

Impact of Psychological Abuse, Physical Abuse, Sexual Abuse, and Neglect During Childhood on Criminal Behavior among Prisoners at Forensic Mental Health Department

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ABSTRACT

Introduction: Childhood maltreatment, including physical, emotional, sexual abuse, and neglect, has been consistently linked to a higher likelihood of aggressive and criminal behaviour in adulthood. This phenomenon, often referred to as the "cycle of violence," perpetuates across generations. Furthermore, victimization during childhood can lead to a broad range of mental health problems, including personality disorders, psychosis, schizophrenia, and substance abuse. These issues are particularly prevalent among individuals within the forensic mental health system. **Objectives:** The study aims to evaluate the impact of psychological abuse, physical abuse, sexual abuse, and neglect during childhood on criminal behaviour among prisoners at forensic mental health department. **Methods:** A cross-sectional descriptive study was conducted to determine the impact of child abuse on criminal behaviour among prisoners in the Forensic Medicine Department. The study was during the period from December 19, 2022 to 15th of July 2024. The research has been carried out at Baghdad City's Al-Rashad Training Hospital. non-probability purposive sample procedures, this study sampling method relied on our judgment when identifying and selecting prisoners in the forensic medicine department, after their consent, who could provide the best information to achieve the objectives of the study. We choose purposive sampling because we want to focus in depth on relatively small samples (150) to get the most accurate results. a purposive sample of (110) prisoners was selected from Al-Rashad Training Hospital. **Results:** The findings indicate that prisoners having moderate to high level of psychological abuse during childhood among items. Prisoners having moderate to high level of physical abuse during childhood among items. The findings indicate that prisoners having moderate to high level of sexual abuse during childhood among items. The prisoners having moderate to high level of neglect during childhood among items. The prisoners have high level of criminal behaviour. There are significant relationships between (psychological, physical, sexual abuse) during childhood and criminal behaviour. **Conclusions:** Prisoners experience a moderate to high level of psychological abuse, physical abuse, and neglect during childhood, and the prisoners also experience a moderate to high level of sexual abuse during childhood.

1. Introduction

Every civilisation has a distinct perspective on what childhood is. Early childhood is considered to be the most significant and impactful stage of a child's life in terms of personality development. The social and cultural issues that shape childhood have an impact on a child's development. 2. When a kid encounters maltreatment throughout their early years, which may instill anxiety and result in violent, hazardous, or life-threatening events that can cause trauma Sadly, this is much too typical. 3. From infancy to adolescence, any disorder in the early stages of growth and development frequently results in disorder in later stages of growth and development. Young people who are abused are significantly more likely to face challenges with their physical and mental health as well as their behaviour, education, and career. 4. Abuse that is physical involves. Furthermore, it has been shown that a sizable portion of the criminal population has a history of childhood violence. Aggressive and criminal behaviours have been extensively examined as a result of abuse and neglect, and they are consistently linked to maltreatment throughout childhood. 5. Abuse throughout childhood has a markedly detrimental impact on mental health. It interferes with the development of emotional self-regulation and causes disturbances in interpersonal interactions as well as psychological issues such as poor self-efficacy, a lack of positive task orientation, and impairments in social information processing. The correlation between child maltreatment and many psychiatric diseases and mental health issues in adulthood, including drug misuse, psychotic disorders, suicidality, and aggression, is unsurprising. 2. And might raise the possibility Maltreatment of children raises the likelihood of

aggressive and criminal behaviour in later life a pattern of transmission known as the "cycle of violence" that occurs throughout generations. Victimization of children also raises the likelihood of all mental health issues, which are common among forensic mental health inpatients and include personality disorders, psychosis, schizophrenia, and drug misuse. Similar to the general population, those with serious mental problems who experienced the most extensive abuse as children are more likely to act violently against others in the future 1.

Objectives

Find out the impact of psychological abuse, physical abuse, sexual abuse, and neglect during childhood on criminal behavior among prisoners at forensic mental health department. Evaluate psychological abuse during childhood among prisoners. Evaluate physical abuse during childhood among prisoners. Evaluate neglect during childhood among Prisoners. Assess criminal activity among the jail population.

