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Cluster Analysis of Psychopathology, Drug Use, Drug and Alcohol Issues, Psychosocial Stressors, and Personal Demographics of Adult Female Sex Offenders

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This is to certify that the doctoral dissertation by

Anne Cyr-Ashworth

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Walden University
2022

Abstract

Cluster Analysis of Psychopathology, Drug Use, Drug and Alcohol Issues, Psychosocial

Stressors, and Personal Demographics of Adult Female Sex Offenders

by

Anne Cyr-Ashworth

MS, Walden University, 2016

BA, Baylor University, 2008

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Clinical Psychology

Walden University

August 2022

Abstract

The purpose of this quantitative study was to examine the number and nature of clusters that emerged as common individual patterns across a set of psychopathology, drug use, drug and alcohol issues, psychosocial stressors, and personal demographics among adult female sexual offenders. A secondary purpose was to determine whether the resulting clusters were independent of characteristics of the offense and of the victim, and the relationship between the offender and victim. These data were analyzed and viewed through the lens of the attachment theory. This study used a nonexperimental correlational and static group comparison archival research designs and secondary analysis of the 2016 Survey of Prison Inmates collected by the United States Bureau of Justice Statistics. A two-step cluster analysis was used to generate groups of cases (i.e., clusters) that shared similar characteristics, using Campbell and Stanley's static group comparison design; the resulting clusters were examined for independence across 12 exploratory variables. Two clusters emerged among a set of eight variables and had a cluster quality of 0.6. Clusters differed on working 30 days prior to incarceration, psychosocial stressors index, and index of drugs ever used. Three exploratory variables were found to have an association to the clusters. Identified common factors among this population can help understand their profile and pathway to criminality as well as their rehabilitation. Findings may be used by administrators for positive social change in understanding adult female offenders.

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Chapter 1: Introduction to the Study

Introduction

Adult female sexual offenders have been at the forefront of research over the years as these crimes have received increased attention from the media (Pflugradt & Allen, 2010). Despite the increased attention, there has been a general lack of research to understanding this unique group of offenders. Various modalities of studies conducted have organized female sexual offenders by characteristics, typology, and motives, and researchers have argued that severe psychosis may be a common element among adult female sexual offenders (Gaudenti, 2006). Many factors have been identified among adult female sexual offenders.Hhowever, no direct link to sexual offending has been established among adult females. Adult female sexual offenders need to be better understood to provide effective treatment.

This quantitative research on adult female sexual offenders helps to fill a gap currently identified in the literature. This study provided additional data to an already small pool of information and contributed new knowledge to professionals who directly work with female sexual offender rehabilitation and those who work with abused children. The findings could effect positive social change by providing information to focus treatment through a taxonomic approach for adult female sexual offenders. Different modalities of offending and underlying psychological problems may be distinct in adult female sexual offending and should be explored to improve treatment for this population. Assessing psychopathology, drug use, drug and alcohol issues, psychosocial

stressors, and personal demographics of adult female sexual offenders provided data to concentrate future research on causation and/or intervention methods.

This chapter includes a synopsis of the research literature on adult sexual offenders in the background information section, the problem statement contains the issues, relevance, and significance related to this topic, the purpose of the study, and the research questions. Further, a discussion of the theoretical framework as it applies to this research is explained, along with the nature of the study, the definitions of key variables, assumptions associated with this research, the scope and delimitations, the limitations of this inquiry, the significance as it relates to positive change, and a summary of this chapter.

Background

Levenson et al. (2015) studied the relationship between adverse childhood adversities and the level of deviance and criminal behavior in the participants. They recruited 47 adult female sexual offenders and used the Adverse Childhood Experiences questionnaire to look at abuse, neglect, and dysfunction within the household (Levenson et al., 2015). The authors found that the adult female sexual offenders were exposed to substantially more sexual abuse, verbal abuse, and emotional neglect than what had been reported in the general public (Levenson et al., 2015). The researchers also found that the higher the adverse childhood experience score, the younger their victims were (Levenson et al., 2015). Additionally, higher endorsement of verbal abuse corresponded to not only younger victims, but victims who were related to the adult female sexual offender. (Levenson et al., 2015). (Levenson et al., 2015). This research was designed to create a

trauma-informed intervention and treatment for female sexual offenders (Levenson et al., 2015). While adverse childhood experiences were the focus of their study, Levenson et al. identified the need to further research traumas for purpose of diagnostic refinement and to help guide treatment among this population.

The study by Willis and Levenson (2016) was prefaced with information on early trauma and its impact on adulthood and adult criminal behavior. Willis and Levenson explained that other studies found that as the adverse childhood experience increased so did substance use, health issues, mental health disorders, and domestic violence among adult female sexual offenders. Willis and Levenson described that childhood traumas caused impairments to social, emotional, and cognitive functioning, resulting in risky behaviors by the adult female sexual offender, and, as such, these factors should be considered in the context of treatment. The purpose of their study was to explore the relationship between childhood experiences and substance use, mental health disorders, and risky behaviors (Willis & Levenson, 2016). Willis and Levenson recruited 47 adult female sexual offenders and had them complete the Adverse Childhood Experiences questionnaire. Using quantitative methods, the researchers examined the adverse childhood experiences and domains related to substance abuse, mental health problems, arrest history, and sexual behaviors of adult female sexual offenders (Willis & Levenson, 2016). Willis and Levenson found a positive correlation between childhood abuse and all domains.

Clements-Nolle et al. (2017) examined the relationship between childhood traumas and risky sexual behaviors among female adolescents. The first part of their

research assessed childhood maltreatment and unprotected sex, and the second phase looked at mediating factors such as substance use, mental health issues, and dating violence (Clements-Nolle et al., 2017). The participants comprised of 289 sexually active female juvenile offenders between the age of 13 and 17 years of age (Clements-Nolle et al., 2017). Using the National Longitudinal Study of Adolescent Health Wave III Survey, the CRAFT Screening Tool for Adolescent Substance Abuse, the Brief Symptom Inventory-18, and two questions for the 2011 Youth Risk Behavior Surveillance Survey, Clements et al. revealed that two to four types of maltreatment were experienced by these females and they were more likely to engage in unprotected sex. Further, substance use and mental health issues were significant mediators (Clements-Nolle et al., 2017).

Pflugradt, Allen, and Zintsmaster (2018) examined childhood experiences between adult female sexual offenders and adult female murderers. The sample of participants consisted of 28 female homicide offenders, 47 female sexual offenders from the Levenson et al.'s (2015) study, and 17,337 nonoffenders from the Center for Disease Control (CDC) Kaiser Permanente ACE Study conducted from 1995 to 1997 (Pflugradt, Allen, & Zintsmaster, 2018). The results were impressive in that 100% of homicide offenders endorsed one or more adverse childhood experience, and 82% of those had endorsed four or more adverse childhood experiences (Pflugradt, Allen, & Zintsmaster, 2018). Pflugradt, Allen, and Zintsmaster explained that adverse childhood experiences were significantly more endorsed by homicide offenders than by the sexual offenders and the nonoffenders. The authors revealed that both the sexual offenders and homicide offenders had reported sexual abuse, parent separation, family violence in the household,

and incarcerated family member. Pflugradt, Allen, and Zintsmaster speculated if their findings were a common criminal pathway and suggested that this should be explored in future research.

However, examining the role that adverse childhood experiences played in the development of sexual offending did not describe why these experiences contributed to sexual offending. Much of the research mentioned above found an endorsement of mental health problems and substance abuse being factors among sexual offenders. Grady et al. (2016) believed that the attachment theory may provide an explanation as to why such experiences have a profound impact on the individual, even later in life. The authors explained that insecure attachment because of childhood abuse, betrayal of trust by a caregiver, and violations of boundaries may have devastating impacts with their coping strategies and provide a distorted view of relationships (Elliot et al., 2005; Harris & Fallot, 2001; Teybure & McClure, 2011, as cited in Grady et al., 2016). The authors explained that these insecure attachments created the child's internal working model, which provided the child's response to future relationships, especially in adulthood (Grady et al., 2016). They also explained that childhood relationship patterns predicted adulthood patterns (Grady et al., 2016). Through their literature review, Grady et al. found that prior research revealed that insecure attachment correlated with greater intimacy issues, emotional, behavioral, and cognitive dysregulation in later years. The authors mentioned that trauma, attachment, and offending needed more consideration as it could provide information on appropriate treatment (Grady et al., 2016).

Sigre-Leirós et al. (2016) explored the relationship between childhood parental rearing and sexual offending among males. Generally, sexual offenders reported inconsistent rearing along with higher levels of abuse, neglect, and family disfunction (Bogaerts et al., 2005). The researchers' population comprised of 113 male sexual offenders who were child molesters and rapists (Sigre-Leirós et al., 2016). Using the Screening Scale for Pedophilic Interests, Egna Minnen Betraffande Uppfostra (My Memories of Upbringing), the Brief Symptom Inventory, and the Socially Desirable Response Set Measure – 5, Sigre-Leirós et al. compiled variables for child molesters, rapist, nonpedophiles, and nonsex offenders. The results revealed that rapists perceived their fathers as being less emotionally warm towards them while pedophiles perceived their mothers as being less emotionally warm towards them (Sigre-Leirós et al., 2016). Intrafamilial child molesters viewed their mothers' child rearing practices negatively (Sigre-Leirós et al., 2016). Further, intrafamilial child molesters and rapists reported more insecure attachments to their fathers than the other groups (Sigre-Leirós et al., 2016). However, this research excluded females.

Darling et al. (2018) examined child sexual abuse in institutional settings. The aim of this study was to analyze various variables of this unique population to assist in policy and practice advancement in supporting treatment victims and offenders (Darling et al., 2018). The authors reviewed court records, professional board hearing decisions, and sentencing database in the United Kingdom of adult female sexual offenders who were caregivers, educators, and other organizational workers (Darling et al., 2018). The information gathered came from public sources such as lawpages.com and

theukdatabase.com (Darling et al., 2018). The sample consisted of 71 adult female sexual

offenders who worked in institutional organizations at the time of the offense (Darling et

al., 2018). Darling et al. categorized their findings according to characteristics of the

female offender, characteristics of the victim, the mode of operation, criminal justice

system response, and criminal justice outcomes. The authors reported that adult female

sexual offenders had no criminal histories, most were between their mid-20s to mid-30s,

and most were established professionals within their organizations (Darling et al., 2018).

The researchers found that these women used relationship issues, external locus of

control, mental health problems, low self-esteem, substance use, feelings of isolation, and

loneliness as justification for their behaviors (Darling et al., 2018). Further, Darling et al.

revealed that this particular group of offenders did not enter employment for the purpose

of abusing children and offended to meet their need for intimacy and social contact.

Darling et al. reported that more studies should be conducted with regard to females who

abuse teenagers and same sex abusers.

The study by Christensen and Darling (2020) juxtaposed male and female

teachers who had sexually abused children while working in the school setting. The

authors compared 20 males and 20 females who were employed as teachers at the time of

the offense (Christensen & Darling, 2020). Using publicly available data of the

professional conduct panel through www.gov.uk, Christensen and Darling found 15

variables that fit under three categories: teacher characteristics, victim characteristics, and

other characteristics. Christensen and Darling revealed that males were older than

females at the time of the offense, none of the teachers had criminal histories, and the

majority were in their midcareer stage of their profession at the time of the offense. The authors found that 35% of men were reprimanded for inappropriate conduct with students while women had no infractions (Christensen & Darling, 2020). The researchers uncovered that the majority of the victims for both groups were of the opposite sex from the offender, and most victims were between the ages of 13 and 17 years (Christensen & Darling, 2020). The authors revealed males had abused students at an average of 12 months or more while women ranged from 6 to 12 months or less than 6 months (Christensen & Darling, 2020). Lastly, Christensen and Darling found males were more likely to engage in sexual intercourse while females engaged in sexualized talk in person or through technology. Christensen and Darling uncovered the offenders often minimized or denied the allegations, they blamed it on their poor mental health or their significant life stressors, and some were teachers who had been certified immediately after high school graduation and had returned to the same school. However, there was one theme seen among the female offenders in which they claimed they were passive in their offending role and suggested that they were the victim in the situation because they were scared, and they were taken advantage of by the student (Christensen & Darling, 2020).

The purpose of the research by Sitney and Kaufman (2020) was to understand how juveniles saw their relationships with their caregivers, and if nonbiological caregivers had an impact on the juveniles. The authors recruited 310 incarcerated male juvenile sexual offenders, 119 violent male juveniles, and nonviolent male juveniles (Sitney & Kaufman, 2020). Sitney and Kaufman gathered demographic information on the juveniles and the current criminal charge and had them complete the Perceived

Relationship with Supervisor Scale questionnaire. The results suggested more juvenile sexual offenders had experienced substituted caregiving; however, nonbiological caregivers had significantly more positive impacts (Sitney & Kaufman, 2020).

Thus, there was a need to better understand the roles that psychopathology, drug use, drug and alcohol issues, psychosocial stressors, and personal demographics played in the development of differentiating taxonomies of adult female sexual offenders as described by the literature above. In previous research, these factors were often very specific to the population studied (e.g. adolescent males, adolescent females, adult males, male and female teachers, etc…) and did not pertain to adult female sexual offenders. Expanding on this area of research may help understand different profiles of adult female sexual offenders, and, more importantly, better guide treatment and intervention protocols specific to the defining characteristics of an individual's profile (Grady et al., 2016; McCartan & Gunnison, 2010). It is necessary to expand knowledge on adult female sexual offenders and provide treatment specific to address their needs.

