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Abstract

Public Perception of Female Sex Co-Offenders: Implications for
Convictions and Sentencing

by

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MA, Marymount University, 2018

BA, McDaniel College, 2016

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

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Abstract

Female-perpetrated sex offenses are on the rise, despite rampant underreporting and harsher legal treatment of male sex offenders (MSOs) than female sex offenders (FSOs). Previous researchers have posited that these discrepancies are due to the prevalence of gender role expectations in the United States. Using the theory of ambivalent sexism, this study explored the impact of co-offending dynamics on public perception of sex offenders, measured by the convictions and sentences assigned by 451 survey participants (recruited via social media) to each offense group: solo male sex offenders (MSOs), solo female sex offenders (FSOs), male/female co-offending pairs (MFCoM and MFCoF), and female/female co-offending pairs (FFCo). Results reflected higher conviction rates for MFCoFs than FSOs, and longer sentences for MSOs than FSOs, MFCoFs than FSOs, MFCoMs than MFCoFs, and MFCoFs than FFCos. MSOs received the highest sentences, followed in order by MFCoMs, MFCoFs, FSOs, and FFCos. This suggests that perception of female offenders was overall more favorable than that of male offenders, and that perceptions of female offenders were diminished with the presence of a male offender. Additionally, the co-offending dynamic alone did not impact public perception, as shown by the scores assigned to the FFCo offenders. Awareness of these differences is essential in ensuring that the court system is working as intended, keeping the legal actions just and fair, as well as simply reminding the public that gender biases are at work in ambiguous ways. Future research may focus more on recruiting a more diverse sample and include a qualitative element to further explore closely held biases. Findings may be used by the court system for positive social change to better serve the public.

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Chapter 1: Introduction

Reports of female-perpetrated sex offenses have been few and far between, though prevalence of and research on female sex offenders (FSOs) are on the rise (Goodwin, 2018). It is difficult to determine the exact incidence rate of FSOs because the statistics vary between studies (Miller & Marshall, 2019; Tozdan et al., 2019). This is likely due to problems with reporting, especially because there are significant differences between official and victimization reports (Miller & Marshall, 2019). It is unclear whether the rise of FSO-perpetrated sex offenses was due to an actual increase in offenses or an increase in awareness surrounding FSOs, resulting in an increase in reporting. Regardless, FSOs remain an under-researched population and enhancing the collective knowledge of FSOs can only benefit society by illuminating changes that could be made to protect against FSOs, such as policy reform.

Compared to FSOs, male sex offenders (MSOs) are more likely to be convicted and to receive harsher sentences (King & Roberts, 2017; Shields & Cochran, 2019). Reports of FSO-perpetrated offenses could be inaccurate because of the public's acceptance of stereotypical gender roles that appoint women as society's nurturers (Tozdan et al., 2019). These same attitudes could be at play in the judicial system, leading judges and jurors to view FSOs and MSOs differently for the same crimes.

This paradigm is further complicated when considering the prevalence of co-offenders. Co-offenders are typically male/female or female/female pairings with relatively few perpetrating in groups of three or more (Budd et al., 2017). However, there is currently very little research determining how co-offending influences offenders'

convictions and sentences. Given the research showing the difference in convictions and sentencing between MSOs and FSOs, the same phenomenon should be studied as it relates to co-offenders. It is essential to explore perceptions of potential jurors pertaining to sex offenders, specifically co-offenders, because those perceptions are likely to provide insight into their decision-making process in a court room and may uncover biases of which lawyers, judges, jury consultants, policy makers, and other stakeholders should be aware. This may also highlight differences between the convictions and sentencing of MSOs, FSOs, and co-offenders, which would lend to researchers' current understanding of public perception of sex offenders.

Though jurors are not involved in sentencing in a typical trial, they do determine whether the defendant is convicted. Depending on the state in which the case is tried, the specific charge can be linked to sentencing guidelines for the judge to follow. Therefore, jurors convicting an offender can impact the sentence based upon which charge they choose to convict. In this study, I asked participants to assign sentence lengths to gain insight regarding participants' perspectives on the severity of the crime.

Background

I found articles in multiple databases, including Social Sciences Citation Index, SocIndex, PsycInfo, and ScienceDirect, using the search terms *female sex offender* and *co-offender OR co-offending* and *perception*. These articles were related to gender differences in sex offenders, sex offender typologies, co-offending dynamics, and theories applied to sexual offending. Miller and Marshall (2019) showed an increase in FSO-perpetrated crimes, although it is unclear whether this was an actual increase in

crimes or simply an increase in awareness allowing experts to recognize these crimes. There had also been an increase in FSO-related research over the last several years, but FSOs, and especially female sex co-offenders, are still an under-researched population.

Several typologies have emerged from FSO-focused research. Researchers have explored motivations behind FSOs' offenses, why FSOs and MSOs may choose to offend together, and how FSOs select victims (Almond et al., 2017; Harrati et al., 2018). Though largely theoretical, these typologies are important to consider because these factors may impact the offenders' potential for rehabilitation and, therefore, how society views the offenders. Society, and juries composed of people from within this society, will likely judge a sadistic offender differently from a coercive one due to the severity of the crime, the likelihood that they will reoffend, and the possibility of rehabilitation.

Given that FSOs may be more common than previously thought, exploring potential differences in offender and victim dynamics, offense characteristics, and psychopathologies between FSOs, MSOs, and co-offenders is essential. An understanding of FSOs as violent offenders will bolster awareness and potentially allow previously undetected FSOs to be caught and their victims protected. Delineating the differences between/within FSO, MSO, and co-offender groups may also have implications for convictions and sentencing; FSOs, MSOs, and co-offenders may be driven by different motivations and may therefore be at different recidivism risk levels. If the jury believes that some offenders are at a higher risk of recidivism due to rehabilitation potential, they may be more likely to convict due to the increased public safety concerns.

When conducting research comparing FSOs and MSOs, King and Roberts (2017) and Shields and Cochran (2019) found that MSOs were more likely to be convicted and face harsher sentences than FSOs. FSOs more often faced lighter, community-based penalties, like electronic monitoring or parole (compared to MSOs more often receiving prison time), and these differences held true across offense types and whether the victim was a minor (Shields & Cochran, 2019). King and Roberts (2017) attributed this difference to the notion that FSOs are less dangerous and their crimes less severe than MSOs'.

However, King and Roberts (2017) also noted that their research could not be applied to male or female sex co-offenders, likely because the public may convict the co-offenders differently depending on the relationship between offenders and the role each offender played, the offense characteristics, the victim, etc. For example, when considering male/female sex co-offending pairs, Williams et al. (2019) found that the FSO would frequently display the sexual inclinations of their MSO counterpart, especially in victim choice, insinuating that the FSO filled a more passive role where victim selection was involved. If judges and juries believe that FSOs are more passive overall, they may continue to judge the FSOs less harshly than MSOs. It is important to continue research in this area because there may be other facets of the offense in which FSOs are more or less active, impacting each offender's legal culpability.

To further complicate the co-offender dynamics, there are multiple possible offender groupings. There are solo offenders, co-offenders (pairs), and groups (three or more people; Carrington, 2018). Co-offenders and groups can be composed of people of

any gender, but FSOs more frequently co-offended with MSOs instead of with other females (Budd et al., 2017). In this present study, I focused primarily on solo and co-offenders, due to the relative rarity of groups (Williams & Bierie, 2015).

Because juries are composed of members of the public, it is important for researchers to understand any common perceptions held by laypeople. Zack et al. (2018) examined public perception based on comments left on news articles related to sex offenses. Researchers found evidence of cognitive dissonance in attitudes pertaining to sex offenders, in that the public believed the FSOs' lighter sentences to be unfair, but still did not consider the FSOs' crimes to be as dangerous as MSOs' (Zack et al., 2018). People of the public serve as jurors, so there is reason to believe that these convoluted beliefs have permeated the judicial system as well. However, research had not yet been conducted describing the differences in convictions and sentencing between types of offender groupings based on public perception, which was the focus of the current study.

Of the theories that could be used to connect the public's perception with the judicial system, the concept of ambivalent sexism was most pertinent. Glick and Fiske (1996) invented the term *ambivalent sexism* to include *hostile sexism* (overt prejudice based on gender) and *benevolent sexism* (more subtle attitudes that are not meant to be harmful, but still contribute to unequal treatment based on gender). Glick and Fiske (1996) found that men and women held similar sexist beliefs, which may imply that the general public, and therefore the potential juror pool, is susceptible to gender bias regardless of gender. A lack of blatant hostile sexism does not mean that other sexist beliefs are not impacting the public, and therefore, the judicial system. Beliefs related to

benevolent sexism, such that women are weaker, need to be protected, etc., may be perpetuating the unequal convictions and sentences of MSOs and FSOs.

Problem Statement

The prevalence of sexual offenses perpetrated by FSOs varied extensively between existing studies (Miller & Marshall, 2019; Tozdan et al., 2019), and researchers suggested that the published rates were likely underestimated for a variety of factors including stigma victims may face and biases held by mandatory reporters (King & Roberts, 2017; Tozdan et al., 2019). Though there has been a recent increase in the number of studies focused on FSOs and their crimes, it is still a relatively under-researched topic (Shields & Cochran, 2019). This could be due to society's perception of women and the social role that women are traditionally expected to fill: Nurturing, kind, and nonviolent (ten Bensel et al., 2019; Tozdan et al., 2019). This influence could also be at work in the judicial system, as researchers found that FSOs tend to receive shorter, less imposing sentences than MSOs (Goodwin, 2019; King & Roberts, 2017; Mackelprang & Becker, 2017; Shields & Cochran, 2019), even when holding offense and victim characteristics constant (Shields & Cochran, 2019).