2. Methods

A cross-sectional descriptive study was conducted to determine the impact of child abuse on criminal behavior among prisoners in the Forensic Medicine Department. This design was done to achieve the objectives of the current study using evaluation technology. The study was during the period from December 19, 2022 to 15th of July 2024. Formal administrative permissions must be obtained before data collection; They were obtained to conduct the study as follows: 1. First permission was obtained from the Department of Psychiatric Nursing after presenting the project, then ethical approval was obtained from the Research Ethics Committee at the College of Nursing, University of Babylon regarding confidentiality and anonymity of participants to conduct the study. 2. Another approval was obtained from the Ministry of Health. Permits were obtained from the Ministry of Health/Rusafa Health Directorate and were agreed upon after clarifying the aim of the study. This ease facilitated the researcher's entry into Al-Rashad Training Hospital. Then interviews were conducted with hospital directors to explain the importance of the study and its objectives and obtain with permission from the director. 3. Participants were accepted after explaining the purpose of the study to them and informing them that all information taken would be treated confidentially and for research purposes only, then obtaining their consent to participate in this study.

The study has been conducted at Al-Rashad Training Hospital which is located in Baghdad City. The hospital was established in 1969. Al-Rashad Psychiatric Hospital is the largest mental health hospital in Iraq. It consists of 24 wards and is a residential accommodation for long-stay patients. Despite its overall capacity of 1200 beds, Al-Rashad Psychiatric Hospital is currently accommodating more than 1440 people. Among al-Rashad Psychiatric Hospital there is a special ward for the forensic medicine department consist of three halls, each hall containing approximately 60 patients. The department also contains 9 nurses, each of them were responsible for a hall. The forensic medicine department contains only men, while women were transferred to the hospital halls (Zeinab hall) due to their small number. The Forensic Psychiatry Department also contains a police room to guard patients.

Non-probability (purposive) sample techniques in which prisoners were selected because they have characteristics that we need in our sample. In other words, prisoners were selected "on purpose" as purposive sampling. As well as the judgmental sampling method, this study sampling method relied on our judgment when identifying and selecting prisoners in the forensic medicine department, after their consent, who could provide the best information to achieve the objectives of the study. We choose purposive sampling because we want to focus in depth on relatively small samples (150) to get the most accurate results. a purposive sample of (110) prisoners was selected from Al-Rashad Training Hospital. A total of (124) prisoners in Al-Rashed Training Hospital, they have met the study criteria and agreed to contribute to the study. Also, another (4) prisoners were excluded because they didn't fill out all the questionnaire domains. A pilot study is conducted on (10) prisoners who are selected purposively from the Al-Rashad Training Hospital in Baghdad City. The sample of the pilot

study is excluded from the original study. Finally, the sample included in the present study is (110) participants. The sample is divided into two groups; (77) participants who were male prisoners from the forensic medicine hall and (33) participants who were female prisoners from other halls in the hospital. Through a review of the related literature and previous studies, the questionnaire by Mohammad khani et al., 2003 and Fekih-Romdhane et al., 2022 is developed as a mean of data collection. It was consisted of (3) major parts: Part I: the first part is concerned with prisoners' socio-demographic characteristics which include {sex, age, Sequence of the prisoner in the family, number of brothers and sisters, Education level, marital status, monthly income, Family history of psychological disorder, Substance abuse type of crime, medical diagnosis and alcohol drinking}. Part II: the second part is concerned with abuse during childhood among prisoners. The scale includes 38 items divided into four domains {psychological abuse (14 items), physical abuse (8 items), sexual abuse (5 items), and neglect (11)}. Part III: the third part is concerned with prisoners' criminal behavior scale which includes 34 items divided into three domains {Socialization Domain (10 items), social conditions domain (10 items), and personal and psychological circumstances domain (14 items)}.

To score the instrument's items, a Likert scale was used for the child abuse scale and scored as follows: never (0), sometimes (1), most often (2), and always (3). The child abuse scale was calculated by first calculating the raw scores of each subscale and then converting them into derived standard scores. And then collecting the standard scores for all four dimensions (physical, psychological, sexual, and neglect). The level of child abuse for each item in the scale was estimated by calculating the cutoff point for the mean of score and rated into four levels also as follows: no child abuse= 0– 0.74, mild= 0.75 – 01. 49, moderate= 1.50 – 2. 24 and High= 2.25 –3. The overall score of child abuse scale was estimated by calculating the range score for a mean of the total score after calculating the range from the minimum score and maximum score; the range score was rated into four levels and scored as follows: the total of 38 items, where the total of the items is 114. Each item has 4-item responses that a weighted score ranging from 0 to 3.: No child abuse= 0 – 28.4, Mild = 28.5 – 56.9, Moderate = 57 – 85.4, High= 85.5-114. The level of child abuse for each item in the scale was estimated by calculating the cutoff point for the mean of score and rated into four levels also as follows: no child abuse= 0– 0.74, mild= 0.75 – 01. 49, moderate= 1.50 – 2. 24 and High = 2.25 –3.

