

THE DESCRIPTIVE STUDY OF THE IMPACT OF CHILDHOOD TRAUMA ON CRIMINAL BEHAVIOR

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Abstract

Background: Childhood trauma, such as abuse, neglect, and exposure to violence, can significantly affect emotional and cognitive development. Adverse childhood experiences (ACEs) have been shown to lead to various negative life outcomes, making individuals more susceptible to aggressive behavior and criminality. Despite extensive international literature, limited research has explored this association within forensic and clinical populations in Pakistan.

Objective: This study aims to examine the relationship between adverse childhood experiences and criminal behavior and to determine the prevalence and pattern of childhood trauma among individuals associated with Sir Cowasjee Jehangir (C.J.) Institute of Psychiatry, LUMHS Hyderabad, Sindh.

Methodology: A descriptive cross-sectional study was conducted on 100 participants selected through convenient sampling. Data was collected using a structured questionnaire including basic personal information, a childhood trauma inventory, and a behavior assessment scale. Quantitative data was analyzed using descriptive statistical methods including mean, standard deviation, frequency and percentage to identify the distribution and severity of ACE exposure and its association with criminal tendencies.

Result: The findings demonstrated a mean ACE Score of 4.15 (SD=2.27), with scores ranging from 0 to 9. Notably, 62% of participants reported four or more ACEs, indicating substantial exposure to childhood trauma within the studied population. Higher ACE score were observed among individuals exhibiting aggressive and antisocial behavioral patterns, suggesting a strong relationship between early traumatic experiences and later criminal risk factors.

Conclusion: The findings indicate a strong connection between childhood trauma and criminal behavior. Individuals with early childhood trauma experiences are more likely to develop aggressive and antisocial behavior, which highlight the importance of early trauma, psychological support, and trauma-informed rehabilitation.

Introduction

Childhood trauma describes difficult and stressful experiences that happen in the early stages of life [9,16]. These experiences can include physical, emotional, and sexual abuse, neglect, and witnessing domestic violence while growing up. These experiences play a critical role in shaping child's emotional and psychological development, with long-term implications for behavior. The World Health Organization states that a large percentage of children globally face different forms of hardship in their early years, with many experiencing violence, neglect, or abuse before adulthood. [10,15].

In forensic science, post-traumatic stress disorder is viewed as a significant contributor to criminal behavior, emotional instability and reduced empathy in offenders [4,5,21]. Such psychological and behavioral changes are strongly associated with an increased likelihood of antisocial and criminal behavior in later life [4,5]. Research shows that offenders often report higher levels of childhood distress than the general population, indicating a significant link between early trauma and criminal behavior [13,14]. In the forensic context, early trauma is considered as an important etiological factor that can affect the development and persistence of criminal behavior [6,7,17,18].

From a forensic psychology perspective, traumatic events have a significant influence on people's behavior and their attitudes. Many studies have revealed that individuals who are involved in crime often have a history of facing abuse, neglect, or family problems during childhood and struggle later in life [6,7,18]. Such early experiences influence how individuals perceive and respond to stress in later stages of life. Children who grow up in violent or unstable environments often show significant behavioral changes, and over time, this may lead them toward harmful or even violent actions in adulthood [8].

Moreover, studies have shown that people who undergo several negative childhood experiences are more likely to display violent behavior, engage in substance abuse, and exhibit various types of antisocial behavior [8,9,15].

However, empirical research focusing especially on forensic populations in Pakistan remains limited [11]. In many communities, people still don't talk much about mental health. Issues such as abuse or neglect often gets ignored. Because of this, children who undergo such experiences may not receive timely support when they actually need it. This study examines the gap of relationship between childhood trauma and criminal behavior within the Pakistani forensic context, where only a limited research has been conducted [11].

The objective of this study is to explore the association between early trauma and criminal behavior among individuals associated with Sir Cowasjee Jehangir (C.J.) Institute of Psychiatry, Liaquat University of Medical and Health Sciences (LUMHS), Hyderabad, Sindh. This research seeks to improve the current understanding of trauma related contributing factors for offending activity by shaping the types and prevalence of childhood trauma experienced by individuals in forensic environments.

Literature Review

Childhood trauma is a devastating experience that can have significant effects on individuals [9,15]. Research shows that traumatic childhood experience can lead to cognitive, emotional, and behavioral problems, increasing the risk of mental health issues, substance abuse, and aggressive behavior later in life [20].

