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Childhood Victimization and the Development of Risk Factors: The Moderating Effect of Age at the Time of the First Event among a Sample of Sex Offenders

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Abstract: This study examines the impact of childhood victimization onset on the development of risk factors among individuals incarcerated for sexual crimes against adult victims in Canada. Using developmental psychopathology and victimology perspectives, a sample comprising 259 individuals was subjected to bivariate, generalized linear model, and multinomial regression analyses. Results confirmed all hypotheses revealed that childhood victimization, especially direct experiences, strongly influenced psychopathological risk factors compared to adolescent victimization or exposure. This study highlights the importance of addressing the age of onset in preventive interventions to reduce long-term psychopathological risks.

Keywords: childhood victimization; psychopathological risk factors; developmental victimology; sexual offenders; adolescent behaviors; age of onset

1. Introduction

As a fundamental period in human development, childhood plays a crucial role in the psychological development and influences behavioral trajectories throughout life [1,2]. Adverse Childhood Experiences constitute an essential area of study, encompassing diverse traumatic events [3,4]. ACEs represent a spectrum of traumatizing events, including childhood victimization (i.e., physical, psychological, and sexual) and household dysfunction (e.g., parental separation, domestic violence, parental mental illness etc.) that can affect individuals in various ways [5]. In criminology, several studies have shown that individuals involved in sexual crimes exhibit a particularly high prevalence of victimization during childhood compared to the general population [6–8]. These experiences include not only forms of physical abuse, which refers to the deliberate infliction of physical harm or injury upon another person, but also psychological abuse, which involves the use of verbal or non-verbal tactics to manipulate, degrade, or intimidate an individual, and sexual violence, which encompasses any unwanted sexual act or activity perpetrated against a person without their consent or against someone unable to give consent [9,10]. Exposure to these events during childhood has been associated with mental health troubles, personality disorders, relational issues, emotional difficulties, or substance use disorders [10–12].

In this context, research has focused on identifying and understanding the links between childhood victimization and the development of specific risk factors associated with criminal offending, particularly in the realm of sexual crimes [13–18]. However, despite these advances, gaps remain in the understanding of the specific



mechanisms underlying these associations and the nuances related to the timing of childhood victimization. This is partly because most studies adopted a dichotomous approach, considering only the presence or absence of childhood victimization. Thus, they do not consider their timing, seriousness (i.e., severity, frequency, chronicity) or other relevant variables. However, recent advances [19] have emphasized that individuals do not uniformly experience childhood victimization, and its effects can differ based on various factors. These factors include the specific nature of the ACEs, individuals' age, the severity and frequency of the experiences, instances of polyvictimization, as well as the presence or absence of social support [20,21]

. Understanding how these experiences influence psychological and behavioral development is essential for designing effective interventions aimed at mitigating the negative consequences of childhood victimization.

Developmental psychopathology and developmental victimology [10,22] are two key frameworks needed to structure our understanding of the impact of childhood victimization in the development of psychopathological risk factors. The former offers a conceptual framework for understanding how traumatic experiences during childhood can influence the development of psychopathological disorders throughout life. The latter emphasizes the role of heterogeneity in the victimization of children and its consequences, considering the specific nature of childhood victimization, but also their timing and their impact on the victim. The integration of these two theoretical approaches enhances our understanding by explaining (1) the mechanisms linking victimization during childhood with the development of risk factors and behaviors, and (2) by considering the heterogeneity of victimization trajectories. This comprehensive framework allows for a nuanced analysis that acknowledges the complex and varied paths through which early adverse experiences impact individuals' later life outcomes.

This study aims to explore the multifaceted aspects of sexual, psychological, and physical direct and indirect (i.e., exposition) victimization during childhood, focusing particularly on the age at which the first incident occurs. This approach seeks to ascertain how the timing of initial victimization experiences may influence subsequent developmental trajectories. We are particularly interested in whether the age of onset of victimization affects the probability of developing risk factors and behaviors that predispose individuals to criminal activity, specifically sexual offenses, later in life. This research utilizes a sample of incarcerated adults to investigate these relationships, thereby contributing to a deeper understanding of the key developmental periods that may be critical in preventing such behaviors. The findings may have significant implications for interventions aimed at reducing the incidence of sexual crimes by addressing the root causes of risk behaviors from an early age.

2. Childhood Victimization and Risk Factors: A Developmental Psychopathology Perspective

Developmental psychopathology provides a conceptual framework to elucidate the impact of adverse early experiences on subsequent mental health disorders and behavioral adaptations. This theory explains the association between childhood adversity and an increased propensity for antisocial and criminal behaviors, highlighting how both positive and negative experiences influence affective and cognitive processing throughout various developmental stages [7,10]. Children exposed to negative events such as abuse and maltreatment are at a heightened risk of developing a range of psychopathological disorders, including cognitive distortions, relational disorders, antisocial behavior, emotional dysregulation, and sexual disorders. These maladaptive outcomes significantly increase the likelihood of engaging in criminal activities later in life [10].

Research has demonstrated a strong link between childhood sexual victimization and the development of cognitions that facilitate sexual offenses. Such cognitions often include the perception of the world as a dangerous place and adults as untrustworthy, as well as attitudes that may condone or normalize the sexualization of children [13,14,23,24]. Moreover, studies have demonstrated gender-specific pathways linking childhood victimization to antisocial behaviors in adulthood. For instance, Widom, Schuck and White [16] found that among males, the relationship between early victimization and alcohol abuse in later life is mediated by early aggressive behaviors. Conversely, for females, a direct link exists between childhood victimization and adolescent alcohol abuse. The enduring effects of childhood victimization also extend to various forms of adult psychopathology, including anxiety, depression, personality disorders, and a broad spectrum of internalized symptoms [5,17].

3. Heterogeneity among Childhood Victimization: A Developmental Victimology Perspective

Finkelhor's developmental victimology framework [22,25,26] explicitly addresses the heterogeneity in the trajectories of child victimization and outlines how these variations are intricately linked to the child's developmental stage. According to the framework, the risk and type of victimization a child encounters vary significantly with age; for example, infants are notably less susceptible to sexual violence compared to older children [20,22]. This variability underscores the critical influence of developmental stages on the nature and severity of victimization impacts. The framework further suggests that the specific developmental stage at the time

of the traumatic event critically determines the trauma's long-term effects. For instance, girls who experience victimization early in childhood are at a higher risk of developing extensive Post-Traumatic Stress Disorder symptoms, as highlighted by Dierkhising, Ko, Woods-Jaeger, Briggs, Lee and Pynoos [21]. In contrast, boys tend to exhibit a correlation between the early onset of victimization and a propensity towards both externalized behaviors, such as aggression, and internalized issues, such as anxiety and depression. Expanding on this, Chopin, Beauregard and Molnar [19] investigated the effects of the duration and diversity of victimization experiences on later behavior. Their findings reveal a significant link between prolonged victimization and increased substance abuse risks, demonstrating the severe impacts of extended exposure to harm. Additionally, experiencing a wide variety of victimization types markedly heightens the likelihood of engaging in violent and sexual criminal activities later in life, further illustrating the diverse and complex pathways of victimization trajectories influenced by childhood experiences.