Problem Statement

Adult female sexual offenders have been at the forefront of research over the years as these crimes have received increased attention from the media (Pflugradt & Allen, 2010). Despite the increased attention, there has been a general lack of research to understanding this unique group of offenders. Various modalities of studies conducted have organized female sexual offenders by characteristics, typology, motives, and researchers have argued that severe psychosis may be a common element among adult female sexual offenders (Gaudenti, 2006). Several factors have been identified among

adult female sexual offenders. However, no direct link to sexual offending has been established among adult females.

Many researchers have focused on adverse childhood experiences with variating results. Levenson et al. (2015) identified that higher adverse childhood experiences resulted in younger female victims. From those adverse childhood experiences, children under the age of 6 developed insecure attachment to their primary caregivers, and they were predisposed for future criminal behaviors to include sexual offending (Grady et al., 2016). The authors further proposed the idea that the attachment theory provided an explanation of etiology between childhood abuse and sexual offending (Grady et al., 2016). Yoder et al. (2018) explained youths who exhibited problematic sexual behaviors reported deficits in their family relationships. Parental care has provided insight into the level of attachment adult female sexual offenders experienced during their childhood. Grady et al. (2016) suggested that further research is warranted on the relationship between trauma, attachment, and sexual offending, especially among adult females.

Some studies identified parental nurturance as a possible factor among sexual offenders. Sigre-Leirós et al. (2016) found that adult male sexual offenders had insecure attachment to their parents. These poor relationships with their parents seemed to echo in another research. In a study of male juvenile sexual offenders, Sitney and Kaufman (2020) found that juvenile sexual offenders differed from other offenders as they had poor quality of care by caregivers; however, juvenile sexual offenders were positively impacted by nonbiological caregivers. While these studies provided some insight about the attachment of sexual offenders, these studies excluded females.

Insecure attachment has been proven to have devastating impacts to one's level of functioning. Childhood abuse, betrayal of trust by a caregiver, and violations of boundaries as a result of insecure attachment usually have disastrous influences on coping strategies and provide a distorted view of their personal relationships (Grady et al., 2016). Willis and Levenson (2016) reported that an increase in adverse childhood experiences resulted in elevations in substance use, medical related issues, mental health disorders, and adulthood traumas such as domestic violence. While dating violence was not a mediating factor in their research, Clements-Nolle et al. (2017) found that approximately 42% of female adolescent offenders had endorsed this element. Moreover, Levenson et al. (2015) identified the need to further research adulthood traumas for purpose of diagnostic refinement and to help guide treatment among this identified population. In addition, Pflugradt, Allen, and Zintsmaster (2018) questioned if abuse, domestic violence, and psychosocial stressors were a common criminal pathway and suggested that these factors should be further explored.

Reasons given for sexual offending have been attributed to locus of control, significant life stressors, and substance use (Christensen & Darling, 2020; Darling et al., 2018). Darling et al. (2018) explained that the sexual offenders often attribute the event as being outside of their control and often blame the victims by reporting that they were intimidated, harassed, or sexually assaulted by the young victims. Christensen and Darling (2020) mentioned that poor mental health and the sexual offenders' inability to cope with their daily stressors were also endorsed as causes for offending. Another reason given by a caregiver to sexually abuse children was substance use (Darling et al., 2018).

Clements-Nolle et al. (2017) reported that more than 75% of their female juvenile offenders met the criteria for substance use. Further, Willis and Levenson (2016) found that there was a positive correlation between childhood abuse and substance use among adult female sexual offenders.

While much of the above literature specifically addressed adult female sexual offenders, other research distinctively targeted males and adolescents in their studies. This information cannot be generalized across different populations. There was a need to better understand the roles that psychopathology, drug use, drug and alcohol issues, psychosocial stressors, and personal demographics played in the development of differentiating taxonomies of adult female sexual offenders. The furtherance of research on these factors is needed for the advancement of treatment for this population.

Purpose of the Study

The purpose of this quantitative study was to examine the number and nature of clusters that emerged as common individual patterns across a set of psychopathology, drug use, drug and alcohol issues, psychosocial stressors, and personal demographics among adult female sexual offenders. A secondary purpose was to determine whether the resulting clusters were independent of characteristics of the offense and of the victim and relationship between offender and victim. Psychopathology were diagnosed disorders such as anxiety, various types of depression, posttraumatic stress, any type of personality disorder, any type of psychotic disorder, or any other type of diagnosed mental or emotional condition. Examples of drugs included marijuana, cocaine, methamphetamines, and prescription medication other than prescribed. Drug and alcohol

issues were problems with emotional, physical health, physical danger, trouble with the law, giving up on important activities, issues at home/school/work, and problems with family and friends as they related to drug and alcohol use. Psychosocial stressors included measures of stress related to the participant's childhood experiences such as parental and sibling incarceration, and others such as homelessness, living in a foster home or public housing, or having welfare assistance prior to age 18. Personal demographics included highest level of education, age, marital status, and employment prior to incarceration. The secondary purpose incorporated variables related to offense characteristics such as the type of offense, whether the participant acted alone or with an accomplice, and if this offense involved drugs and/or alcohol. Victim characteristics included the number of victims, the sex, the age range, and measures related to the offender's relationship to the victim. Lastly, offender characteristics such as education and race were also assessed.

Research Questions

1. Research Question (RQ)1: How many differentiating taxonomies existed of adult female sexual offenders across a set of psychopathology disorders, drug use, drug and alcohol issues, psychosocial stressors, and personal demographics variables?

   Analysis 1: Two-step cluster analysis.

   Hypotheses: A hypothesis required a statistical test that yielded a probability value. Cluster analysis had no such p-value, so a hypothesis was not possible.

The value of the silhouette measure of cohesion and separation was reported as an index of cluster quality.

2. RQ2: What were the shared defining characteristics of individuals grouped together in a cluster?

   Analysis 2: Two-step cluster analysis with focus on cluster centroids, standardized loadings of metric variables, and adjusted standardized residuals of categorical variables.

   Hypotheses: As with RQ1, a hypothesis was not possible.

3. RQ3: To what extent were taxonomies evenly distributed (i.e., % of cases in each cluster), and if not evenly distributed, what characterized the rare cluster with the vast majority of cases?

   Analysis 3: One-way chi square test of independence.

   Null: The clusters had an even distribution of cases.

   Alternative: The clusters did not have an even distribution of cases.

4. RQ4: To what extent were the resulting clusters independent of each of the 12 exploratory variables?

   Analysis 4: Chi square tests of independence.

   Hypotheses: This was an exploratory RQ and hypotheses about the association between the resulting clusters, and each of the exploratory variables were not warranted.

The variables in this research were psychopathology, drug use, drug and alcohol issues, psychosocial stressors, and personal demographics among adult female sexual

offenders. Psychopathology were diagnosed disorders such as anxiety, various types of depression, posttraumatic stress, any type of personality disorder, any type of psychotic disorder, or any other type of diagnosed mental or emotional condition. Examples of drugs included marijuana, cocaine, methamphetamines, and prescription medication other than prescribed. Drug and alcohol issues were problems with emotional health, physical health, physical danger, trouble with the law, giving up on important activities, issues at home/school/work, and problems with family and friends as they related to drug and alcohol use. Psychosocial stressors were measures of stress related to the participants' childhood experiences such as parental and sibling incarceration, and others such as homelessness, living in a foster home or public housing, or having welfare assistance prior to age 18. Personal demographics included highest level of education, age, marital status, and employment prior to incarceration. These variables were studied through clustering. Cluster analysis is a mathematical method of classifying data from a population into groups (Romesburg, 2004). This method is further explained in Chapter 3. The secondary purpose included variables related to offense characteristics, such as the type of offense, whether the participant acted alone or with an accomplice, and if this offense involved drugs and/or alcohol. Victim characteristics included the number of victims, the sex, the age range, and measures related to the offender's relationship to the victim. Lastly, offender characteristics such as education and race were also assessed.

Theoretical Framework for the Study

The theoretical framework used in this study was the attachment theory by Bowlby (1988). The premise of his study was that the attachment theory not only

addressed the attachment of a child to a caregiver but also gave reference to their

behavior (Bowlby, 1988). According to Bowlby's theory, a child's pattern of

development, as nurtured by the parent, determined whether a child had a secure or

disturbed development of attachment that manifested throughout their childhood and

adulthood with other figures. This theory posited that a child's attachment to their

caregiver, usually a mother, determined not only their behavior throughout their

childhood but also their level of attachment in future relationships with other people.

The attachment theory provided an explanation of the adult female sexual

offender's psychopathology, drug use, drug and alcohol issues, psychosocial stressors,

and personal demographics factors. The use of this theory directly applied to the

population being studied and is further explained in the second chapter.

Nature of the Study

To address the RQs in this quantitative study, a cluster analysis was used to

classify participants into similar and dissimilar groups. Specifically, a two-step cluster

analysis was conducted to examine the number and nature of distinct taxonomies of adult

female sexual offenders across a set of psychopathology, drug use, drug and alcohol

issues, psychosocial stressors, and personal demographics. A two-step cluster analysis

grouped individuals together based on shared profiles rather than by hierarchies (see

Romesburg, 2004). This method was better suited to answer the RQs, which involved

taxonomies and common characteristics shared in a group. The relationships among

variables within each cluster were viewed through the attachment theory to explain the

taxonomies. The key variables in this study were psychopathology, drug use, drug and

alcohol issues, psychosocial stressors, and personal demographics. The exploratory analysis included measures related to the offense characteristics, victim characteristics, and offender characteristics. Archival data (study #37692) collected by the United States Bureau of Justice Statistics (2021), which was found on the Inter-university Consortium for Political and Social Research (ICPSR) website, were used for this research.

Definitions

In order to understand findings in this study, it was imperative to define each variable.

Adult female sexual offenders: People who were assigned to the female gender at birth, were 18 years of age or older, and were convicted of a sexual offense (Kipane, 2014).

Drug and/or alcohol issues: Problems related to the utilization of alcohol, prescription medication, or illegal drugs which impairs one's ability to function (American Psychiatric Association, 2021).

Drug use: The usage of illegal drugs (National Institute on Drug Abuse, 2018).

Offender characteristics: Variables related to the offender's race and education (Christensen & Darling, 2020).

Offense characteristics: "The elements of the crime and the aggravating and mitigating factors relating to the offense" (Law Insider, 2022, p. 1).

Personal demographics: Attributes of a particular population, which included age, education, marital status, and employment (yourdictionairy, n.d.).

Psychopathology: The presence of behavioral or cognitive problems or disorders (American Psychological Association [APA], 2020).

Psychosocial stressors: Life circumstances that brought about a high degree of stress and generated or aggravated mental health (APA, 2020).

Victim characteristics: The victim's gender, age, relationship to the offender, and the number of victims (Christensen & Darling, 2020). It also includes the amount of contact an offender and victim had with one another (Turvey & Freeman, 2014).

Assumptions

For this research, the main assumptions were that archival data did not have missing information, the data collected met criteria of this research's definitions, all variables were available, and the sample size was large enough to produce meaningful inferences.

Scope and Delimitations

For this study, five variables were identified: psychopathology, drug use, drug and alcohol issues, psychosocial stressors, and personal demographics. Prior research have focused on adverse childhood experiences, which have often been correlated with other variables, such as mental health, maladaptive coping skills, age of the victim, domestic violence, substance use, and adulthood traumas (Levenson et al., 2015; Strickland, 2008; Willis & Levenson, 2016). Additionally, Grady et al. (2016) proposed that the attachment theory offered a link between childhood adverse experiences and sexual offending. The attachment theory was ideal in explaining this phenomenon. Grady et al. reported that more research on trauma, attachment, and sexual offending to further knowledge about

adult female sexual offenders was warranted, and Levenson et al. (2015) stated that further research on traumas should be further explored for diagnostic and treatment purposes. Additionally, Pflugradt, Allen, and Zintsmaster (2018) reported murderers and sexual offenders had significant endorsements for sexual abuse, parent separation, domestic violence, and parental incarceration, and these variables warranted further research.

Other reasons for sexual offending were due to having significant life stressors and substance use (Christensen & Darling, 2020; Darling et al., 2018). However, their research applied only to adult females who worked as educators or in institutional settings. In another study, the data were collected from a female juvenile population.

More data were needed to understand psychopathology, drug use, drug and alcohol issues, psychosocial stressors, and personal demographics among adult female sexual offenders. While much of the above literature specifically addressed adult female sexual offenders, other studies have distinctively targeted males and adolescents. This information could not be assumed across different populations. There was a need to better understand the roles that psychopathology, drug use, drug and alcohol issues, psychosocial stressors, and personal demographics played in the development of differentiating taxonomies of adult female sexual offenders. Further, the classification of these variables was best measured by a two-step cluster analysis.

My research was bound to a narrow parameter of operation due to the utilization of archival data. Issues related to missing data were a factor that caused exclusion of data from this study. My research specifically targeted adult female sexual offenders

incarcerated in the United States. I did not focus on other adult female sexual offenders in other countries, nor male or juvenile sexual offenders. This research was only focused on the attachment theory and not focused on punishment or the rehabilitation of this population. This research provided a gateway to future research for the purpose of treatment of adult female sexual offenders.