The concept of Adverse Childhood Experiences (ACEs) is widely used to examine how early life difficulties influence health and behavior later in life. Some researchers, like Felitti did a study on how adverse childhood experiences emphasized the combined effects of childhood hardship on enduring health and behavioral results affects later in life [3,16]. Studies show that people with higher ACEs scores are more likely to engage in antisocial and criminal behavior [3,9].

Multiple research efforts carried out in forensic and criminological contexts indicate that criminals frequently have ACE scores that are considerably elevated compared to those of non-offenders [6,7]. Despite consistent findings, these studies often rely on cross-sectional designs,

making it difficult to establish a clear causal relationship between childhood trauma and criminal behavior. However, not all studies show the same level of impact, as some researchers argue that individual resilience and social support can reduce the negative effects of childhood trauma. This indicates that while trauma is an important factor, it does not affect every individual in the same way. Greater exposure to adversity has consistently been linked with increased involvement in aggressive and criminal behavior [3,8].

Social Learning Theory suggests that children learn behaviors by observing their environment, especially exposure to violence [8]. When children constantly observe violence or aggression in the home, they may start to see such actions as a characteristic or acceptable method of resolving disputes. Ultimately, these developed responses can be affected, raising the chances that people may engage in aggressive acts or criminal actions in later life stages. While this theory explains learned behavior, it may overlook individual differences such as resilience and personal coping mechanisms that can influence behavioral outcomes.

General Strain Theory posits that people who face considerable stress or hardship in their early years may cultivate negative feelings like anger and frustration [8]. Lacking adequate coping strategies or social support, these feelings can drive individuals to participate in deviant or criminal activities as a way to manage psychological stress. However, not all individuals exposed to strain engage in criminal behavior, suggesting that additional psychological and environmental factors also play a significant role. Together, these theories provide complementary explanation of how learned behavior and emotional strain contribute to criminal tendencies.

Poly-victimization can also make individuals engage in unlawful behavior and exhibit aggressive or harmful behavior toward others. From a theoretical standpoint, criminological theories also offer insights into the connection between childhood trauma and criminal conduct [17].

In addition to theoretical explanations, several studies have reported that individuals with high ACE scores like to exhibit aggressive behavior, engage in substance abuse, and have recurring criminal activities [4,5]. However, most of these studies have been conducted in Western populations, which may limit their applicability in culturally different settings such as Pakistan, where social norms and family structures differ significantly. In comparison, cultural differences in countries like Pakistan, such as strong family systems and social norms, may influence how individuals experience and respond to trauma. Therefore, findings from Western studies may not fully apply to the local population.

Previous research has also highlighted the connection between childhood trauma and substance abuse [5]. People who experience childhood trauma are more likely to use substances as a way to manage psychological or mental suffering [5]. The addictive behavior increases the chance of criminal activity by compromise judgment, enhancing impulsivity, and leading to participation in criminal acts. Many studies have also found that offenders with higher ACE scores often have showing a strong connection between early trauma, addiction, and criminal behavior [3,9,13].

In recent years, more attention is given towards trauma-informed tactics in both mental health and the criminal justice system. These programs based on this approach are now being used in some correctional locations, and they seem to help in reducing repeat offending while also improving rehabilitation, especially for those who had difficult childhood experiences. [5,12]

Despite extensive international research, limited studies in context of Pakistan have explored the relationship between childhood trauma and criminal behavior [11]. Cultural values, financial problems, and family problems can really shape a child's early experiences and how they deal with them later. In many communities, children who face abuse or neglect limited access to support or care when they need most. Because of that, these issues may persist into later stages of life. This makes it important to carry out local studies,

especially in Pakistan, to better understand how childhood trauma affects individuals involved in forensic settings.

More research is essentially needed on mental health and criminal justice system in Pakistan to better understand how early negative experiences affect behavior later in life [11]. The connection between childhood trauma and criminal activity could offer important perceptions for forensic experts, psychological well-being consultants, and lawmakers.

Materials and Methods

Study Design and Settings

This research employed a descriptive cross-sectional study design to investigate the link between childhood trauma and criminal behavior. The quantitative aspect enables the measurement and statistical evaluation of negative childhood experiences and behavioral signs, while the qualitative aspect investigates the individual experiences, viewpoints, and emotional effects of trauma on participants. This approach was considered appropriate as it allows for a more comprehensive understanding of the issue by combining numerical data with personal experiences.

