



Intra and Extra-Familial Child Sexual Abuse: The Role of Psychopathy

Marta Sousa¹ · Olga Cunha² · Rui Abrunhosa Gonçalves¹ ·
Andreia de Castro-Rodrigues³

Accepted: 31 May 2023
© The Author(s) 2023

Abstract

The present study analyses the relationship between psychopathic traits, the four facets of psychopathy (i.e., interpersonal, affective, lifestyle, and antisocial), and the type of crime committed (i.e., intrafamilial and extrafamilial child sexual abuse; and nonsexual crimes). The Self-Report Psychopathy Scale – Short Form (SRP-SF) and the Marlowe-Crowne Social Desirability Scale – Short Form were completed by 110 male individuals who sexually offended minors (ISOMs) and 146 individuals convicted for nonsexual crimes. Four binary logistic regression analyses were conducted, controlling for sociodemographic, criminal, and individual variables. ISOMs are less likely to score high in the SRP-SF total score and the interpersonal facet and more likely to score high in the affective facet than individuals with nonsexual crimes. Besides, ISOMs are less likely to have a prior history of alcohol and drug abuse and to have previous contact with the justice system but are more likely to have a history of psychological problems. Therefore, only the prior alcohol and drug abuse history emerged as predictors for ISOMs subtypes. According to our results, psychopathic traits should not be considered in the assessment and intervention of ISOMs, and the focus of the intervention should be on the affective dimension and the level of psychopathology.

Keywords Psychopathy · Treatment · Intrafamilial child sex offending · Extrafamilial child sex offending

Child Sexual Abuse

Sexual offending against minors is a topic of high social and political interest. The literature reveals that it is an extreme form of child maltreatment with far-reaching consequences for the victims, their families, and the communities (Hailes et al., 2019; Sanjeevi

✉ Marta Sousa
martaasousaa@gmail.com

¹ Psychology Research Center (CIPSI), School of Psychology, University of Minho, Campus de Gualtar, 4710-057 Braga, Portugal

² Hei-Lab, Universidade Lusófona Do Porto, Porto, Portugal

³ ISPA, William James Center for Research, Lisbon, Portugal

et al., 2018). Therefore, prevention strategies should be implemented in the most effective possible way.

An important research topic has been the study of the characteristics and heterogeneity of individuals who sexually offended minors (ISOMs) (Bonta & Andrews, 2016). Such information might lead to an accurate assessment of their risk of violence and, consequently, to increased effectiveness of psychological intervention programs with perpetrators (Bonta & Andrews, 2016), which compounds a critical path to reducing sexual recidivism (Helmus et al., 2013). A relevant distinction among ISOMs has been established according to the relationship between victim and perpetrator, that is, intrafamilial or extrafamilial ISOMs. Intrafamilial ISOMs are related biologically or by marriage with the victim (Loinaz Calvo et al., 2019) (e.g., father, grandfather, stepfather, uncle). By contrast, extrafamilial ISOMs are people outside the victim's familial environment (e.g., a friend of the family/ babysitter/ teacher/ neighbor / unknown person).

Three crucial aspects made the distinction of ISOMs based on the relationship between victim and perpetrator very important. First, the perpetrator of child sexual abuse is often known to the victim without being family (i.e., extrafamilial ISOMs; a friend of the family/ babysitter/ teacher/ neighbor) (Finkelhor et al., 2014; Guziak, 2020; Kloppen et al., 2016; Magalhães et al., 2009). Secondly, beyond the high prevalence, extrafamilial ISOMs showed a significantly higher risk of recidivism (Johnson et al., 2016; Seto et al., 2015), with studies showing that they indeed re-offend more than intrafamilial ISOMs (Nilsson et al., 2014; Turner et al., 2016). Lastly, even though it is not so common, the negative impact of intrafamilial abuse is higher than extrafamilial abuse (Muratoglu et al., 2018; Stroebel et al., 2012). It has very pertinently been suggested that a more refined characterization of these two groups of ISOMs would be particularly beneficial for the development of more effective interventions.

Psychopathy and Sexual Offending

Psychopathy is a clinical construct that combines specific personality traits (Hare, 2003; Hare & Neumann, 2008). It is characterized by a set of interpersonal (e.g., superficial charm, grandiose sense of self-worth), affective (e.g., lack of remorse or guilt, shallow affect, callous/lack of empathy), and behavioral characteristics (e.g., impulsivity, irresponsibility, poor behavioral controls) (Hare, 2003). The Psychopathy Checklist–Revised (PCL–R; Hare, 2003) is the standard tool for the assessment of psychopathy, measuring two distinct factors of the syndrome: factor 1 (interpersonal – affective factor) and factor 2 (lifestyle-antisocial factor) (Hare, 1991). In the more recent formulation, Hare (2003) proposed that a four-factor conceptualization of psychopathy is needed to describe the construct. The conceptualization is underpinned by interpersonal (i.e., dissocial characteristics such as pathological lying and manipulation), affective (i.e., compromised empathy and lack of guilt and concern about others), lifestyle (i.e., impulsive and reckless behaviors), and antisocial (i.e., antisocial behaviors) facets. The term “psychopathy” in the Diagnostic and Statistical Manual of Mental Disorders (DSM) has been used as a synonym for antisocial personality disorder (ASPD), even though they are not the same (Hare et al., 2018). Alternative models and measures of psychopathy have been developed with the inclusion of psychopathy

specifier for diagnosing ASPD in the Section III of the fifth edition of the DSM (American Psychological Association [APA], 2013). However, this inclusion has met with some criticisms (Crego & Widiger, 2014; Few et al., 2015), with the need to bring the diagnostic criteria for ASPD into line with the conceptualization of psychopathy by Hare (2003; Hare et al., 2018).

Studies have examined whether psychopathy relates to criminal behavior and sexual offending (Ferretti et al., 2021; Hanson & Morton-Bourgon, 2005; Leung et al., 2021; Walters et al., 2016). Literature reveals that a high level of psychopathy is a key factor in initiating and maintaining sexual offending (Seto, 2008, 2013). However, the studies are contradictory in assessing the ability to predict recidivism: some studies found that psychopathy predicted sexual recidivism (Bazinet et al., 2022; Hanson & Morton-Bourgon, 2005; Krstic et al., 2021), while other studies demonstrated that psychopathy predicted violent and general recidivism but not sexual recidivism (Murrie et al., 2012; Rojas & Olver, 2022; Yoon et al., 2022). Nevertheless, high levels of psychopathy were related to worse treatment outcomes (Langton et al., 2006; Rojas & Olver, 2022). Besides, literature found that individuals convicted with high psychopathic traits were 2.5 times more likely to be granted conditional release (Porter et al., 2009), given the use of their manipulative style of communication with prison staff. Therefore, assessing psychopathic traits is an important research topic since these individuals need specific interventions to reduce their risk of sexual and non-sexual violence.

However, the results remain inconsistent concerning the psychopathic traits assessment among ISOMs (Olver & Wong, 2006; Sohn et al., 2022). Some literature has shown that psychopathy scores depend on the type of convicted individuals, identifying the ISOMs as a group with low scores (Brown et al., 2015; Garofalo et al., 2018; Olver & Wong, 2006; Porter et al., 2000, 2009; Stoll et al., 2019) when compared with individuals with sexual convictions against adults and with non-sexual crimes groups (i.e., individuals convicted for physical assault, domestic violence, and/or coercion/ threats). The authors pointed out that ISOMs often suffer from the effects of social stigma for their deviant behaviors. These sufferings seem incompatible with psychopathic traits such as interpersonal manipulation, selfishness, and egocentricity (Garofalo et al., 2018). Besides that, no correlation between the psychopathy factors has been found in ISOMs, possibly suggesting that callousness in many ISOMs manifests only in sexual offending (Porter et al., 2000), not being a behavioral pattern across their entire functioning. Also, low levels of psychopathy in ISOMs may be related to their criminal conduct. Individuals who commit sex crimes usually specialize in that behavior (Hare, 2003; Neumann et al., 2015), contrary to the versatility and diverse pattern of individuals with high psychopathic traits.