A three Likert scale was used for the criminal behavior scale and scored as follows: Disagree (1), neutral (2), and Agree (3). The criminal behaviors scale was calculated by first calculating the raw scores of each subscale and then converting them into derived standard scores. And then the standard scores for all three dimensions (Socialization Domain (10 items), social conditions domain (10 items), and personal and psychological circumstances domain (14 items). The level of Criminal Behavior for each item in scale was estimated by calculating the cutoff point for the mean of score and rated into three levels also as follows: Low= 1 –1.66, Moderate = 1.67 – 2.33, and High= 2.34– 3. The overall score of criminal behavior was estimated by calculating the range score for a mean of total score after calculating the range from minimum score and maximum score; the range score was rated into three levels and scored as follows: Low= 34 – 56.65, Moderate= 56.66 – 79.31, and High= 79.32 – 102. For this study, data are analyzed through the application of statistical procedures and by using (SPSS) version (24) which may assist in determining the study results.

3. Results and Discussion

Table 1. Distribution of participants according to their Socio-demographic Characteristics

List	Characteristics		f	%
1	Sex	Male	77	70
		Female	33	30

2	Age	20-30	44	40
		30-40	50	45.5
		40-50	7	6.4
		50-60	5	4.5
		60 and more	4	3.6
3	Sequence of the prisoner in the family	First	15	13.6
		Second	20	18.2
		Third	32	29.1
		Fourth	27	24.53
		Fifth	8	7.3
		Six	5	4.54
		Seven	3	2.73
4	No brothers or sisters	Zero	6	5.45
		One	24	21.82
		Two	29	26.37
		Three	19	17.27
		Fourth	15	13.64
		Five	17	15.45
5	Educational levels	Read and write	33	30
		Primary school	40	36.36
		Secondary school	30	27.27
		Graduated	6	5.46
		Post graduated	1	0.91
6	Marital Status	Single	20	18
		Married	11	1
		Divorce	58	49
		Separate	10	9
		Widow	27	14
7	Type of Crime	Killing	60	54.55
		Rape	20	18.18
		Theft	3	2.73
		Terrorism	27	24.54
8	Medical Diagnosis	Psychosis	77	70
		Obsessive-compulsive	2	1.8
		Bipolar disorder	2	1.8
		Depression	22	20
		Addiction	7	6.4

9	Family history of psychological disorder	Yes	52	47.27
		No	58	52.73
10	Substance abuse	Yes	60	54.5
		No	50	45.5
11	Drink alcohol	Yes	55	50
		No	55	50

F: Frequency, %: Percentage The findings in the table shows that about two third of prisoners were males (70%) and remaining were are females. The age group among prisoners 45.5% of them were seen with the age group of 30-40 years. Regarding the sequence of the prisoner in the family, the highest percentage among prisoners refers to being third child in family as reported among 29.1% of them. Also, 26.37% of them have two brothers and sister. 36.36% of prisoners have finished the primary school according the level of education. The marital status of those prisoners reveals that 49% of them are divorced. Most of the sample of the study was detained in prison with killing as a type of crime 54.55 %. Also 70% of them with medical diagnosis. The family history of psychological disorders among prisoners reveals that 47.27% have family member with psychological disorders. Additionally, 54.5% of prisoners under substance abuse and 50% of them drinking alcohol.