The study was conducted at the Sir Cowasjee Jehangir (C.J.) Institute of Psychiatry, Liaquat University of Medical and Health Sciences (LUMHS), Hyderabad, Sindh, Pakistan. Conducting the research in this location provided access to individuals who may have experience significant psychological stress, behavioral issues, or criminal activity linked with childhood trauma. This setting was particularly suitable due to the availability of individuals with relevant forensic and psychological backgrounds. The collected data were analyzed using statistical software to ensure accurate evaluation.

Study Population and Sampling

The research population included individuals linked to the forensic and psychiatric services at the C.J. Institute of Psychiatry. Participants consisted of criminals and those deemed at risk of engaging in criminal activity, having a background

of negative experiences during childhood. A convenience sampling method was chosen for the research. This approach was selected due to accessibility constraints of participants however, it might restrict the general applicability of the results. The study involved a total of 100 individuals. This sample size was considered sufficient to identify general patterns and trends within the target population. Participants of both genders were included to gain a wider insight into childhood trauma and its possible connection to criminal behavior among various demographic groups.

Data Collection Procedure

The data for this research were collected using a structured proforma for the study's objectives. The organized proforma included various sections designed to gather comprehensive information regarding participants' background and experiences. The initial part contained demographic details, and fundamental family history. The second part of that proforma, about different types of abuse, neglect, and family dysfunction experienced during childhood. These examinations aimed to determine the nature and rate of traumatic events faced by participants previous to reaching eighteen years of age.

The structured questionnaire, semi structured interviews were carried out with participants to obtain more deeper insights into their individual trauma experiences and its supposed impact on their behavior. The combination of these methods helped to enhance the depth and reliability of the collected data. The participants were allowed to express their experiences sincerely, offering qualitative understandings that enhanced the quantitative outcomes gathered from the structured questionnaire. Semi structured interviews also allowed the researcher to investigate emotional reactions, coping strategies, and life experiences that continuous questionnaires could not fully convey.

Ethical Considerations

The research followed ethical standards, and institutional permission before gathering data. All

participants were completely aware about the purposes of study, and their involvement was completely voluntary. Participants were sure that their replies should stay private and anonymous, and the gathered data would be utilized only for academic and research purpose. Informed written consent was secured from all participants preceding to conducting interviews or distributing the questionnaire. Participants also aware that they should withdraw from the research at any point without encountering any adverse impacts. The interviews took place in a gentle and non-critical situation to reduce emotional discomfort and promote truthful answers. The study was conducted following approval from the institutional ethical review committee.

Criteria for Inclusion

This research involved individuals who fulfilled the subsequent requirements:

- 1) Offenders who are 18 years old and older, regardless of gender.
- 2) People who indicated or had proof of negative childhood experiences or trauma from their early years.
- 3) Participants who agreed to take part in the study and gave written informed consent.

Criteria for Exclusion

Participants were not included in the research based on these criteria:

- 1) People with severe or acute mental disorders that may hinder their capacity to give accurate responses.
- 2) People who declined to take part or were hesitant to give informed consent.
- 3) Participants who could not finish the questionnaire or interview process.

Data Analysis Procedures

Upon finishing the data collection process, the responses gathered from the structured forms and interviews were meticulously arranged and examined. Quantitative information gathered from the Adverse Childhood Experiences (ACE)

questionnaire and the Criminal Behavior Checklist was methodically examined. Descriptive statistical techniques were employed to summarize the gathered data. These encompassed frequency distributions, percentages, mean values, and standard deviation to analyze the prevalence and intensity of adverse childhood experiences among the participants. Numerical values were assigned to each adverse experience reported, and then the cumulative trauma score for every participant was calculated based on those values.

The qualitative information gathered from the semi-structured interviews was examined through thematic analysis. Responses that were alike were categorized to reveal main themes, including the emotional effects of trauma, issues concerning family, and elements leading to aggressive behavior. These themes helped explain how early adversities influenced participants behavior and life experiences.

Ultimately, the quantitative results and qualitative insights were analyzed and interpreted in conjunction to achieve a deeper understanding of the connection between childhood trauma and criminal behavior. This comprehensive analysis enabled the researchers to discern patterns and connections between childhood traumatic experiences and the emergence of behavioral tendencies linked to criminal activities. The analysis was also conducted to examine the relationship between childhood trauma and behavioral outcomes.