Nevertheless, some research demonstrated that ISOMs had higher psychopathy scores than individuals with non-sexual convictions, especially in facets 1 (interpersonal) and 2 (affective) (Schimmenti et al., 2014; Sohn et al., 2022). These results contradict the idea of deficits only related to sexual offenses, with ISOMs reporting more interpersonal and affective problems. Indicators of such problems are social isolation, emotional distance, manipulation of others, instability, and inappropriate sexualization (Ferretti et al., 2021). These results can be related to abusive situations in two different ways. First, these interpersonal-affective problems might be related to the difficulties in creating and maintaining strong attachment bonds, a risk factor for perpetrating sexual aggression (Maniglio, 2012). Second, people high on facets 1 and 2 are hyporesponsive to victims' distress (Knight &

Guay, 2006), making them less likely to stop violence because of victim distress (Cardona et al., 2018).

The results are also inconclusive when intrafamilial and extrafamilial ISOMs are compared concerning psychopathy. Some studies found differences between these two groups in some facets (e.g., Porter et al., 2000). Porter et al. (2000) found that extrafamilial ISOMs scored the lowest on callous personality (i.e., factor 1), with no significant differences in chronically, impulsive, antisocial, and unstable lifestyle (i.e., factor 2) and on total score. In contrast, in another study, intrafamilial ISOMs had lower scores on psychopathy than extrafamilial ISOMs (Rice & Harris, 2002). Researchers pointed out that one of the explanations for this result was related to the minimal use of violence in the case of intrafamilial ISOMs, which possibly exhibited evidence of some paternal solicitude, a characteristic inconsistent with psychopathy. Still, other studies have found no differences in psychopathy total scores and factor scores between intrafamilial and extrafamilial ISOMs (Firestone et al., 2000; Olver & Wong, 2006; Rosenberg et al., 2005; Walters et al., 2016), suggesting that psychopathy may not play a role in the choice of the victim.

Present Study

There is little consensus in the research about how psychopathic traits may differentiate the subtypes of ISOMs, as well as ISOMs, from individuals with nonsexual convictions. Apart from the lack of consensus, in Portugal, minimal research has investigated the psychopathy of ISOMs and their subtypes, especially examining the four facets separately, as proposed by Hare (2003). It is, therefore, important to consider the role of psychopathy within different groups since a better understanding of such a construct is needed to increase treatment adherence and effectiveness. Thus, we aimed to analyze the relationship between psychopathic traits and different types of offending behavior (intrafamilial and extrafamilial child sexual offending behavior and non-sexual offending behavior); specifically, we intended to assess whether interpersonal, affective, lifestyle and antisocial facets are related to child sexual offending and nonsexual offending behavior.

Method

Participants

The study participants were selected according to a non-random convenience sampling process. To select the ISOMs, we defined a set of inclusion criteria: (a) being male; (b) being older than 16 years old at the moment of the crime (since the age of penal responsibility in Portugal is 16); (c) having a conviction for child sexual abuse, child pornography and/or sex acts with adolescents, and (d) having sufficient reading and writing skills to answer the instruments. Data were collected in two contexts: correctional services (i.e., individuals in custody) and individuals in the community (i.e., individuals with non-custodial measures). To select the participants convicted of non-sexual crimes, we defined the same inclusion criteria for the ISOMs and added one exclusion criterion, having a conviction for any sexual crimes.

One hundred and ten adult male ISOMs participated in the present study. Participants in this group were recruited from prison ($n=66$; 60%) and the community ($n=44$; 40%). Individuals in the community were serving non-custodial measures ($n=37$; 84.09%) or were in supervision by probation services ($n=7$; 15.90%). The mean age of the participants was 45.18 ($SD=14.56$), and almost half of them were married/cohabiting ($n=46$, 41.8%) in the present. Educational background was relatively varied among participants, with primary school ($n=32$; 29.1%) and sixth grade ($n=29$; 26.4%) being the most prevalent in our sample. Regarding professional status, about half of the sample was employed at the moment of the incident ($n=58$; 52.7%).

One hundred forty-six adult males convicted for nonsexual crimes also participated in the study ($M=40.57$; $SD=9.65$). Most participants were single ($n=61$; 41.8%), and more than half of the sample ($n=79$; 54.1%) was unemployed at the moment of the incident. Concerning educational level, 56 (38.4%) had completed the sixth grade and 36 (24.7%) had completed the ninth grade. They were convicted of different crimes, including homicide, threat, robbery, coercion, and possession of a prohibited weapon. Participants' characteristics are presented in Table 1.

Procedures

The current study was approved by the Ethics Committee for Research in Social and Human Sciences of the University of Minho. In addition, researchers sought authorization from the General Directorate of Reintegration and Prison Services – Ministry of Justice (*Direção Geral de Reinserção e Serviços Prisionais – Ministério da Justiça*) to collect the data from custodial settings.

In the case of ISOMs, a list of potential participants (who met the inclusion criteria) was obtained for the first author by staff from the justice system. Through that list, 72 individuals were identified in prison and 46 were identified in the community. The potential participants were informed about the study's nature and asked for voluntary participation. Among the individuals contacted, six individuals in the prison and two in the community refused to participate in the study. Moreover, one individual in prison dropped out while completing the instruments. Data concerning individuals in the community (i.e., individuals with non-custodial measures) were collected in four services in the North of Portugal (i.e., probation services and clinical services). Data concerning institutionalized individuals were collected in six national prisons.

Through the personal files of individuals without sexual convictions, we identified the men who fulfilled the inclusion criteria. The participation rate was 93%. Data were collected in two national prisons.

All the participants who agreed to collaborate in the research signed an informed consent, where the study was explained, and anonymity and confidentiality were assured. Information was given regarding the nonexistence of financial, or any other form of compensation for participating, nor was any damage implied. The instruments were administered individually in an appropriate setting. Institutional files were also used to collect sociodemographic, individual, and penal information data. Some of the information (e.g., the presence of physical/ psychological/sexual abuse in childhood/ adolescence) was also confirmed by self-reports.

Data collection was conducted in 2021 and 2022.

Table 1 (continued)

	ISOMs (n = 110)		Non-sexual sample (n = 146)		t	g ^l	95% CI	Intrafamilial ISOMs (n = 51)		Extrafamilial ISOMs (n = 59)		
	M (SD)	M (SD)	M (SD)	M (SD)				M (SD)	M (SD)	t	g ^l	95% CI
Past sexual victimization												
Yes	26 (23.6)	35 (24.0)	.021	.009	1	1	15 (29.4)	11 (18.6)	1.92	1	-	
No	83 (75.5)	107 (73.3)					35 (68.6)	48 (81.4)				
Past physical victimization												
Yes	60 (54.5)	76 (52.1)	.128	.023	1	1	28 (54.9)	32 (54.2)	.03	1	-	
No	49 (44.5)	68 (46.6)					22 (43.1)	27 (45.8)				
Past psychological victimization												
Yes	72 (65.5)	89 (61.0)	.484	.044	1	1	33 (64.7)	39 (66.1)	.00	1	-	
No	37 (33.6)	55 (37.7)					17 (33.3)	20 (33.9)				
Prior history of alcohol and drug abuse												
Yes	33 (30.0)	101 (69.2)	39.447***	.393	1	1	21 (41.2)	12 (20.3)	5.66*	1	-	
No	77 (70.0)	44 (30.1)					30 (58.8)	47 (79.7)				
Prior history of psychological problems												
Yes	32 (29.1)	22 (15.1)	7.411**	.170	1	1	18 (35.3)	14 (23.7)	1.78	1	-	
No	78 (70.9)	124 (84.9)					33 (64.7)	45 (76.3)				
Previous contact with the justice system												
Yes	40 (36.4)	115 (78.8)	47.221***	.429	1	1	22 (43.1)	18 (30.5)	1.89	1	-	
No	70 (63.6)	31 (21.2)					29 (56.9)	41 (69.5)				
Previous contact with the justice system with sexual convictions against minors												
Yes	-	-	-	-	-	-	3 (13.6)	2 (11.1)	.06	1	-	
No	-	-					19 (86.4)	16 (88.9)				
Other convictions												
Yes	-	-	-	-	-	-	14 (27.5)	13 (22.0)	.43	1	-	

Table 1 (continued)

	ISOMs (<i>n</i> = 110)		Non-sexual sample (<i>n</i> = 146)		Intrafamilial ISOMs (<i>n</i> = 51)		Extrafamilial ISOMs (<i>n</i> = 59)	
	M (SD)	t	M (SD)	g ^l	M (SD)	t	M (SD)	g ^l
No	-	-	-	-	37 (72.5)	-	46 (78.0)	-
Legal situation								
Prison	-	-	-	-	36 (70.6)	4.44*	30 (50.8)	1
Community	-	-	-	-	15 (29.4)	-	29 (49.2)	-

p* < .05. *p* < .01 ****p* < .001

Measures

Self-Report Psychopathy Scale – Short Form (SRP-SF)