Limitations

The unique population of this study posed some challenges in reference to the population size as some females who have offended could have been excluded from this study for the reasons listed below. Adult female sexual offenders make up approximately 2% of reported cases in the United States, while surveys completed by victims indicated that approximately 12% of offenders are females (Cortoni et al., 2017). These statistics reveal a 10% gap of unreported offenses perpetrated by females. Mackelprang and Becker (2017) explained that attractive women were favored and received a lesser punishment when their crimes were compared to males, and unattractive females received comparable punishments to males. This perception, if also applied by jurors, judges, and attorneys, diminished this sample size. Also, findings by Shields and Cochran (2020) revealed female offenders were viewed as being less dangerous and often received community supervision in lieu of time in prison. Further, it was my experience as a crime against children detective for nearly 7 years that attorneys often tried to reach plea bargains to receive a favorable outcome and prevented the case from going to trial to reduce the backlogging of the court system. These plea bargains at times reduced the sexual abuse charges, which required registration as a sex offender, to a lesser offense,

such as injury to a child or endangering a child. In contrast, these offenses did not require registration and appeared more favorable in society.

Another limitation was missing data, which further reduced the amount of information from the archival data that could be used. The limitation related to missing data could not be controlled by me. As for the variables being available and meeting the definition, I did not have to exclude any variables to complete this research, and I did not need to be flexible in the definitions of the variables.

Significance

Although there has been more media coverage on adult female sexual offenders, there exists a deficit in available data to better understand this unique population (Christopher et al., 2007; Loper et al., 2008; Pflugradt & Allen, 2010). This quantitative research on adult female sexual offenders helped fill a gap that was identified in the literature. This study provided additional data to an already small pool of information and further contributed new knowledge to professionals who directly work with female sexual offender. This research provided further understanding of adult female sexual offenders to provide effective treatment post offense through the justice system (e.g. juvenile detention centers, adult jails and prisons, probation, parole) and offered a new perspective for treatment in private practice by psychologists and counselors.

The findings could effect positive social change by providing information to effect policy change for treatment that addresses psychopathology, drug use, drug and alcohol issues, psychosocial stressors, and personal demographics. A secondary purpose was to determine whether the resulting clusters were independent of characteristics of the

offense and of the victim and relationship between offender and victim. A taxonomic approach provided useful information in the treatment of adult female sexual offenders. Different modalities of offending and psychosocial stressors may be distinct in adult female sexual offending and should be explored to improve treatment for this population. Assessing psychosocial stressors of adult female sexual offenders provided data to concentrate future research on causation, treatment, and/or intervention methods.

Summary

Adult female sexual offenders have been at the forefront of research over the years as these crimes have received increased attention from the media (Pflugradt & Allen, 2010). Despite the increased attention, there was a general lack of research to understand this unique group of offenders. The purpose of this quantitative study was to conduct a two-step cluster analysis to examine the number and nature of distinct taxonomies of adult female sexual offenders across a set of psychopathology, drug use, drug and alcohol issues, psychosocial stressors, and personal demographics among adult female sexual offenders. A secondary purpose was to determine whether the resulting clusters were independent of characteristics of the offense and of the victim, and relationship between offender and victim. Psychopathology was diagnosed disorders such as anxiety, various types of depression, posttraumatic stress, any type of personality disorder, any type of psychotic disorder, or any other type of diagnosed mental or emotional condition. Examples of drugs included marijuana, cocaine, methamphetamines, and prescription medication other than prescribed. Drug and alcohol issues were problems with emotional health, physical health, physical danger, trouble

with the law, giving up on important activities, issues at home/school/work, and problems with family and friends as they related to drug and alcohol use. Psychosocial stressors included measures of stress related to the participant's childhood experiences such as parental and sibling incarceration, and others such as homelessness, living in a foster home or public housing, or having welfare assistance prior to age 18. Personal demographics incorporated the highest level of education, age, marital status, and employment prior to incarceration. The secondary purpose included variables related to offense characteristics such as the type of offense, whether the participant acted alone or with an accomplice, and if this offense involved drugs and/or alcohol. Victim characteristics included the number of victims, the sex, the age range, and measures related to the offender's relationship to the victim. Lastly, offender characteristics such as education and race were also assessed. The attachment theory was the theoretical framework for this research, which directly applied to this population. The data were retrieved from the ICPSR website (www.icpsr.umich.edu; study #37692). Missing data and unreported offenders were limitations identified for this study. The findings could effect positive social change by providing data to concentrate future research on causation, treatment, and intervention methods.

Chapter 1 set forth the groundwork for the direction of this research. The next chapter addresses the method of search implemented, the theoretical foundation, and a review of the literature for this study.

Chapter 2: Literature Review

Introduction

Adult female sexual offenders have been at the forefront of research over the years as these crimes have received increased attention from the media (Pflugradt & Allen, 2010). Despite the increased attention, there has been a general lack of research to understand this unique group of offenders. More data were needed to understand adult female sexual offenders. Some of the literature mentioned in Chapter 1 specifically addressed adult female sexual offenders, while other studies distinctively targeted male and juvenile offenders. This information should not be generalized across different populations.

Researchers have focused on adverse childhood experiences with variating results. Levenson et al. (2015) reported that high scores on the childhood adverse experiences resulted in younger victims. Trauma and other experiences during childhood contributed to insecure attachment, which predisposed these children to criminality in later years (Grady et al., 2016). Parental nurturance has played an important role in the development from childhood to adulthood, and children with problematic sexual behaviors have often reported having poor relationships and insecure attachments with their primary caregiver (Sigre-Leirós et al., 2018; Yoder et al., 2018). Adverse childhood experiences also influenced substance use, mental health disorders, medical related issues, and adulthood traumas from abusive relationships (Willis & Levenson, 2016). Reasons given for sexual offending were due to locus of control, significant life stressors, and substance use (Christensen & Darling, 2020; Darling et al., 2018). Additional

research were needed to better understand the differentiating taxonomies among adult female sexual offenders.

The purpose of this quantitative study was to examine the number and nature of clusters that emerged as common individual patterns across a set of psychopathology, drug use, drug and alcohol issues, psychosocial stressors, and personal demographics among adult female sexual offenders. A secondary purpose was to determine whether the resulting clusters were independent of characteristics of the offense and of the victim, and relationship between offender and victim. In this chapter, the search strategy is discussed along with the theoretical foundation of this research and the literature review of key variables.

Literature Search Strategy

While I explored for literature related to this research, the online database from Walden University Library and the Scholar Google sites were searched. In the Walden University Library, the probing was done under the topic of psychology, using the PyscInfo, PsyArticles, Sage, SocIndex, and ProQuest databases. The main key terms used were *women sexual offenders* and *female sexual offenders*. These key words were then combined with other words to provide more focused searches. The years explored had a range of 1980 to present, and through the search options, the preference for peer-reviewed scholarly journals was selected. These articles were downloaded for review. It became apparent that saturation was reached, and there were limited data that specifically applied to adult female sexual offenders when the same articles came up in all searches. I initially began the review with older articles to explore the foundation of the literature on

this topic. Because of the limited number of articles on the adult female sexual offenders, a broad search was conducted to find additional data about offenders in order to provide additional information not found in the original exploration of the key words women sexual offenders and female sexual offenders. The terms *sex offenders, sexual offenders,* and *sexual abusers* were used to focus on certain variables. See the Appendix for more information on the terms used. The Google Scholar search engine was used to find additional articles, and I used the same key terms listed above and in the Appendix. For any new articles found, I searched the title in the Walden University Library to download the article. I also examined the references of these articles, and new articles were downloaded from the Walden University Library.

Theoretical Foundation

The attachment theory by Bowlby (1988) was the theoretical framework used in this study. The premise of his study was that attachment theory has not only addressed the bonding of a child to a caregiver but has also given reference to their behavior (Bowlby, 1988). According to Bowlby, a child's pattern of development, as nurtured by the parent, determined whether a child had a secure or disturbed development of attachment that manifested throughout their childhood and adulthood with other figures. This theory posited that a child's attachment to their caregiver, usually a mother, determined not only their behavior throughout their childhood but also the level of attachment in future relationships with other people. According to this theory, the mother or primary caregiver was largely responsible for the development of healthy attachment. To the child, the mother or primary caregiver was a place of safety, the "secure base,"

from which the child left and returned when exploring new environments (Bowlby, 1988,

p. 46). The mother or primary caregiver set the tone as to how the child would develop

and would behave in the future. Bowlby identified three patterns of attachment: secure,

anxious ambivalent, and anxious avoidant. These have been recognized through the work

of Ainsworth (as cited in Krumwiede, 2001). Ainsworth had children and parents

participate in a scenario in which they were in a room, a stranger arrived, the child was

left alone with the stranger, and the parent returned (as cited in Krumwiede, 2001, p. 7).

Based on the child's reaction throughout the experiment, she classified the children into

three levels of attachment quality: securely attached, anxious-avoidant attachment, and

anxious-ambivalent attachment (as cited in Krumwiede, 2001). The securely attached

children sought their mother and accepted comfort or even an offer to play by the

stranger, reunited with their mother in a joyful manner, and sought close physical contact

with their mother (as cited in Krumwiede, 2001). The more secure a child felt, the more

they were willing to explore their environment and returned to their mother to seek

comfort when uncertain about their environment. Bowlby's secure child was confident

their parent would respond to them and would help in times of uncertainty. The anxious-

avoidant children ignored their mother exiting the room without disruption to play, they

engaged in more play with the stranger as compared to their mother, and they avoided

contact with the mother upon her return (as cited in Krumwiede, 2001). The anxious

avoidant child expected to be rejected by their mother and went through life without

expectations of love or help from others (Bowlby, 1988). The anxious-ambivalent

attached children cried incessantly upon their mother's departure, were not comforted by

the stranger, and expressed annoyance while greeting their mothers (as cited in Krumwiede, 2001). The anxious ambivalent child was provided with inconsistent responses and help from the mother or primary caregiver, and this uncertainty incited anxiety in the child (Bowlby, 1988). Bowlby explained that such child often, without intervention, developed various degrees of psychopathic disorders. This process was largely determined by the distance of the proximity from their mother who was their "secure base" (Bowlby, 1988, p. 46).

For this research, several assumptions were considered. Per Grady et al. (2016), the attachment theory explained how childhood abuse contributed to perpetrating sexual abuse. The authors explained that insecure attachment because of childhood abuse, betrayal of trust by a caregiver, and violations of boundaries possibly had devastating impacts with their coping strategies and provide a distorted view of relationships (Elliot et al., 2005; Harris & Fallot, 2001; Teybure & McClure, 2011, as cited by Grady et al., 2016). The authors explained that these insecure attachments created the child's internal working model, which provided the child's response to future relationships, especially in adulthood (Grady et al., 2016). They also explained that childhood relationship patterns predicted adulthood patterns (Grady et al., 2016). Through their literature review, Grady et al. found that prior research reported that insecure attachment correlated with greater intimacy, emotional, behavioral, and cognitive dysregulation in later years. Per Sigre-Leirós et al. (2016), male intrafamilial child molesters and rapists reported more insecure attachments to their fathers than the other groups.

Grady and Shields (2018) conducted a study with 59 males who were incarcerated and convicted of a sexual offense. The authors posited that because of their anxious and insecure attachment style, the male sexual offenders had issues with emotional regulation (Grady & Shields, 2018). The findings supported their hypothesis. This theory was further developed to an adult style of attachment by Marshall (1989; as cited by Staufenberg 2010) in which they posited that due to the insecure attachment, the sexual offender was unable to establish intimacy within a relationship and pursued inappropriate sexual relationship to fill this need.

Ward et al. (1995) formulated an attachment model related to intimacy in sexual offenders. Their model divided the insecurely attached into three categories: anxious/ambivalent, avoidant I, and avoidant II (Ward et al., 1995). The anxious /ambivalent group sought relationships and tended to quickly become infatuated with their partner (Ward et al., 1995). Ward et al. explained that this group lacked confidence, sought approval from others, and felt unworthy of love, but they sought partners they could control and easily related to needy children. Ward et al. asserted that these individuals were "sexually preoccupied" (p. 325) and defined their offending against a child in sexual terms. These types of offenders were those who took the time to groom their victims (Ward et al., 1995). Avoidant I desired closeness but were fearful of rejection and viewed their relationship with their partners in negative terms (Ward et al., 1995). This avoidance led to a lack of social skills and intimacy, making relationships with other adults nearly impossible (Ward et al., 1995). Ward et al. explained that this category of male offenders had no personal contact with the victim, lacked empathy, and

did not feel guilt. This group included exhibitionism, voyeurism, and child molestation.

Avoidant II male sexual offenders were independent and did not seek intimacy (Ward et

al., 1995). This group was often hostile towards their partner and had no empathy for

their partner or victim (Ward et al., 1995). Offenders who fell within this category were

aggressive in their manner of approach (Ward et al., 1995). While several articles

addressed the attachment style of male sexual offenders, at the time of this research, only

one study was found to address adult female sexual offenders. Harrati et al. (2014)

examined the attachment of adult female sexual offenders and adult female murderers.

With the use of the Thematic Apperception Test, the authors found that this population of

women had a "détaché" (p. 520; detached) style of attachment (Harrati et al., 2014). This

meant that these women were often emotionally devoid (Harrati et al., 2014). This deficit

highlighted the caliber of connections adult female sexual offenders had with others.