FSOs were more likely to co-offend than MSOs (Miller & Marshall, 2019; Shields & Cochran, 2019), but there is very little existing research to determine if this co-offending dynamic impacts convictions and sentencing for either party (Shields & Cochran, 2019). Because MSOs tended to be judged more harshly (Goodwin, 2019; King & Roberts, 2017; Mackelprang & Becker, 2017; Shields & Cochran, 2019), associating with an MSO may impact an FSO's conviction and sentencing. Conducting further

research into the public's perception of co-offenders compared to solo offenders could provide the legal community with invaluable data regarding conviction and sentencing discrepancies between offender sexes and groupings.

Purpose of the Study

In this study, I sought to explore co-offending relationships as potential influences on the public's perception of and, consequently, the conviction and sentencing of FSOs. Existing research showed that there are differences in conviction and sentencing rates of MSOs and FSOs but did not investigate the co-offender dynamic as a potential contributing factor. I used a quantitative approach to explore differences in convictions and sentencing assigned by potential jurors to different types of sex offenders: solo FSO, solo MSO, male/female co-offending pairs (MFCoM and MFCoF), and female/female co-offending pairs (FFCo1 & FFCo2).

Research Questions and Hypotheses

RQ1: How will participants convict and/or sentence MSOs compared to FSOs?

H_{01} : There is not a significant difference between convictions assigned to solo MSOs and solo FSOs by participants.

H_{11} : There is a significant difference between convictions assigned to solo MSOs and solo FSOs by participants.

H_{02} : There is not a significant difference between sentences assigned to solo MSOs and solo FSOs by participants.

H_{12} : There is a significant difference between sentences assigned to solo MSOs and solo FSOs by participants.

H_{013} : There is not a significant difference between convictions assigned to MFCoMs and MFCoFs by participants.

H_{113} : There is a significant difference between convictions assigned to MFCoMs and MFCoFs by participants.

H_{014} : There is not a significant difference between sentences assigned to MFCoMs and MFCoFs by participants.

H_{114} : There is a significant difference between sentences assigned to MFCoMs and MFCoFs by participants.

RQ2: How will participants convict and/or sentence solo FSOs compared to female sex co-offenders?

H_{021} : There is not a significant difference between convictions assigned to solo FSOs and MFCoFs by participants.

H_{121} : There is a significant difference between convictions assigned to solo FSOs and MFCoFs by participants.

H_{022} : There is not a significant difference between sentences assigned to solo FSOs and MFCoFs by participants.

H_{122} : There is a significant difference between sentences assigned to solo FSOs and MFCoFs by participants.

H_{023} : There is not a significant difference between convictions assigned to solo FSOs and FFCos by participants.

H₁₂₃: There is a significant difference between convictions assigned to solo FSOs and FFCos by participants.

H₀₂₄: There is not a significant difference between sentences assigned to solo FSOs and FFCos by participants.

H₁₂₄: There is a significant difference between sentences assigned to solo FSOs and FFCos by participants.

RQ3: How will participants convict and/or sentence FSOs who offend with other females compared to FSOs who offend with males?

H₀₃₁: There is not a significant difference between convictions assigned to FFCos and MFCoFs by participants.

H₁₃₁: There is a significant difference between convictions assigned to FFCos and MFCoFs by participants.

H₀₃₂: There is not a significant difference between sentences assigned to FFCos and MFCoFs by participants.

H₁₃₂: There is a significant difference between sentences assigned to FFCos and MFCoFs by participants.

Theoretical Framework for Study

To create the research questions and design of this study, I used the theory of ambivalent sexism. Glick and Fiske (1996) originally proposed this theory to differentiate between two related but distinct facets of sexism: hostile sexism, which refers to overt, clear sexual prejudice (such as gender-based wage gaps), and benevolent sexism, which refers to beliefs that still contribute to the unequal treatment of the sexes, but are seen as

more positive (such as the belief that women are weaker and need protection). Ambivalent sexism has been exercised in other studies recently but had not yet been applied to perceptions of FSO-perpetrated crimes. I used ambivalent sexism in the development of this study to understand how individuals can be sexist without being openly antagonistic; benevolent sexism could be present without the individual realizing they hold such biases. Therefore, benevolent sexism is likely one of the driving factors behind the leniency afforded FSOs compared to MSOs in legal contexts. This may relate to the findings of Zack et al. (2018), in which the public reported believing in equal treatment of MSOs and FSOs, but still displayed sexist beliefs that benefit FSOs.

The application of ambivalent sexism becomes more complicated when considering the potential differences between solo and co-offenders. It could be that FFCo offenders would receive lesser sentences simply because of their gender, or that MFCoF offenders would receive lesser sentences because jurors believe the females were coerced. Ambivalent sexism applied to this study because the general public, and therefore potential jurors, likely holds attitudes congruent with benevolent sexism. That is, the potential jurors may apply sexist ideals in the conviction and sentencing of sex offenders, but they are more likely to be benevolent than hostile due to the historical preferential treatment of FSOs.

Nature of Study

In the current study, I used a quantitative methods approach to give public perceptions of sex offenders tangible values. I compared public perception of sex offender gender/offense groupings based on conviction rates and sentencing. My focus on

sex offender groupings derived from previous research describing the perceptions of MSOs and FSOs and recommending that future research be conducted on female sex co-offenders (see Budd et al., 2017; Cortoni et al., 2017; Harrati et al., 2018; King & Roberts, 2017; Shields & Cochran, 2019; Wijkman & Silva, 2020). Previous research showed that legal consequences and media coverage were harsher for MSOs than FSOs, suggesting that there are differences in public perception leading to biased treatment of sex offenders based on gender (King & Roberts, 2017; Mackelprang & Becker, 2017; Shields & Cochran, 2019). Considering the lack of knowledge surrounding female sex co-offenders, there may be undiscovered avenues that could be used to encourage equitable legal treatment of sex offenders.

To collect firsthand data from the public, I chose a survey method to be distributed via social media. The participants were randomly assigned one of four vignettes, each describing a sex offense perpetrated by a different offender type/group and were asked to decide whether the offender should be convicted, and if so, how long the offender's sentence should be. I used these data to quantify public perception of each of these groups and comparison of the scores for potential differences. Understanding these differences, the legal community may better understand the public's attitudes toward offenders and therefore may have implications for jury selection, policy reform, and community education.

Definitions

Co-offender or *group offense*: the commission of a crime by more than one person (Carrington, 2018). These terms can be misleading because throughout previous research,

both co-offender and group offense can be used to describe a crime committed by two individuals or a crime committed by more than two individuals (Carrington, 2018). In this study, co-offender will be used to describe a crime committed by two individuals, and group offense will be used to describe a crime committed by three or more individuals.

Ambivalent sexism: originally coined by Glick and Fiske (1996), ambivalent sexism refers to the theory that sexism is a binary concept, encompassing both hostile sexism (overt prejudice based on gender) and benevolent sexism (more subtle attitudes that are not meant to be harmful, but still contribute to the unequal treatment of genders).

Scope and Delimitations

In this study, I sought to address the gap in the data regarding co-offending FSOs. I chose this focus because the potential conviction and sentencing differences between genders is a clear threat to legal justice. If co-offenders are also judged differently based on gender, the legal community should be informed in order to bring awareness to the discrepancies and potentially make differences in policy and practice.

I collected the primary data in this study via a survey distributed on social media. Each randomly assigned survey contained a vignette and a set of questions. There were four different vignettes (and therefore four versions of the survey) to describe different sexual offense scenarios: a solo MSO, a solo FSO, a male/female co-offending pair, and a female/female co-offending pair. The different genders and offense groupings were reflected in the research questions and were included so that researchers will be able to compare groups based on gender, offense group, and gender and offense group. There

was also a demographics questionnaire to collect participant age, gender, race/ethnicity, education level, and geographical location type that remained constant between the four survey versions. Participants read the vignette, stated how likely they were to convict the individual(s) of the sex offense, and if likely, stated how long they believed the offender(s) should be imprisoned for the offense (Appendix A).

In this study, I sought participants who were members of the general public who are eligible for jury duty in the United States. Therefore, eligibility criteria included participants who were: (a) able to communicate in English, (b) age 18 or older, and (c) had U.S. citizenship.

Limitations

Because participation in this study was voluntary, there was a possibility that only certain types of people chose to take the survey. Though the survey did not contain any explicit descriptions, it is possible that some people may have been triggered by child sexual assault themes and opted out of the survey following the informed consent. This may mean that law enforcement, social workers, psychologists, etc. would be more likely to take the survey because they were not repelled by mention of child sexual assault. For example, participants with a law enforcement background may display differing views from participants who have personal experience with child sexual assault, potentially skewing the data and impacting validity.

The Hawthorne Effect is also a potential limitation because some participants may not have been honest if they think they may be judged (or even judge themselves) for their opinions (Goodwin et al., 2017). This was mitigated by ensuring participant

anonymity and data confidentiality, but just having to record their responses may have been enough to make participants reconsider their answers.

Significance

In this study, I addressed the gap in research regarding how public perception of female sex co-offenders impacted their treatment in legal contexts, including potential jurors' understanding and assessment of sex crimes committed by female sex co-offenders, a previously under-researched topic. Existing research studied sex offenders' experiences in the legal system and the public's attitude toward MSOs and FSOs; however, these studies did not address the same topics for co-offenders, which make up a majority of the FSO population (Budd et al., 2017). This original contribution to the field may provide further insight into gender and offense group differences in the courtroom, inform lawyers and consultants of jurors' potential reactions to co-offending defendants, and add to the growing knowledge regarding gender bias applied to FSOs. This addition to the field literature may also have implications for policy reform where sex offense-related legislation is involved.

Summary

FSOs are an under-researched population and even less is known about co-offenders. The unequal treatment of offenders in the judicial system may be due to ambivalent sexism, manifesting in fewer convictions and lighter sentences for FSOs. I designed this quantitative study to address the gap in current research regarding the influence of public opinion on the convictions and sentencing of sex offenders, particularly co-offenders. Increasing awareness of the public's opinion regarding female

sex co-offenders offers the research community, legal practitioners, legislators, and ultimately potential jurors the information they need to make practical changes in legislation and the courtroom.