Table 2. Evaluation of psychological abuse during childhood

No	Psychological abuse domain	M	S.D	Level
1.	I get the impression that my family does not think well of me or like me.	1.64	.91191	M
2.	I get the impression that my parents don't think well of me or like me.	1.75	.7327	M
3.	My family's other members berate me.	2.3	.94451	H
4.	My relatives make fun of me.	2.37	.52315	H
5.	My folks give me grief.	1.94	.87509	M
6.	My parents are disrespectful to me.	1.55	.82078	M
7.	My parents' treatment of me makes me feel unworthy.	1.99	.9525	M
8.	My folks are very critical of me.	2.7	.5654	H
9.	I want to move in with a different family.	2.8	.4897	H
10.	Parents give me a lot of orders.	2.56	.2457	H
11.	In the company of others, my parents accuse me.	2.87	.46987	H
12.	I get the impression that my family laughs at me.	2.45	.54545	H
13.	My folks make fun of me.	2.65	.5897	H
14.	My family members give me a lot of orders.	1.50	.7854	M
Total		31.07	.4789	M

F: Frequency, %: Percentage, MS: Mean of score, SD Standard deviation

This table presents the items related to psychological abuse during childhood among prisoners; the findings indicates that prisoners having moderate to high level of psychological abuse during childhood among items.

Table 3. Evaluation of physical abuse during childhood

No	Physical abuse domain	M	S.D	Level
1.	My father beats me harshly and there are marks on my body.	1.53	.7556	M
2.	Strike hard at home. My father hits me with the belt.	1.94	.7525	M

3.	I'm being beaten because of a small mistake	2.89	.4579	H
4.	I am unjustly punished at home	2.48	.888	M
5.	He was severely beaten, which caused me serious injuries.	2.99	.8441	H
6.	My parents' punishment is not commensurate with my mistakes	2.91	.95444	H
7.	My other brothers are being beaten.	2.45	.2148	M
8.	When I don't obey the family rules, I get severely punished.	2.85	.1225	H
Total		20.04	.4112	H

This table presents the items related to physical abuse during childhood prisoners; the findings indicates that prisoners having moderate to high level of physical abuse during childhood among items.

Table 4. Evaluation of sexual abuse during childhood

No	Sexual abuse domain	M	S.D	Level
1.	Some adults have attempted to access my personal information.	2.45	.3567	H
2.	An adult or some adults have tried to look at my private	1.99	.83546	M
3.	Someone or several adults are verbally abusive to me.	2.92	.2354	H
4.	Someone or many adults have attempted to do me sexual harm.	2.37	.6485	H
5.	An adult made me look at or touch his or her private parts.	2.68	.5249	H
Total		12.41	.4457	H

This table presents the items related to sexual abuse during childhood among prisoners; the findings indicates that prisoners having moderate to high level of sexual abuse during childhood among items.

Table 5. Evaluation of neglect abuse during childhood

No	Neglect abuse domain	M	S.D	Level
1.	I was sure my family members would help me if I had a problem	2.00	.3457	M
2.	My parents cared about my desires.	2.45	.3548	H
3.	My family allowed me to act according to my wishes.	2.44	.2455	H
4.	My family cared about my cleanliness.	1.94	.3548	M
5.	I was spending a comfortable life.	1.69	.1475	M
6.	My family's expectations were within my means.	2.92	.2458	H
7.	My father's expectations were within my means.	2.50	.9542	H
8.	My life was going well overall.	2.78	.8452	H
9.	My parents cared about my nutritional status.	2.63	.5428	H
10.	I was getting enough sleep and rest.	2.22	.2458	M
11.	I was sure my father would help me, if I had a problem.	2.15	.4458	M
Total		25.72	.4587	H

This table presents the items related to neglect during childhood among prisoners; the findings indicates that prisoners having moderate to high level of neglect during childhood among items.

Table (6). Overall Evaluation of Criminal behavior

Knowledge	f	%	M	SD	Evaluation
Mild	2	1.818181818	84.63	2.64587	High
Moderate	21	19.09090909			
High	87	79.09090909			
Total	110	100			

f: Frequency, %: Percentage; M: Mean for total score, SD: Standard Deviation for total score

This table reveals that prisoners have high level of criminal behavior.

Table (7): Correlation between Abuse during childhood and Criminal behavior among Prisoners

Correlation		Abuse during childhood	Criminal behavior
Abuse during childhood	Pearson Correlation	1	.923
	Sig. (2-tailed)		.004*
	N	110	110
Criminal behavior	Pearson Correlation	.923	1
	Sig. (2-tailed)	.004*	
	N	110	110

*. Correlation is significant at the 0.05 level (2-tailed). This table indicates that there is high significant relationship between Abuse during childhood and Criminal behavior at p-value= .004.