The attachment theory was justified by Grady et al. (2016) as it provided an

explanation of the relationship between childhood experiences and sex offending. The

attachment theory addressed various aspects of this research with respect to

psychopathology, drug use, drug and alcohol use, psychosocial stressors, and personal

demographics. This theory identified abused children by simply observing the bonding of

children to their mother. Bowlby (1988) explained that anxious ambivalent children often

had parents who were inconsistent in their level of responsiveness, separation, and threats

of abandonment. These parents may at times resorted to emotional blackmail to gain

control of a child's behavior. In observing these children in a childcare setting, these

children were often described as being demanding of attention, having poor level of

control, and having a low tolerance for frustration (Bowlby, 1988). Anxious-avoidant

children were raised by a mother or primary caregiver who rejected the child and was

unloving (Bowlby, 1988). Bowlby explained that constant rejection, abuse, neglect, and

extended times in institutions resulted in issues with psychopathy. These children often

had behavioral issues and were observed in childcare facilities as they required excessive

amount of attention (Bowlby, 1988). They were emotionally indifferent and detached;

they were aggressive and antisocial (Bowlby, 1988). The attachment quality provided me

with insight into the adult female sexual offender's psychopathology, drug use, drug and

alcohol issues, and psychosocial stressors.

Mothers who had physically abused their children were often found to have been

subjected to the same abuse as children (Bowlby, 1988). This multigenerational abuse

continued to perpetuate unless it was intervened (Bowlby, 1988). These mothers were

described as being impulsive and immature, but they had long interval of acute anxiety

followed by violent outbursts (Bowlby, 1988). Bowlby (1988) explained that poorly

attached individuals used anxiety and aggression to cope with circumstances that were

perceived as normal to them but out of context from others (Bowlby, 1988). While these

mothers longed for love, they were unable to maintain close relationships due to high

levels of distrust (Bowlby, 1988). Because of their isolation, they sought comfort from

their own children to fill that void, often treating these children as they were adults

(Bowlby, 1988). Further, according to Bowlby, women in violent relationships were

themselves battered as children and viewed this behavior as the norm. These women

often stayed in these relationships because of their need of having a caregiver and fearing

loneliness (Bowlby, 1988). White (2005) explained that attachment to the primary caregiver had a primitive function in providing care and protection to the child when the child was threatened. When the attachment failed, the process continued at an unconscious level until it was triggered by the loss of their primary caregiver or another encounter of loss (White, 2005). In patients with a history of childhood onset of sexual abuse, White found the patients experienced regular incidences of unwanted sexual thoughts and found pleasure in inflicting and receiving pain for sexual gratification. The patients used deviant sexual activity to exact relief.

Literature Review Related to Key Variables

For this study, I chose a cluster analysis as the quantitative method to examine the differentiating taxonomies present among adult female sexual offenders across a set of psychopathology, drug use, drug and alcohol issues, psychosocial stressors, and personal demographics. This method was used in a study by Ferguson and Meehan (2005) in their search for trends and patterns among adult female sexual offenders. Soldino et al. (2019) also conducted a cluster analysis in examining personality patterns among adult male sexual offenders.

With reference to approaches by other researchers, I found that many studies were focused on male offenders, related to juveniles, or had a small sample size. Many articles found for this research involved the comparison of adult male sexual offenders to adult female sexual offenders. While this provided insight into an underrepresented population, many researchers have found many differences when comparing adult female sexual offenders to adult male sexual offenders (Miccio-Fonseca, 2000; Pflugradt, Allen, &

Marshall, 2018; William & Bierie, 2015). These differences are further discussed later in

this chapter. Additionally, juveniles were studied by Roe-Sepowitz and Krysik (2008),

Prinsloo and da Costa (2017), Sitney and Kaufman (2020), and Clement-Nolle et al.

(2017). While the information provided by these authors was important, it cannot be

assumed to apply to adult female sexual offenders. Another weakness was the sampling

size of adult female sexual offenders. Many researchers have used a population size

ranging from 12 to 90 adult female sexual offenders (Beech et al., 2009; Christensen &

Darling 2020; Christopher et al., 2007; DeCou et al., 2015; Gannon et al., 2010; Gillespie

et al., 2015; Levenson et al., 2015; Lewis & Stanley, 2000; Mathews et al., 1989; Miccio-

Fonseca, 2000; Nathan & Ward, 2002; Pflugradt, Allen, & Zintsmaster, 2018; Strickland,

2008; Willis & Levenson, 2016). For example, Miccio-Fonseca (2000) used 18 adult

female sexual offenders and compared them to 332 adult male sexual offenders and 215

nonoffending females. While this study did provide additional information, the

generalizability of 18 women compared to 332 men was not representative of the whole

population. When a sample size was not available, researchers turned to archival data or

governmental records (Bensel et al., 2019; Bickart et al., 2019; Christensen & Darling,

2020; Cortoni et al., 2017; Darling et al., 2018; Harrati et al., 2018; Marshall & Miller,

2019; McLeod, 2015; Turner et al., 2008; Vandiver et al., 2019; Williams & Bierie,

2015) in an effort to provide an analysis to readily available data, or used a compilation

of others' research (Christiansen & Thyer, 2002; Grady et al., 2016; Pflugradt, Allen, &

Zintsmaster, 2018; Robertiello & Terry, 2007; Solis & Benedek, 2012) to write reviews

of existing data on this topic.

There was a need to better understand the roles that psychopathology, drug use, drug and alcohol issues, psychosocial stressors, and personal demographics played in the development of differentiating taxonomies of adult female sexual offenders. Information regarding juveniles or male offenders should not be assumed to represent this unique population. Expanding on this area of research helped understand different profiles of adult female sexual offenders, and, more importantly, better guide treatment specific to the defining characteristics of an individual's profile (Grady et al., 2016; McCartan & Gunnison, 2010).

Comparison of Male and Female Sexual Offenders as Related to Personal Demographics, and Victim, Offender, and Offense Characteristics

Many researchers have stated that adult female sexual offenders differ from adult male sexual offenders (Miccio-Fonseca, 2000; Pflugradt, Allen, & Marshall, 2018; William & Bierie, 2015), and this warranted a closer look at adult female sexual offenders. In a study by Cortoni et al. (2017), they collected and processed the data from 12 countries to reveal that when they only considered reported crimes, female sexual offenders made up about 2%. Of those offenders, juvenile female sexual offenders 18 years of age or younger were slightly higher than the adult female sexual offender population (Cortoni et al., 2017). When reviewing solely victimization data, female sexual offenders comprised approximately 12% of offenders (Cortoni et al., 2017). These authors also found that female sexual offenders targeted male victims at a higher rate than female victims (Bensen et al., 2019; Bourke et al., 2014; Cortoni et al., 2017). However, this was a contradiction of earlier studies from other researchers. William and Bierie

(2015) found approximately 50% of the cases females had offended against a victim of the same sex and McLeod (2015) reached the same conclusion with reference to perpetrating on same sex victims in about 68% of the cases.

Miccio-Fonseca (2000) compared males and females among various variables and found some similarities and differences. The age, ethnicity, education level, and life stressors were generally similar in both groups; however, differences were apparent for psychological problems, sexual history, their victimization, and choice in victims (Miccio-Fonseca, 2000). A higher percentage of females had attempted suicide, reported fewer to no sexual partners within a year, and had a higher rate of sexual abuse in their formative years as opposed to their male counterparts (Miccio-Fonseca, 2000). However, adult female sexual offenders' answers were of interest when questioned about their choice of victims. Miccio-Fonseca found that approximately 15% of men had victims of both genders while females reported none, and males were less likely to victimize another male family member. Generally, males felt the need to have power and control over their victims as an element of their sexual offending behaviors while females did not. Common factors were not found among adult female sexual offenders (Miccio-Fonseca, 2000). Additionally, common motives for offending were due to coercion, rejection, revenge, and jealousy at a pathological level (Nathan & Ward, 2002). Other similarities and differences were found among incidents. William and Bierie (2015) found that both groups predominantly offended in their own home, the victim was usually an acquaintance, injuries and drug abuse were rare in these cases. However, this was not the case in a study by Nathan and Ward (2002) who found that a majority of their cases the

offense occurred in the victim's home. When looking beyond the wide trends they found differences among the other variables. For example, William and Bierie uncovered that alcohol use was more common with male sexual offenders, and males had a high propensity of offending in cars, outdoors, and in buildings while females were more prone to offend in institutional settings such as jails, schools, and hospital. They also found that in about a third of the cases, female offenders had a male accomplice (William & Bierie, 2015) which supported the findings of earlier studies by Nathan and Ward. With regard to offending, McLeod (2015) found that female sexual offenders had a shorter duration of offending, and the onset of offending began later in life as opposed to adult male sexual offenders.

In a comparison study of male and female teachers who abused children, Christensen and Darling (2020) found 15 variables that fit under three categories: teacher characteristics, victim characteristics, and other characteristics. Christensen and Darling revealed the males were older than the females at the time of the offense, none of the teachers had criminal histories, and the majority were in their mid-career stage of their profession at the time of the offense. The authors found 35% of men had received reprimands for inappropriate conduct with students while women had no infractions (Christensen & Darling, 2020). The researchers uncovered the majority of the victims for both groups were of the opposite sex from the offender and most victims were between of 13 and 17 years of age (Christensen & Darling, 2020). The authors revealed the males had abused students at an average of 12 months or more while women ranged from 6 to 12 months or less than 6 months (Christensen & Darling, 2020). Christensen and Darling

found the males were more likely to engage in sexual intercourse while females engaged in sexualized talk in person or through technology. Christensen and Darling uncovered the offenders often minimized or denied the allegations, and they blamed it on their poor mental health or their significant life stressors. Some of the offenders were teachers who had been certified immediately after high school graduation and returned to the same school. However, there was one theme seen among the female offenders in which they claimed they were passive in their offending role and suggested that they were the victim in the situation because they were scared and were taken advantage of by the student (Christensen & Darling, 2020).

In their research, Lewis and Stanley (2000) revealed in their study that in a sample of 15 adult female offenders, 23 people had been victimized ranging in age from 3 to 17 years of age. They found nearly 60% had sexually abused their own child, about 47% of the cases involved a co-defendant with 86% of the time it involved a male, about 33% had abused an acquaintance, 67% occurred in the victim's home, substance abuse was present in about 7% of those cases, and approximately 27% had used a weapon (Lewis & Stanley, 2000; Nathan & Ward, 2002; Robertiello & Terry, 2007). The perpetrator and victim relationship was contradicted in later studies by Bourke et al. (2014) and Bensen et al. (2019) who revealed female were more likely to target an acquaintance versus a relative. In reference to the offense, the digital contact of the female sexual organ was the most common form of sexual abuse at 80% (Lewis & Stanley, 2000). Digital penetration occurred in about 67% of the cases, anal penetration or the use of an object occurred in 27% of the cases, and nearly 67% of the time there

was more than one mean of sexual abuse (Lewis & Stanley, 2000). Of those cases, Lewis and Stanley only had one female sexual offender with an intellectual disability. With reference to gender traits, Christiansen and Thyer (2002) uncovered an unusual perception among female sexual offenders, as they identified themselves with more feminine traits on the Sex Role Inventory and endorsed the 'Loves children' (p. 5) compared to women in the general population. In a comparison of solo and cooffenders, Bensen et al. found that the race of both groups to be predominantly Caucasians, had a high school diploma, were employed, had children of their own, had no criminal history, had substance use problems, and had no reported mental health history. The majority of solo offenders identified themselves as single and referenced their act to be consensual while cooffenders were more likely to be married and used force to commit the offense (Bensen et al., 2019). Another study on solo and cooffenders as related to mental health and recidivism, revealed solo offenders had high scores for aggression, dominance, and warmth while cooffenders scored highest on anxiety, and anxiety-related disorders (Miller & Marshall, 2019). Further, cooffenders experienced sexual abuse throughout their entire life, including adulthood (Miller & Marshall, 2019).

Psychopathology as Related to Typologies of Female Sexual Offenders

One of the most popular typologies is that of Mathews et al. (1989) in which they studied a group of 16 female sexual offenders and divided them into three groups of offenders based on the offense, their personal history, and dynamics. The researchers concluded female sexual offenders were either "teacher/lover", "predisposed", or "male-coerced" (Mathews et al., 1989, p. 1). The "teacher/lover" took on the role of educating

the victim about sexuality and generally involved male victims (Mathews et al., 1989, p. 1; Solis & Benedek, 2012). Adult female sexual offenders in this category did not perceive their actions as harmful but consensual and mutual (Christiansen & Thyer, 2002; Robertiello & Terry, 2007). Christiansen and Thyer (2002) explained that this category of adult female sexual offenders experienced mainly emotional and physical abuse in childhood, had inconsistent relationship with their parent, and felt they were abused by their adult male partner. The "predisposed" adult female sexual offenders were usually sexually abused for longer periods of time beginning at an early age and this abuse was characterized as being multigenerational, and some also encountered physical abuse (Mathews et al., 1989, p. 1). These women were perceived as being promiscuous in their adolescence and exhibited behavioral issues (Christiansen & Thyer, 2002). The "male-coerced" adult female sexual offender were generally women who lacked assertiveness, were dependent on their partner, abused substances (i.e. illegal drugs and/or alcohol), had low self-esteem, and were abused by their partners (Christiansen & Thyer, 2002; Mathews et al., 1989, p. 1; Robertiello & Terry, 2007). However, these typologies were not supported in a study by Turner et al. (2008) who used a larger sample and quantitative measures. Instead, they found that it was not childhood sexual abuse that would predict the placement of the adult female sexual offender in a group but their adulthood sexual abuse. Turner et al., found three categories based on PAI scores. The first group had the highest elevation with regard to substance abuse, the second group had high elevations for borderline characteristics, and the third group had pathological elevations for all problems assessed (Turner et al., 2008).