The multi-dimensional approach to childhood victimization has been empirically corroborated in multiple studies after the initial taxonomic approach (i.e., absence or presence) regarding childhood victimization started being questioned by studies that identified several patterns of childhood victimization. For instance, Ford, Grasso, Hawke and Chapman [27] studied youth in juvenile detention facilities and found three distinct classes of youths: (1) the polyvictims (5%, Mean = 11.4 ACEs); (2) relatively moderate adversity group (36%, Mean = 8.9 adverse events, 2.65 traumatic events); (3) low adversity class (59%, Mean = 7.4 adversity events; 0.3 traumatic events). Furthermore, Aebi, Linhart, Thun-Hohenstein, Bessler, Steinhausen and Plattner [28] found as well three distinct classes: (1) no/mild trauma (76%), (2) emotional and physical trauma (18%), and (3) emotional, physical, and sexual trauma (8%). The second and third categories were related to a variety of psychiatric disorders and self-reported mental health problems [28]. Turner, Wolf, Barra, Müller, Gregório Hertz, Huss, Tüscher and Retz [29] proposed a latent-class analysis (LCA) 3-class model. The results evidenced (1) a low ACEs trajectory, (2) a mainly neglectful ACEs trajectory, and (3) a multiple ACEs trajectory [29].

On the other hand, DeCamp and Zaykowski [30] identified four distinct classes using trajectory modeling: (1) rarely victimized (61%); (2) young adult victims (1%); (3) childhood victims (19%); and (4) chronically victimized (20%). Another classification found is Barra's et al. (2018) whose results highlighted the existence of five victimization trajectories: multiple victimization (9.0%), mainly family related (17.1%), mainly peer related (21.7%), mainly neglectful (18.6%), and little/no (33.5%) ACEs. Chopin, Beauregard and DeLisi [20] used a sample of sex offenders and identified four different ACEs trajectories: no ACE trajectory, poly exposure and victimization trajectory, childhood exposure trajectory, and polyvictimization trajectory. These trajectories exhibit victimization of varying intensity and severity.

4. Aims of the Study

Abundant research addressed the impact of childhood victimization among individuals involved in crimes, finding associations between the presence of childhood victimization and the development of risk factors and behaviors that predispose individuals to engage in sexual offenses later in life. These studies have also demonstrated the heterogeneity of childhood victimization and the need to study their complexity to better understand their impact. At this stage, research has focused on two variables: the impact of the severity and duration of childhood victimization. However, the age of the first childhood victimization has been rather neglected, with some exceptions quoted in the former section. Given the exploratory nature of these studies, they require further investigation. In that regard, our study analyses the role of the age at which the childhood victimization occurs, highlights nuances between exposure and direct victimization, and examines whether their timing (either during childhood or adolescence) influences the subsequent development of psychopathological risk factors which increases the likelihood that an individual will engage in sexual offenses later in life. By delving into these aspects, we seek to contribute to the overall understanding of the impact of childhood victimization and inform preventive and therapeutic interventions.

To structure this study, we have formulated the following hypotheses:

H1: *Individuals who experienced childhood victimization at an earlier age are at an increased risk of developing risk factors related to criminal behaviors.*

H2: *Exposure to childhood victimization at an early age has less severe consequences than victimization at an early age in the development of risk factors.*

H3: *Exposure to victimization during childhood has more significant consequences in the development of risk factors than exposure to victimization during adolescence.*

5. Methods

5.1. Data and Sample

Our sample ($N = 259$) is derived from a prospective study ($N = 613$) on the recidivism of individuals involved in sexual crimes in Canada, serving prison sentences of a minimum two years in a federal the Quebec region. The data collection took place between 1994 and 2000. The participation rate is considered high, with 93% of the participants agreeing to participate in the study. To qualify for the study, participants had to be offenders who committed sexual assaults against victims aged 16 or older, aligning with Arbanas, Marinovic and Buzina [31]'s criteria regarding the age of sexual consent. This focus stems from significant differences in sexual crimes against children versus adults [32]. Furthermore, to maintain sample homogeneity, individuals who committed sexual violence in domestic settings were excluded, considering the distinct nature of familial versus extrafamilial sexual assaults [33]. Consequently, the study included 259 participants, 42.25% of the total sample. All individuals in the sample were male. Ethical approval was obtained from the University of [left blind for review], and all participants consented to their data being used exclusively for research.

5.2. Procedure

Data were gathered using semi-structured interviews and a computerized questionnaire, covering aspects of the participants' lives and criminal behaviors before, during, and after the crime, attitudes towards their offenses, victimization experiences, developmental factors, and psychiatric diagnoses. This self-reported data was cross-checked with psychiatric and behavioral records for validation, achieving high inter-rater agreement (Cohen's $\kappa = 0.87$). Inter-rater agreement was assessed based on 16 interviews (alongside a review of official documents) jointly conducted by two evaluators both trained clinical psychologists with extensive experience in forensic assessment and diagnosis within correctional settings. Evaluations were carried out independently by each evaluator post-interview.

Personality disorder information was sourced from psychologists responsible for participants' assessment, based on the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) criteria. Before meeting with a psychologist, they underwent the Minnesota Multiphasic Personality Inventory-II (MMPI-II). The psychologist had access to the test results before engaging with the individuals. Via a structured clinical interview, the psychologist formulated diagnoses primarily based on DSM-IV criteria, MMPI-II results, and official information present in the correctional records.