The SRP-SF (Paulhus et al., 2016) is a 29-items self-report instrument selected from the 64-item complete version of the SRP-4 (Paulhus et al., 2016). The instrument assesses psychopathic traits and follows the same factor structure as PCL-R – interpersonal (INT), affective (AFF), lifestyle (LIF), and antisocial (ANT) (Hare, 1991). Some disadvantages in using PCL-R led to the developing of the Self-Report Psychopathy Scale and later the Self-Report Psychopathy -Short Form (Hare, 1980; Paulhus et al., 2016). The PCL-R remains difficult to administer to a huge sample, given the time required for its administration. Besides, an efficient PCL assessment requires a review of file information, which is often incomplete (Gordts et al., 2017). The SRP-SF was chosen to be used in this study since it overcomes some of these disadvantages, and, more importantly, it was developed using a model-based measurement theory (Neumann et al., 2013). Items are scored on a 5-point Likert-type scale (1 = *strongly disagree* to 5 = *strongly agree*). The INT subscale assesses characteristics such as pathological lying and manipulation (e.g., “I would get a kick out of “scamming” someone”); AFF measures the affective aspects of psychopathy, such as compromised empathy and lack of guilt and concern about others (e.g., “I never feel guilty over hurting others”); LIF refers to impulsive and reckless behaviors (e.g., “I keep getting in trouble for the same things over and over”) and ANT evaluate the overt antisocial behaviors (e.g., “I have threatened people into giving me money, clothes, or makeup”). Except for the ANT scale, each subscale has seven items. Even though the ANT scale includes eight items, only seven were considered for the study. Given its low variability in offender sample, the item “committed a crime” was omitted (Seara-Cardoso et al., 2019). Scores of each facet are obtained by summing up the corresponding individual item scores. Considering SRP-SF manual norms (Paulhus et al., 2016), an SRP-SF total score of 70 or greater is classified as elevated.

The psychometric properties of the SRP-SF were previously examined among a large southern European (Portuguese) sample, demonstrating good results regarding validity and reliability (Seara-Cardoso et al., 2019). The internal consistency for the current study, estimated by Cronbach’s alphas, was: INT=0.79; AFF=0.58; LIF=0.79; ANT=0.59; total=0.89.

Marlowe-Crowne Social Desirability Scale – Short Form (MCSDS-SF)

The MCSDS-SF is a 12-item measure (Ballard, 1992; Pechorro et al., 2012) that assesses participants’ tendency to respond in a socially desirable way. The items are classified as true or false by the respondent. The Portuguese version has shown adequate internal consistency (Pechorro et al., 2012). The Portuguese version has shown an acceptable internal consistency (Kuder-Richardson=0.60) (Pechorro et al., 2012). In the present study, the coefficient alpha was 0.72.

Demographic, Criminal, and Individual Questionnaire

A questionnaire was developed by the authors to collect data about demographic, criminal variables, and individual information of each participant. The first section of the

questionnaire consists of sociodemographic information such as age, marital status (at the moment of the crime and in the present), educational level, and professional occupation (at the moment of the crime). The second section consists of criminal information (i.e., previous contact with the justice system and other convictions apart from sexual convictions and legal situations in the case of ISOMs). The last section of the questionnaire allows us to collect individual information about each participant and was developed using variables that predicted sex offending in previous studies (i.e., past sexual, physical, and psychological victimization in childhood, prior history of alcohol and drug abuse, and prior history of psychological problems). We considered individuals to have psychological problems if there were any diagnoses in the individual files or if the participant reported such problems (e.g., the participant had problems at the depressive level if he had been diagnosed by a professional or if he took medication for effect prior to imprisonment).

The first author collected data.

Data Analysis

Data were analyzed using IBM SPSS Statistics Version 28. Parametric and nonparametric tests were performed since normality and homogeneity were not assumed. If tests show identical results, parametric tests were preferentially reported.

First, descriptive statistics (measures of central and dispersion tendency) were performed to describe the participants' sociodemographic, individual, and penal characteristics. Secondly, chi-square and tests of differences analyses were performed to examine differences/associations between the ISOMs and individuals with nonsexual convictions and between intrafamilial ISOMs and extrafamilial ISOMs in the different variables analyzed. Lastly, four binary logistic regressions were used to investigate the relationship between psychopathy (SRP-SF total score and SRP-SF facets) and the dependent variables (ISOMs *versus* individuals with nonsexual convictions; intrafamilial ISOMs *versus* extrafamilial ISOMs). The sociodemographic, individual, and penal variables that presented statistically significant differences between the groups and social desirability were also included as covariates to control their possible effects.

Results

Sociodemographic, Individual, and Penal Characteristics

ISOMs and Individuals with Nonsexual Convictions

Results concerning sociodemographic, individual, and penal characteristics revealed statistically significant differences between the ISOMs and individuals with nonsexual convictions in the following variables: age $t(178) = 2.88, p = 0.004$; employment at the moment of the crime, $\chi^2(3) = 16.82, p < 0.001$, with small effect size, $V = 0.26$; prior history of alcohol and drug abuse, $\chi^2(1) = 39.45, p < 0.001$, with a medium effect size, $V = 0.39$; prior history of psychological problems, $\chi^2(1) = 7.41, p = 0.006$, with a small effect size, $V = 0.17$, and previous contact with the justice system, $\chi^2(1) = 47.22, p < 0.001$, with a medium effect size, $V = 0.43$ (see Table 1).

The results showed that ISOMs are older than individuals with nonsexual convictions. Besides that, ISOMs had a higher number of individuals employed at the moment of the

crime, while the group with nonsexual convictions had a higher percentage of individuals unemployed. Among ISOMs, there was a lower percentage of individuals with prior history of alcohol and drug abuse and previous contact with the justice system. In comparison, among the nonsexual convictions group, there was a higher percentage of individuals with prior history of alcohol and drug abuse and previous contact with the justice system. Most individuals in the two groups had no history of psychological problems. Regarding psychological problems in the ISOMs group, 46.9% of the sample had depression problems and 12.5% anxiety.

Regarding prior history of psychological, $\chi^2(1)=0.484$, $p=0.487$, physical, $\chi^2(1)=0.128$, $p=0.720$, and sexual abuse, $\chi^2(2)=0.021$, $p=0.884$, the results revealed no differences between the two groups.

Intrafamilial and Extrafamilial ISOMs

Results revealed that intrafamilial and extrafamilial ISOMs are statistically significantly different concerning some variables: marital status at the moment of the crime, $\chi^2(2)=6.36$, $p=0.041$, with a small effect size, $V=0.24$; prior history of alcohol and drug abuse, $\chi^2(1)=5.66$, $p=0.017$, with a small effect size, $V=0.23$, and legal situation, $\chi^2(1)=4.44$, $p=0.035$, with a small effect size, $V=0.20$. Intrafamilial ISOMs had a higher number of individuals married or cohabiting, and serving sentences in prison, while extrafamilial ISOMs had the same number of individuals single and married/cohabiting at the moment of the crime and almost the same number of individuals serving sentences in prison and the community. Among intrafamilial ISOMs, there was almost the same number of individuals with and without prior history of alcohol and drug abuse. In contrast, extrafamilial ISOMs had a lower percentage of individuals with prior history of alcohol and drug abuse (see Table 1).

Psychopathy Traits

ISOMs and Individuals with Nonsexual Convictions

There were statistically significant differences between the individuals convicted for child sex crimes and the nonsexual crimes group in the total psychopathy score, as well as in the four facets of the scale (Table 2), with ISOMs scoring less than the nonsexual convictions group. According to the cut-off, 8.3% ($n=9$) of the individuals convicted for sexual crimes against minors had a total score of 70 or higher, while 37.5% ($n=54$) of the nonsexual crimes group had a total score of 70 or higher.

Intrafamilial and Extrafamilial ISOMs

Intrafamilial ISOMs tend to score higher in SRP-SF total score as compared to extrafamilial ISOMs, $U=1191.50$, $p=0.060$. Furthermore, intrafamilial ISOMs also tend to present a higher score in interpersonal, $U=1221.50$, $p=0.087$, and antisocial factors, $U=1217.50$, $p=0.067$, than extrafamilial ISOMs (Table 2). However, the results are not statistically significant.