Another grouping of adult female sexual offenders was developed as a result of a study by DeCou et al. (2015). The researchers found that there were many influences with regard to the process of adult female sexual offenders. Variables such as relationship issues, mental illness, prior victimization, life stressors, substance use, external locus of control, and poorly defined boundaries painted a broad picture (DeCou et al., 2015). However, at a closer look, smaller factions developed within these broad groupings each with unique characteristics. DeCou et al. discovered three smaller grouping: "Co-Offending", "Relationship with Victim", and "Post Offense" (p. 310). Cooffenders had poor relationships which provided limited emotional support, felt helpless, had a desire to please their partner, and were victims of domestic violence (DeCou et al., 2015). Those who had relationships with their victims also had poor relationships with limited emotional support, they felt lonely, they had no prior intentions of offending, and they felt gratified (DeCou et al., 2015). After the sexual abuse the last group isolated themselves, were scared of being caught, and reflected on the offense (DeCou et al., 2015). A study by Harriti et al. (2018) found that traumas experienced in childhood and adolescence had serious effects in adulthood. Through a review of biographical information and criminal offenses found in court records, they discovered some motives for offending, such as, desire for power, sadism, anger, and a desire for self-affirmation (Harriti et al., 2018). Harriti et al. explained that this population should not be considered as being representative of the adult female sexual offender population. These cases were most likely a representation of the more severe offenders encountered in the court system at the time of their research.

Researchers suggested that if there were significant differences between the groups that there was a need to perhaps have theoretical approach that was specific to female sexual offenders (Cortoni, 2015; DeCou et al., 2015; Solis & Benedek, 2012; William & Bierie, 2015;). This riveting statement highlighted the need for a perspective that differed from what was used with male sexual offenders. Researchers suggested that further studies were needed with reference to female sexual offenders which targeted their pattern of thoughts (Miccio-Fonseca, 2000), preferred location of offenses (William & Bierie, 2015), and life experiences (McLeod, 2015). Bensen et al. (2019) suggested that the context of offenses and life histories of female sexual offenders be further researched. Additionally, more research in motives for offending among adult female sexual offenders should be studied. Another area identified by DeCou et al. (2015) was the need to further explore the offenders' own victimization in solo and cooffenders.

Gannon et al. (2010) took a different approach by providing an explanation of possible pathways for adult female sexual offenders. They did so by looking at the adult female sexual offenders' childhood history, abuse history, lifestyle outcome, vulnerability factors, and life stressors (Gannon et al., 2010). They found three emerging pathways: "Explicit Approach", "Directed Avoidant", and "Implicit Disorganized" (Gannon et al., 2010, p. 375). Of interest as related to this research was the "Directed Avoidant" (p. 375) group who were pressured into offending. This group of adult female sexual offenders were commonly passive or dependent, had poor coping skills, were not assertive, felt isolated, and were in abusive relationships (Gannon et al., 2010). This population had a strong desire to please their partner, gain intimacy, and feel supported by their significant

other (Gannon et al., 2010). Per Bensen et al. (2019) cooffenders were usually viewed as victims as they were victims of domestic violence and were coerced to participate in sexual offenses.

According to Turner et al. (2008) adulthood trauma was a good predictor as to the severity of psychopathology experienced by adult female sexual offender. McCartan and Gunnison (2010) found female sexual offenders who reported prior sexual abuse were more likely to associate with other criminals, had difficulty maintaining employment, referenced their family as loving, and experienced abusive relationships. Willis and Levenson (2016) reported that an increase in adverse childhood experiences resulted in elevations in substance use, medical related issues, mental health disorders, and adulthood traumas such as domestic violence. While dating violence was not a mediating factor in their research, Clements-Nolle et al. (2017) found that approximately 42% of female adolescent offenders had endorsed this factor. Further, according to Marshall and Miller (2019), adult female sexual offender who reported adulthood physical abuse and childhood sexual abuse were more at risk of sexual recidivism.

Adulthood trauma in itself was a complex issue. Adulthood trauma compounded with a childhood history of abuse and being an adult female sexual offender; these layers provided a paradigm worth studying. Grady et al., (2016) suggested that further research should be warranted on the relationship between trauma, attachment, and sexual offending, especially among adult female sexual offenders. Levenson et al. (2015) identified the need to further research adulthood traumas for purpose of diagnostic refinement and to help guide treatment among this identified population.

Research has shown that adult female sexual offenders were exposed to long durations of childhood sexual abuse by a caregiver at a higher frequency than those who did not offend (Christopher et al., 2007; Loper et al., 2008). However, the link from childhood abuse to adult offending was not clear and should be examined. Christopher et al. (2007) reported that there was a need to understand the function that links childhood sexual abuse to sexual offending as an adult. The leading factors to this link included social resources and support, coping mechanisms, and intervention programs at an early age. Strickland (2008) found a correlation between adverse childhood experiences, mental health, and maladaptive coping skills but reported that this statistical significance was weak. Additionally, Strickland explained that female sexual offenders were more self-conscious, insecure, and felt inferior in their relationships when it came to social and intimate sexual contact. Roe-Sepowitz and Krysik (2008) found female juvenile sexual offenders with an early onset of abuse had a correlation between the use of force and coercion used with their own victims. These authors found that among female juvenile sexual offenders with a history of abuse had more mental health issues then those without (Roe-Sepowitz & Krysik, 2008). Other researchers have focused on adverse childhood experiences with varying conclusions. A study by Levenson et al. (2015) revealed adult female sexual offenders were more likely to have experienced sexual abuse, verbal abuse, emotional neglect, and had an incarcerated relative. Additionally, higher adverse childhood experiences scores resulted in younger victims. Willis and Levenson (2016) found that adverse childhood experiences correlated with substance use, criminal history,

history of mental health related issues, and problematic sexual behaviors among adult female sexual offenders.

A study by Pflugradt, Allen, and Zintsmaster (2018) examined the adverse childhood experiences scores of violent offenders, namely female murderers and adult female sexual offenders. The authors found all of the female murderers had endorsed one adverse childhood experience. When the female murderers were compared to the adult female sexual offenders, the female murderers reported more adverse childhood experiences (Pflugradt, Allen, & Zintsmaster, 2018). The authors noted that their participants referenced domestic violence (Pflugradt, Allen, & Zintsmaster, 2018). Another interesting finding was by Bensel et al. (2019) who reported adult female sexual offenders with a history of sexual abuse were more likely to commit a severe violent sexual offense against a child compared to the offenders who did not report sexual abuse in their formative years. Furthermore, adult female sexual offenders who experienced childhood sexual abuse and adulthood physical abuse were at risk of sexual recidivism (Marshall & Miller, 2019). Levenson et al. (2015) explained that adulthood traumas should be another area of study to better understand adult female sexual offenders.

Childhood abuse at the hands of a primary caregiver could have devastating effects. Children under the age of 6 who developed insecure attachment to their primary caregivers were often predisposed to future criminal behaviors to include sexual offending (Grady et al., 2016). Grady et al. (2016) further proposed the idea that the attachment theory provided an explanation of etiology between childhood abuse and sexual offending (Grady et al., 2016). Yoder et al. (2018) explained that youths who

exhibited problematic sexual behaviors reported deficits in their family relationships. Grady et al. (2016) explained that childhood abuse, betrayal of trust by a caregiver, and violations of boundaries as a result of insecure attachment would possibly have disastrous influences on coping strategies and provide a distorted view of their personal relationships. Researchers mentioned that significant life stressors and the sexual offenders' inability to cope with their daily stressors were also endorsed as reason for offending (Christensen & Darling, 2020; Darling et al., 2018). However, this information was extracted from court records, licensing hearings, and sentencing database (Christensen & Darling, 2020; Darling et al., 2018).

Psychosocial Stressors

Pflugradt, Allen, and Zintsmaster (2018) examined childhood experiences between adult female sexual offenders and adult female murderers. The sample of participants consisted of 28 female homicide offenders, 47 female sexual offenders from the Levenson et al. (2015) study, and 17,337 non-offenders from the CDC Kaiser Permanente ACE Study conducted from 1995 to 1997 (Pflugradt, Allen, & Zintsmaster, 2018). The Kaiser Permanente ACE Study identified three areas of adverse childhood experience which were classified as abuse, neglect, and household challenges (CDC, 2021). Abuse was comprised of emotional, physical, and sexual maltreatment (CDC, 2021). Neglect referred to both emotional and physical neglect (CDC, 2021). Household challenges were violence against the mother, mental illness, drug and alcohol use, parental separation or divorce, and incarceration of a household member (CDC, 2021). The results were impressive in that 100% of homicide offenders endorsed one or more

adverse childhood experience, and 82% of those had endorsed four or more adverse childhood experiences (Pflugradt, Allen, and Zintsmaster, 2018). Pflugradt, Allen, and Zintsmaster explained that homicide offenders endorsed significantly more adverse childhood experiences than did the sexual offenders and the non-offenders. The authors revealed both the sexual offenders and homicide offenders had reported sexual abuse, parent separation, family violence in the household, and incarcerated family member. Pflugradt, Allen, and Zintsmaster wondered if this was a common criminal pathway and suggested that this should be explored in future research. With regard to child pornography, adult female sexual offenders who participated in the production and victimization of a child reported a higher rate of sexual abuse history followed by physical abuse in their psychosocial history (Bickart et al., 2019). Bickart et al. (2019) reported that additional study on this population was needed to better understand and refine treatment. Additional data should be pursued to understand and prevent these offenses (Bickart et al., 2019).

Drug and Alcohol

Illicit drugs and not alcohol seemed to be a prevalent factor among males who sexually abused women (Baltieri & Andrade, 2008). A study by Fazel et al. (2010) found that there was a high rate of comorbid diagnosis for psychotic and substance abuse disorders among psychiatrically hospitalized adult female sexual offenders. A higher rate of substance use was also found among solo adult female sexual offenders (Gillespie et al, 2015). Clements-Nolle et al. (2017) reported that more than 75% of their female juvenile offenders met the criteria for substance use. They found that substance use was a

mediator between childhood abuse and unprotected sex among juvenile female offenders. Further, Willis and Levenson (2016) found that there was a positive correlation between childhood abuse and substance use among adult female sexual offenders. Substance use was a repeated reason used to justify sexual offending by adult females in organizational settings (Christensen & Darling, 2020; Darling et al., 2018). However, this information was extracted from court records, licensing hearings, and sentencing database (Christensen & Darling, 2020; Darling et al., 2018). In a study comparing recidivists and nonrecidivists among adult female sexual offenders, Vandiver et al (2019) found that recidivism for sexual offenses had a history of prior incarcerations for drug and/or alcohol related offenses.

Summary and Conclusions

For this research the Walden University Library and Google Scholar were used as the search engines to generate articles of interest. This study was grounded in a developmental theory, namely, the attachment theory by Bowlby (1988). There was a need to better understand the roles that psychopathology, drug and alcohol use, psychosocial stressors, and personal demographics played in the development of differentiating taxonomies of adult female sexual offenders. Information regarding juveniles or male offenders should not be assumed to represent this unique population. Expanding on this area of research helped understand different profiles of adult female sexual offenders, and, more importantly, better guide treatment and intervention protocols specific to the defining characteristics of an individual's profile (Grady et al., 2016; McCartan & Gunnison, 2010).

Chapter 3: Research Method

Introduction

The purpose of this archival quantitative study was to examine the number and nature of clusters that emerged as common individual patterns across a set of psychopathology, drug use, drug and alcohol issues, psychosocial stressors, and personal demographics among adult female sexual offenders. A secondary purpose was to determine whether the resulting clusters were independent of characteristics of the offense and of the victim, and relationship between offender and victim.

In this chapter, I describe the correlational and static group comparison design aspects of my study, the population and sampling for the original data collection, the eligible cases for my secondary analysis purposes, the variables of interest from the original data that I used, my RQs and data analysis plan, the minimally detectable effect sizes given the eligible and nonmissing cases across the variables of interest, threats to validity, and ethical procedures for original data collection and for my study.

Research Design and Rationale

This study used a nonexperimental correlational and static group comparison archival research designs and secondary analysis of the 2016 Survey of Prison Inmates (SPI) collected by the United States Bureau of Justice Statistics (2021). The dataset was limited to female cases incarcerated as a result of a sexual-related crime. A two-step cluster analysis was used to generate groups of cases (i.e., clusters) that shared similar characteristics across indices of mental health diagnoses, drug use, problems related to drug or alcohol use, psychosocial stressors, and certain demographics of the female

offender. Then, using a static group comparison design (see Campbell & Stanley, 1963), the resulting clusters were examined for independence across type of sexual offense, acting alone or with someone helping, one or more than one victim, sex of victim, age of victim, relationship to victim, and whether under the influence of drugs or alcohol at time of offense. Each of these variables has been specifically operationalized in a subsequent section of the chapter.

The initial correlational cluster design was a classificatory process necessary to answer the RQs about the differentiating taxonomies, the distribution of taxonomies, and the characteristics of those groupings. Classification is fundamental to science and for validating or generating theory (Aldenderfer & Blashfield, 1984). Thus, identifying typologies of female sexual offenders on risk factors promised to advance knowledge in the discipline. The second, static group comparison, part of the study was necessary to answer RQs about sexual offender risk profiles and characteristics of the offense and the victim, which can lead to a better understanding of offender-victim associations. Because the public use dataset was freely accessible, the archival design with correlational and static group comparison aspects did not pose any time or resource constraints.