Results

Descriptive Statistics of ACE Scores (N= 100)

This research involved a total of 100 participants. The assessment of Adverse Childhood Experiences (ACE) scores revealed that the scores varied from 0 to 9, with an average score of 4.15 and a standard deviation of 2.27, representing a modest to high degree of experience to childhood trauma among the participants. Individuals with higher ACE scores more likely to exhibit aggressive behavior.

Variable	N	Minimum	Maximum	Mean	Standard Deviation
ACE Score	100	0	9	4.15	2.27

Frequency Distribution of ACE Score Categories



ACE Score Distribution

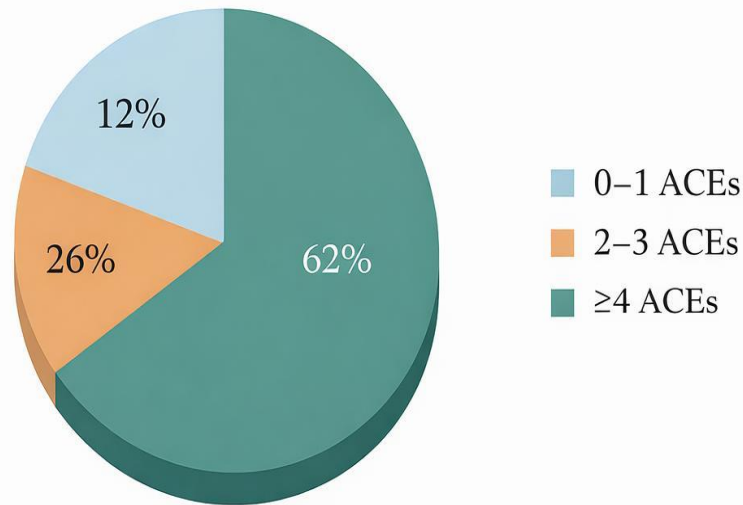


Figure 1: Shows the distribution of participants according to ACE score categories.

Behavioral Indicators Among Participants with ≥ 4 ACEs

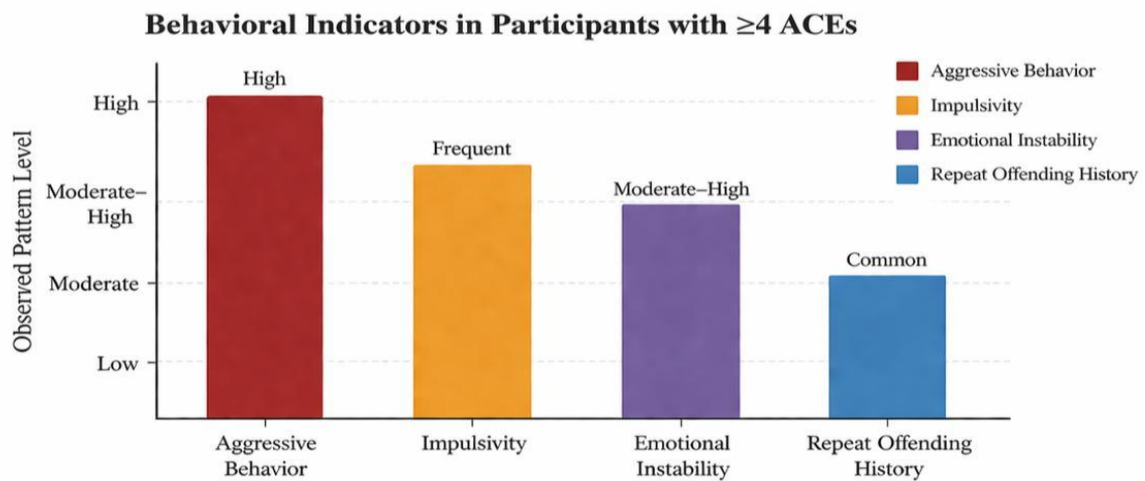


Figure 2: Shows the behavioral indicators observed among participants with ≥ 4 ACEs.

Overall, the findings demonstrate a clear trend indicating that higher ACE scores are associated with increased behavioral and criminal tendencies among participants. This indicates a strong association between high ACE scores and increased behavioral risk.