5.3. Measures

Response Variables. To evaluate the impact of the age of the first childhood victimization, we employed multiple response variables. Initially, childhood victimization were operationalized based on two variables allowing to distinguish between indirect and direct victimization: (a) exposure to victimization and (b) childhood victimization. Exposure to victimization, which operationalizes indirect victimization during childhood, entails witnessing victimization during childhood/adolescence (i.e., less than 18 years old), encompassing psychological violence, physical violence, pedophilia, rape, incest, and sexual violence. Childhood victimization operationalize the direct victimization and refers to a child's exposure to acts or behaviors deemed harmful, detrimental, or traumatic, including various forms such as psychological, physical, incest, and sexual violence (see the correlation matrix of these different types of direct and indirect victimization in Appendix A). Our response variables relate to the age of the first exposure and/or victimization, utilizing four variables (i.e., two continuous and two categorical): (1) age of the first exposure ($M = 4.08$, $SD = 3.99$), (2) age of the first victimization ($M = 5.08$; $SD = 4.05$), (3) age category of the first exposure (0 = no exposure, 1 = exposure before 12 years of age, 2 = exposure between 12 and 18 years of age), (4) age category of the first victimization (0 = no victimization, 1 = victimization before 12 years of age, 2 = victimization between 12 and 18 years of age).

Explanatory Variables: To determine if the age of the first childhood victimization was associated with the development of risk factors, five categories of explanatory variables were utilized: (1) personality disorders, (2) cognitions, (3) criminal history, (4) problematic behaviors during adolescence, (5) sexual issues and dysfunctions.

Personality Disorders: To test the impact of the age of the first childhood victimization, 10 dichotomous variables (0 = absence, 1 = presence) were utilized, distributed into three personality disorder clusters: Cluster A—Eccentric, Cluster B—Dramatic, and Cluster C—Anxious. The Eccentric cluster includes (5) paranoid, (6) schizoid, and (7) schizotypal. The Dramatic cluster includes (8) antisocial, (9) borderline, (10) histrionic, and (11) narcissistic. Finally, the Anxious cluster includes (12) avoidant, (13) dependent, and (14) obsessive-compulsive. All individuals in our sample were referred to a psychologist.

Substance Use Disorder: In line with previous research suggesting an association between childhood victimization and alcohol/drug abuse [16] we have included the following variables (15) alcohol use disorder and (16) drug use disorder. These variables characterize a current or past dependence status, occurring in adulthood and diagnosed according to DSM-IV criteria by psychologists involved in data collection.

Cognitive Distortions: Several studies have shown an association between crime-favoring cognitions and childhood victimization e.g., [13]. In this context, three dichotomous variables were used: (17) cognitions that victims provoked the aggression, (18) cognitions that victims deserved the aggression, (19) cognitions that victims were consenting. In this study, cognitions were assessed based on the interviews conducted with each individual by the researchers and psychologists.

Criminal History: To test whether criminal history may be associated with the age of the first childhood victimization, criminal career parameters were included: (20) number of violence offenses, (21) number of sexual offenses (i.e., other than the one for which the individual was incarcerated), (22) number of property offenses. This information constitutes official data on individual convictions.

Problematic Behaviors During Adolescence: To assess whether problematic behaviors during adolescence could be associated with the age of the first childhood victimization, two continuous variables were used: (23) antisocial problematic behaviors ($M = 2.01$, $SD = 1.62$) and (24) internalized problematic behaviors ($M = 2.02$, $SD = 1.86$). The variable of internalized problematic behaviors is a scale computed from dichotomous variables: daydreaming, social isolation, enuresis, poor self-image, phobias, nightmares, sleep disorders (Cronbach's $\alpha = 0.75$). The variable of antisocial problematic behaviors is a scale computed from dichotomous variables: chronic lying, rebellious attitude, anger temperament, reckless behavior, running away, and auto-mutilation (Cronbach's $\alpha = 0.65$). Each measure was obtained by screening diverse official records and conducting interviews with the individuals involved.

Sexual Issues and Dysfunctions: To test the impact of the age of the first childhood victimization on sexual development, two continuous variables were used: (25) problematic sexual behaviors ($M = 0.72$, $SD = 1.07$) and (26) sexual dysfunctions ($M = 1.32$, $SD = 0.83$). The variable *problematic sexual behaviors* is a scale constructed from behaviors such as compulsive masturbation before 18 years old, watching pornographic movies before 18 years old, watching pornographic magazines before 18 years old, going to strip joints before 18 years old, having sex with sex workers before 18 years old, and participating in prostitution activities before 18 years old (Cronbach's $\alpha = 0.60$). The variable *sexual dysfunctions* was constructed based on indicators such as erectile dysfunction (according to DSM-IV), premature ejaculation (according to DSM-IV), delayed ejaculation, desire disorder (according to DSM-IV), anhedonic ejaculation, sexual aversion (according to DSM-IV), and sexual phobia (Cronbach's $\alpha = 0.58$).

5.4. Analytical Strategy

This study aims to analyze the relationships that may exist between, on the one hand, the age of the first childhood victimization, and, on the other hand, a series of risk factors. To examine this relationship, we followed a two-step analytical process. First, we conducted bivariate comparisons (i.e., Chi-square, Mann-Whitney U, Spearman's rho, Kruskal-Wallis K) between all explanatory variables and response variables. Second, using only the significant variables at the bivariate level [34], we performed generalized linear models (i.e., for age variables at first exposure and victimization) and multinomial regression analyses (i.e., for age category variables at first exposure and victimization). For generalized linear models, a logarithm gamma transformation was applied to the two age variables to accommodate their non-normally distributed, left-skewed nature. This transformation method was chosen due to its ability to effectively handle skewed data distributions, ensuring the robustness of the modeling approach. By incorporating this transformation, we aimed to deeply uncover the underlying relationships between the age variables and the outcome measures, enhancing the interpretability and accuracy of our analyses.

Regression analysis is commonly employed for two primary purposes [35]: prediction and causal inference. In prediction studies, the aim is to establish a predictive model that can forecast the values of the response variable based on observed values of the explanatory variables. Conversely, causal analysis seeks to determine the causal relationships between explanatory variables and the response variable. In this study, we performed causal analysis, in which childhood victimization variables were considered potential causal factors for the explanatory variables.

A multicollinearity test was conducted for the variables included in the multivariate analyses, and the results indicate that the variance inflation factor statistic did not exceed the threshold of 1.69, and tolerance was greater than 0.59 (see Appendix A).

6. Results

Table 1 provides descriptive statistics of the individuals included in the sample. The results indicate that over half of the sample has been exposed to traumatic events (54.44%) and/or victimized during their childhood/adolescence. For those who experienced childhood victimization, the mean age at their first exposure was 4.08 years, and 5.08 years for their first victimization. The most prevalent personality traits in our sample are antisocial, narcissistic, borderline, and dependent personalities. Just under a quarter (21.24%) of individuals have cognitions suggesting that victims deserve what happened to them. Substance use disorders are highly prevalent, with rates of 72.93% for alcohol consumption and 55.21% for drug use. Analysis of their official criminal careers indicates that individuals included in the sample have been unfavorably known for committing an average of 5.24 property offenses, 2.18 violent offenses, and 0.50 sexual offenses. The mean number of problematic adolescent behaviors is approximately 2 for both antisocial behaviors ($M = 2.01$) and internalized behaviors ($M = 2.02$). Finally, concerning their sexual development, individuals exhibit an average of 1.32 sexual dysfunction.