Chapter 2: Literature Review

Though the reported number of offenses committed by FSOs is considerably lower than offenses committed by MSOs, there has been an increase in the frequency of FSO-perpetrated cases (Almond et al., 2017) and an increase in researchers studying FSOs (ten Benschel et al., 2019). It remains to be seen, however, whether this increase represents a true rise in FSO-perpetrated cases or whether it is indicative of an increase in awareness surrounding FSOs. Due to traditional gender roles, women are often seen as nonviolent and maternal, making it difficult to reconcile the aggressive nature of sexual offenses (Tozdan et al., 2019). However, disregarding female offenders has potentially permitted FSOs to offend without consequence and allowed for countless crimes. Researchers have shown that even when FSOs are prosecuted, they are convicted less often and are given lighter sentences than MSOs (Goodwin, 2019; King & Roberts, 2017; Mackelprang & Becker, 2017; Shields & Cochran, 2019). Co-offenders are even more of an enigma due to their relative rarity, but determining differences in public perception between MSOs, solo FSOs, and co-offending MSOs and FSOs may provide an essential perspective into the court system.

Literature Search Strategy

I conducted the literature search for this study primarily using the Walden University library resources, as well as Google Scholar. Several databases were used, including PsycINFO, SAGE Journals, SocINDEX, and Science Direct. I used only scholarly, peer-reviewed publications published between 2015 and 2022, aside from the publications providing foundation for background and theoretical framework. The search

was composed of the keywords *female sex offender, co-offender OR co-offending, and perception*. The literature offered insights into public perceptions of FSOs and MSOs, but not female sex co-offenders, which highlighted the research gap.

Theoretical Framework

Because researchers have grounded the differences in perception between FSOs and MSOs in gender bias (Goodwin, 2019; King & Roberts, 2017; Mackelprang & Becker, 2017; Shields & Cochran, 2019; ten Bensel et al., 2019, Tozdan et al., 2019), I used the theory of ambivalent sexism developed by Glick and Fiske (1996) as the background for this study. Ambivalent sexism is the theory that there are two opposing facets to sexism. The first is hostile sexism, which includes overt behaviors and beliefs meant to perpetuate unequal treatment of the sexes. For example, a college admissions board purposefully rejecting female applicants because they believe that women are less intelligent or hard working than men would be displaying hostile sexism. The second is benevolent sexism, which are more subtle behaviors and beliefs that are not meant to be harmful, but still contribute to unequal treatment based on sex. A man believing that women are naturally weak and innocent, and therefore need a man's protection, is displaying benevolent sexism. Clear threats to equality (hostile sexism) are often what people think of when they consider the term sexism, but benevolent sexism also perpetuates gender inequality.

Glick and Fiske (1996) found that male and female participants held similar sexist beliefs, suggesting that everyone is susceptible to sexist beliefs and behavior, regardless of gender. This unexpected result, similar to Zack et al.'s (2018) study in which men and

women alike displayed sexist attitudes regardless of conscious beliefs, suggested that both male and female jurors may contribute to the unequal treatment of FSOs and MSOs, even if the jurors are unaware of their own biases. Given the results of Zack et al.'s (2018) study, I wondered whether jurors apply sexist attitudes to the conviction and sentencing of MSOs and FSOs in court, as well as whether co-offenders are treated differently still. I used ambivalent sexism as this study's framework to illuminate the differences in convictions and sentencing of MSOs, FSOs, and co-offenders due to gender biases held by potential jurors.

Prevalence of FSO-Perpetrated Sex Offenses in the United States

FSO-perpetrated sex offenses cases have been on the rise (Almond et al., 2017), though it is not clear whether this was due to an actual increase in offenses, if society is simply becoming more aware of FSOs, or if reporting procedures are improving. To complicate matters, there have been large differences in prevalence rates depending on the source. Miller and Marshall (2019) estimated that FSO-perpetrated cases made up 2 to 12% of all sex offenses. Analysis of self-report surveys among college students showed that of 531 participants who had experienced sexual assault, 14% experienced FSO-perpetrated sexual assault (Gambardella et al., 2020). Similarly, Tozdan et al. (2019) found that among official reports, FSOs represented 1.4% to 12% of offenders, but among victimization reports, FSOs represented 1.5% to 44% of offenders. Cortoni et al. (2017) also found a sharp contrast between official and victimization reports, suggesting that FSO-perpetrated cases may be six times more common than official reports indicate. These are large ranges, which Tozdan et al. (2019) attributed to gender

bias because women are traditionally viewed as innocent, nonviolent caregivers, and therefore, are not considered dangerous.

Due to this gender bias, victims of female offenders may not report the offense because of the risk that they will not be believed or their trauma will be minimized, or because of the pervasive belief that males are lucky to have the attention of older women (Christensen, 2021; Gambardella et al., 2020; Zack et al., 2018). This may further impact prevalence rates if victims are unwilling to report their experiences due to stigma. Though it is difficult to determine the true prevalence of FSO-perpetrated sex offenses due to these reporting discrepancies, the research shows that these cases are growing in numbers, delineating FSOs as a population requiring more study.

FSO Typologies

The existing research on FSOs has delineated several possible typologies. Almond et al. (2017) posited that 84% of FSO-perpetrated sex offenses could be divided into one of three themes: involvement (intimacy, pseudo relationship), control (lack of empathy, victim as sexual object), and hostility (venting anger and frustration). Harrati et al. (2018) found that FSOs could be acting on one of four motivations: a desire for power, sadism, extreme anger, or a quest for self-affirmation. Similarly, McLeod and Dodd (2022) found that FSOs fit into a three-pronged typology of relational (seeking emotional connection and does not believe their behavior is morally wrong), predatory (seeking power and control), and chaotic (operates under cognitive distortions) behaviors. Budd et al. (2017) offered a simplified duology, suggesting that co-offending FSOs could either be male-coerced (reacting to force from the MSO, such as fear of abuse) or male-

accompanied (participate willingly with MSO, perhaps due to jealousy toward victim or desire to maintain intimacy with MSO).

These typologies are important to consider when studying FSOs because they often speak to motivations behind the offense, which could also inform an offender's chances of rehabilitation and recidivism. For example, McLeod and Dodd (2022) determined that the root of FSO behavior was trauma, and the type of trauma from which a woman suffered would determine her typology. In this case, a trauma-based approach to assessment and treatment might be most effective. Additionally, some FSOs' behaviors might be mitigated by their motivations. An FSO who offended because she was coerced by a co-offender may be treated very differently in a courtroom than an FSO who had hostile intentions. These differences will likely matter to a jury deciding whether to convict or a judge determining sentencing.

Societal Perception of Sex Offenses

The earliest known mention of societal perceptions of sex offenses was by American sociologist Edwin Sutherland in 1950. He found that sex offenders were not commonly believed to be reformable and spoke out against early forms of civil commitment for sex offenders. Sutherland also wrote that sexual offenses were particularly heinous crimes because of the psychological trauma forced on the victims and that all sex offenders should be separated from society because their behavior was due to mental illness (Sutherland, 1950). These beliefs have withstood time and research, which has shown that the majority of Americans do not believe that sex offenders can be rehabilitated (Mancini & Pickett, 2016).

Researchers have posited that there are stigmas toward sex offenders perpetuated in society because they typically target stereotypically vulnerable populations (women and children), and the public cannot understand the desire to do so, which creates a need to separate sex offenders from the general population (Mancini & Pickett, 2016). This results in a perceived need for protection against sex offenders, which is reflected in some policy decisions, but is different from those of other violent crimes (Mancini & Pickett, 2016). For example, there are laws in many states that do not allow sex offenders to live within a certain distance from schools and playgrounds, but no such laws exist to restrict individuals convicted of assault. Sex offenders are more highly regulated than other types of offenders, which speaks to highly negative public perception, potentially due to increased perceived dangerousness of sex offenders. Mancini and Pickett (2016) suggested that this negative perception led to the inability to see sex offenders in any positive light, to include the potential for rehabilitation.

This connection between perception and potential for rehabilitation might also be an important factor in determining convictions and sentencing among sexual offenders. Defendants whom jurors view as remediable may face different, lesser convictions and/or sentences than defendants whom jurors view as irredeemable. Traditional sexual offense assessment and mitigation practices, which are traditionally geared toward MSOs, may not be the most efficient for targeting recidivism in FSOs (Marshall & Miller, 2019).

As mentioned, one of the stigmas attached to sex offenders is their proclivity for victimizing women and children (Mancini & Pickett, 2016); until recently, it was counterintuitive to consider the existence of FSOs. Researchers theorized that it is

difficult for society to comprehend the actions of FSOs because FSOs are challenging firmly held societal beliefs regarding women's roles (Tozdan et al., 2019). This creates opportunities for FSOs to groom their victims by isolating them, building trust with the victim and adults in the victim's life, and desensitizing the victim to physical and sexual contact (Kaylor et al., 2022). Likewise, because society is unlikely to believe that a woman could commit a violent sexual crime, victims of FSOs are unlikely to come forward out of fear of being stigmatized, ignored, or blamed (Gambardella et al., 2020; Tozdan et al., 2019). Victims of MSOs also face fears of reporting, but researchers have found that victims of FSOs are even less likely to report than victims of MSOs (Tozdan et al., 2019). This may be due to the common perception that MSOs will cause more damage and will reoffend more often than FSOs (Osagie Jr. & Pica, 2022).