Archival Data Methodology

Population

The 2016 SPI universe included 102,308 female inmates aged 18 and over across 467 correctional facilities (United States Bureau of Justice Statistics, 2021). The 2016 SPI sample included 6,302 females across 91 facilities (United States Bureau of Justice Statistics, 2021). The public use dataset available for secondary analyses included 6,265

cases coded as female, 116 of whom were incarcerated because of a sexually related crime. Of these 116, one had missing data on a key variable for cluster analysis, leaving 115 cases as the population for my study.

Sampling and Sampling Procedures

According to the United States Bureau of Justice Statistics (2021), sampling of prisons and participants was based on the 2012 census. Those states that housed 100,000 inmates or more, such as California, Florida, and Texas, had their own classification; the remaining 47 states were classified into one category, and so were the federal prisons (see United States Bureau of Justice Statistics, 2021). These five strata were divided into males and females so that each stratum had five classifications of males and five categories of females. Additionally, the size measure was increased by a factor of 3.5 for females in state facilities and 2.4 for females in federal prisons (United States Bureau of Justice Statistics, 2021). This adjustment was made to provide a better national estimate for this population (United States Bureau of Justice Statistics, 2021). The initial sample allocation for the facilities was adjusted in anticipation of people not participating in the data collection (United States Bureau of Justice Statistics, 2021).

Data were collected via computer-assisted face-to-face interviews by RTI International from January through October 2016 (United States Bureau of Justice Statistics, 2021). Interviews, on average, lasted 50 minutes (United States Bureau of Justice Statistics, 2021). Of 35,509 eligible male and female participants from both state and federal prisons, 70% participated, 6,302 of whom were female (United States Bureau of Justice Statistics, 2021). For the purpose of my study, public use data of the 2016 SPI

available from the ICPSR (www.icpsr.umich.edu; study # 37692) was analyzed. The

public use data had no restrictions on access, but users were expected to be responsible to

include (a) using the data for analysis and aggregated reporting of findings, (b)

safeguarding confidentiality of research participants, (c) reporting any potential breach,

(d) no selling of or redistribution of the data, and (e) citing the data and informing the

consortium of use of the data in any publications (ICPSR, 2022a, 2022b). For the purpose

of my study, no sampling was done and included 115 females incarcerated for a sexually

related offense with valid data on the variables to be used for cluster analysis.

Sample Size Justification for Secondary Analysis

The primary analysis for my study was a two-step cluster analysis. In Monte

Carlo studies, cluster analysis was found to produce reliable results with sample sizes of

50 or more (Wärmefjord et al., 2010), so the sample size of 115 for my study was

adequate. All secondary analyses were chi square tests of independence. The overall

sample size was fixed, so of interest was the minimally detectable effect size. The

minimally detectable effect size depended on the number of resulting clusters, the

number of levels within an exploratory variable, and the number of valid cases for each

variable. Table 1 lists the minimally detectable Cohen's *w* effect size for each exploratory

variable in the case of a two, three, or four cluster solution. Cohen's *w* values of .10, .30,

and .50 were considered small, medium, and large effects, respectively (see Cohen,

1988). As evident in the table, minimally detectable effect sizes ranged from .189 to .386.

In general, the larger the number of resulting clusters and the larger the number of levels

within a variable, the less powerful the statistical analysis, but this varies somewhat

across the list of exploratory variables because of varying amounts of missing data.

Table 1

Minimally Detectable Cohen's w Effect Size by Exploratory Variable for Two to Four Clusters

			No. of clusters		
Variable	Valid *n*	No. of levels	2	3	4
Solo	106	2	.190	.216	.233
No. victims	108	2	.189	.214	.231
Sex victim	83	2	.215	.244	.263
Know victim	83	2	.215	.244	.263
Alcohol	100	2	.196	.223	.240
Drugs	85	2	.213	.241	.260
Know victim well	73	3	.261	.297	.321
Age victim	80	3	.249	.283	.306
Education level	115	4	.224	.255	.277
Relationship to victim	59	4	.312	.357	.386
Offender race	113	5	.238	.273	.296
Offense type	114	5	.237	.272	.295

Instrumentation and Operationalization of Constructs

The 2016 SPI dataset contains more than 2,000 variables. For my analyses, eight

variables were used for cluster analysis, and 12 others were used for exploratory

associations with cluster results or for descriptive purposes. Table 2 operationalizes the

key variables of interest cluster analysis, and Table 3 operationalizes the exploratory

variables. Both tables include the variable name, response scale, and item or description

in the original SPI dataset, as well as the recoded name and scale as they were used for my secondary analysis purposes.

Key Variables for Cluster Analysis

The cluster analysis variables constituted a set of potential risk factors for sexual offending, including psychopathology, drug use, drug or alcohol issues, psychosocial stressors, and personal demographics. A composite index of number of diagnosed psychological disorders across seven SPI items was computed, with higher scores indicating more diagnosed disorders. Diagnosed disorders included anxiety, various types of depression, posttraumatic stress, any type of personality disorder, any type of psychotic disorder, or any other type of diagnosed mental or emotional condition.

A composite index of 11 categories of drugs ever used was computed, with higher scores indicating having used a larger variety of drugs. Examples included marijuana, cocaine, meth, and prescription medications other than as prescribed. The 2016 SPI included seven items related to issues with drug use, including emotional, physical health, physical danger, trouble with the law, giving up on important activities, problems at home/school/work, and problems with family or friends. The same seven questions were asked with respect to alcohol. A composite index of the number of "yes" responses across the entire 14 items were computed, with higher scores indicated more drug or alcohol problems.

Psychosocial stressors included four items that captured being homeless, part of a foster home, living in public housing, or on welfare/public assistance before age 18, and three items that captured whether father, mother, or sibling were ever sentenced or served

time. A composite index across all seven items were computed, with a higher score indicating more psychosocial stressors.

Finally, for the cluster analysis, four personal demographic risk variables included highest year of education completed prior to prison, age, marital status, and working 30 days prior to arrest. Age and marital status were coded as of the time of the SPI interview and served as proximate surrogates because age and marital status at time of offense was not in the public use dataset. Similarly, there was no employment item at time of offense, so working within the month prior to arrest had to be used to assess employment history.

Exploratory Analysis and Descriptive Variables

The variables of interest for exploratory analysis and descriptive purposes are listed in Table 2. Variables related to characteristics of the offense included type of offense as indexed by the National Corrections Reporting Program's 3-digit code and whether acting alone or with someone's help in committing the offense. Alcohol and drug related variables included whether under the influence of alcohol or drugs at time of offense. Victim characteristics included whether there was one or more than one victim, sex of victim, age range of victim, and knowledge of and relationship to victim. Offender characteristics included a 4-level educational attainment variable and the offender's race.

Table 2

PI and Study Variables for Cluster Analysis

SPI name & scale	Item or description	Analysis variable & scale
Psychopathology		
V1185: 1 (*yes*) 2 (*no*)	diagnosed manic depression/bipolar disorder/mania	disorders
V1186: 1 (*yes*) 2 (*no*)	diagnosed depressive disorder	Index of number of "yes"; possible range 0 – 7.
V1187: 1 (*yes*) 2 (*no*)	diagnosed schizophrenia/other psychotic disorder	
V1188: 1 (*yes*) 2 (*no*)	diagnosed post-traumatic stress disorder	
V1189: 1 (*yes*) 2 (*no*)	diagnosed anxiety disorder	
V1190: 1 (*yes*) 2 (*no*)	diagnosed personality disorder	
V1191: 1 (*yes*) 2 (*no*)	diagnosed another mental or emotional condition	
Drug use		
V1291 to V1299, V1310, V1311: 1 (*yes*) 2 (*no*)	Ever used marijuana, cocaine, crack, heroin, PCP, ecstasy, other hallucinogen, meth, inhalants, prescription meds other than as prescribed, other drugs just for kicks	drugs.ever Index of number of "yes"; possible range 0 – 11.
Drug and alcohol issues		
V1279: 1 (*yes*) 2 (*no*)	Issues with emotions due to alcohol	drug.or.alcohol.issues
V1281: 1 (*yes*) 2 (*no*)	Physical health issues due to alcohol	Index of number of "yes"; possible range 0 – 14.
V1283: 1 (*yes*) 2 (*no*)	Gave up on important activities due to alcohol	
V1284: 1 (*yes*) 2 (*no*)	Problems at home/school/work due to alcohol	
V1285: 1 (*yes*) 2 (*no*)	Physical danger due to alcohol	
V1286: 1 (*yes*) 2 (*no*)	Repeated trouble with law due to alcohol	
V1287: 1 (*yes*) 2 (*no*)	Problems with family or friends due to alcohol	
V1362: 1 (*yes*) 2 (*no*)	Emotional problems made worse by drug usage	
V1364: 1 (*yes*) 2 (*no*)	Physical health issues due to drugs	
V1366: 1 (*yes*) 2 (*no*)	Gave up on important activities due to drugs	
V1367: 1 (*yes*) 2 (*no*)	Problems at home/school/work due to drugs	
V1368: 1 (*yes*) 2 (*no*)	Regular drug usage resulted in physical danger	
V1369: 1 (*yes*) 2 (*no*)	Repeated trouble with law due to drugs	
V1370: 1 (*yes*) 2 (*no*)	Problems with family or friends due to drugs	

SPI name & scale	Item or description	Analysis variable & scale
Psychosocial stressors		
V1165: 1 (*yes*) 2 (*no*)	Homeless before age 18	psychosocial.stressors
V1166: 1 (*yes*) 2 (*no*)	Part of foster home before age 18	Index of number of "yes"; possible range 0 – 7.
V1170: 1 (*yes*) 2 (*no*)	Welfare/public assistance before age 18	
V1171: 1 (*yes*) 2 (*no*)	Lived in public housing before age 18	
V1172: 1 (*yes*) 2 (*no*)	Father ever been sentenced/served time	
V1173: 1 (*yes*) 2 (*no*)	Mother ever been sentenced/served time	
V1174: 1 (*yes*) 2 (*no*)	Sibling ever been sentenced/served time	
Personal demographics		
V1079: 1 (*yes*) 2 (*no*)	Any jobs worked 30 days before arrest	was.working: 0 (*no*) 1 (*yes*)
RV0001: continuous	Current age	offender.age: continuous
RV0051	Marital status	marital.status
1 (*married*) 2 (*widowed*) 3 (*separated*) 4 (*divorced*) 5 (*never married*)		1 (*married*) 2 (*widowed, separated, divorced*) 3 (*never married*)
RV0052: continuous	Educational attainment - highest year of education completed prior to prison	edu: continuous

Table 3

SPI and Exploratory Variables to Be Associated With Cluster Results

SPI name & scale	Item or description	Analysis variable & scale
Characteristics of offense		
V0114 – V0118	List of up to five coded offenses for being in prison now from National Corrections Reporting Program's 3-digit code as assigned by the United States Bureau of Justice Statistics	offense.type 50 (*rape-force*) 60 (*rape-statutory-no force*) 70 (*sexual assault-other*) 80 (*lewd act with children*) 110 (*forcible sodomy*) 900 (*multiple types*)
V0478 1 (*acting alone*) 2 (*someone was helping*)	"Were you acting alone when you committed the [CONTROLLING_OFFENSE] for which you are now incarcerated or was someone helping you?"	solo 0 (*acting alone*) 1 (*someone was helping*)
Alcohol & drug related		
V1267: 1 (*yes*) 2 (*no*)	Drinking alcohol at time of offense	alcohol: 0 (*no*) 1 (*yes*)
V1326: 1 (*yes*) 2 (*no*)	Under influence of drugs at time of offense	drugs: 0 (*no*) 1 (*yes*)
Victim characteristics		
V0480 1 (*one*) 2 (*two or more*)	One or more victim	number.victims 0 (*one*) 1 (*two or more*)
V0489 1 (*male*) 2 (*female*)	Sex of victim	sex.victim 0 (*female*) 1 (*male*)
V0490 1 (*under 12 years*) 2 (*12 to 17*) 3 (*18 to 24*) 4 (*25 to 34*) 5 (*35 to 54*) 6 (*55 or older*)	Age range of victim	age.victim 1 (*under 12 years*) 2 (*12 to 17*) 5 (*35 to 54*)
V0491 1 (*knew*) 2 (*stranger*)	Did you know the victim	know.victim 0 (*stranger*) 1 (*knew*)
V0492 1 (*sight only*) 2 (*casual acquaintance*) 3 (*well known*)	How well did you know victim	know.victim.well 1 (*sight only*) 2 (*casual acquaintance*) 3 (*well known*)

SPI name & scale	Item or description	Analysis variable & scale
V0493	Relationship to victim at time of crime	relationship to victim
1 (*spouse*) 2 (*ex-spouse*) 3 (*parent/step-parent*) 4 (*own child*) 5 (*stepchild*) 6 (*brother, sister, stepbrother, stepsister*) 7 (*other relative*) 8 (*boyfriend, girlfriend*) 9 (*ex-boyfriend, ex-girlfriend*) 10 (*friend, ex-friend*) 11 (*other*)		1 (*own child, stepchild*) 2 (*parent/stepparent, sibling, stepsibling, other relative*) 3 (*boyfriend, girlfriend*) 4 (*friend, exfriend*) 5 (*other*)
Offender characteristics		
RV0054	Educational attainment (4 levels) - highest year of education completed prior to prison	edu4
1 (*less than high school*) 2 (*high school*) 3 (*some college*) 4 (*college degree or more*)		1 (*less than high school*) 2 (*high school*) 3 (*some college*) 4 (*college degree or more*)
RV0003B	Race/Hispanic origin	offender race
1 (*white*) 2 (*black*) 3 (*Hispanic*) 4 (*other*) 5 (*2+ races*)		1 (*white*) 2 (*black*) 3 (*Hispanic*) 4 (*other*) 5 (*2+ races*)

Data Analysis Plan

IBM SPSS software was used for data analysis. The 2016 SPI dataset was downloaded from the ICPSR website (www.icpsr.umich.edu; study # 37692) in order to determine the number of eligible cases and variables for my secondary analysis. A separate dataset with the 115 eligible cases and items of interest was created. Items were recoded or aggregated into the indices as previously listed in Tables 2 and 3. Descriptive statistics were reported for all study variables. In this study, the RQs were:

1. RQ1: How many differentiating taxonomies existed of adult female sexual offenders across a set of psychopathology, drug use, drug and alcohol issues, psychosocial stressors, and personal demographics variables?