Table 1. Descriptive statistics.

		n = /\bar{x}	%/S.D
Exposure to victimization during childhood/adolescence		141	54.44
Victimization during childhood/adolescence		167	64.48
Age at the first exposure		4.08	3.99
Age at the first victimization		5.08	4.05
Personality disorders			
Cluster A			
	Paranoid	26	10.04
	Schizoid	16	6.18
	Schizotypal	0	0.00
Cluster B			
	Antisocial	116	44.79
	Borderline	64	24.71
	Histrionic	6	2.32
	Narcissistic	69	26.64
Cluster C			
	Avoidant	29	11.20
	Dependent	81	31.27
	Obsessive-compulsive	8	3.09
	Alcohol use disorder	189	72.97
	Drug use disorder	143	55.21
Cognitions			
	The victim provoked the aggression	31	11.97
	The victim deserved the aggression.	55	21.24
	The victim was consenting	47	18.15
Criminal history			
	Violent offenses during adulthood	2.18 ^a	3.69 ^b
	Sexual offenses during adulthood	0.50 ^a	1.14 ^b
	Property offenses during adulthood	5.24 ^a	11.03 ^b
Problematic behaviors during adolescence			
	Antisocial problematic behaviors	2.01 ^a	1.62 ^b
	Internalized problematic behaviors	2.02 ^a	1.86 ^b
Sexual disorders			
	Number of sexual dysfunctions	1.32 ^a	0.83 ^b
	Number of sexual deviances	0.72 ^a	1.07 ^b

Notes. ^a Denotes the mean; ^b Denotes the standard deviation.

Table 2 presents bivariate analyses of the relationships between explanatory variables and response variables. The results indicate relationships between the age at the first exposure to traumatic events and the antisocial (Mann-Whitney $U = 2896.50$; $p = 0.034$) and borderline (Mann-Whitney $U = 2233.50$; $p = 0.039$) personality disorders. The findings also suggest an association between the age at the first exposure to traumatic events and cognitions supportive of sexual crimes, specifically the belief that victims deserved their assault (Mann-Whitney $U = 1315.50$; $p = 0.029$). Finally, a relationship exists between the age at the first exposure and the number of property offenses ($\rho = 0.19$; $p = 0.023$) and sexual offenses ($\rho = 0.19$; $p = 0.024$) in participants' criminal histories.

Significant relationships are also observed between the age of the first victimization and the schizoid (Mann-Whitney $U = 96$; $p = 0.026$), antisocial (Mann-Whitney $U = 3866$; $p = 0.011$), and borderline (Mann-Whitney $U = 3468$; $p = 0.010$) personality traits. Significant relationships also exist between the age of first victimization and the number of property offenses ($\rho = 0.18$; $p = 0.017$) and the number of problematic sexual behaviors ($\rho = 0.13$; $p = 0.048$).

Regarding different age categories of exposure to victimization (i.e., no exposure/exposure during childhood/exposure during adolescence), associations are observed with the following variables: antisocial personality ($\chi^2 = 14.23$; $p < 0.001$), alcohol use disorder ($\chi^2 = 14.89$; $p < 0.001$), drug use disorder ($\chi^2 = 14.95$; $p < 0.001$), violent offenses (Kruskal-Wallis $K = 16.36$; $p < 0.001$), sexual offenses (Kruskal-Wallis $K = 14.46$; $p < 0.001$), and property offenses (Kruskal-Wallis $K = 30.49$; $p < 0.001$). Variables such as antisocial problematic behaviors during adolescence (Kruskal-Wallis $K = 30.49$; $p < 0.001$) and internalized problematic behaviors (Kruskal-Wallis $K = 31.96$; $p < 0.001$) are also associated with age categories of the first exposure to ACEs. Finally, for age categories associated with the first victimization, the following variables show significant relationships: antisocial personality ($\chi^2 = 13.78$; $p < 0.001$), borderline personality ($\chi^2 = 16.77$; $p < 0.001$), alcohol use disorder ($\chi^2 = 29.35$; $p < 0.001$), and drug use disorder ($\chi^2 = 27.05$; $p < 0.001$). Additionally, variables such as the number of violent (Kruskal-Wallis $K = 21.38$; $p < 0.001$) and sexual (Kruskal-Wallis $K = 30.15$; $p < 0.001$) assaults, property offenses (Kruskal-Wallis $K = 11.73$; $p = 0.003$), as well as problematic antisocial (Kruskal-Wallis $K = 63.81$; $p < 0.001$) and internalized behaviors (Kruskal-Wallis $K = 51.19$; $p < 0.001$) during adolescence are associated with age categories of the first victimization.

Table 2. Bivariate analysis.