Even though legal professionals described both MSOs and FSOs as *vulnerable* because childhood victimization history is common, MSOs were also considered *other*, *dominant*, and *riskier* offenders, while FSOs were described as *chronic victims* (Rooney, 2020). These descriptions play into traditional patriarchal beliefs, inferring that men are aggressive and power players, while women are just products of their own victimization, unable to cause real damage. Additionally, despite the fact that this study was discussing sexual offenses, participants rarely brought up sexual intent when speaking about FSOs' potential motivations, suggesting that the participants did not believe in or were uncomfortable discussing sexual deviance among women (Rooney, 2020). Researchers also suggested that demographics such as age, gender, and geographic location may impact differences in perceptions of sex offenders. Cain et al. (2017) found that though

most of their sample weighed MSO- and FSO-perpetrated sex offenses equally, men over the age of 50 who lived in rural areas were more likely to believe in antiquated definitions of sexual offenses. For example, they were more likely to believe that FSOs were less dangerous than MSOs because women are not physically strong enough to commit serious violent offenses or because they considered offenses by women less severe due to a lack of penile penetration (Cain et al., 2017).

It is a common belief that FSO-perpetrated assaults are not damaging, but if that were true, victims of FSOs would fare better than victims of MSOs following the assault; this is not the case because the wellbeing scores of both types of victims were not found to be significantly different (Gambardella et al., 2020). In fact, some researchers have suggested that FSO-perpetrated offenses are considered more traumatizing than offenses perpetrated by MSOs because (a) the victims face more stigmatization due to women's traditional, nonviolent role in society, and (b) male victims' allegations may be taken lightly because they are often considered lucky to have the attention of an older woman (Almond et al., 2017; Christensen, 2021; Zack et al., 2018).

MSOs are also viewed more unfavorably in the media than FSOs (Tozdan et al., 2019) and are more likely to be convicted and receive harsher sentences than FSOs (King & Roberts, 2017; Shields & Cochran, 2019). Though members of the general public consciously reported that they believe in equal treatment for FSOs and MSOs, they also demonstrated contradictory beliefs, such that male victims of FSOs were *lucky* to be sexualized by a woman (Zack et al., 2018). Ten Bense et al. (2019) even found that investigation reports of sex offenses by solo FSOs against male victims were more likely

to describe the sexual contact as consensual than with female co-offenders. This illuminated a dangerous contradiction because the public (men and women alike) can hold sexist beliefs without realizing it (Glick & Fiske, 1996). Society's beliefs may be contributing to inequality in legal contexts because jurors are selected from the public, which gives potentially biased individuals a chance to determine culpability of sex offenders in court.

These considerations become even more intricate when considering sexual co-offenders, which are sex offenders who offend in pairs or groups. Most sex offenders act alone, but FSOs are more likely to work with a co-offender than MSOs (Budd et al., 2017). Research has been conducted to compare offender groupings in many aspects, but if and how co-offenders are treated differently in legal contexts compared to solo FSOs and MSOs had not been explored.

MSOs, FSOs, and Co-Offenders

Though there are some similarities, FSOs, MSOs, and co-offenders frequently display different characteristics in the commission of their offense. Male/female co-offending pairs were more likely to target female, dependent child victims than solo FSOs (Budd et al., 2017; ten Bensel et al., 2019). Miller and Marshall (2019) noted that there were patterns of victim selection, in that solo FSOs tended to target male victims, and solo MSOs and male/female co-offending pairs tend to target female victims. Additionally, Williams et al. (2019) found that MSOs were more likely to view children as ideal sexual partners than FSOs. Researchers suggested that the co-offenders may target female children related to them because the MFCoFs were following along with

MFCoMs' sexual orientation and victim preference (Miller & Marshall, 2019). MSOs were more likely to engage in contact offenses, while FSOs were more likely to engage in non-contact offenses; some researchers classified contact offenses as more severe than non-contact offenses, meaning that FSOs were believed to be less violent (Christensen & Darling, 2020). However, Augarde and Rydon-Grange (2022) found that physical force, violence, and threats were commonly used by FSOs, especially against older victims. Budd and Bierie (2020) also found instances of major and minor injuries inflicted during FSO-perpetrated sex offenses and mentioned that, because of the societal biases toward women labeling them as non-violent, there may be an inherent inability for society to acknowledge that women can be sexually violent.

Offender characteristics also differed between groupings. For example, solo FSOs reported higher levels of antisocial personality traits, while female co-offenders reported more symptoms of depression (Miller & Marshall, 2019). Solo FSOs were more likely to experience low self-esteem and emotional loneliness, while female co-offenders (with both male and female co-offenders) exhibited higher levels of impulsivity and unstable relationships (Williams et al., 2019). These offender and offense differences are important to note because it may influence the offender's rehabilitation and recidivism potential, which would likely have an impact on a jury's sentencing decision. These differences are supported by the fact that there are separate clinical approaches for MSOs and FSOs; Pflugrad et al. (2018) proposed a treatment plan for females that primarily focuses on bolstering FSOs' social skills and ensuring that they have healthy coping

mechanisms. Pflugradt et al. (2018) showed that MSOs and FSOs may exhibit similar behavior but have very different base motivations.

There were two types of MFCoF offenders identified in the literature: male-coerced MFCoFs and male-accompanied MFCoFs (Budd et al., 2017). Male-coerced MFCoFs may offend in order to maintain intimacy with their partner, to avoid physical or verbal abuse, or out of jealousy toward the victim (Budd et al., 2017). This typology has been criticized for disregarding the autonomy of female offenders (ten Bensele et al., 2019); however, research supports this typology as male/female co-offending pairs tend to target dependent female victims, consistent with victim preferences commonly displayed by male offenders (Budd et al., 2017). Other existing research on this subject is contradictory, suggesting that solo FSOs may target non-familial male victims more than female victims (Comartin et al., 2018; Miller & Marshall, 2019; ten Bensele et al., 2019) or that solo FSOs may target male and female victims equally (Augarde & Rydon-Grange, 2022). Regardless, this further supports the male-coerced/-accompanied typology given that solo FSOs tend to target different populations than co-offenders. This change in modus operandi could indicate to a jury that the MFCoFs are less culpable for the offense because they may have been coerced and were not invested in the offense characteristics.

Given that juries were more likely to convict and impose harsh sentences on solo MSOs than solo FSOs (King & Roberts, 2017; Mackelprang & Becker, 2017; Shields & Cochran, 2019), the typologies are important to consider because they may impact a jury's decision. The motivation behind the offense may impact an offender's charges and

sentencing because there could be mitigating or aggravating factors involved. For example, knowing that MSOs were more likely to engage in grooming behavior and seek children as victims (Williams et al., 2019) may lead jurors to convict MSOs more often and impose harsher sentences. FSOs were more likely to exhibit anxiety, depression, and borderline personality disorder (Miller & Marshal, 2019; Williams et al, 2019), which jurors may consider treatable, leading them to convict FSOs on a lesser charge or convict less often.

Sexual offense mitigation efforts typically target MSOs because, as reported, MSOs commit a large majority of sex offense cases (Kaylor et al., 2022). However, due to aforementioned reporting discrepancies, FSOs may commit more sex offenses than official reports state. Additionally, research suggests that certain circumstances may lead legal professionals to see FSOs in a harsher light. Shaw et al. (2022) found that while women were overall less likely to be arrested for a sexual offense than men, women were more likely to be arrested when certain offense characteristics were present, such as using a weapon, causing the victim injury, committing penetrative offenses (as opposed to fondling), etc. Shaw et al. (2022) attributed this shift to the *chivalry* and *evil woman* hypotheses, suggesting that society and the legal system do not view women as capable of sexual offenses until they deviate from traditional gender roles and commit a sex offense with additional elements of violence. Whether these influences have an impact on FSOs' legal treatment remains to be seen.

Juries may have a more difficult time with co-offenders due to the dynamic of having two offenders. Depending on the evidence presented and the offenders'

motivations for the offense, juries may determine culpability differently than if the individuals had offended separately. For example, a solo FSO may be held more accountable with a conviction and harsher sentence than a female sex co-offender because the jury believed the female sex co-offender to be coerced by the MSO.

Summary

The goal of this study was to determine how the public perceptions of sex offenders impact convictions and sentencing, especially regarding co-offenders. Given this information and lack of previous research on co-offenders in legal contexts, researchers currently do not know whether female sex co-offenders would most often be considered more culpable or less culpable than their male counterparts. Perhaps jurors will believe that a solo FSO acted of her own accord and will convict solo FSOs more often than co-offending FSOs, who could have been coerced. Maybe jurors will condemn MFCoF offenders for working with an MSO, whom they consider dangerous and violent. The current study will explore the public's reaction to each scenario to garner a better understanding of the perceptions of co-offenses.

Chapter 3: Research Methods

Within this study, I sought to explore if and how co-offending relationships influence the public's perception of and, consequently, the conviction and sentencing of FSOs. I collected data for this study via a Qualtrics survey distributed on social media (Appendix A). I chose an online survey in order to offer location flexibility for both researcher and participants, to ensure participant anonymity, and to allow the study to reach more participants than an in-person study. I limited participation to English-reading U.S. citizens over the age of 18 years old to mimic the requirements to serve as a juror in the U.S. court system. To maintain participants' anonymity, I did not collect any personally identifying information.

Research Design and Rationale

The independent variable in this study was the offense grouping (solo MSO, solo FSO, male/female co-offending pair, and female/female co-offending pair) and the dependent variables were conviction rates and sentence lengths. I employed a quantitative design because the research questions specifically explored comparisons between groups, which qualitative methodologies do not support. I chose the quantitative design to delineate differences in convictions and sentencing lengths between offense groupings; the co-offending groups will be of particular interest to the forensic psychology field due to a lack of current literature on the topic. Determining whether there is a statistically significant difference between convictions and sentencing assigned to each offense group will contribute to existing research in the field of forensic psychology by enhancing the

community's understanding of the relationship between perception, offender characteristics, and legal consequences.