   Analysis 1: Two-step cluster analysis.

   Hypotheses: A hypothesis required a statistical test that yields a probability value. Cluster analysis had no such *p*-value, so a hypothesis was not possible. The value of the silhouette measure of cohesion and separation was reported as an index of cluster quality.

2. RQ2: What were the shared defining characteristics of individuals grouped together in a cluster?

   Analysis 2: Two-step cluster analysis with focus on cluster centroids, standardized loadings of metric variables and adjusted standardized residuals of categorical variables.

   Hypotheses: As with RQ1, a hypothesis was not possible.

3. RQ3: To what extent were taxonomies evenly distributed (i.e., % of cases in each cluster), and if not evenly distributed, what characterized the rare cluster with the vast majority of cases?

Analysis 3: One-way chi square test of independence.

Null: The clusters had an even distribution of cases.

Alternative: The clusters did not have an even distribution of cases.

4. RQ4: To what extent were the resulting clusters independent of each of the 12 exploratory variables?

Analysis 4: Chi square tests of independence.

Hypotheses: This was an exploratory RQ and hypotheses about the association between the resulting clusters and each of the exploratory variables were not warranted.

The principal analysis in this study was a two-step cluster analysis, the only one of a variety of clustering techniques that allowed for metric and categorical variables in the solution (Norusis, 2012). Metric variables were standardized to eliminate bias in the solution toward variables with large number scales or raw standard deviations (Norusis, 2012). The two-step cluster procedure involved an automatic preclustering to reduce the matric of all possible pairs of cases followed by a hierarchical clustering algorithm that determined the optimal number of clusters based on minimization of the Schwarz Bayesian Information Criterion (Norusis, 2012).

Potential outliers in the cluster solution were handled by allowing the solution to create a separate cluster for cases that did not fit in a primary cluster. The initial two-step

solution screened for and removed variables that did not statistically significantly contribute, and a new analysis was run.

Threats to Validity

In this section I focused on internal, external, construct, and statistical conclusion validity as it pertained to this research. Problems related to causality were referred to as internal validity (Frankfort-Nachmias et al., 2015; Warner, 2013). Causal inferences cannot be established with correlational designs and, thus, compromised this study's internal validity (Hageman, n.d.; Warner, 2013). Nonexperimental research design had weak internal validity (Hageman, n.d.; Warner, 2013). Independent variables used from the archival data were usually correlated and confounded with other independent variables and therefore, causality could not be determined (Warner, 2013). Generally, no efforts are made to control for problems related to internal validity in nonexperimental research design (Salkind, 2010). Salkind (2010) explained that inferences in nonexperimental research designs were normally descriptive in nature. Therefore, no attempt was made to address the internal validity in this research because causality was not the goal of this study but finding and describing the different clusters and their associations with other variables.

External validity referred to the threats with regard to generalizability of the findings (Urban & Eeden-Moorefield, 2018). The key issue for external validity was representativeness of the sample (Frankfort-Nachmias et al., 2015). This target population was very specific in that it was comprised of adult female sexual offenders and the sample was from archival data of incarcerated adult female sexual offenders

within the United States. The 2016 SPI used stratified random sampling to select about 6.2% of incarcerated females, which provided some confidence in representativeness. However, only 71.8% of females selected for interviews were actually interviewed. The dataset contained 115 females incarcerated because of a sexually related offense who had valid data on the key variables in my study. So, by extrapolation, there may have been about 45 eligible females that refused to participate, and it cannot be known how representative the 115 available cases were to those who refused or to the population of all females incarcerated for a sexual offense. Also, because this sample was very specific, it cannot be generalized to adult female sexual offenders who were not incarcerated, those who had yet to be accused and convicted of this offense, or those in other countries.

With regard to the threats of construct validity, measurement error was of concern, particularly missing data. While only one of the 116 eligible cases had missing data on a variable that was used for cluster analysis, the other variables that were examined for associations with cluster results varied in the amount of missing data, with one having missing data on nearly half the cases. Missing data was possibly caused by errors in the interview guide or inappropriate skip loops during interviewing (United States Bureau of Justice Statistics, 2021). Missing data affected reliability and validity of measurement.

With respect to statistical conclusion validity, cluster analysis was appropriate to answer the primary RQs and chi square tests of independence were appropriate to answer the exploratory RQ. Cluster analysis was found in Monte Carlo studies to produce reliable results with sample sizes of 50 or more (Wärmefjord et al., 2010), so a sample

size of 115 was adequate. However, as previously noted, minimally detectable Cohen's *w*

effect sizes in the secondary exploratory analyses were not constant due to missing data

on some variables. Statistical conclusion validity was compromised to the extent that a

meaningful effect size was statistically significantly undetectable because of missing

data.

Ethical Procedures

Approval from the Institutional Review Board was obtained (05-03-22-0597758).

Participants in the 2016 SPI were provided written and verbal informed consent prior to

being interviewed (United States Bureau of Justice Statistics, 2021). Participants were

informed their participation was voluntary, and the information provided confidential

(United States Bureau of Justice Statistics, 2021). With respect to linking the survey

results to administrative records, participants were allowed to refuse, consent for link to

2016 SPI only, or consent to 2016 SPI linkage and up to 5 years of future criminal-

history records.

For my purposes, use of archival data created minimal risks with regard to

research. While the original research was confidential in nature, the public use dataset

was anonymized. I and my dissertation chair stored the public use dataset on our

respective password protected computers. Upon completion of this research the data will

be kept for a minimum of 5 years as recommended by the Walden IRB after which it will

be destroyed by being deleted. I did not use the data in any other capacity than for the

purpose of completing quantitative analysis consistent with my proposed research.

Descriptions of the data and analysis findings was in aggregate; information across variables for an individual case was not reported.

Summary

The purpose of this archival quantitative study was to examine the number and nature of clusters that emerged as common individual patterns across a set of psychopathology, drug use, drug and alcohol issues, psychosocial stressors, and personal demographics among adult female sexual offenders. I used a nonexperimental research design by using archival data retrieved from the ICPSR. A two-step cluster analysis was used to answer the primary RQs, and chi square tests of independence was used to answer secondary exploratory questions. My research applied only to incarcerated adult female sexual offenders and should not be generalized across other groups and, as nonexperimental in nature causal inferences cannot be established. Original data collection followed standard ethical procedures and my use of the anonymized public use data for secondary analysis created minimal risks.

Chapter 4: Results

Introduction

The purpose of this archival quantitative study was to examine the number and nature of clusters that emerged as common individual patterns across a set of psychopathology, drug use, drug and alcohol issues, psychosocial stressors, and personal demographics among adult female sexual offenders. A secondary purpose was to determine whether the resulting clusters were independent of characteristics of the offense and of the victim and the relationship between the offender and the victim.

Four RQs were used for the basis of this study. How many differentiating taxonomies existed of adult female sexual offenders across a set of psychopathology, drug use, drug and alcohol issues, psychosocial stressors, and personal demographics variables? A hypothesis requires a statistical test that yielded a probability value. Cluster analysis has no such p-value, so a hypothesis was not possible. The value of the silhouette measure of cohesion and separation was reported as an index of cluster quality. What were the shared defining characteristics of individuals grouped together in a cluster? As with the first RQ, a hypothesis was not possible. To what extent were taxonomies evenly distributed (i.e., % of cases in each cluster), and if not evenly distributed, what characterized the rare cluster with the vast majority of cases? For this question, I hypothesized that the clusters did have an even distribution of cases. To what extent were the resulting clusters independent of each of the 12 exploratory variables? This was an exploratory RQ, and hypotheses about the association between the resulting

clusters and each of the exploratory variables were not warranted. In this chapter, I describe the data collection and the results of my study.

Data Collection

Data were collected via computer-assisted face-to-face interviews by RTI International from January through October 2016 (United States Bureau of Justice Statistics, 2021). Interviews, on average, lasted 50 minutes (United States Bureau of Justice Statistics, 2021). Of 35,509 eligible male and female participants from both state and federal prisons, 70% participated, 6,302 of whom were female (United States Bureau of Justice Statistics, 2021). For the purpose of my study, public use data of the 2016 SPI available from the ICPSR (www.icpsr.umich.edu; study # 37692) were analyzed. The 2016 SPI universe included 102,308 female inmates aged 18 and over across 467 correctional facilities (United States Bureau of Justice Statistics, 2021). The 2016 SPI sample included 6,302 females across 91 facilities (United States Bureau of Justice Statistics, 2021). The public use dataset available for secondary analyses included 6,265 cases code as female, 116 of whom were incarcerated because of a sexually related crime. Of these 116, one had missing data on a key variable for cluster analysis, leaving 115 cases as the population for my study.

When looking at the adult female sexual offenders interviewed, this population had a mean age of 38.5 years old and had less than a high school education, which was approximately 11.5 years of education prior to prison. The majority of the participants were White (57.4%) and worked prior to incarceration (55.7%). With reference to their marital status, 43.5% were widowed, separated, or divorced; 30.4% were never married;

and 26.1% were married. A plurality of the cases had been incarcerated for the offense of

sexual assault (39.1%), followed by forcible rape (21.7%). For those with no missing

data, more had a cooffender and had offended on only one victim that they knew very

well; often the victim was their own child and was between the ages of 12 and 17 years.

Most offenders had not used drugs or alcohol at the time of the offense. The reported

gender of their victim was evenly distributed between males and females. Table 4 and

Table 5 provide additional information as to the breakdown of each variable of this

population.

Table 4

Adult Female Sexual Offender Demographics

Variable	n	%
Race		
White	66	57.4
Black	12	10.4
Hispanic	11	9.6
Other	5	4.3
Biracial	19	16.5
Uncategorized	2	1.7
Marital status		
Married	30	26.1
Widowed, separated, divorced	50	43.5
Never married	35	30.4
Was working 30 days prior to arrest		
No	51	44.3
Yes	64	55.7

	M	SD	Range
Age (in years)	38.5	10.1	20 - 74
Highest year of education	11.5	2.7	2 - 18

Table 5

Descriptive Statistics of Exploratory Variables

Variable	n	%
Acting alone or someone helping		
Acting alone	48	41.7
Someone was helping	58	50.4
Missing data	9	7.8
Offender race		
White	66	57.4
Black	12	10.4
Hispanic	11	9.6
Other	5	4.3
2+ races	19	16.5
Uncategorized	2	1.7
Education level		
Less than high school	46	40.0
High school	39	33.9
Some college	20	17.4
College degree or more	10	8.7
One or more than one victim		
One victim	83	71.3
More than one victim	25	21.7
Missing data	7	6.1
Sex of victim		
Female	41	35.7
Male	42	36.5
Missing data	32	27.8
Age of victim		
Under 12 years	24	20.9
12 to 17	55	47.8
35 to 54	1	0.9
Missing data	35	30.4
Stranger or knew victim		
Stranger	10	8.7
Knew	73	63.5

Variable	*n*	%
Missing data	32	27.8

table continues

Knew victim well
Slight only	1	0.9
Casual acquaintance	11	9.6
Well-known	61	53.0
Missing data	42	36.5

Relationship to victim
Own child (or step-)	26	22.6
Parent (or step-), sibling (or step-), other relative	10	8.7
Boyfriend / girlfriend	2	1.7
Friend / ex-friend	15	13.0
Other	8	7.0
Missing data	54	47.0

Drinking alcohol at time of offense
No	65	56.5
Yes	35	30.4
Missing data	15	13.0

Under influence of drugs at time of offense
No	52	45.2
Yes	33	28.7
Missing data	30	26.1

Offense type
Rape (force)	25	21.7
Rape (statutory, no force)	11	9.6
Sexual assault (other)	45	39.1
Lewd act with children	17	14.8
Forcible sodomy	1	0.9
Multiple types	16	13.9

The 2016 SPI used stratified random sampling to select about 6.2% of incarcerated females, which provided some confidence in representativeness. However, only 71.8% of females selected for interviews were actually interviewed. The dataset contained 115 females incarcerated because of a sexually related offense who had valid data on the key variables in my study. By extrapolation, there may have been about 45 eligible females who refused to participate, and it cannot be known how representative the 115 available cases were to those who refused or to the population of all females incarcerated for a sexual offense. Because this sample was very specific, it cannot be generalized to adult female sexual offenders who were not incarcerated, those who had yet to be accused and convicted of this offense, or those in other countries.