Table 2 Differences between groups regarding psychopathic scores

	ISOMs (<i>n</i> = 110)	Nonsexual crimes (<i>n</i> = 146)			
	<i>M</i> (<i>SD</i>)	<i>M</i> (<i>SD</i>)	<i>t</i>	<i>gl</i>	95% <i>CI</i>
SRP-SF					
Interpersonal factor	11.25 (4.13)	15.63 (6.18)	-6.80***	250	[-5.66; -3.11]
Affective factor	12.63 (3.69)	14.48 (4.76)	-3.38***	254	[-2.92; -.77]
Lifestyle factor	13.36 (4.73)	18.62 (6.17)	-7.73***	253	[-6.60; -3.92]
Antisocial factor	11.72 (3.35)	16.19 (5.45)	-8.10***	245	[-5.57; -3.39]
SRP-SF Total	48.94 (12.43)	64.92 (18.71)	-8.19***	250	[-19.81; -12.13]
	Intrafamilial ISOMs (<i>n</i> = 51)	Extrafamilial ISOMs (<i>n</i> = 59)			
	<i>M</i> (<i>SD</i>)	<i>M</i> (<i>SD</i>)	<i>U</i>		
SRP-SF					
Interpersonal factor	11.96 (4.31)	10.63 (3.90)	1221.50 ⁺		
Affective factor	13.14 (3.91)	12.19 (3.45)	1285.00		
Lifestyle factor	13.87 (5.04)	12.92 (4.44)	1360.50		
Antisocial factor	12.43 (3.82)	11.08 (2.77)	1217.50 ⁺		
SRP-SF Total	51.40 (13.38)	46.82 (11.23)	1191.50 ⁺		

⁺ $p < .10$ *** $p < .001$

Crime Type as a Function of Psychopathy Total Score and Psychopathy Facets

ISOMs and Individuals with Nonsexual Convictions

Two binary logistic regressions were conducted to find predictors of ISOMs and perpetrators of nonsexual crimes (Table 3). SRP-SF total score and SRP-SF facets are entered as predictors in two independent models after controlling for the variables that revealed statistically significant differences between the two groups: age; employment at the time of the crime; prior history of alcohol and drug abuse; prior history of psychological problems, and previous contact with the justice system. Social desirability was also included as a control variable. The sociodemographic, psychological, penal, and social desirability were entered at the first step, followed by the SRP-SF total score/ SRP-SF facets.

In both models, the variables included in the first step produced a statistically significant model, $\chi^2(8) = 84.291$, $p < 0.001$. The role of such variables produced a pseudo- R^2 between 28.8% (Cox and Snell) and 38.6% (Nagelkerke), revealing that the model accurately classified 74.6% of the cases.

When we added the SRP-SF total score to this analysis, the model was statistically significant, $\chi^2(9) = 91.930$, $p < 0.001$, with this variable producing a pseudo- R^2 between 31.0% (Cox & Snell) and 41.5% (Nagelkerke). The model accurately classified 75.8% of the cases. Four variables contributed significantly to the model: prior history of alcohol and drug abuse (OR = 0.427; 95% CI = [0.218; 0.836]), prior history of psychological problems (OR = 2.479; 95% CI = [1.136; 5.409]), previous contact with the justice system (OR = 0.333; 95% CI = [0.169; 0.655]) and SRP-SF total score (OR = 0.965; 95% CI = [0.941; 0.991]). Thus, ISOMs are 2.4 times more likely to have a history of psychological problems. Besides that, ISOMs are 0.43 times less likely to have a prior history of

Table 3 Logistic regression coefficients of PCL-R total scores and PCL-R facets predicting ISOMs

	SRP-SF Total Scores						SRP-SF facets					
	Model 1			Model 2			Model 1			Model 2		
	B	S.E	Exp (B)	B	S.E	Exp (B)	B	S.E	Exp (B)	B	S.E	Exp (B)
Age	.003	.014	1.003	.002	.015	1.002	.003	.014	1.003	.003	.015	1.003
Employed vs. unemployed	.613	.780	1.847	.767	.804	2.153	.613	.780	1.847	.861	.818	2.364
Retired vs. non-retired	.334	.766	1.411	.576	.792	1.778	.334	.766	1.411	.762	.814	2.144
Student vs. non-student	2.329	1.470	10.269	2.409	1.485	11.118	2.329	1.470	10.269	1.942	1.430	6.976
Prior history of alcohol and drug abuse	-1.056	.329	.348***	-.851	.343	.427*	-1.056	.329	.348***	-.807	.350	.446*
Prior history of psychological problems	.866	.391	2.376*	.908	.398	2.479*	.866	.391	2.376*	.934	.415	2.545*
Previous contact with the justice system	-1.282	.334	.277***	-1.100	.345	.333**	-1.282	.334	.277***	-1.196	.366	.303**
Social desirability	.183	.064	1.201**	.080	.074	1.083	.183	.064	1.201**	.009	.079	1.009
SRP-SF Total Score				-.035	.013	.965**						
SRP-SF F1												
SRP-SF F2												
SRP-SF F3												
SRP-SF F4												
Chi-squared	84.291 ***			91.930***			84.291***			101.117***		
Pseudo R ² (Cox & Snell, Nagelkerke)	.288, .386			.310, .415			.288, .386			.335, .449		

type of participant (0=no, 1=yes); prior history of alcohol and drug abuse (0=no, 1=yes); prior history of psychological problems (0=no, 1=yes); previous contact with justice system (0=no, 1=yes); interpersonal facet (scale); affective facet (scale); antisocial facet (scale); and lifestyle facet (scale), and PCL-R total scores (scale). **p* < .05. ***p* < .01 ****p* < .001

alcohol and drug abuse, 0.33 times less likely to have previous contact with the justice system, and almost one time less likely to score high in the total score of psychopathy.

After including SRP-SF facets, the full model remained statistically significant, $\chi^2(12)=101.117$, $p<0.001$, accounting for between 33.5% (Cox and Snell R^2) and 44.9% (Nagelkerke R^2) of the variance in the sub-types of ISOMs. The overall classification accuracy rate was 78.2%. Five variables contributed significantly to the model: previous contact with the justice system (OR=0.303; 95% CI=[0.148; 0.620]); prior history of alcohol and drug abuse (OR=0.446; 95% CI=[0.225; 0.886]), SRP-SF facet 1 (OR=0.896; 95% CI=[0.810; 0.992]), SRP-SF facet 2 (OR=1.125, 95% CI=[1.011; 1.253]), and prior history of psychological problems (OR=2.545; 95% CI=[1.129; 5.735]). Thus, ISOMs are 0.45 times less likely to have a prior history of alcohol and drug abuse, 0.30 times less likely to have previous contact with the justice system, and almost one time less likely to score higher in facet 1 of psychopathy. Furthermore, ISOMs are 1.13 more time likely to score higher in facet 2 of the psychopathy and 2.55 times more likely to have psychological problems.

Intrafamilial and Extrafamilial ISOMs

Two binary logistic regressions were conducted by entering the covariates and the psychopathy total score and psychopathy facets as predictors in two independent models (Table 4). The variables that were statistically significant differences between the two groups (i.e., marital status at the moment of the crime; prior history of alcohol and drug abuse; legal situation), as well as social desirability, were entered first, followed by the SRP-SF total score/ SRP-SF facets.

Both logistic regression models presenting the sociodemographic, individual, and penal characteristics (step 1) were statistically significant, $\chi^2(5)=18.038$, $p=0.003$, accounting for between 15.1% (Cox and Snell R^2) and 20.2% (Nagelkerke R^2) of the variance in sub-types of ISOMs. These models classified 66.4% of all cases.

When the SRP-SF total score was added to this model (step 2), the role of these variables produced a pseudo r -square between 16.3% (Cox and Snell R^2) and 21.8% (Nagelkerke R^2). The model accurately classified 69.1% of the cases and was significantly reliable, $\chi^2(6)=19.586$ $p=0.003$. The analysis of the variables revealed that the only variable that emerged as a predictor for ISOMs status was having a prior history of alcohol and drug abuse. The odds of being an extrafamilial ISOMs decreased by a factor of 0.34 if they had a prior history of alcohol and drug abuse.