Methodology

The target population for this study was anyone who could serve as jurors in U.S. courts of law. I distributed surveys via social media and relied on non-probabilistic convenience snowball sampling in order to recruit the number of participants needed for sufficient power. I employed snowball sampling by encouraging participants to share the survey with other potential participants, targeting a wider portion of the population. I did not randomly select the sample from the general population, which may have posed a threat to external validity and generalizability of the results. The only inclusion criteria were that participants must be over 18 years of age, with U.S. citizenship, and the ability to read English.

Estimated sample size for this study was found using the formula (Smith, n.d.) below:

$$\text{Sample size} = \frac{(z\text{-score})^2 \times SD(1-SD)}{(\text{margin of error})^2} = \frac{1.96^2 \times 0.5(1 - 0.5)}{(0.5)^2} = \frac{3.8416 \times 0.25}{0.0025} = 384.16$$

The target sample size was 385 participants, based on a 0.05 alpha level, a 0.5 (large) effect size, and a 0.80 (strong) power level.

I distributed the Qualtrics survey and recruited participants via my personal Facebook, Instagram, and LinkedIn accounts. I encouraged participants to share the survey with others in order to reach a larger segment of the population. The survey included an informed consent, demographics questions, one of four vignettes depicting a different offender grouping, and two questions per offender asking the participants to

decide how likely they are to convict the offender on a four-point scale and, if very likely or somewhat likely, to assign a prison sentence in years. I also collected participant age, gender, race/ethnicity, education level, and geographical location type data (Appendix A) because each of those characteristics may be related to differences in gender biases (Cain et al., 2017). I collected and stored the data via Qualtrics for the duration of the survey's use; once data collection was complete, I removed the survey and raw data from Qualtrics, and kept the only copies of the data on a password-protected laptop and on an encrypted drive.

Before participants could begin the survey, they were required to provide informed consent. The informed consent narrative contained a general overview of the study, including the estimated length of the survey (no more than 10 minutes) and the potential positive impact the results of the study could have on the field and society in general. Additionally, I included a content warning in case any participants would find basic, inexplicit descriptions of child sexual assault triggering, as well as resources for anyone upset by said content, such as the National Sexual Assault Hotline and RAINN.org. I advised the participants via the informed consent that they can stop the survey at any time. The lack of personal questions assured confidentiality, as the survey did not collect any identifying information and only the advisory committee and I viewed the raw data as needed. Incentives were not offered for completing the survey. I included my email and the contact information for the Walden University's Research Participant Advocate in case of any questions or concerns.

Upon acceptance of the informed consent, Qualtrics directed the participants to the demographics questions, and then to the main survey. There were four versions of the survey, each containing a vignette and two or four questions for participants to read and answer, depending on the offender group in question. Each version of the survey contained a different vignette reflecting the four levels of offense groups studied: solo MSOs, solo FSOs, male/female co-offending pairs, and female/female co-offending pairs. The participants read their randomly assigned vignette and decided how likely they were to convict the offender(s) on a 4-point scale and, if very likely or somewhat likely, how many years of prison time they believed the offender deserves. When the questions were answered, the participants selected the finish button at the bottom of the screen to continue to the debrief screen. The debrief contained a note of appreciation, again provided the resources from the informed consent in case any of the survey content was triggering and informed them that the results will be available via social media when the results were finalized. Participants were not required to follow up.

Instrumentation and Operationalization of Constructs

I adapted the instrument used in this study from the instrument used in King and Roberts (2017), in which they proposed five different vignettes depicting different types of sexual assaults to determine if offense type, offender characteristics, victim characteristics, and participant characteristics predicted differences in offender conviction rates/sentence lengths. I simplified the King and Roberts (2017) instrument for the purposes of this study to only include four vignettes with the same offense type but varying offender genders and groups. I adapted the survey questions to directly address

this study's research questions. I inferred content validity based on this measure's use in King and Roberts (2017).

The independent variable in this study was the offender groupings. In the vignettes provided to participants, the types of offender groupings were: one solo MSO, one solo FSO, a male/female co-offending pair, and a female/female co-offending pair. The vignettes were identical aside from the change in offender group. One vignette depicting one of the offender groupings was offered to each participant at random.

The dependent variables were the convictions and sentences assigned by participants for each type of offender group. The conviction variable was categorical and was measured by a four-scale question asking how likely the participant is to convict the described defendant(s). The sentencing variable was ratio, continuous, and was measured in the number of years in prison each participant determines for the offender(s) that they chose to convict.

Comparing the offender groupings based on the convictions and sentences assigned to each group presented any differences present in public perception of each group. For example, if more participants chose to convict and assign longer sentences for the solo MSO than the other groups, it suggested that members of the public believed the solo MSOs to be more culpable than the solo FSOs, female/female co-offending pairs, or male/female co-offending pairs for the same sexual assault. This could have implications for decisions jurors would make in a court room, which, in this example, may see MSOs convicted more often and sentenced more harshly than other offenders for the same crime.

Data Analysis Plan

I utilized SPSS Statistics software to analyze the data for this study. I included all data in the analysis, barring any incomplete, nonsensical, or significantly outlying answers. I used the analysis to address the research questions for this study, which are:

RQ1: How will participants convict and/or sentence MSOs compared to FSOs?

H_{01} : There is not a significant difference between convictions assigned to solo MSOs and solo FSOs by participants.

H_{11} : There is a significant difference between convictions assigned to solo MSOs and solo FSOs by participants.

H_{02} : There is not a significant difference between sentences assigned to solo MSOs and solo FSOs by participants.

H_{12} : There is a significant difference between sentences assigned to solo MSOs and solo FSOs by participants.

H_{03} : There is not a significant difference between convictions assigned to MFCoMs and MFCoFs by participants.

H_{13} : There is a significant difference between convictions assigned to MFCoMs and MFCoFs by participants.

H_{04} : There is not a significant difference between sentences assigned to MFCoMs and MFCoFs by participants.

H_{14} : There is a significant difference between sentences assigned to MFCoMs and MFCoFs by participants.

RQ2: How will participants convict and/or sentence solo FSOs compared to female sex co-offenders?

H_{02_1} : There is not a significant difference between convictions assigned to solo FSOs and MFCoFs by participants.

H_{12_1} : There is a significant difference between convictions assigned to solo FSOs and MFCoFs by participants.

H_{02_2} : There is not a significant difference between sentences assigned to solo FSOs and MFCoFs by participants.

H_{12_2} : There is a significant difference between sentences assigned to solo FSOs and MFCoFs by participants.

H_{02_3} : There is not a significant difference between convictions assigned to solo FSOs and FFCos by participants.

H_{12_3} : There is a significant difference between convictions assigned to solo FSOs and FFCos by participants.

H_{02_4} : There is not a significant difference between sentences assigned to solo FSOs and FFCos by participants.

H_{12_4} : There is a significant difference between sentences assigned to solo FSOs and FFCos by participants.

RQ3: How will participants convict and/or sentence FSOs who offend with other females compared to FSOs who offend with males?

H_{03_1} : There is not a significant difference between convictions assigned to FFCos and MFCoFs by participants.

H_{13_1} : There is a significant difference between convictions assigned to FFCos and MFCoFs by participants.

H_{03_2} : There is not a significant difference between sentences assigned to FFCos and MFCoFs by participants.

H_{13_2} : There is a significant difference between sentences assigned to FFCos and MFCoFs by participants.

I planned to use Mann-Whitney U and Wilcoxin rank tests to ensure that the scores between groups were not equal, which would allow me to reject the null hypothesis and determine that conviction rates and sentence lengths were different between groups. I chose Mann-Whitney U and Wilcoxin rank tests because the data required non-parametric analysis, and because the research questions required finding the differences between and within groups. Mann-Whitney U and Wilcoxin rank tests operate under the same assumptions as the ANOVA, but are applicable for variables without normal distribution and for between- and within-group comparisons. Because Mann-Whitney U and Wilcoxin rank tests are individual analyses, only comparing two groups at a time, post hoc tests are not needed to show where the differences exist. I measured statistical significance by using a 0.05 alpha level and 95% confidence interval.

Independently from the stated research questions, I also planned to use nonparametric Kendall's tau-b correlations to delineate potential relationships between the dependent variables and participant demographics. For example, as age increases, did conviction rates and/or sentence lengths also increase? I also sought to explore whether

any of the participant demographic variables could predict differences in the conviction rates variable, using an ordinal logistic regression.

Threats to Validity

Convenience sampling threatened external validity in this study because it is not a random sampling procedure. I therefore potentially recruited a sample that was not representative of the entire target population (U.S. citizens eligible to sit on a jury), which means that the results of this study cannot be generalized. However, I chose the convenience sampling procedure in order to draw the number of participants required for the power level of this study. This study's results could be used as the foundation for further research with a true random sample.

Ethical Procedures

Walden University Institutional Review Board (IRB) approved this study (approval #02-15-23-1014402). I did not collect any identifying or sensitive information, ensured that the survey was anonymous, and confirmed that this study did not involve any researcher/participant relationships or conflicts of interest. The only ethical concern related to data collection was that some participants may find the content disturbing. However, I mitigated these concerns by only including inexplicit descriptions of the offenses, informing the participants that they were free to leave the survey at any time, and providing resources for any participants who were upset by the content.

Data collection for this study was anonymous and I kept the raw data confidential. I was the only person with immediate access to the data, and I provided the data to the

dissertation committee only as needed. I stored the data on a password-protected laptop in an encrypted file, where it will be kept for the required five years.

Summary

I created this quantitative study with the purpose of delineating the differences in convictions and sentences between offender groups: solo MSOs, solo FSOs, male/female co-offending pairs, and female/female co-offending pairs. I collected data with a survey distributed via social media. Participation was voluntary and anonymous. I kept raw data confidential, only shared between me and the dissertation committee for data analysis purposes.