Table 8. Association between Abuse during childhood subdomain and criminal behaviour

items			Sum of Squares	df	Mean Square	F	Sig.
psychological * Criminal behavior	Between Groups	(Combined)	1.306	4	.327	1.334	.0474
	Within Groups		11.014	105	.245		
	Total		12.320	109			
Physical abuse * Criminal behavior	Between Groups	(Combined)	7.199	4	1.800	3.603	.0222
	Within Groups		22.481	105	.500		
	Total		29.680	109			
Sexual abuse* Criminal behavior	Between Groups	(Combined)	2.482	4	.621	.416	.0145
	Within Groups		67.198	105	1.493		
	Total		69.680	109			
	Between	(Combined) Groups	1.463	4	.366	.416	.0645
Neglect * Criminal behavior	Within Groups		35.215	105	1.245		
	Total		42.458	109			

This table reveals that there are significant relationships between (psychological, physical, sexual abuse) during childhood and criminal behavior at p-value= 0.05. There are no significant relationships between neglect during childhood and criminal behavior.

Table 9. Association between Diagnosis and Type of Crime

Correlation	Diagnosis	Type of crime
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Diagnosis	Pearson Correlation	1	.214
	Sig. (2-tailed)		.0621
	N	110	110
Type of crime	Pearson Correlation	.214	1
	Sig. (2-tailed)	.0621	
	N	110	110

This table indicates that there is no significant relationship between Abuse during childhood and type of crime at p-value= .05.

The study findings show that about two third of prisoners were males (70%) and the remaining were females. These findings corroborated those of Graf et al. (2021), whose research aimed to compile epidemiological data supporting the link between ACEs and interactions with the legal system. According to demographic data, men made up more than half of the sample (61%)6. 45.5% of the sample, according to age group, were in the 30- to 40-year-old range. This results agree with Kazeem (2020) his study aim to examined the impact of socioeconomic status (SES) and adverse childhood experiences (ACEs) on criminal behaviour. The participants' ages varied from 20 to 53 years old, with a mean age of 30 years (± 9.7)7, according to him. According to level of education the result shows that 36.36% of prisoners have finished primary school graduation. his result is consistent with Canturk et al. (2021). They discovered that there is substantial evidence of the detrimental effects of childhood trauma on an individual's mental health. The purpose of this research was to ascertain the connection between male convicts and inmates' violent tendencies, criminal behaviour, and childhood trauma. Primary school graduates make up around 40.3% of the offenders and inmates that participated in this study8.

The marital status of prisoners reveals that 49% of them were divorced. This result is constant with Canturk et al. (2021). This study aimed to determine the relationship between childhood trauma, violence tendency, and crime among male prisoners and inmates in prison. It was seen that the total scores of emotional abuse and childhood traumas were significantly higher in divorced prisoners than other groups8. According to Substance abuse the result shows that 54.5% of prisoners under substance abuse and 50% of them drinking alcohol. These results agree with a study by Basto et al (2023) who examined the relationship between ACEs and criminal behaviors in young adults living in 10 countries located across five continents, after accounting for sex, age, and cross-national differences. The majority of the sample were addicted to drugs without legal prescription9. The result presents the items related to psychological abuse during childhood among prisoners; the findings indicate that prisoners have moderate to high levels of psychological abuse during childhood among items. Our study agrees with Fang et al. (2020) investigated if empathy acted as a moderator in the association between moral disengagement and psychological abuse throughout childhood. They looked at whether moral disengagement and childhood psychological abuse were mediated by callous-unemotional (CU) characteristics, and if empathy acted as a moderator in this mediating process. They show that the subjects had significant rates of moral disengagement and psychological abuse10.