After including SRP-SF facets, the model remained statistically significant, $\chi^2(9)=20.607$, $p=0.015$, accounting for between 17.1% (Cox and Snell R^2) and 22.8% (Nagelkerke R^2) of the variance in the sub-types of ISOMs. The overall classification accuracy rate was 70.9%. Only the prior history of alcohol and drug abuse emerged as a predictor (OR=0.345; 95% CI=[0.122; 0.977]).

Discussion

This study contributes to a better comprehension of the differences between ISOMs and individuals with nonsexual convictions as well as the differences in ISOMs subtypes. Besides, the main goal of this study was to analyze the relationship between psychopathic traits and the four facets of psychopathy (i.e., interpersonal, affective, lifestyle, and

Table 4 Logistic regression coefficients of PCL-R total scores and PCL-R facets predicting intra and extrafamilial ISOMs

	SRP-SF Total Scores						SRP-SF facets					
	Model 1			Model 2			Model 1			Model 2		
	B	S.E	Exp (B)	B	S.E	Exp (B)	B	S.E	Exp (B)	B	S.E	Exp (B)
Single vs. nonsingle	.742	.821	2.100	.878	.820	2.405	.742	.821	2.100	.822	.837	2.275
Married/ Cohabiting vs. nonmarried/ cohabiting	-.702	.774	.495	-.604	.764	.546	-.702	.774	.495	-.567	.781	.567
Prior history of alcohol and drug abuse	-1.283	.499	.277*	-1.068	.524	.344*	-1.283	.499	.277*	-1.065	.532	.345*
Legal situation	.579	.436	1.784	.595	.440	1.813	.579	.436	1.784	.631	.445	1.880
Social desirability	.055	.095	1.056	-.005	.107	.995	.055	.095	1.056	.005	.112	1.005
SRP-SF Total Score				-.026	.021	.975						
SRP-SF F1										-.035	.073	.966
SRP-SF F2										-.035	.067	.966
SRP-SF F3										.032	.069	1.033
SRP-SF F4										-.093	.085	.911
Chi-squared	18.038**			19.586**			18.038**			20.607*		
Pseudo R ² (Cox & Snell, Nagelkerke)	.151, .202			.163, .218			.151, .202			.171, .228		

p* < .05. *p* < .01 ****p* < .001

antisocial) to the type of crime committed (i.e., intrafamilial and extrafamilial child sexual offending and nonsexual offending).

The results revealed that ISOMs presented a lower probability of scoring higher in the psychopathy total score than the nonsexual convictions group. This result suggests that psychopathy is not a key factor in initiating and maintaining child sexual offending (Seto, 2008, 2013). In our study, the percentage of ISOM with a high total psychopathy score was residual (8.3%). These results agree with previous studies (e.g., Brown et al., 2015; Garofalo et al., 2018; Porter et al., 2009) and can be related to the modus operandi of the ISOMs. The literature has revealed that the individuals who sexually offended and used violence to control victims scored higher in psychopathic traits, which is valid for ISOMs (Clayton et al., 2018; Ward & Siegert, 2002; Woodworth et al., 2013). Furthermore, these results are consistent with the psychopathy construct, which is associated with a more versatile and diverse antisocial behavior pattern. ISOMs have been found to specialize in one type of offense (Hare, 2003; Neumann et al., 2015). Besides that, theories and research on child sexual offending have documented the presence of certain characteristics and reactions to social disclosure of their deviant acts that are inconsistent with the psychopathy traits like the negative mood states and low self-esteem (Loinaz et al., 2021; Ward & Beech, 2006; Whitaker et al., 2008), as well as the presence of emotional suffering from the effects of a social stigma (Garofalo et al., 2018).

However, when the four-facet scores were included in the prediction model, the affective facet of psychopathy was significantly related to committing a sexual crime. Thus, ISOMs were 1.13 times as likely to score higher in the affective facet than individuals with nonsexual convictions. The literature has been contradictory at this point: some studies point to deficits in empathic capacity (Cardona et al., 2018; Ferretti et al., 2021; Sohn et al., 2022), while others claim that some aspects of functioning in ISOMs may be selectively impaired toward their victims (Barnett & Mann, 2016; Marshall et al., 2001; Porter et al., 2000). However, this result is in line with the idea that the difference between ISOMs and individuals with nonsexual convictions lies in the affective dimension (Cardona et al., 2018; Ferretti et al., 2021; Sohn et al., 2022), suggesting that deficits in the affective facet of psychopathy, such as lack of guilt and concern about others, are relevant in child sexual offending. The literature has shown that individuals with high scores on facet 2 of psychopathy fail to identify facial recognition of expressions such as disgust and fear. This a situation facilitates sexual aggression (Igoumenou et al., 2017). This result led us to reflect on the psychological intervention with ISOMs. Poor affective commitment leads to the establishment of superficial relationships, which is a risk factor for the perpetration of sexual aggression (Maniglio, 2012). It may be important to address the emotional coldness in intervention programs and not just empathy for victims, which is the case of the current intervention programs (McGrath & Cumming, 2010; Morrow, 2020).

Furthermore, contrary to the literature (Ferretti et al., 2021; Sohn et al., 2022), ISOMs were less likely to score higher in the interpersonal facet than individuals with nonsexual convictions. Thus, the grandiosity and manipulation style does not seem to characterize ISOMs. This result seems incompatible with the ISOMs' modus operandi, in which individuals use grooming techniques (i.e., manipulation and superficial charm) to prepare a child, significant others, and the environment for sexual abuse (Craven et al., 2006). However, the items included in this facet (e.g., "take advantage before others do"; "people are suckers, easy to fool") do not seem to be related to the manipulation used by ISOMs to attract victims. Despite this, according to the ISOMs' social interactions, the use of conning/manipulative and glibness/superficial charm does not seem to be their way of interacting with adults since research reveals difficulties at the social level (e.g., distrust of other

people, lack of communication skills) that sometimes lead to social avoidance (Heffernan & Ward, 2015; Sigre-Leirós et al., 2015). Besides, some characteristics of this facet, like grandiosity, are not compatible with some characteristics of these individuals (e.g., low self-esteem) (Loinaz et al., 2021; Sigre-Leirós et al., 2015; Ward & Beech, 2006; Whitaker et al., 2008), which possibly explain these results. These results lead us to consider that it is not so important for intervention programs to focus on manipulative communication styles but possibly to address problems in establishing relationships.

Despite the psychopathy variable, other variables make it possible to distinguish between ISOMs and men who perpetrate nonsexual crimes. ISOMs are less likely to have a previous history of alcohol and drug abuse and previous convictions compared to the other group. Our results add information to the debate about the influence of alcohol and drug abuse. The literature has not been consistent regarding the influence of these variables (Kraanen & Emmelkamp, 2011). However, in our study, ISOMs have a lower percentage of alcohol and drug abuse than individuals with nonsexual convictions. Besides, this result seems to put into question, at least in part, the integrated theory of child sexual abuse proposed by Marshall and Barbaree (Marshall & Barbaree, 1990). According to this theory, some vulnerability factors (i.e., abusive and neglectful environments that leave individuals with psychological deficits) interact with situational factors such as intoxication to cause a sexual offense against a child since this specific stressor can compromise self-regulation. However, our results seem to highlight that other situational factors (i.e., strong negative affect; the presence of a potential victim) may contribute to ISOMs' inability to use adjusted coping strategies in certain situations. Future studies should consider this factor since a better understanding of the origin of deviant behavior will lead to the development of more effective interventions. Concerning criminal variables, this result confirms prior investigations in this field, highlighting that ISOMs show fewer problems in domains concerning antisocial behavior (Petrucci et al., 2017; Porter et al., 2000). Besides, it is in line with another result of the present study, i.e., the lower prevalence of psychopathic traits among ISOMs. Individuals who committed sexual offenses against children tend to specialize in this type of crime, while individuals with nonsexual convictions are more involved in diverse criminal activities (Brown et al., 2015; Mitchell & Beech, 2011).