		Age First Exposition n = 141		Age First Victimization = 167		No Exposure/Exposure during Childhood/Exposure during Adolescence		No Victimization/Victimization during Childhood/Victimization during Adolescence	
		Man-Withney U/Spearman rho	p Value	Man-Withney U/Spearman rho	p Value	χ ² /Kruskal-Wallis-H	p Value	χ ² /Kruskal-Wallis-H	p Value
Personality disorders									
Cluster A									
	Paranoid	1087.00	0.828	1542.50	0.963	1.84	0.399	3.31	0.191
	Schizoid	114.00	0.556	96.00*	0.026	1.83	0.401	0.39	0.822
	Schizotypal	-	-	-	-	-	-	-	-
Cluster B									
	Antisocial	2896.50 *	0.034	3866.00*	0.011	14.23 ***	<0.001	13.78 **	0.001
	Borderline	2233.50 *	0.039	3468.00*	0.010	8.33 *	0.016	16.77 ***	<0.001
	Histrionic	322.00	0.536	271.50	0.755	0.78	0.677	0.87	0.647
	Narcissistic	2070.00	0.476	3968.50	0.445	0.05	0.977	2.03	0.363
Cluster C									
	Avoidant	1139.50	0.665	1754.00	0.445	5.11	0.078	7.99 *	0.018
	Dependent	2413.00	0.475	2873.00	0.254	1.64	0.440	0.62	0.734
	Obsessive-compulsive	357.00	0.614	323.00	0.434	2.10	0.350	0.34	0.845
	Alcohol use disorder	2019.00	0.317	2277.00	0.317	14.89 ***	<0.001	29.35 ***	<0.001
	Drug use disorder	2352.00	0.515	3214.00	0.643	15.95 ***	<0.001	27.05 ***	<0.001
Cognitions									
	The victim provoked the aggression	1500.00	0.149	1652.50	0.782	2.56	0.278	0.83	0.659
	The victim deserved the aggression.	1315.50	0.029	2370.50	0.340	0.50	0.780	4.25	0.120
	The victim was consenting	1714.50	0.477	2527.50	0.503	0.59	0.747	4.07	0.131
Criminal history									
	Violent offenses during adulthood	-0.01 ^a	0.882	0.05 ^a	0.561	16.36 ^{b***}	<0.001	21.38 ^{b***}	<0.001
	Sexual offenses during adulthood	0.19 ^{a*}	0.024	0.08 ^a	0.301	14.46 ^{b***}	<0.001	30.15 ^{b***}	<0.001
	Property offenses during adulthood	0.10 ^a	0.230	0.18 ^{a*}	0.017	30.49 ^{b***}	<0.001	11.73 ^{b**}	0.003
Problematic behaviors during adolescence									
	Antisocial problematic behaviors	0.03 ^a	0.686	0.01 ^a	0.489	32.35 ^{b***}	<0.001	63.81 ^{b***}	<0.001
	Internalized problematic behaviors	0.07 ^a	0.411	0.01 ^a	0.314	31.96 ^{b***}	<0.001	51.19 ^{b***}	<0.001
Sexual disorders									
	Number of sexual dysfunctions	-0.06 ^a	0.480	0.05 ^a	0.489	5.23 ^b	0.073	0.43 ^b	0.807
	Number of sexual deviances	-0.05 ^a	0.585	0.13 ^{a*}	0.048	3.22 ^b	0.200	0.04 ^b	0.978

Notes. * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$. ^a Denotes the Spearman rho; ^b Denotes the Kruskal-Wallis H.

Table 3 presents the results of the generalized linear model with log-gamma for factors associated with the age of the first exposure to a traumatic event. The results indicate that the older the age of the first exposure to traumatic events during childhood, the more likely individuals are to exhibit antisocial personality traits ($\beta = 0.40$; $p = 0.009$). Conversely, the youngest the age of the first exposure, the higher the probability of endorsing cognitions supporting the idea that victims deserve their assault ($\beta = -0.26$; $p = 0.017$).

Table 3. Generalized linear model with a gamma log-link function of factors associated with the age of first exposure to victimization (N = 141).

	β	<i>p</i> Value	95% CI
Borderline	-1.21	0.119	[-2.22–0.20]
Antisocial	0.40 **	0.009	[0.10–0.70]
The victim deserved the aggression.	-0.26 *	0.017	[-0.63–0.12]
Sexual offenses during adulthood	0.07	0.381	[-0.08–0.21]
Constant	1.27 ***	<0.001	[1.02–1.51]
χ^2	14.28 ***	<0.001	
Akaike Information Criterion (AIC)	643.53		
Bayesian Information Criterion (BIC)	644.21		
Deviance	107.40		
Likelihood Ratio Test	-315.37		

Notes. * $p < 0.05$. ** $p < 0.01$. *** $p < 0.001$. This table allows testing hypotheses 1 and 2. The constant refers to the intercept of the regression line. Its significance test evaluates whether this intercept is statistically significant, indicating the adequacy of the model fit; χ^2 : Measures model fit by comparing observed and expected frequencies. Akaike Information Criterion (AIC): Balances model fit and complexity, with lower values indicating better fit. Bayesian Information Criterion (BIC): Similar to AIC, but penalizes model complexity more strongly. Lower BIC values indicate better model fit and parsimony; Deviance: Measures overall model fit by comparing predicted and observed values. Likelihood Ratio Test: Assesses if predictors significantly improve model fit compared to a null model.

Table 4 displays the generalized linear model results with log-gamma for factors associated with the age of the first victimization. The findings suggest that the older the age of the first victimization, the higher the likelihood to present schizoid personality traits ($\beta = -1.83$; $p = 0.015$). In contrast, the older age of the first victimization is associated with an increased risk of developing antisocial personality disorders ($\beta = 0.40$; $p = 0.015$). Similarly, the number of problematic antisocial ($\beta = 0.13$; $p = 0.023$) and internalized behaviors ($\beta = 0.10$; $p = 0.020$) are positively associated with the age of the first victimization.

Table 4. Generalized linear model with a gamma log-link function of factors associated with the age of first victimization (N = 141).

	β	Sig.	95% CI
Schizoid	-1.83 *	0.015	[-3.30–0.35]
Antisocial	0.40 *	0.015	[0.08–0.72]
Borderline	0.42	0.247	[0.09–0.75]
Property offenses during adulthood	-0.01	0.162	[-0.03–0.00]
Number of sexual deviance	0.01	0.950	[-0.14–0.15]
Antisocial problematic behaviors	0.13 *	0.023	[0.02–0.24]
Internalized problematic behaviors	0.10 *	0.020	[0.02–0.18]
Constant	0.42 **	0.007	[0.12–0.72]
χ^2	46.35 ***	<0.001	
Akaike Information Criterion (AIC)	1171.74		
Bayesian Information Criterion (BIC)	1200.17		
Deviance	371.30		
Likelihood Ratio Test	-577.87		

Notes. * $p < 0.05$. ** $p < 0.01$. *** $p < 0.001$. This table allows testing hypotheses 1 and 2. The constant refers to the intercept of the regression line. Its significance test evaluates whether this intercept is statistically significant, indicating the adequacy of the model fit; χ^2 : Measures model fit by comparing observed and expected frequencies. Akaike Information Criterion (AIC): Balances model fit and complexity, with lower values indicating better fit. Bayesian Information Criterion (BIC): Similar to AIC, but penalizes model complexity more strongly. Lower BIC values indicate better model fit and parsimony; Deviance: Measures overall model fit by comparing predicted and observed values. Likelihood Ratio Test: Assesses if predictors significantly improve model fit compared to a null model.

Table 5 presents the results of the multinomial regression for factors associated with the age categories of the first exposure to a traumatic event. This model has a Nagelkerke R² of 0.17. Model 1 indicates that individuals not exposed to traumatic events during childhood are less likely to exhibit alcohol and drug use disorder ($\beta = -0.70$; $p = 0.023$) than those exposed during childhood. Model 2 suggests that individuals exposed to a traumatic event during adolescence are less likely to have alcohol consumption disorders than those exposed during childhood.

Table 5. Multinomial regression of factors associated with category of age for the first exposure to victimization (N = 259).