Chapter 4: Results

I sought to explore differences in public perception of sex offenders in different groupings by collecting conviction rates and sentencing data from participants based on four different vignettes. The three research questions and related null hypotheses for this study were as follows:

RQ1: How will participants convict and/or sentence MSOs compared to FSOs?

H_{01} : There is not a significant difference between convictions assigned to solo MSOs and solo FSOs by participants.

H_{11} : There is a significant difference between convictions assigned to solo MSOs and solo FSOs by participants.

H_{02} : There is not a significant difference between sentences assigned to solo MSOs and solo FSOs by participants.

H_{12} : There is a significant difference between sentences assigned to solo MSOs and solo FSOs by participants.

H_{03} : There is not a significant difference between convictions assigned to MFCoMs and MFCoFs by participants.

H_{13} : There is a significant difference between convictions assigned to MFCoMs and MFCoFs by participants.

H_{04} : There is not a significant difference between sentences assigned to MFCoMs and MFCoFs by participants.

H_{14} : There is a significant difference between sentences assigned to MFCoMs and MFCoFs by participants.

RQ2: How will participants convict and/or sentence solo FSOs compared to female sex co-offenders?

H_{02_1} : There is not a significant difference between convictions assigned to solo FSOs and MFCoFs by participants.

H_{12_1} : There is a significant difference between convictions assigned to solo FSOs and MFCoFs by participants.

H_{02_2} : There is not a significant difference between sentences assigned to solo FSOs and MFCoFs by participants.

H_{12_2} : There is a significant difference between sentences assigned to solo FSOs and MFCoFs by participants.

H_{02_3} : There is not a significant difference between convictions assigned to solo FSOs and FFCos by participants.

H_{12_3} : There is a significant difference between convictions assigned to solo FSOs and FFCos by participants.

H_{02_4} : There is not a significant difference between sentences assigned to solo FSOs and FFCos by participants.

H_{12_4} : There is a significant difference between sentences assigned to solo FSOs and FFCos by participants.

RQ3: How will participants convict and/or sentence FSOs who offend with other females compared to FSOs who offend with males?

H_{03_1} : There is not a significant difference between convictions assigned to FFCos and MFCoFs by participants.

H_{13_1} : There is a significant difference between convictions assigned to FFCos and MFCoFs by participants.

H_{03_2} : There is not a significant difference between sentences assigned to FFCos and MFCoFs by participants.

H_{13_2} : There is a significant difference between sentences assigned to FFCos and MFCoFs by participants.

In this chapter, I will discuss data collection, sample demographics and descriptive data, statistical analyses used, results, and post-hoc analyses.

Data Collection and Retention

Data collection proceeded as planned. I published the survey on my personal social media pages, including Facebook, Instagram, and LinkedIn. I encouraged participants to share the survey within their own networks to increase visibility. The survey was open for 11 days, during which I collected 451 responses to allow some margin for removing incomplete/nonsensical answers and outliers. At that time, I closed the survey and moved the raw data to an encrypted file folder and external drive.

Participants were randomly assigned to one of four groups (Figure 1). Group 1 (Dataset 1), which received the solo MSO vignette, was composed of 91 participants. Group 2 (Dataset 2), which received the solo FSO vignette, was composed of 96 participants. Group 3 (Datasets 3 & 4), which received the male/female co-offending pair vignette, was composed of 100 participants. Group 4 (Datasets 5 & 6), which received the female/female co-offending pair vignette, was composed of 100 participants.

Figure 1*Connections Between Participant Groups and Datasets*

I removed only one egregious outlier, in which the participant sentenced an offender to 1000 years; I retained all other outliers as assessed by SPSS (Figures 2 & 3) because they fell within other groups' response ranges and because removing the outliers decreased the power of the study and did not significantly impact the results. Scores for all groups for both dependent variables were abnormal, as they did not group around the line in the Normal Q-Q Plots. Sixty-four incomplete or nonsensical answers were removed from the dataset, such as participants who wrote "need more information" instead of assigning a sentence length in years or participants who responded that they were likely to convict the offender but did not provide a sentence length as directed. This left 387 responses to be analyzed.

Figure 2

Demonstrating Extreme Outliers in the Conviction Rate Scores of Datasets 3 and 4.

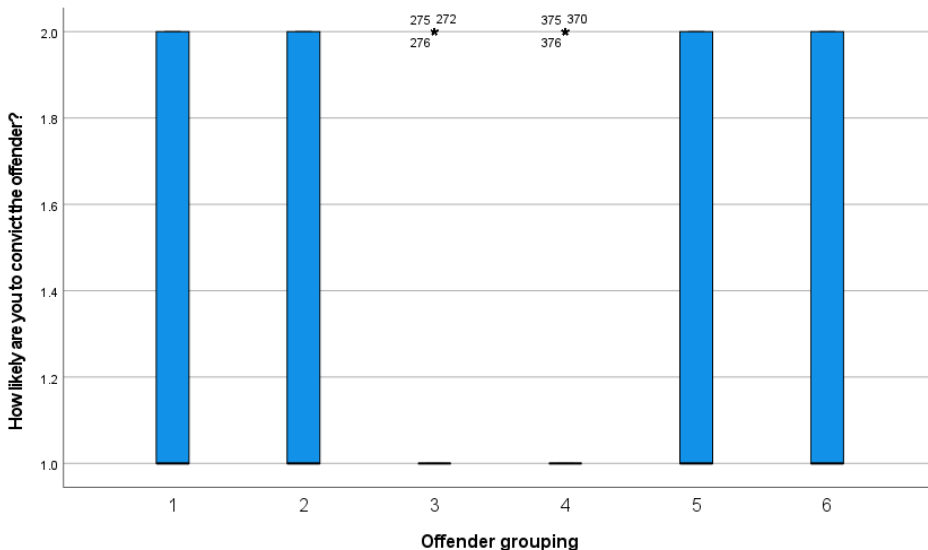
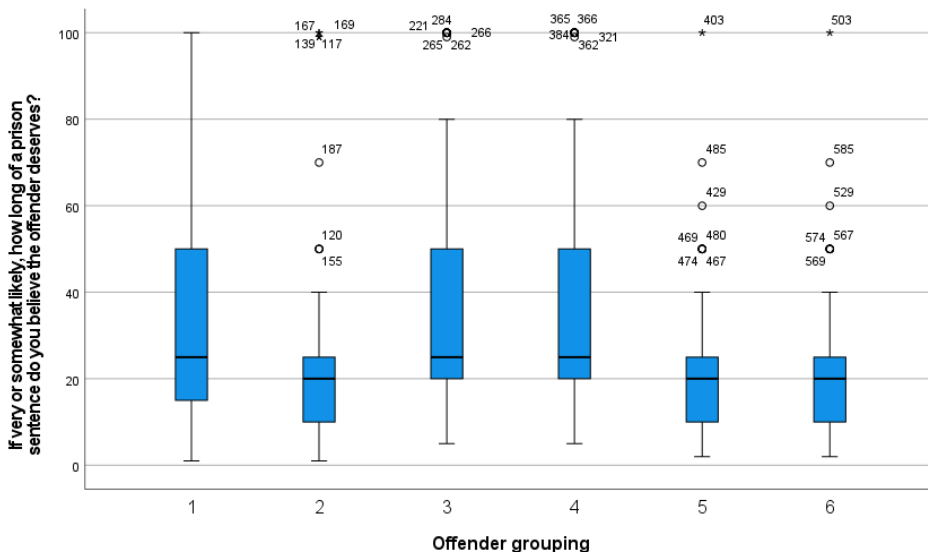


Figure 3

Demonstrating Typical and Extreme Outliers in the Sentencing Scores of Datasets 2, 3, 4, 5, and 6.



Sample Demographics and Descriptive Data

After incomplete answers and extreme outliers were removed, this study had a total of 387 participants (587 datapoints, as two groups answered multiple questions). The sample was skewed female and Caucasian/White, with 86.3% female, 13.4 % male, and 0.0% nonbinary (0.3% preferred not to disclose) and 96.6% Caucasian/White, 1.6% Hispanic/Latinx, 0.8% Asian, 0.5% Black/African American, and 0.5% other. Participants varied in age, with 3.9% reporting 18 to 25 years of age, 22.7% reporting 26 to 35 years of age, 20.7% reporting 36 to 45 years of age, 24.3% reporting 46 to 55 years of age, 17.3% reporting 56 to 65, 9.3% reporting 66-75 years of age, and 1.8% reporting 75+ years of age. Geographical locations of participants were 10.9% urban, 45.5% suburban, and 42.6% rural. Education levels varied as well, with 0.5% without a high school diploma, 11.9% graduated high school, 16.0% had some college or a certification, 10.9% had an associate's degree, 30.2% had a bachelor's degree, 26.1% had a master's degree, and 4.4% had a PhD or other advanced graduate degree.

This sample appeared to be representative of the population in terms of age and education levels. However, gender and ethnicity were heavily skewed with Caucasian/White females making up the majority of participants. Additionally, participants living in urban areas were underrepresented. These discrepancies impacted the generalizability of this study's results, as the sample does not truly represent the general population.

Data Analysis Plan

One study design barrier that I encountered was in asking multiple questions of two groups of participants. For example, Participant Group 3 was assigned a vignette describing a male/female co-offense and were asked to convict and sentence both offenders, in the interest of exploring the difference in perception of male and female defendants involved in the same offense. Figure 1 details how each participant group provided each dataset. Some datasets were independent and some were within groups, so a one-way ANOVA could not be used to determine the significance of the whole model.

Because I found the data to be abnormally distributed and contained extreme outliers, I conducted multiple Mann-Whitney Tests to determine the differences between independent datasets. The assumptions of the Mann-Whitney Tests, as follows, were met: (a) the study employed one dependent variable at the continuous or ordinal level, (b) the study employed one independent variable with two categorical, independent groups, and (c) observations were made independently.