Beyond this, ISOMs are more likely to have prior psychological problems. Our results also show that ISOMs had a significant proportion of individuals with depression and anxiety problems. This result is not surprising since literature has demonstrated that, for example, anxiety is very frequent in ISOMs and can lead to social avoidance (Whitaker et al., 2008). Anxiety is also often associated with interpersonal deficits, possibly explaining why these individuals prefer contact with children. These results lead us to reflect on the assessment of ISOMs, which should consider their levels of psychopathology, developing psychological intervention programs that address their specific needs. The level of psychopathology (i.e., depression, anxiety) in these individuals can be seen as a result of their lack of relational competence and consequent social isolation. Contrary to the idea that this factor is not linked to recidivism and should not be a target for intervention (Bonta & Andrews, 2007), we defend the same position as some authors who believe that these targets should be incorporated into interventions since they help to create the conditions for change (Hanson & Yates, 2013; Hanson et al., 2009; Sousa et al., 2022).

In our study, the psychopathy total score and the four facet scores were not predictors of ISOMs subtypes, which means that psychopathy traits are not a distinguishing element between the two types. Our results align with some literature that found no differences in these variables between the groups (Firestone et al., 2000; Olver & Wong, 2006; Rosenberg et al., 2005; Walters et al., 2016). Besides, a prior history of alcohol and drug

abuse was significantly associated with intrafamilial ISOMs. A review carried out in 2011 found that just three out of ten studies reported differences between the groups (Kraanen & Emmelkamp, 2011), so this result adds new information to the debate about the influence of alcohol and drug abuse. These results complement the information discussed earlier, so intoxication, according to Marshall and Barbaree's integrated theory (Marshall & Barbaree, 1990), may be a situational risk factor for this offense subtype only. However, the small number of individuals in each group may have influenced the results, so future studies should consider a large sample to draw more robust conclusions.

These results have clinical implications. First, ISOMs had lower levels of psychopathic traits, suggesting that this is not a crucial target in the assessment and treatment of this group. The same happened for the intrafamilial and extrafamilial ISOMs. Secondly, our findings suggest that intervention programs could instead have a more selected focus on empathy in general. Clinical efforts should be directed to the affective feature of psychopathy to increase their ability to recognize and consider feelings in others. This phase could have important implications at different levels: in training interpersonal skills, creating adaptive relationships, and increasing empathy towards their victims. Thirdly, ISOMs did not show problems in the interpersonal features of psychopathy, which can suggest that the focus of the intervention does not need to target the manipulation communication style. Lastly, the assessment and psychological intervention of ISOMs should consider their level of psychopathology.

Despite the important contributions of the present study, some limitations should be mentioned. First, although some variables (e.g., prior history of psychological problems, prior history of sexual, psychological, and physical abuse) were assessed through two methods of data collection (i.e., institutional files and self-report), it may result in an underestimation of their prevalence. The participants may not recognize that they have been abused and neglected, which would influence the results. Second, psychopathic traits in individuals with high traits of psychopathy are challenging to measure with self-report instruments. So, individuals may underreport on self-report instruments. Also, we cannot exclude that the scores can be influenced by limited insight. Thus, these situations may have influenced the internal consistency of some subscales. As a consequence, the results must be interpreted with caution. However, due to the use of this measure, the present study was able to assess a large group of individuals with convictions in a timely and cost-effective way. Lastly, some limitations concerning our sampling should be mentioned. For example, our sample was composed only of men, so it is unclear how the findings extend to women. Also, although one of the study's aims was to differentiate ISOMs based on subtypes (intrafamilial vs. extrafamilial), the groups are small. Further replications with larger samples mainly based on subtypes of ISOMs are required. Further, the ISOMs might be parsed into subgroups based on contact level (i.e., hands-on and hands-off), which could present differences in psychopathic traits.

In sum, despite some limitations, the present study sheds light on an area where there is little agreement – the contribution of psychopathy and its facets to the different types of offending (intrafamilial and extrafamilial child sexual offending and non-sexual offending). Our findings reveal that higher levels of psychopathy total score and interpersonal facet are linked to committing nonsexual crimes, and a higher level of affective dimension is linked to committing a sexual crime against a minor. However, psychopathic traits are unrelated to the subtypes of child sexual abuse. Besides, individual and criminal variables were the factors that best distinguish both child sexual offending and nonsexual offending and intrafamilial and extrafamilial child sexual offending.

Funding Open access funding provided by FCTIFCCN (b-on). The study was conducted at the Psychology Research Center (PSI/01662), School of Psychology, University of Minho. Marta Sousa was funded by a Doctoral research grant from the Portuguese Foundation for Science and Technology, grant number 2020.06634.BD.

Data Availability The datasets generated during and/or analyzed during the current study are available from the corresponding author on reasonable request.

Declarations

Declarations of Interest None

Open Access This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit <http://creativecommons.org/licenses/by/4.0/>.

References

- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Author.
- Ballard, R. (1992). Short forms of the Marlowe-Crowne Social Desirability Scale. *Psychological Reports*, 71, 1155–1160.
- Barnett, G. D., & Mann, R. E. (2016). Theories of Empathy Deficits in Sexual Offenders. *The Wiley Handbook on the Theories, Assessment and Treatment of Sexual Offending* (1, 223–244). <https://doi.org/10.1002/9781118574003.watts011>
- Bazinet, A., Carniello, T. N., Abracen, J., Looman, J., & Valliant, P. M. (2022). The contribution of psychopathic traits and substance use in the prediction of recidivism of sexual offenders. *International Journal of Law and Psychiatry*, 81, 101779. <https://doi.org/10.1016/j.ijlp.2022.101779>
- Brown, A. R., Dargis, M. A., Mattern, A. C., Tsonis, M. A., & Newman, J. P. (2015). Elevated psychopathy scores among mixed sexual offenders: Replication and extension. *Criminal Justice and Behavior*, 42(10), 1032–1044. <https://doi.org/10.1177/0093854815575389>
- Bonta, J., & Andrews, D. (2007). Risk-need-responsivity model for offender assessment and rehabilitation. *Rehabilitation*, 6(1), 1–2.
- Bonta, J., & Andrews, D. A. (2016). *The Psychology of Criminal Conduct* (6th ed.). Routledge.
- Cardona, N., Berman, A. K., Sims-Knight, J. E., & Knight, R. A. (2018). Covariates of the severity of aggression in sexual crimes: Psychopathy and borderline characteristics. *Sexual Abuse*, 32(2), 154–178. <https://doi.org/10.1177/1079063218807485>
- Clayton, E., Jones, C., Brown, J., & Taylor, J. (2018). The aetiology of child sexual abuse: A critical review of the empirical evidence. *Child Abuse Review*, 27(3), 181–197. <https://doi.org/10.1002/car.2517>
- Craven, S., Brown, S., & Gilchrist, E. (2006). Sexual grooming of children: Review of literature and theoretical considerations. *Journal of Sexual Aggression*, 12(3), 287–299. <https://doi.org/10.1080/13552600601069414>
- Crego, C., & Widiger, T. A. (2014). Psychopathy, DSM-5, and a caution. *Personality Disorders: Theory, Research, and Treatment*, 5(4), 335–347. <https://doi.org/10.1037/per0000078>
- Few, L. R., Lynam, D. R., Maples, J. L., MacKillop, J., & Miller, J. D. (2015). Comparing the utility of DSM-5 Section II and III antisocial personality disorder diagnostic approaches for capturing psychopathic traits. *Personality Disorders*, 6(1), 64–74. <https://doi.org/10.1037/per0000096>
- Ferretti, F., Pozza, A., Carabellese, F., Schimmenti, A., Santoro, G., Mandarelli, G., Gualtieri, G., Carabellese, F., Catanesi, R., & Coluccia, A. (2021). Non-intimate relationships and psychopathic interpersonal and affective deficits as risk factors for criminal career: A comparison between sex offenders and other offenders. *Frontiers in Psychology*, 12, 600370. <https://doi.org/10.3389/fpsyg.2021.600370>