	Model 1				Model 2			
	β	p Value	Exp (β)	95% CI	β	p Value	Exp (β)	95% CI
Antisocial	-0.13	0.662	0.88	[0.50–1.56]	2.76	0.860	15.86	[0.81–139.34]
Borderline	-0.58	0.068	0.56	[0.30–1.04]	-1.74	0.110	0.18	[0.02–1.48]
Alcohol use disorder	-0.58	0.065	0.56	[0.30–1.04]	-0.14 *	0.013	0.87	[0.19–4.03]
Drug use disorder	-0.70 *	0.023	0.50	[0.27–0.91]	-0.84	0.432	0.43	[0.10–1.83]
Constant	0.86 ***	<0.001			-3.52 ***	0.001		
Cox & Snell R ²	0.14							
Nagelkerke R ²	0.17							
McFadden R ²	0.09							

Notes. * $p < 0.05$. *** $p < 0.001$. This table allows testing hypotheses 2 and 3. Model 1: Exposure during childhood (ref cat) vs. No exposure; Model 2: Exposure during childhood (ref cat) vs. Exposure during adolescence; The constant refers to the intercept of the regression line. The significance test evaluates whether this intercept is statistically significant, indicating the adequacy of the model fit. Cox & Snell R²: This statistic measures the proportion of variation explained by the model, with higher values indicating better fit. Nagelkerke R²: Similar to Cox & Snell R², this metric also assesses the proportion of variation explained by the model, but it is adjusted to provide a better estimation of the model's fit. McFadden R²: This statistic evaluates the proportion of variation explained by the model relative to a null model, with values closer to 1 indicating better fit.

Table 6 presents the results of the multinomial regression for factors associated with the age categories of the first victimization. This model has a Nagelkerke R² of 0.44. Model 1 suggests that individuals not experiencing traumatic events during childhood are less likely to have problematic antisocial behaviors ($\beta = -0.50$; $p < 0.001$) and internalized behaviors ($\beta = -0.37$; $p < 0.001$) compared to those who faced traumatic events during childhood. Model 2 indicates that individuals who experienced victimization during adolescence are less likely to exhibit antisocial personality traits ($\beta = -1.29$; $p = 0.029$) and alcohol consumption disorders ($\beta = -1.47$; $p < 0.013$) than those who faced victimization during childhood.

Table 6. Multinomial regression of factors associated with category of age for the first victimization (N = 259).

	Model 1				Model 2			
	β	p Value	Exp(β)	95% CI	β	p Value	Exp(β)	95% CI
Antisocial	0.15	0.709	1.17	[0.52–2.61]	-1.29 *	0.040	3.65	[1.06–12.54]
Borderline	-0.75	0.107	0.47	[0.19–1.18]	0.49	0.424	1.63	[0.49–5.43]
Avoidant	-0.98	0.081	0.38	[0.13–1.13]	-0.07	0.940	0.94	[0.17–5.18]
Alcohol use disorder	-0.45	0.256	0.64	[0.29–1.39]	-1.47 *	0.013	0.23	[0.07–0.74]
Drug use disorder	-0.33	0.421	0.72	[0.32–1.61]	-0.17	0.785	0.85	[0.25–2.82]
Violent offenses during adulthood	-0.09	0.135	0.92	[0.81–1.03]	-0.05	0.647	0.96	[0.79–1.16]
Sexual offenses during adulthood	-0.17	0.298	0.98	[0.94–1.03]	0.06	0.817	0.86	[0.73–1.01]
Property offenses during adulthood	-0.02	0.407	0.85	[0.62–1.16]	-0.15	0.041	1.06	[0.64–1.75]
Antisocial problematic behaviors	-0.50 ***	<0.001	0.61	[0.45–0.81]	0.07	0.737	1.08	[0.70–1.64]
Internalized problematic behaviors	-0.37 ***	<0.001	0.69	[0.55–0.87]	-0.06	0.731	0.95	[0.69–1.30]
Constant	2.00 ***	<0.001			-1.37 *	0.032		
Cox & Snell R ²	0.37							
Nagelkerke R ²	0.44							
McFadden R ²	0.26							

Notes. * $p < 0.05$. *** $p < 0.001$. This table allows testing hypotheses 2 and 3. Model 1: Exposure during childhood (ref cat) vs. No exposure; Model 2: Exposure during childhood (ref cat) vs. Exposure during adolescence; The constant refers to the intercept of the regression line. Its significance test evaluates whether this intercept is statistically significant, indicating the adequacy of the model fit; Cox & Snell R²: This statistic measures the proportion of variation explained by the model, with higher values indicating better fit. Nagelkerke R²: Similar to Cox & Snell R², this metric also assesses the proportion of

variation explained by the model, but it is adjusted to provide a better estimation of the model's fit. McFadden R^2 : This statistic evaluates the proportion of variation explained by the model relative to a null model, with values closer to 1 indicating better fit.

7. Discussion

This study investigates the influence of childhood victimization onset age on the development of risk factors and behaviors among incarcerated individuals convicted of adult sexual offenses. Drawing upon developmental psychopathology and developmental victimology perspectives [10,22,25], risk factors and behaviors were categorized into five blocks: personality disorders, cognitions supporting sexual aggression, criminal history, problematic adolescent behaviors, and sexual issues/dysfunctions. The findings support all three hypotheses regarding the impact of childhood victimization onset age, distinctions between victimization and exposure, and the influence of age category on actual age.

8. The Age of Onset of Childhood Victimization: An Indicator to Consider in the Development of Risk Factors

The first hypothesis—that posited that the age at which individuals experience their first childhood victimization is associated with the presence of risk factors—was supported through both the bivariate and multivariate analyses conducted. These results are consistent with the existing literature on childhood victimization and their impact on the development of various risk factors and provides a nuanced understanding aligned with perspectives from both developmental psychopathology and victimology. Consistent with the framework of developmental psychopathology [10,36], our results strengthen the idea that childhood abuse and maltreatment are associated with an increased risk of maladaptive functioning and psychopathological disorders throughout an individual's life.

The identification of specific risk factors, such as the development of schizoid personality disorders in individuals victimized at a younger age, supports the premise of developmental psychopathology theory, suggesting that they are associated with maladaptive behaviors [10]. These results align with the perspective associated with the development of specific cognitive patterns, such as social withdrawal, mistrust of others, and difficulties in interpersonal relationships [37–39]. Our study's results, highlighting an association between the age at which individuals undergo their first childhood victimization and the later development of antisocial personality disorders in older children, build upon previous research findings [17,38–40]. Older children, being at advanced stages of social development, may experience disruptions in socialization due to victimization, leading to increased relational difficulties and antisocial behaviors. Mechanisms such as responses to stressors, exposure to antisocial role models, complex cognitive development, and interaction in different social groups may be factors associated with this pattern [10,11,41]. Moreover, victimization at an older age may be associated with the development of antisocial thought patterns, adding to other cumulative risk factors and thus increasing the overall risk of antisocial personality disorders.