Results

The first RQ asked the number of differentiating taxonomies that existed of adult female sexual offenders across a set of psychopathology, drug use, drug and alcohol issues, psychosocial stressors, and personal demographics variables. When the two-step cluster analysis was computed for all eight cluster variables (see Chapter 3, Table 2), the cluster quality, as indexed by the silhouette measure of cohesion and separation, was 0.3. The eight variables were screened for statistical significance. I found that five variables (marital status, mental health, offender age, education, and drug and alcohol issues) were not statistically significant and were eliminated from the cluster analysis. The final clusters were comprised of the working 30 days prior to incarceration, the psychosocial stressors index, and the index of drugs ever used variables, and had a more favorable cluster quality of 0.6.

The shared characteristics of individuals grouped in a cluster asked in the second RQ proved to be revealing. The highest predictor of importance was the factor related to working 30 days prior to incarceration. Cluster #1 was comprised of 44.3% of the cases, with all of them not working 30 days prior to incarceration, while all cases in Cluster #2 were working 30 days prior to incarceration. With respect to Cluster #1, these cases had a higher average index of psychosocial stressors and index of drugs ever used with cluster centroids of 3.22, and 2.94, respectively. Alternatively, Cluster #2 had a slightly lower index of psychosocial stressors and drugs ever used with cluster centroids of 2.09 and 2.13. The breakdown of each cluster is presented in Table 6.

Table 6

Composition of Clusters

	Cluster 1 (n = 51)	Cluster 2 (n = 64)
Variable	Centroid	
Psychosocial stressors	3.22	2.09
Index of # of drugs ever used	2.94	2.12
	n (%)	
Was working 30 days prior to incarceration		
No	51 (100.0)	0 (0.0)
Yes	0 (0.0)	64 (100.0)

For the third RQ I rejected the alternative hypothesis as the clusters proved to be statistically proportionally evenly distributed at 44.3% and 55.7% for Clusters 1 and 2 respectively, $\chi^2(1, N = 115) = 1.47$, $p = .225$. The ratio between the cluster with the highest proportion and lowest proportion was 1.26.

Lastly, with respect to the fourth RQ, which asked the extent that the resulting clusters were independent of each of the 12 exploratory variables, I found only three exploratory variables that, though not statistically significant, had a noteworthy relationship to the clusters. When Cramer's V is divided by the degrees of freedom, the result is equivalent to Cohen's w for which small, medium, and large effects are .10, .30. and .50, respectively. The largest effect size was for being under the influence of drugs at the time of offense. In Cluster #1, more cases than proportionally expected were under the influence of drugs. In Cluster #1, there were also more cases than proportionally expected in which someone helped with the offense, and more cases than proportionally expected in which the victim was a male. More details are provided about the values, Pearson's chi-squared, and Cramer's V in Table 7.

Table 7

Exploratory Variables Chi-Square Test of Independence and Effect Size

Variable	n	df	X^2	p	V^a	V/df^b
Acting alone or someone helping	106	1	3.45	.063	.180	**.180**
Offender race[c]	115	1	0.01	.919	.010	.010
Education level	115	3	5.99	.112	.228	.076
One or more than one victim	108	1	0.00	.959	.005	.005
Sex of victim	83	1	2.10	.148	.159	**.159**
Age of victim[d]	79	1	0.11	.740	.037	.037
Stranger or knew victim	83	1	0.14	.713	.040	.040
Knew victim well[e]	73	1	0.03	.868	.019	.019
Relationship to victim[f]	61	3	3.64	.303	.244	.081
Drinking alcohol at time of offense	100	1	1.06	.303	.103	.103
Under influence of drugs at time of offense	85	1	3.31	.069	.197	**.197**
Offense type[g]	114	4	6.42	.170	.237	.059

[a] Cramer's *V*.
[b] *V/df* = Cohen's *w*. Bold values are between small and medium size effects.
[c] White versus all other combined.
[d] Excludes one case 35 to 54 years old.
[e] Combined one case of slight only with casual acquaintance.
[f] four categories: (a) own child or stepchild; (b) parent, stepparent, sibling, stepsibling, other relative; (c) boyfriend, girlfriend, friend, ex-friend; (d) other.
[g] Excludes one case of forcible sodomy.

Summary

Two clusters, with relatively equal number of cases, emerged from a set of three variables and had a cluster quality of 0.6. Clusters differed on working 30 days prior to incarceration, psychosocial stressors index, and index of drugs ever used. The predictor of highest importance was working 30 days prior to incarceration variable. All cases in Cluster #1 were not working 30 days prior to incarceration and tended to have a higher index of psychosocial stressors and a higher index of the number of different types of drugs ever used. When analyzed across a list of exploratory variables, more cases than

proportionally expected in Cluster #1 were under the influence of drugs at the time of the offense, had someone help them with the offense, and sexually offended more males. The pattern for cases in Cluster #2 was the reverse of the pattern for Cluster #1.

In Chapter 5. I interpret the findings with respect to attachment theory and the literature I reviewed in Chapter 2, and I discuss the limitations of my study, potential significance of my results, and recommendations for future research.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

The purpose of this archival quantitative study was to examine the number and nature of clusters that emerged as common individual patterns across a set of psychopathology, drug use, drug and alcohol issues, psychosocial stressors, and personal demographics among adult female sexual offenders. This was completed with a two-step cluster analysis. A secondary purpose was to determine whether the resulting clusters were independent of characteristics of the offense and of the victim and the relationship between the offender and the victim. There was a need to better understand the roles that psychopathology, drug use, drug and alcohol issues, psychosocial stressors, and personal demographics played in the development of differentiating taxonomies of adult female sexual offenders. Expanding on this area of research helped understand different profiles of adult female sexual offenders, and, more importantly, better guide treatment and intervention protocols specific to the defining characteristics of an individual's profile (Grady et al., 2016; McCartan & Gunnison, 2010). It is necessary to expand the knowledge on adult female sexual offenders and provide treatment specific to address their needs.

Two clusters emerged among a set of eight variables and had a cluster quality of 0.6. Clusters differed on working 30 days prior to incarceration, psychosocial stressors index, and index of drugs ever used. The predictor of highest importance was the working 30 days prior to incarceration variable. All cases in Cluster #1 were not working 30 days prior to incarceration, had a higher index of psychosocial stressors, and had a higher

index of the number of different types of drugs ever used. When analyzed across a list of exploratory variables, more cases than proportionally expected in Cluster #1 were under the influence of drugs at the time of the offense, had someone help them with the offense, and sexually offended more males. The pattern for cases in Cluster #2 was the reverse of the pattern for Cluster #1.

Interpretation of the Findings

Cluster #1 as described in Chapter 4 appeared to have higher risk factors compared to the other cluster. It was characterized with participants who were not working 30 days prior to incarceration, had experienced at an average three psychosocial stressors, and had used nearly three different types of drugs. Additionally, the majority of the participants, when the clusters were compared to the 12 variables, reported they were under the influence of drugs at the time of the offense, had a cooffender, and their victims were predominantly males. Conversely, Cluster #2 was categorized as 100% of the participants working 30 days prior to incarceration, and this population at an average endorsed fewer psychosocial stressors and index of drugs used. In part, this confirms prior research such as Gannon et al. (2010), who had a group of adult female sexual offenders who were pressured into offending and were commonly passive or dependent, had poor coping skills, were not assertive, felt isolated, and were in abusive relationships. They had a desire to please their partner (DeCou et al., 2015). Per Bensen et al. (2010), cooffenders were usually victims of domestic violence. Psychosocial stressors and substance use were supported by other studies. The study by Willis and Levenson (2016) also supported the results in this research. They reported that an increase in adverse

childhood experiences resulted in elevations in substance use (Willis & Levenson, 2016).

It should be noted that while psychosocial stressors incorporated various aspects of life, it

did contain events experienced prior to 18 years of age and household challenges such as

incarceration of a household member, which was considered an adverse childhood

experience in the CDC Kaiser Permanente ACE Study (as cited in Pflugradt, Allen, &

Zintsmaster, 2018). The cluster with the higher psychosocial stressor endorsement also

had an elevation for drug use and under the influence of drugs at the time of the offense.

Gillespie et al. (2015) contradicted my results on drug use. They reported that solo

offenders endorsed a higher rate of substance use (Gillespie et al., 2015). While my study

did not separate the participants based on solo or cooffending, it is noteworthy that

Cluster #2 had a majority of solo who at an average were not under the influence of drugs

at the time of the offense and had fewer endorsements for drug use. The choice in victim

was both validated and contradicted. Cortoni et al. (2017), Bourke et al. (2014), and

Bensen et al. (2019) found that female sexual offenders targeted male victims at a higher

rate than female victims, yet this was disputed by earlier studies from William and Bierie

(2015), who found that approximately 50% of the cases females had offended against a

victim of the same sex. McLeod (2015) reached the same conclusion with reference to

perpetrating on same sex victims in about 68% of the cases. The only variable that was

not supported was working 30 days prior to incarceration. Christensen and Darling

(2020) reported that adult female sexual offenders who offended in institutional settings

were employed at the time of the offense. However, the literature did not specify

anything about unemployed adult female sexual offenders.

The psychosocial stressors referenced in this study were events that occurred in early life. For example, experiencing homelessness, being in a foster home, getting welfare or public assistance, living in public housing prior to 18 years of age, and the incarceration of a family member. Based on the psychosocial stressors, these participants had insecure attachments that began in early childhood and affected their development into adulthood, and in lieu, evolved their coping skills into maladaptive ones, such as using drugs and being unemployed 30 days prior to incarceration. Per Grady et al. (2016), the attachment theory explained how childhood abuse may contribute to perpetrating sexual abuse. The authors explained that insecure attachment because of childhood abuse, betrayal of trust by a caregiver, and violations of boundaries may have devastating impacts with their coping strategies and provide a distorted view of relationships (Elliot et al., 2005; Harris & Fallot, 2001; Teybure & McClure, 2011, as cited in Grady et al., 2016). Within this research, the variable related to psychosocial stressors involved aspects of events involving the participant being in foster care prior to age 18. In most cases, children are placed in foster care due to the parents' inability to care for their children or abuse. Furthermore, other aspects of the psychosocial stressors involved other events that led to the participants being separated from their family due to incarceration and incidents of homelessness and hardships which could further exacerbate the parent/child relationship, leading to insecure attachments. The authors explained that these insecure attachments create the child's internal working model, which provided the child's response to future relationships, especially in adulthood (Grady et al., 2016). They explained that childhood relationship patterns predicted adulthood patterns (Grady et al.,

2016). Grady et al. found that prior research reported that insecure attachment correlated with greater intimacy, emotional, behavioral, and cognitive dysregulation in later years. This can be seen with the unemployment and drug use. Bowlby (1988) explained that insecure attachment from constant rejection, abuse, neglect, and extended times in institutions resulted in issues with psychopathy. Additionally, insecure attachment can stem from inconsistent parenting, separation, and threats of abandonment (Bowlby, 1988).

Limitations of the Study

Limitations with reference to the population size was of concern as 115 cases is not enough to make meaningful inferences for the exploratory variables in this research. Additionally, the 115 participants in the entire United States were not representative of other incarcerated adult female sexual offenders as this sample made up a very small percentage of this population. Moreover, the results cannot be generalized in offenders who have yet been reported and/or convicted or those who received a lesser punishment through plea bargains.

Another limitation was missing data. With respect to this research, only one case was found to have missing data for the clusters and was omitted from the study. The limitation related to missing data could not be controlled by me. While only one of the 116 eligible cases had missing data on a variable that was used for cluster analysis, the other variables that were examined for associations with cluster results varied in the amount of missing data, with one having missing data on nearly half the cases. Missing data were possibly caused by errors in the interview guide or inappropriate skip loops

during interviewing (United States Bureau of Justice Statistics, 2021). Missing data affected reliability and validity of measurement.

Recommendations

Childhood experiences have profound impacts into adulthood per the attachment theory and other research. Psychosocial stressors should receive increased attention in subsequent studies. Pflugradt, Allen, and Zintsmaster (2018) asked if parental incarceration was a common criminal pathway among this population and suggested this should be explored in the future. Additionally, a high proportion of participants in Cluster #1 had a cooffender, and further research should address this phenomenon.

Implications

Psychosocial stressors, drug use, and employment are factors that should be addressed in interventions and rehabilitation of incarcerated adult female sexual offenders. The need for early intervention in children was rooted in the attachment theory and should be mediated with the primary caregiver with reference to parenting and their ability to provide more stability within the home. However, the reality is that intervention of any kind usually occurs after being convicted of the offense. Additional effort should be applied in raising these issues with adult female sexual offenders during treatment and stop the cycle that is perpetuated by the insecure attachment.

Conclusion

There is still much more to learn about this unique group of adult female sexual offenders, and they deserve better understanding. Identified common factors among this

population can help understand their profile and pathway to criminality, but especially their rehabilitation.

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Appendix: Search Terms

Female sexual offenders

Women sex offenders, and personality disorders

Female sexual offenders, and borderline personality disorder

Female sexual offenders, and personality disorders

Female sexual offenders, and childhood abuse

Female sexual offenders, and borderline personality disorder, and childhood abuse

Women sexual offenders

Women sexual offenders, and borderline personality disorder

Women sexual offenders, and personality disorders

Women sexual offenders, and childhood abuse

Sex offenders, sexual offenders, sexual abusers, and loneliness

Sex offenders, sexual offenders, sexual abusers, and intimacy

Sex offenders, sexual offenders, sexual abusers, and coping skills, coping strategies,

      stress management

Sex offenders, sexual offenders, sexual abusers, and locus of control

Sex offenders, sexual offenders, sexual abusers, and substance abuse