I used multiple Wilcoxon signed-rank tests to determine the differences between Datasets 3 & 4, due to the within-group nature of the data. This test is similar to the Mann-Whitney Test but can be conducted for datasets without independent observations. The assumptions of the Wilcoxon signed-rank test, as follows, were met: (a) the study employed one dependent variable measured at the continuous or ordinal level, (b) the study employed one independent variable with two categorical, related groups, and (c) the difference scores' distributions were symmetrical.

I evaluated all results at the $p < 0.05$ significance level with a 95% confidence interval. I used $N = 387$ and the formula $r = Z/\sqrt{N}$ to calculate effect sizes (Fawad, n.d.).

Results

RQ1: MSOs versus FSOs

I sought to compare MSOs and FSOs across groupings with the first research question. I chose to run a Mann-Whitney Test to determine whether there were significant differences between convictions and sentences assigned to solo MSOs and solo FSOs (Datasets 1 & 2). The distributions of convictions scores were similar, but the distributions of sentencing scores were dissimilar, as assessed by visual comparison, so mean ranks were examined to determine significance. Conviction scores were not statistically different between solo MSOs and solo FSOs, $U = 4,101$, $z = -.866$, $p = .386$, using the asymptotic significance value. However, distributions of the sentencing scores between solo MSOs (*mean rank* = 104.44) and solo FSOs (*mean rank* = 79.38) were statistically significantly different, $U = 2,997$, $z = -3.238$, $p = .001$, using the asymptotic significance value. The effect size for this model was found to be small ($r = -.165$). Thus, I accepted H_{01} and rejected H_{02} .

Also related to the first research question, I conducted a Wilcoxon signed-rank test to determine differences in conviction and sentencing scores between co-offending MSOs and FSOs (Datasets 3 & 4). The histograms for both sets of scores were approximately symmetrical. The model for conviction rates was not statistically significant, $z = 1.134$, $p = .257$, demonstrating that there was not a meaningful difference in scores between MFCoM and MFCoF offenders. The model for sentencing scores was

statistically significant ($z = -2.032, p = .042$), with five participants out of 96 having negative ranks, meaning that those participants assigned a lesser sentence for the MFCoF. The effect size for this model was found to be small ($r = -.103$). I therefore accepted H_{013} and rejected H_{014} .

RQ2: Solo FSOs versus. Co-offending FSOs

With the second research question, I asked how participants convicted and sentenced solo FSOs compared to female sex co-offenders. To test the related hypotheses, I conducted multiple Mann-Whitney Tests between scores for the solo FSO (Dataset 2), the MFCoF (Dataset 4), and FFCo1 and FFCo2 (Datasets 5 & 6).

Conviction scores were statistically different between solo FSOs (*mean rank* = 105.27) and MFCoF (*mean rank* = 92.00), $U = 4,150, z = -2.029, p = .042$, using the asymptotic significance value. The conviction scores effect size was found to be small ($r = -.103$). Additionally, the sentencing scores were statistically different between solo FSOs (*mean rank* = 80.35) and MFCoF (*mean rank* = 110.33), $U = 3,088, z = -3.796, p < .001$, using the asymptotic significance value. The effect size was found to be small ($r = -.193$). Therefore, I rejected both H_{021} and H_{022} .

There were not any statistically significant differences in conviction or sentencing scores between solo FSOs and the FFCo1 offender (Dataset 5), $U = 4,619, z = -.543, p = .587/U = 4,296.500, z = -.577, p = .564$, respectively. There were also not any statistically significant differences in conviction or sentencing scores between solo FSOs and the FFCo2 offender (Dataset 6), $U = 4,648, z = -.454, p = .650/U = 4,330, z = -.608, p = .543$, respectively. On this basis, I accepted H_{023} and H_{024} .

RQ3: Co-offending FSO with FSO versus Co-offending FSO with MSO

With the third research question, I sought to compare co-offending FSOs depending on the gender of their co-offender. I compared conviction and sentencing scores between MFCoF (Dataset 4) and FFCo1 and FFCo2 (Datasets 5 & 6).

Conviction scores were not statistically different between MFCoF and FFCo1 (dataset 5), $U = 4,522$, $z = -1.476$, $p = .140$, or between MFCoF and FFCo2 (dataset 6), $U = 4,485$, $z = -1.583$, $p = .113$. I accepted H_{031} .

Sentencing scores were statistically different between MFCoF (*mean rank* = 114.14) and FFCo1 (*mean rank* = 78.86) (Dataset 5), $U = 2914$, $z = -4.446$, $p < .001$, and MFCoF (*mean rank* = 114.99) and FFCo2 (*mean rank* = 79.19) (Dataset 6), $U = 2,928.500$, $z = -4.499$, $p < .001$. The effect sizes were found to be small ($r = -.226$ and $r = -.229$, respectively). I therefore rejected H_{032} .

Additional Hypotheses

One additional hypothesis emerged from the analysis of the original hypotheses, concerning if there were differences in conviction and sentencing scores between solo MSOs (Dataset 1) and MFCoM (Dataset 3). Using the Mann-Whitney Test, neither conviction nor sentencing scores were statistically significant, $U = 4,143$, $z = -1.377$, $p = .168$ / $U = 4,062$, $z = -.688$, $p = .491$, respectively.

Post-Hoc Analyses

Some sample demographics were also collected to determine if participant characteristics were related to and/or could predict the results. Kendall's tau-b correlations were conducted between participant gender, age, race/ethnicity, geographical

location, and education level and each of the dependent variables (conviction rates and sentence lengths). Two relationships emerged.

There was a statistically significant small positive relationship between participant age and sentence lengths, $r(374) = 0.080$, $p = 0.045$. As participant age increased, sentence lengths also increased. Additionally, a statistically significant small negative relationship occurred between education level and sentence lengths, $r(374) = -0.111$, $p = 0.005$. As participants' educational level increased, sentence lengths decreased.

Further testing was conducted to determine if any of the demographic independent variables could predict changes in the dependent variables. Due to the abnormality of the distributions, presence of outliers, and mixture of categorical and continuous variables, only the conviction rates variable could be tested. After ensuring that the assumptions were met, an ordinal logistic regression was conducted. The final model did not statistically significantly predict conviction rates over and above the intercept-only model, showing that none of the independent variables (participant gender, age, race/ethnicity, geographic location, or education) could predict conviction rates, $\chi^2(20) = 25.992$, $p = .166$.

Summary

Based on the data analyses, I rejected five of the ten null hypotheses explored in this study. Significant differences were found in conviction rates between solo FSOs and MFCoF, and in sentence lengths between solo MSOs and solo FSOs, MFCoM and MFCoF, solo FSOs and MFCoF, and FFCos and MFCoF. Participants' race/ethnicity,

geographical location, and gender were not found to have any relationship with conviction rates or sentence lengths assigned to any offender group. However, age and education level were both found to be correlated with sentence length, though none of the demographics variables could predict conviction rates.

These results are likely to have implications for the field of forensic psychology because this type of data has not been collected or analyzed in previous research, and the null hypotheses that I was able to reject may inform future research. A deeper understanding of public perception of sex offenders is essential to the continued examination of the legal system as a beacon of true justice to ensure that harmful biases do not continue unchecked.

Chapter 5: Discussion & Conclusion

Within the current study, I intended to expand upon the existing literature on the public perception of sex offenders, particularly regarding whether co-offending relationships impacted legal treatment. Researchers previously found that there were differences in conviction rates and sentence lengths assigned to MSOs and FSOs, but had not yet explored the potential influence of the co-offender dynamic on these variables. This potential relationship is important to delineate due to the impact it may have on the effectiveness of the justice system as a fair and impartial arena.

Key Findings and Theoretical Framework

The results of this study supported and extended the existing literature regarding differences in perception between FSOs and MSOs. Consistent with previous studies, I found that solo MSOs were assigned longer sentences compared to solo FSOs (though conviction rates between the two groups were not significantly different, contrary to previous studies' findings). With this study design, I was able to take the results one step further to include co-offending dynamics. Using these results, I posited that it was not the co-offending dynamic itself that influenced public perception of sex offenders, but the presence of a male offender. Solo FSOs were less likely to be convicted and received significantly lower sentences than MFCoFs, though differences were not found between solo FSOs and female sex co-offenders who offended with other FSOs. The MFCoM still received significantly higher sentences than the MFCoF in the same pairing, and MFCoF offenders received significantly higher sentences than FFCo offenders. This further

supports previous studies' theories that gender differences are the primary factor in sex offender perception discrepancies and therefore may create bias in legal contexts.

Additionally, I found that participant age and education level were slightly related to sentence lengths. As participant age increased, sentence lengths also increased. As participant education increased, sentence lengths decreased. There are many possible explanations for these relationships, including confounding variables that were not controlled, such as political affiliation and career/education field. Perhaps some participants would have preferred the death penalty to jail time for child sex offenders, or some participants have experience in law-related fields and did not convict due to their knowledge of wrongful conviction rates. Further research is needed to delineate these differences.

The theory of ambivalent sexism states that there are two types of gender-related bias in society: hostile sexism and benevolent sexism. I contend that benevolent sexism was at work in this study, as it is clear that FSOs were treated with more leniency than MSOs for the exact same offense, even when offending alongside one another. This suggests that the general public holds gender biases that work against the equitable treatment of all offenders within the legal system, regardless of their own gender identity. These biases could be related to the beliefs that FSOs are inherently non-violent and therefore innocent or do not cause severe damage, or because FSOs are considered more reformable than MSOs (McLeod & Dodd, 2022; Miller & Marshall, 2019; Pflugradt et al., 2019; Williams et al., 2019).

I collected demographic data of all participants in the interest of delving deeper into the variables that may impact this biased behavior, including gender. I did not find a significant correlation between gender and conviction rates or sentence lengths assigned to offenders, suggesting that male and female participants did not show any differences in perception of sex offenders. Additionally, the results did not show a predictor relationship between gender and conviction rates (sentence lengths were not tested due to data distribution and statistical test assumption constraints). This supports the original research by Glick and Fiske (1997) on ambivalent sexism, wherein they claimed that the existence of benevolent sexism was not dependent on participant gender.