- Finkelhor, D., Shattuck, A., Turner, H. A., & Hamby, S. L. (2014). The lifetime prevalence of child sexual abuse and sexual assault assessed in late adolescence. *Journal of Adolescent Health, 55*(3), 329–333. <https://doi.org/10.1016/j.jadohealth.2013.12.026>
- Firestone, P., Bradford, J. M., Greenberg, D. M., & Serran, G. A. (2000). The relationship of deviant sexual arousal and psychopathy in incest offenders, extrafamilial child molesters, and rapists. *The Journal of the American Academy of Psychiatry and the Law, 28*(3), 303–308.
- Garofalo, C., Bogaerts, S., & Denissen, J. J. (2018). Personality functioning and psychopathic traits in child molesters and violent offenders. *Journal of Criminal Justice, 55*, 80–87. <https://doi.org/10.1016/j.jcrimjus.2018.02.003>
- Gordts, S., Uzieblo, K., Neumann, C., Van den Bussche, E., & Rossi, G. (2017). Validity of the self-report psychopathy scales (SRP-III full and short versions) in a community sample. *Assessment, 24*(3), 308–325. <https://doi.org/10.1177/1073191115606205>
- Guziak, M. A. (2020). Child sexual abuse among polish adult population: prevalence and abuse characteristics. 1–23. <https://doi.org/10.31234/osf.io/bpk7v>
- Hailes, H. P., Yu, R., Danese, A., & Fazel, S. (2019). Long-term outcomes of childhood sexual abuse: An umbrella review. *The Lancet Psychiatry, 6*(10), 830–839. [https://doi.org/10.1016/S2215-0366\(19\)30286-X](https://doi.org/10.1016/S2215-0366(19)30286-X)
- Hanson, R. K., Bourgon, G., Helmus, L., & Hodgson, S. (2009). The principles of effective correctional treatment also apply to sexual offenders: A meta-analysis. *Criminal Justice and Behavior, 36*(9), 865–891. <https://doi.org/10.1177/0093854809338545>
- Hanson, R. K., & Morton-Bourgon, K. E. (2005). The characteristics of persistent sexual offenders : A meta-analysis of recidivism studies. *73*(6), 1154–1163. <https://doi.org/10.1037/0022-006X.73.6.1154>
- Hanson, R. K., & Yates, P. M. (2013). Psychological treatment of sex offenders. *Current Psychiatry Reports, 15*(3). <https://doi.org/10.1007/s11920-012-0348-x>
- Hare, R. D. (1980). A research scale for the assessment of psychopathy in criminal populations. *Personality and Individual Differences, 1*(2), 111–119. [https://doi.org/10.1016/0191-8869\(80\)90028-8](https://doi.org/10.1016/0191-8869(80)90028-8)
- Hare, R.D. (1991). *The Hare Psychopathy Checklist-Revised*. Multi-Health Systems.
- Hare, R. D. (2003). *Hare Psychopathy Checklist-Revised* (2nd ed.). Multi-Health Systems.
- Hare, R. D., & Neumann, C. S. (2008). Psychopathy as a clinical and empirical construct. *Annual Review of Clinical Psychology, 4*, 217–246. <https://doi.org/10.1146/annurev.clinpsy.3.022806.091452>
- Hare, R. D., Neumann, C. S., & Mokros, A. (2018). The PCL-R assessment of psychopathy: Development, properties, debates, and new directions. In C. J. Patrick (Ed.), *Handbook of psychopathy* (pp. 39–79). The Guilford Press.
- Heffernan, R., & Ward, T. (2015). The conceptualization of dynamic risk factors in child sex offenders: An agency model. *Aggression and Violent Behavior, 24*, 250–260. <https://doi.org/10.1016/j.avb.2015.07.001>
- Helmus, L., Hanson, R. K., Babchishin, K. M., & Mann, R. E. (2013). Attitudes supportive of sexual offending predict recidivism: A meta-Analysis. *Trauma, Violence, and Abuse, 14*(1), 34–53. <https://doi.org/10.1177/1524838012462244>
- Igoumenou, A., Harmer, C. J., Yang, M., Coid, J. W., & Rogers, R. D. (2017). Faces and facets: The variability of emotion recognition in psychopathy reflects its affective and antisocial features. *Journal of Abnormal Psychology, 126*(8), 1066–1076. <https://doi.org/10.1037/abn0000293>
- Johnson, H. C., Underwood, L. A., Baum, L. J., & Newmeyer, M. (2016). Differences in risk scores among intrafamilial and extrafamilial sexual offenders. *International Journal of Emergency Mental Health, 18*(2), 742–751. <https://doi.org/10.4172/1522-4821.1000326>
- Kloppen, K., Haugland, S., Svedin, C. G., Maehle, M., & Breivik, K. (2016). Prevalence of child sexual abuse in the nordic countries: A literature review. *Journal of Child Sexual Abuse, 25*(1), 37–55. <https://doi.org/10.1080/10538712.2015.1108944>
- Knight, R. A., & Guay, J. P. (2006). The Role of Psychopathy in Sexual Coercion against Women. In C. J. Patrick (Ed.), *Handbook of psychopathy* (pp. 512–532). The Guilford Press.
- Kraanen, F. L., & Emmelkamp, P. M. G. (2011). Substance misuse and substance use disorders in sex offenders: A review. *Clinical Psychology Review, 31*(3), 478–489. <https://doi.org/10.1016/j.cpr.2010.11.006>
- Krstic, S., Harris, D. A., & Knight, R. A. (2021). Psychopathy and sexual aggression: Management implications. *International Journal of Offender Therapy and Comparative Criminology*. <https://doi.org/10.1177/0306624X211022672>
- Langton, C. M., Barbaree, H. E., Harkins, L., & Peacock, E. J. (2006). Sex offenders' response to treatment and its association with recidivism as a function of psychopathy. *Sexual Abuse: Journal of Research and Treatment, 18*(1), 99–120. <https://doi.org/10.1007/s11194-006-9004-5>
- Leung, P. C., Looman, J., & Abracen, J. (2021). To reoffend or not to reoffend? An investigation of recidivism among individuals with sexual offense histories and psychopathy. *Sexual Abuse, 33*(1), 88–113. <https://doi.org/10.1177/1079063219877173>

- Loinaz Calvo, I., Bigas Formatjé, N., & Sousa, A. M. D. (2019). Comparing intra and extra-familial child sexual abuse in a forensic context. *Psicothema*, *31*(3), 271–276. <https://doi.org/10.7334/psicothema2018.351>
- Loinaz, I., Sánchez, L. M., & Vilella, A. (2021). Understanding empathy, self-esteem, and adult attachment in sexual offenders and partner-violent men. *Journal of Interpersonal Violence*, *36*(5–6), 2050–2073. <https://doi.org/10.1177/0886260518759977>
- Magalhães, T., Taveira, F., Jardim, P., Santos, L., Matos, E., & Santos, A. (2009). Sexual abuse of children. A comparative study of intra and extra-familial cases. *Journal of Forensic and Legal Medicine*, *16*(8), 455–459. <https://doi.org/10.1016/j.jflm.2009.05.007>
- Maniglio, R. (2012). The role of parent-child bonding, attachment, and interpersonal problems in the development of deviant sexual fantasies in sexual offenders. *Trauma Violence & Abuse*, *13*(2), 83–96. <https://doi.org/10.1177/1524838012440337>
- Marshall, W. L., & Barbaree, H. E. (1990). An Integrated Theory of the Etiology of Sexual Offending (pp. 257–275).
- Marshall, W. L., Hamilton, K., & Fernandez, Y. (2001). Empathy deficits and cognitive distortions in child molesters. *Sexual Abuse: A Journal of Research and Treatment*, *13*(2), 123–130. <https://doi.org/10.1177/107906320101300205>
- McGrath, R., & Cumming, G. (2010). Current practices and emerging trends in sexual abuser management. In *Brandon, VT: Safer ...* http://www.saferociety.org/downloadables/WP141-Current_Practices_Emerging_Trends.pdf
- Mitchell, I. J., & Beech, A. R. (2011). Towards a neurobiological model of offending. *Clinical Psychology Review*, *31*(5), 872–882. <https://doi.org/10.1016/j.cpr.2011.04.001>
- Morrow, E. P. (2020). Cognitive, affective, and general empathy in individuals convicted of a sexual offense: A meta-analysis. *Sexual Abuse: Journal of Research and Treatment*, *32*(8), 883–906. <https://doi.org/10.1177/1079063219858062>
- Muratoglu, G., Celikel, A., & Karbeyaz, K. (2018). Evaluation of the incest cases in Hatay. *Medicine*, *7*(2), 257–259. <https://doi.org/10.5455/medscience.2017.06.8736>
- Murrie, D. C., Boccaccini, M. T., Caperton, J., & Rufino, K. (2012). Field validity of the psychopathy checklist-revised in sex offender risk assessment. *Psychological Assessment*, *24*(2), 524–529. <https://doi.org/10.1037/a0026015>
- Neumann, C. S., Hare, R. D., & Pardini, D. A. (2015). Antisociality and the construct of psychopathy: data from across the globe. *Journal of Personality*, *83*(6), 678–692. <https://doi.org/10.1111/jopy.12127>
- Neumann, C. S., Uzieblo, K., Crombez, G., & Hare, R. D. (2013). Understanding the Psychopathic Personality Inventory (PPI) in terms of the unidimensionality, orthogonality, and construct validity of PPI-I and -II. *Personality Disorders: Theory, Research, and Treatment*, *4*(1), 77–79. <https://doi.org/10.1037/a0027196>
- Nilsson, T., Carlstedt, A., Baudin, C., Jakobsson, C., Forsman, A., & Anckarsäter, H. (2014). Intra- and extra-familial child sexual abusers and recidivism in Sweden: A 10- to 15-year follow-up study. *Journal of Forensic Psychiatry and Psychology*, *25*(3), 341–361. <https://doi.org/10.1080/14789949.2014.911945>
- Olver, M. E., & Wong, S. C. P. (2006). Psychopathy, sexual deviance, and recidivism among sex offenders. *Sexual Abuse: A Journal of Research and Treatment*, *18*(1), 65–82. <https://doi.org/10.1177/107906320601800105>
- Paulhus, D. L., Neumann, C. S., & Hare, R. D. (2016). *The SRP-4: Self-report psychopathy scale* (4th ed.). Multi-Health Systems.
- Pechorro, P., Vieira, R. X., Piores, C., & Marôco, J. (2012). Contributos para a Validação duma Versão Curta da Escala de Desejabilidade Social de Marlowe-Crowne com Adolescentes Portugueses. *Arquivos de Medicina*, *26*(3), 103–108.
- Petrucelli, I., Barbaranelli, C., Costantino, V., Gherardini, A., Grilli, S., Craparo, G., & D'Urso, G. (2017). Moral disengagement and psychopathy: A study on offenders in Italian jails. *Psychiatry, Psychology and Law*, *24*(5), 670–681. <https://doi.org/10.1080/13218719.2017.1291291>
- Porter, S., Brinke, L., & Wilson, K. (2009). Crimes profiles and conditional release performance of psychopathic and non-psychopathic sexual offenders. *Legal and Criminological Psychology*, *14*, 109–118.
- Porter, S., Fairweather, D., Drugge, J., Hervé, H., Birt, A., & Boer, D. P. (2000). Profiles of psychopathy in incarcerated sexual offenders. *Criminal Justice and Behavior*, *27*(2), 216–233. <https://doi.org/10.1177/0093854800027002005>
- Rice, M. E., & Harris, G. T. (2002). Men who molest their sexually immature daughters: Is a special explanation required? *Journal of Abnormal Psychology*, *111*(2), 329–339. <https://doi.org/10.1037/0021-843X.111.2.329>
- Rojas, E. Y., & Olver, M. E. (2022). Juvenile psychopathy and community treatment response in youth adjudicated for sexual offenses. *International Journal of Offender Therapy and Comparative Criminology*, *66*(15), 1575–1602. <https://doi.org/10.1177/0306624X21994066>