Furthermore, our findings contribute to the literature on the cognitive consequences of childhood victimization, supporting previous research indicating that early exposure to trauma can be associated with the development of distorted cognitions such as the belief that victims deserve the aggression they endure [13,14,23,24]. These results align with the developmental psychopathology perspective [10] and underscore the vulnerability of young children in developing such cognitions due to their ongoing cognitive and social development, emphasizing the importance of considering the developmental context to understand the formation of these beliefs. The developmental victimology perspective [25] offers a relevant framework for understanding the heterogeneity of childhood victimization and their association with subsequent outcomes. The identification of distinct trajectories of childhood victimization echoes the dimensional approach posited by developmental victimology and corroborates previous research demonstrating the heterogeneous nature of childhood victimization [20,27,28,30]. By specifically linking the age at which individuals undergo their first childhood victimization to the development of personality disorders, antisocial behaviors, and problematic behaviors during adolescence, our study aligns with previous research indicating that the developmental stage at the time of trauma significantly influences psychopathological risk factors [16,42,43].

9. Exposure vs. Victimization: A Gradual Impact on the Development of Risk Factors

The second hypothesis—that posited that there was a difference in the impact of the age of first exposure and the age of first victimization on the development of risk factors—was also corroborated by our findings. The results highlight significant nuances between the age of first exposure and the age of first victimization in developmental trajectories. Within the framework of developmental psychopathology [10,36], our findings highlight that the age of first victimization is associated with a greater likelihood of developing psychopathological risk factors

compared to the age of first exposure to victimization. This distinction holds particular significance in light of Finkelhor's [22,26,44] work, which emphasizes the heterogeneity of victimization trajectories in children. One fundamental difference could lie in the intensity of psychological effects in the sense that the consequences of direct victimization, often perceived as more immediate and impactful, may lead to immediate behavioral responses, thereby contributing to more serious risk factors [45,46]. The intense psychological repercussions, including the possibility of developing post-traumatic stress disorder, combined with alterations in interpersonal relationships, may be associated with the development of these risk factors. Moreover, direct victimization may lead to stronger sensations of injustice and stigmatization, which may influence self-perception and the perception of the world [47]. These aspects, aligned with previous findings on distorted cognitions in individuals exposed to childhood victimization [13,14,23,24], highlight how the immediate and impactful nature of direct victimization may be associated with the formation of specific cognitive patterns linked to psychopathological risk factors. Furthermore, our observation that the age of first exposure is associated with fewer risk factors aligns with the postulates of developmental psychopathology, suggesting that disruptions in skill acquisition due to negative experiences may lead to maladaptive behaviors. These results broaden the perspective by highlighting that, while exposure is a factor to consider, direct victimization appears to be more strongly associated with the development of psychopathological risk factors.

10. Childhood vs Adolescence: Does the Age Category of the First ACEs Matter?

The third hypothesis—that early victimization during childhood yield more pronounced consequences than those occurring during adolescence—is also corroborated by our analyses. Regarding exposure to negative experiences during childhood, our finding of an association between early exposure to negative experiences during childhood and an increased risk of alcohol consumption disorders during adolescence supports and extends previous findings [16,43]. This highlights the significant association between early ACEs and risk behaviors during the crucial developmental phase of adolescence. It emphasizes the importance of preventive interventions specifically targeting infants and young children. Furthermore, the findings that the first victimization during childhood is associated with an elevated risk of personality disorders provide a novel contribution to the existing literature on developmental victimology, particularly in the works of Finkelhor [22,26,44]

By emphasizing the critical importance of this early occurrence during childhood, our study provides insight into the specificity of the association between early victimization and psychopathological effects. In addition to these findings, it is essential to contextualize these results by comparing them to age-based measures. The age at the first ACE—whether exposure or victimization—emerges as a more relevant measure than a simple age category. This measure provides a nuanced perspective by identifying associations with various factors and risk behaviors. It allows for a finer understanding of the associations between the chronology of traumatic events and the subsequent development of psychopathological issues.

11. Theoretical and Practical Implications

The study has significant theoretical implications for both developmental psychopathology and developmental victimology. The observed associations between the age of first childhood victimization and psychopathological outcomes contribute significantly to our understanding of how the timing of trauma exposure influences long-term psychological consequences. In the realm of developmental psychopathology, the study's results align with the core tenets of this theoretical framework, emphasizing the critical importance of considering the developmental stage at the time of trauma. Developmental psychopathology posits that experiences during specific developmental periods can shape cognitive, emotional, and behavioral patterns, influencing the course of psychopathological development. The identification of specific associations between the age of first victimization and the development of personality disorders, cognitive distortions, and problematic behaviors supports and extends these principles. It underscores that the age at which individuals experience trauma plays a pivotal role in determining the nature and severity of psychopathological outcomes. Moreover, the study contributes to the field of developmental victimology, which focuses on understanding the diverse trajectories of victimization during childhood and their implications. By highlighting the differential impact of the age of first victimization on psychopathological outcomes, the findings provide empirical support for the heterogeneity within victimization experiences. Developmental victimology emphasizes that the effects of victimization are not uniform and can vary based on factors such as the age at the time of victimization. The results add granularity to this perspective by specifying how the age of first childhood victimization is linked to distinct psychopathological risk factors, contributing to a nuanced understanding of the complex interplay between victimization experiences and subsequent psychological well-being. Another perspective that can enrich the interpretation of our findings is the

developmental cascade model [48]. This model refers to the process by which early experiences, such as childhood victimization, initiate chains of developmental consequences that spread across multiple domains of functioning over time. In the context of our results, early victimization experiences may not only have immediate effects on psychopathological risk factors but may also indirectly influence the emergence of further behavioral, cognitive, and emotional difficulties during adolescence and adulthood. This cascading effect aligns with our observations regarding the accumulation of problematic behaviors and the development of personality disorders later in life. Viewing the influence of early trauma through a cascade framework highlights the dynamic and interdependent nature of developmental pathways, suggesting that early preventive interventions could potentially interrupt these negative trajectories before they amplify across developmental stages.