Limitations

Though this study found significant results, there are concerns related to generalizability. The first limitation is related to the sampling practices. I employed a convenience snowball sampling technique and shared the survey on personal social media platforms. This likely resulted in the recruitment of participants with similar backgrounds and characteristics. Indeed, a strong majority of the participants were Caucasian/White females. Due to my background in and connections to the field of forensic psychology, it is also possible that many of the participants were also educated in legal and/or psychological fields, which may have skewed the results compared to a true random population.

The models in this study demonstrated small effect sizes. This suggests that while the study found true relationships between variables, the practical applicability of the

results must be questioned. Though the instrument in this study was presumed valid, I made changes that could have impacted the validity and reliability of the instrument.

Future Research

The main limitation for the current study was the sample's lack of diversity. This could be aided in future studies by employing a more random participant recruitment plan. Additionally, though the target sample size was reached for this study, a larger sample may offer more powerful results. Future researchers may also consider other factors to study in relation to co-offenders that could strengthen the effect sizes. These factors could include offense and victim characteristics, which the current study held constant, but that could offer valuable insight. For example, it is possible that introducing a male victim would offer novel results.

Because the data distributions in the current study required nonparametric tests, the power of the study was diminished. Future studies should be designed in a way that limits outliers and prompts the data to follow a normal curve where possible, so that statistical tests with higher power yields may be used. Future research would also be augmented with the introduction of qualitative studies. With these results, I have offered novel data for the field to consider, but I was left to speculate where the differences in perception originated. Asking participants to describe their thought processes may provide additional data that researchers could organize into patterns to further explain the differences between groups.

A study designed with participant demographics involved in the initial research question development may also yield valuable results. I was unable to establish a

predictor relationship between demographic variables and the dependent variables, but the existence of two significant correlations suggests that there are relationships that could be explored further. The introduction of other demographics, such as career and/or education field, the type of area in which the participants were raised as opposed to where they live now, political affiliation, etc., may provide further explanation for the differences between groups.

Potential for Positive Social Change

Because of the limits to generalizability and practical application of the results, direct social impact will be low. However, the results of this study have the potential to add to the pool of existing research for future researchers to review and improve upon. Therefore, the primary implication of this study for positive social change is in the forensic psychology field. This research applied Glick and Fiske's Ambivalent Sexism theory (1996) in a novel way, which should be further explored. This study was built from dozens of previously published research articles, and these results may serve as a jump-point for future research in the same way.

Additionally, though the direct social impact is limited, the results of this study should serve as a reminder that the general public may be more susceptible to biases than previously recognized. It is the responsibility of researchers to continue conducting studies on related topics to keep the systems running as intended, including ensuring that the legal system enacts true justice by identifying and eradicating pervasive obstacles, such as widely held biases.

Conclusion

Because FSO-perpetrated offenses are on the rise and FSOs are consistently treated more leniently in legal settings than MSOs, research studies pertaining to gender-specific differences must be prioritized. This is especially applicable to studies of female sex co-offenders, which remains an under-researched population. Previous research suggested that these gaps and discrepancies are a result of gender role expectations. Therefore, I employed the ambivalent sexism theory in an effort to explore differences in public perception of co-offending sex offenders. I utilized conviction rates and sentence lengths assigned by participants to fictitious offenders in each offense group, MSOs, FSOs, MFCoMs and MFCoFs, and FFCos, to measure public perception. Analyses found that higher conviction rates were assigned to MFCoFs than FSOs, though significant differences were not found between other groups. Longer sentence lengths were assigned to MSOs compared to FSOs, MFCoFs compared to FSOs, MFCoMs compared to MFCoFs, and MFCoFs compared to FFCos. Thus, MSOs remained the group assigned the harshest sentences, followed in order by MFCoMs, MFCoFs, FSOs, and FFCos.

These results suggested that the general public, and therefore jurors, will favor FSOs over MSOs for the same crime, which is consistent with previous research. Additionally, the presence of a male offender diminished perceptions of female offenders even within the same crime. The co-offending dynamic itself was not related to public perception, as FFCos received the lowest sentences. The exploration of the co-offending dynamics extended the existing research, and the results have potentially practical applications, such as enhancing education surrounding and awareness of gender bias in

legal contexts. Understanding the prevalence of pervasive biases is essential to ensure that the justice system works as intended and promised, which requires judges, jurors, attorneys, and other legal players to recognize their own implicit, and potentially ambiguous, biases. Future research on this topic may include qualitative studies to further delineate participants' biases, offenders and victims of all genders to determine how opinions change based on offender-victim pairings, and more robust research designs to increase the model's power.

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Appendix A: Public Perception of Female Sex Co-Offenders and Implications for
Convictions and Sentencing

Survey Flow

Standard: Informed Consent (1 Question)

Branch: New Branch

If

If You are invited to complete an anonymous survey by a Walden University student working toward a d... No Is Selected

EndSurvey:

Block: Demographics (5 Questions)

Standard: Directions (1 Question)

BlockRandomizer: 1 - Evenly Present Elements

Block: Vignette 1 Q1 (2 Questions)

Block: Vignette 2 Q1 (2 Questions)

Block: Vignette 3 Q1 (4 Questions)

Block: Vignette 4 Q1 (4 Questions)

Q1 What gender do you identify as?

- Male (1)
- Female (2)
- Non-binary / third gender (3)
- Prefer not to say (4)

Q2 What is your age?

- 18-25 (1)
- 26-35 (2)
- 36-45 (3)
- 46-55 (4)
- 56-65 (5)
- 66-75 (6)
- 75+ (7)

Q3 Which best describes your race/ethnicity?

- Asian (1)
- Black/African American (2)
- Caucasian/White (3)
- Hispanic/Latinx (4)
- Native American/Alaskan (5)
- Native Hawaiian/Pacific Islander (6)

Other: (7) _____

Q18 Which best describes the geographical location in which you live?

- Urban (1)
- Suburban (2)
- Rural (3)
-

Q19 Which best describes your education level?

- Did not graduate high school (1)
- High school diploma (2)
- Some college/certification (3)
- Associate's degree (4)
- Bachelor's degree (5)
- Master's degree (6)
- PhD or other advanced graduate degree (7)

End of Block: Demographics

Start of Block: Directions

Q4 Directions: You have been chosen to serve as a juror for the following case. Please read the scenario provided and answer the questions below.

End of Block: Directions

Start of Block: Vignette 1 Q1

Q5 Joe Martin, 30 year old male, is on trial for the sexual assault of 10-year-old Katie Brown. DNA has linked Martin to Brown's assault. Martin was a stranger to Brown at the time of the assault.

How likely are you to convict Joe Martin for the sexual assault of Katie Brown?

- Very likely (1)
 - Somewhat likely (2)
 - Somewhat unlikely (3)
 - Very unlikely (4)
-

Q20 If very likely or somewhat likely, to how many years in prison do you believe Joe Martin should be sentenced? Please form your response in whole numerical years only.

End of Block: Vignette 1 Q1

Start of Block: Vignette 2 Q1

Q7 Veronica Richardson, 30 year old female, is on trial for the sexual assault of 10-year-old Katie Brown. DNA has linked Richardson to Brown's assault. Richardson was a stranger to Brown at the time of the assault.

How likely are you to convict Veronica Richardson for the sexual assault of Katie

Brown?

- Very likely (1)
 - Somewhat likely (2)
 - Somewhat unlikely (3)
 - Very unlikely (4)
-

Q21 If very likely or somewhat likely, to how many years in prison do you believe Veronica Richardson should be sentenced? Please form your response in whole numerical years only.

End of Block: Vignette 2 Q1

Start of Block: Vignette 3 Q1

Q9 Joe Martin, 30 year old male, and Veronica Richardson, 30 year old female, are on trial for the sexual assault of 10-year-old Katie Brown. DNA has linked Martin and Richardson to Brown's assault. Martin and Richardson were strangers to Brown at the time of the assault.

How likely are you to convict Joe Martin for the sexual assault of Katie Brown?

- Very likely (1)
 - Somewhat likely (2)
 - Somewhat unlikely (3)
 - Very unlikely (4)
-

Q22 If very likely or somewhat likely, to how many years in prison do you believe Joe Martin should be sentenced? Please form your response in whole numerical years only.

Q23 How likely are you to convict Veronica Richardson for the sexual assault of Katie Brown?

- Very likely (1)
- Somewhat likely (2)
- Somewhat unlikely (3)
- Very unlikely (4)

Q24 If very likely or somewhat likely, to how many years in prison do you believe Veronica Richardson should be sentenced? Please form your response in whole numerical years only.

End of Block: Vignette 3 Q1

Start of Block: Vignette 4 Q1

Q14 Veronica Richardson, 30 year old female, and Anna March, 30 year old female, are on trial for the sexual assault of 10-year-old Katie Brown. DNA has linked Richardson and March to Brown's assault. Richardson and March were strangers to Brown at the time of the assault.

How likely are you to convict Veronica Richardson for the sexual assault of Katie

Brown?

- Very likely (1)
 - Somewhat likely (2)
 - Somewhat unlikely (3)
 - Very unlikely (4)
-

Q25 If very likely or somewhat likely, to how many years in prison do you believe Veronica Richardson should be sentenced? Please form your response in whole numerical years only.

Q26 How likely are you to convict Anna March for the sexual assault of Katie Brown?

- Very likely (1)
 - Somewhat likely (2)
 - Somewhat unlikely (3)
 - Very unlikely (4)
-

Q27 If very likely or somewhat likely, to how many years in prison do you believe Anna March should be sentenced? Please form your response in whole numerical years only.

End of Block: Vignette 4 Q1