- Rosenberg, A. D., Abell, S. C., & Mackie, J. K. (2005). An examination of the relationship between child sexual offending and psychopathy. *Journal of Child Sexual Abuse, 14*(3), 49–66. https://doi.org/10.1300/J070v14n03_03
- Sanjeevi, J., Houlihan, D., Bergstrom, K. A., Langley, M. M., & Judkins, J. (2018). A review of child sexual abuse: Impact, risk, and resilience in the context of culture. *Journal of Child Sexual Abuse, 27*(6), 622–641. <https://doi.org/10.1080/10538712.2018.1486934>
- Schimmenti, A., Passanisi, A., & Caretti, V. (2014). Interpersonal and affective traits of psychopathy in child sexual abusers: Evidence from a pilot study sample of Italian offenders. *Journal of Child Sexual Abuse, 23*(7), 853–860. <https://doi.org/10.1080/10538712.2014.938210>
- Seara-Cardoso, A., Queirós, A., Fernandes, E., Coutinho, J., & Neumann, C. (2019). Psychometric properties and construct validity of the short version of the Self-Report Psychopathy Scale in a Southern European sample. *Journal of Personality Assessment, 91*(2), 161–171. <https://doi.org/10.1080/00223891.2019.1617297>
- Seto, M. C. (2008). *Pedophilia and sexual offending against children: Theory, assessment, and intervention*. American Psychological Association.
- Seto, M. C. (2013). *Internet sex offenders*. American Psychological Association.
- Seto, M. C., Babchishin, K. M., Pullman, L. E., & McPhail, I. V. (2015). The puzzle of intrafamilial child sexual abuse: A meta-analysis comparing intrafamilial and extrafamilial offenders with child victims. *Clinical Psychology Review, 39*, 42–57. <https://doi.org/10.1016/j.cpr.2015.04.001>
- Sigre-Leirós, V., Carvalho, J., & Nobre, P. J. (2015). Adult interpersonal features of subtypes of sexual offenders. *Journal of Forensic and Legal Medicine, 34*, 5–10. <https://doi.org/10.1016/j.jflm.2015.04.015>
- Stoll, C. B., Boillat, C., Pflueger, M. O., Graf, M., & Rosburg, T. (2019). Psychopathy, neuroticism, and abusive behavior in low risk child sex offenders. *Journal of Child Sexual Abuse, 28*(8), 990–1006. <https://doi.org/10.1080/10538712.2019.1630880>
- Sohn, J. S., Reyes, N. C., & Kim, H. (2022). Interpersonal and affective facets and items of the Psychopathy Checklist-Revised (PCL-R) in predicting child sex offending. *Journal of Interpersonal Violence, 37*(9–10), NP6720–NP6732. <https://doi.org/10.1177/0886260520958411>
- Sousa, M., Andrade, J., Castro-Rodrigues, A., & Gonçalves, R. A. (2022). The effectiveness of psychological treatment in adult male convicted for sexual offenses against children: A systematic review. *Trauma, Violence & Abuse, 1*–15. <https://doi.org/10.1177/15248380221082080>
- Stroebel, S. S., O'Keefe, S. L., Beard, K. W., Kuo, S.-Y., Swindell, S. V. S., & Komor, M. J. (2012). Father–daughter incest: Data from an anonymous computerized survey. *Journal of Child Sexual Abuse: Research, Treatment, & Program Innovations for Victims, Survivors, & Offenders, 21*(2), 176–199.
- Turner, D., Rettenberger, M., Yoon, D., Klein, V., Eher, R., & Briken, P. (2016). Risk assessment in child sexual abusers working with children. *Sexual Abuse: Journal of Research and Treatment, 28*(6), 572–596. <https://doi.org/10.1177/1079063214564390>
- Walters, G. D., Knight, R. A., Looman, J., & Abracen, J. (2016). Child molestation and psychopathy: A taxometric analysis. *Journal of Sexual Aggression, 22*(3), 379–393. <https://doi.org/10.1080/13552600.2016.1199742>
- Ward, T., & Beech, A. (2006). An integrated theory of sexual offending. *Aggression and Violent Behavior, 11*(1), 44–63. <https://doi.org/10.1016/j.avb.2005.05.002>
- Ward, T., & Siegert, R. J. (2002). Toward a comprehensive theory of child sexual abuse: A theory knitting perspective. In *Psychology, Crime and Law* (Vol. 8, Issue 4). <https://doi.org/10.1080/10683160208401823>
- Whitaker, D. J., Le, B., Hanson, R. K., Baker, C. K., McMahon, P. M., Ryan, G., ..., & Rice, D. D. (2008). Risk factors for the perpetration of child sexual abuse: A review and meta-analysis. *Child Abuse & Neglect, 32*(5), 529–548. <https://doi.org/10.1016/j.chiabu.2007.08.005>
- Woodworth, M., Freimuth, T., Hutton, E. L., Carpenter, T., Agar, A. D., & Logan, M. (2013). High-risk sexual offenders: An examination of sexual fantasy, sexual paraphilia, psychopathy, and offence characteristics. *International Journal of Law and Psychiatry, 36*(2), 144–156. <https://doi.org/10.1016/j.ijlp.2013.01.007>
- Yoon, D., Eher, R., & Mokros, A. (2022). Incremental validity of the Psychopathy Checklist-Revised above and beyond the diagnosis of antisocial personality disorder regarding recidivism in sexual offenders. *Journal of Criminal Justice, 51*(2), 101780. <https://doi.org/10.1016/j.jcrimjus.2020.101780>