involved in Captivity Sexual Assaults vs. Non captivity Sexual Assaults

	Involved Captivity⁺ (n=12)	Did Not Involve Captivity⁺ (n=151)
Murder	16.7% (n=2)	6.3% (n=10)
Sexual assault	41.7% (n=5)	51.7% (n=78)
Felony Assault	41.7% (n=5)	47.0% (n=71)
Robbery	41.7% (n=5)	37.7% (n=57)
Burglary	16.7% (n=2)	39.1% (n=59)
Domestic Violence	33.3% (n=4)	38.4% (n=58)
Felony Drug Offense	41.7% (n=5)	55.6% (n=84)

⁺Total n=163 known offenders have criminal history data and a captivity or non captivity status

Conclusion

The purpose of this report is to provide law enforcement and others with a general framework of sexual offending patterns by utilizing non-forensic data to help identify offenders. These findings could be used by Cuyahoga County and other jurisdictions as a guide to collecting data on what might be the most important factors in identifying suspects and provide information that complements the probative value of a DNA hit.

The data presented here explore patterns for several different types of sexual assaults—sexual assaults that include kidnapping, were committed by strangers, were committed by multiple offenders, and included captivity. We examined the characteristics of these types of sexual assaults, including the use of weapons, the location of the assaults, the means of approaching the victims, and the criminal histories of offenders.

How can these findings inform practice?

Our data provides a more complete picture of sexual offending patterns than what was previously known for several reasons. First, our criminal history data are particularly robust in that we were able to define an offense at the time of arrest instead of at conviction and, in many instances, offenders had up to 20 years to offend. Second, due to the number of cases we coded, we were able to begin to explore more rare types of offending, such as multiple offender and captivity sexual assaults, as the research is sparse for these types of sexual assaults.

The data point to several important findings. Weapons appear to be commonly used to threaten victims in assaults that often require immediate, forced “acquiescence,” such as in kidnapping sexual assaults, stranger sexual assaults, and multiple offender sexual assaults. (Interestingly, this does not seem to be the case with captivity sexual assaults.) Weapons are primarily used to threaten and are rarely used during the assaults. A firearm is the most common type of weapon used to threaten the victim.

Vehicles appear to be frequently involved with sexual assaults as means of approaching, means of transporting, and/or the site of the sexual assault. In fact, a quarter (25.2%) of all sexual assaults involved a vehicle. Vehicles appear to be more commonly involved with certain types of sexual assaults—those that include kidnapping, strangers, and multiple offenders.

Stranger sexual assaults often occur outside or in a vehicle and include an immediate attack on the victim but, compared to non stranger sexual assaults, were not more likely to occur at night. Offenders involved in stranger sexual assaults appear to be more frequently serial sexual offenders.

Multiple offender sexual assaults occurred in 17% of the sexual assaults and appear to often involve a group of younger men, unknown to the victim, using a vehicle as a means of approaching/transporting the victim and/or as the location of the assault. Also, offenders involved in multiple offender sexual assaults are less likely to have sexual offending arrests in their criminal histories but do have more domestic violence and assault arrests compared to offenders not involved in multiple offender sexual assaults. This offending pattern differs from common perceptions of multiple offender sexual assaults (e.g., a house party or bar where the victim knows at least one offender, where all parties, but particularly the victim, are highly intoxicated, etc.). Our data perhaps speak to a different type of multiple offender sexual assaults.

When coding began on this research project, we did not include a variable for captivity. However, these types of sexual assaults were occurring frequently enough to warrant recoding the sexual assaults to specifically indicate the presence of captivity. We were interested in knowing more about these types of sexual assaults, as these appear to be particularly brazen offenses. These offenders were strangers to the victims but transported them, often to their own residences, for an extended period of time, ranging from 1½ hours to 3½ days. Additionally, force was less often used with these types of sexual assaults—weapons were not more commonly used to threaten the victim with this type of sexual assault. Instead, offenders most often gained approach to the victim by offering assistance or the victim requesting assistance.

Limitations and Future Research

Our findings have limitations. First, these findings are based upon a sample of unsubmitted sexual assault kits primarily from 1993 to 1998. Our sample is based only on those sexual assaults where the victim received a SAK that was not previously submitted for DNA testing AND was not previously adjudicated AND prioritized for prosecution. Thus, our sample is disproportionately comprised of stranger sexual assaults and/or serial sexual offenders. As this SAK Initiative continues, we will explore whether these patterns hold for a larger, more diverse sample of sexual assaults—including but not limited to those that were previously disposed, those that occurred more recently, and those that did not have DNA in the SAK.

With regards to the criminal history data, our findings are based on known offenders—primarily those who were in the federal DNA database, CODIS (Combined DNA Index System). We do not have criminal histories for unknown offenders. Since 1997, Ohio has been swabbing for DNA for a felony conviction and since 2011, swabbing for a felony arrest. Thus, offenders not in CODIS are likely to have less extensive (at least in terms of severity) criminal histories or were convicted or committed crimes prior to 1997 and 2011, respectively. As offenders continue to be identified as part of SAK Initiatives, future research should focus on examining if and/or how known offenders differ from unknown offenders.

Lastly, as the project continues, we will continue to code more sexual assaults thereby providing more robust data with which to explore these types of sexual assaults along with other types such as marital rape/intimate partner sexual assault.