The results present the items related to physical abuse during childhood prisoners; the findings indicate that prisoners having moderate to high level of physical abuse during childhood among items. This result costant with Lansford et al, (2021) in study hypothesized that early childhood physical abuse would prospectively predict adult outcomes in education and economic stability, physical health, mental health, substance use, and criminal behavior. The participants in this study present with high physical abuse levels in order to find the adulthood outcome11. The results present the items related to sexual abuse during childhood among prisoners; the findings indicates that prisoners having moderate to high level of sexual abuse during childhood among items. This results are strikingly similar to those by Reavis et al, (2013), who showed that The criminal group reported almost four times as many adverse childhood events as an adult male normative sample. Of the

criminal population, eight cases out of ten were found at significantly higher levels. Additionally, convicted sexual offenders and child abusers were more likely to report having experienced sexual abuse as a kid than other offender categories¹². The results present the items related to neglect during childhood among prisoners; the findings indicate that prisoners having moderate to high level of neglect during childhood among items. This is due to deprivation of some of the needs that the individual needs and the feeling of neglect, which therefore leads to some psychological behavioral disorders in adulthood. This results agree with Graf et al. (2021) study to synthesize epidemiological evidence for the association between ACEs and justice system contact. The participants in this study present high level of neglect during childhood⁶. The study findings reveals that prisoners have high level of criminal behavior.

This results were strikingly similar to those by Reavis et al, (2013), who indicated that the offender group reported nearly four times as many adverse events in childhood than an adult male normative sample. Eight of ten events were found at significantly higher levels among the criminal population. In addition, convicted sexual offenders and child abusers were more likely to report experiencing sexual abuse in childhood than other offender types¹². The findings indicate that there was a high significant relationship between Abuse during childhood and Criminal behavior at $p\text{-value} = .004$. Adverse Childhood Experiences (ACEs): Research has shown that ACEs are linked to a number of detrimental effects in adulthood, such as aggressive behaviour and mental and physical health issues. Child abuse may have detrimental effects that might end in criminal behaviour due to a shaming experience. This result agrees with Jiang & Zhang, (2023) who stated that in their study, Unfavourable childhood experiences have been linked to a considerable increased likelihood of violent crime and antisocial behaviour as adults. Adversity throughout childhood is closely linked to criminal behaviour and personality problems. Adversity during infancy, such as drug and alcohol abuse by parents, physical and sexual abuse, and domestic violence, can have a detrimental impact on one's personality development, ability to form close relationships, physical and mental health both now and in the future¹³. This agrees with Kazeem (2020) in the study aim to examined the impact of socioeconomic status (SES) and adverse childhood experiences (ACEs) on criminal behaviour. According to him, negative childhood experiences have a big impact on criminal behaviour, including drug crime, property crime, interpersonal crime, and general conflict tactics¹⁴.

Also, the results agree with Merluşca & Chiracu (2018). They find out the Dark Triad, self-control, and unfavourable early events' roles in the formation of criminal behaviour. The goal of this study was to identify the underlying causes of criminal behaviour as well as the processes that lead to the development of an aggressive, impulsive, and uncontrollable mentality. In actuality, adverse childhood experiences have a significant effect on a child's development because they shape the knowledge and role models in their environment and prevent them from having access to constructive alternatives for handling certain problems.¹⁵ The results reveal that there were significant relationships between (psychological, physical, sexual abuse) during childhood and criminal behavior at $p\text{-value} = 0.05$. While there were no significant relationships between neglect during childhood and criminal behavior.

This results agree with Jiang & Zhang, (2023) who conclude that in their study study, Adversity in childhood has been linked to criminal behaviour and personality problems. Adversity during childhood, such as drug and alcohol abuse by parents, physical and sexual abuse, and domestic violence, can have a detrimental impact on personality development, present and future interpersonal relationships, physical and mental health, and well-being both now and in the future¹³. This results agree with study by Basto et al (2023) who investigated, after controlling for sex, age, and cross-national variations, the association between ACEs and criminal behaviours in young people residing in ten nations spread over five continents. Domestic drug addiction, physical and sexual abuse, and physical neglect were linked to a range of criminal behaviours worldwide, independently among genders, and in nations with varying Human Development Index (HDI) rankings. Furthermore, three of the five instances of home dysfunction were linked to criminal activity; however, further studies

show that some types of household dysfunction are statistically significant only for men or females, or for nations with lower HDI9 rankings.

4. Conclusions

Prisoners in this study reported experiencing high levels of childhood abuse, including psychological, physical, sexual abuse, and neglect. These experiences were significantly correlated with high levels of criminal behavior among the prisoner population. Notably, psychological, physical, and sexual abuse were found to have significant associations with criminal behavior, while neglect did not. However, the type of crime committed was not found to be significantly related to childhood abuse experiences.

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