As to the practical implications of the results, the study emphasizes the critical significance of implementing targeted interventions during childhood, particularly within populations that are at an elevated risk for childhood victimization. The identification of the age at which these experiences occur as a crucial factor in the development of psychopathological risk factors suggests specific implications for preventive and intervention strategies. Early prevention and intervention programs that center on addressing childhood trauma hold the potential to be instrumental in mitigating the emergence and exacerbation of psychopathological risk factors. By targeting interventions at an early age, when individuals are more susceptible to the impact of childhood victimization, there is an opportunity to influence the potential trajectory toward psychopathology. Such programs could involve early identification systems within schools, for example, comprehensive support systems, including mental health services, social interventions, and educational initiatives designed to foster resilience and coping mechanisms. Moreover, the findings imply that prevention interventions should be targeted to the developmental stage at which trauma occurs. Interventions during childhood may be particularly impactful due to the malleability of cognitive and emotional processes during this period. Therefore, early identification of individuals at risk for childhood victimization and the prompt implementation of preventive measures can potentially improve the psychopathological and social outcomes of individuals.

Furthermore, the potential reduction in the likelihood of criminal behaviors associated with psychopathological risk factors adds a societal dimension to the practical implications of the study. Targeted interventions during childhood not only have the potential to improve individual well-being but may also contribute to broader public safety initiatives by addressing the root factors of criminal behaviors. While the study primarily focuses on the developmental aspects of childhood victimization and their association with psychopathological outcomes, it indirectly raises considerations for the treatment of sex offenders, especially those with a history of victimization. The findings underscore the importance of understanding the specific developmental stages at which trauma occurs, which can inform targeted interventions and support for individuals within the criminal justice system, particularly those incarcerated for sexual crimes. Treatment programs tailored to this population may benefit from incorporating trauma-informed approaches, recognizing the potential impact of childhood victimization on the development of psychopathological risk factors. Therapeutic interventions should not only address the immediate behavioral consequences of criminal acts but also explore and address the underlying trauma that may contribute to maladaptive behaviors. Trauma-focused therapies, such as Trauma-Focused Cognitive Behavioral Therapy (TF-CBT) or Eye Movement Desensitization and Reprocessing (EMDR), could be considered as part of the comprehensive treatment plan [49,50]. These therapeutic approaches aim to address the psychological impact of trauma and assist individuals in processing and coping with traumatic experiences. Additionally, the study's emphasis on the importance of early intervention and prevention aligns with the broader concept of primary prevention in the context of sex offender management. By identifying individuals at risk for childhood victimization and implementing preventive measures during childhood, there is a potential to interrupt the trajectory that may lead to psychopathological outcomes and, subsequently, criminal behaviors. It is important to note that the treatment of sex offenders is a complex and multifaceted field, often involving a combination of therapeutic modalities, risk assessment, and rehabilitation efforts. Integrating an understanding of the developmental impact of childhood victimization into sex offender treatment programs may contribute to a more holistic and effective approach to addressing both the immediate legal concerns and the underlying psychological factors that contribute to offending behaviors.

12. Conclusions

This study yielded crucial insights into the developmental trajectories of individuals incarcerated for sexual crimes, focusing on the age of the first victimization. The age at which individuals first experience childhood victimization emerged as a significant factor influencing the development of various psychopathological risk factors, supporting the framework of developmental psychopathology. The study identified specific associations

between the age of first childhood victimization and the later development of problematic behaviors during adolescence, personality disorders, and antisocial behaviors. Moreover, the study explored nuanced differences between the age of first exposure and the age of first victimization, revealing that the latter exerts a more pronounced influence on the development of psychopathological risk factors. This distinction adds depth to the understanding of the impact of childhood victimization and aligns with the principles of developmental victimology, emphasizing the psychological intensity of direct victimization. Finally, the findings demonstrate that the occurrence of victimization during childhood has more significant consequences than during adolescence. However, using age as a measure rather than a category appears to be more relevant.

Despite the original contributions proposed by this study, it is crucial to acknowledge several methodological limitations. The utilization of retrospective self-report data from incarcerated individuals introduces the possibility of recall bias and underreporting, potentially impacting the accuracy and completeness of the information gathered. Furthermore, it is possible that the exact age provided by individuals may not be accurate, especially for those who report a very young age at first victimization. Indeed, individuals may struggle to recall certain memories from the early years of their lives. Additionally, the study's focus on a specific population—individuals incarcerated for sexual crimes—precludes the generalizability of the findings to more diverse populations. Additionally, the study concentrated on specific risk factors and behaviors, neglecting the exploration of other potential confounding variables that could influence the observed associations. Finally, a further methodological limitation pertains to the absence of ethnicity and socioeconomic status measurements. Given prior literature highlighting that these demographic factors can significantly impact the relationships between childhood victimization and subsequent psychopathological and criminal outcomes, the lack of control for these variables may limit the robustness and generalizability of our findings.

Future research should address the limitations of this study by employing longitudinal designs, diverse participant samples, and comprehensive assessments. Exploring the potential moderating and mediating factors in the relationship between childhood victimization and psychopathological outcomes (such as post-traumatic stress disorder or emotional dysregulation) could provide a more nuanced understanding of the underlying mechanisms. Furthermore, investigating the effectiveness of specific interventions and preventive measures targeted at individuals with a history of victimization could inform evidence-based practices. Comparative studies across different populations and cultures may reveal cultural variations in the impact of childhood victimization on psychopathological and social outcomes.

Author Contributions

Conceptualization, J.C. and V.M.; data curation, J.C. and V.M.; methodology, J.C. and V.M.; formal analysis, J.M.; writing—original draft, J.C.; writing—review and editing, J.C., V.M., E.B., L.M. and M.D. All authors have read and approved the final version of the manuscript for publication.

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Informed Consent Statement

Not applicable.

Data Availability Statement

The data underlying this study cannot be shared publicly due to ethical and legal restrictions related to participant confidentiality. Although we fully support data transparency and reproducibility, the sensitive nature of the information collected precludes open access. Interested and qualified researchers may contact the corresponding author to discuss potential access, subject to appropriate safeguards and institutional approvals.

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Conflicts of Interest

The authors declare no conflict of interest.

Appendix A. Correlation Matrix of Direct and Indirect Childhood Victimization Different Types (N = 259)

	1	2	3	4	5	6
1 Psychological childhood victimisation exposure						
2 Physical childhood victimisation exposure	0.811 **					
3 Sexual childhood victimisation exposure	0.072	0.078				
4 Psychological childhood victimisation	0.602 **	0.526 **	0.067			
5 Sexual childhood victimisation	0.138 *	0.138 *	0.129 *	0.222 **		
6 Physical childhood victimisation	0.714 **	0.692 **	0.077	0.684 **	0.130 *	

Notes. ** $p < 0.01$; * $p < 0.05$.

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