Discussion

The findings of this research indicate a notable frequency of adverse childhood experiences within the examined forensic population. An average ACE score 4.15 suggests that many participants were exposed to different forms of childhood adversities during their early years. This result is consistent with earlier research [3,9], which proposed that higher ACE scores are strongly associated with an increased likelihood of engaging in criminal behavior due to high psychological stress.

This study adds to the existing literature by providing evidence from a Pakistani forensic setting, where such research is still limited. It highlights how cultural and social factors may influence the relationship between childhood trauma and criminal behavior. However, these findings should be interpreted cautiously due to the cross-sectional nature of the study.

The distinguished proportion of participants reporting four or more adverse childhood experiences (62%) suggests that experiencing trauma is a common rather than an isolated incident among those displaying criminal behavior. However, not all individuals are exposed to childhood trauma develop such mentality, which indicates the role of protective factors such as resilience, social support, and access to mental health services. The presence of multiple ACEs demonstrates the cumulative nature of trauma, where repeated exposure to negative experiences can clearly increase the likelihood of negative developmental outcomes [3,9]. This also indicates that the issue is not limited to a single type of experience, but rather a combination of different difficulties that build up over time and affect behavior in a more serious way.

A significant behavioral trend noted among individuals with elevated ACE scores was the

existence of impulsivity and aggressive behavior. These behavioral inclinations can be explained by changes in brain function linked to extended exposure to stress and trauma in childhood. It is also possible that recall bias may have impacted how participants reported their past experiences. When neurological systems are affected in early development, individuals may struggle with anger management, impulsivity control, and responding to stress in socially acceptable behavior [4,5]. As a result, they may react quickly in stressful situations without fully thinking about consequences. These findings are supported by Social Learning Theory and General Strain Theory, which suggest that exposure to violence and chronic stress during childhood may lead to learning aggressive behavior and emotional strain, ultimately increasing the likelihood of criminal involvement [8].

Individuals exposed to adverse environments may lead to unhealthy coping strategies, such as aggression, drug use, or involvement in risky behaviors. In the absence of proper psychological support and intervention, these coping mechanisms may continue into adulthood and lead to ongoing participation in criminal behaviors [6,7]. This highlights the importance of early support and intervention.

The socio-cultural context in Pakistan can also affect the childhood trauma and illegal activities. Many factors in communities such as, poverty, family disputes and limited access to mental health care, may increase the chances of children experiencing trauma. Currently, a lack of understanding about mental health and psychological wellness might delay children from receiving necessary support. Therefore, emotional and behavioral issues related to trauma might go unnoticed or be left untreated for long periods [11]. This highlights the need to understand the results through the socio-cultural lens of Pakistan, where stigma related to mental health and limited availability of psychological services might be the enduring impacts of childhood trauma.

This study shows the need to apply trauma-informed policies in forensic and correctional facilities. Straight disciplinary measures for

criminal acts regularly emphasize punishment instead of addressing the underlying psychological factors that lead to such behavior. The stressful childhood experiences support program can assist individuals in establishing improved coping strategies, improving emotional regulation, and decreasing the chances of re-offense [5,12].

Early involvement approaches aimed at at-risk children and underprivileged families could be crucial in the prevention of long-term effects of childhood trauma. Initiatives aimed at improving family bonds, healthy parenting methods, and offering psychological support for children affected by trauma can greatly decrease the likelihood of behavioral issues in the future [12]. The educational institutions, and healthcare systems can also help in the early identification and support of children facing problematic situations.

The results demonstrated the need of implementation in a more general and context-relevant strategy for understanding criminal behavior, especially in developing nations like Pakistan. Despite these limitations, the research still offers valuable understanding of the connection between early trauma and criminal behavior. These findings have important implications for forensic psychology, rehabilitation programs, and criminal justice policies in Pakistan.

Limitations

This study has some limitations. The use of convenience sampling and a relatively small sample size may limit the generalizability of the findings. Also, because the cross-sectional design restricts the ability to establish causal relationships between childhood trauma and criminal behavior. The reliance on self-reported data may also introduce response and recall bias.

Conclusion

The findings of this research highlight a notable link between childhood trauma and criminal activity within the forensic population in Pakistan. Higher ACE scores among participants suggest that early adverse experience may contribute to

behavioral problems and involvement in criminal activities later in life.

These findings emphasize the importance of early psychological intervention, trauma-informed rehabilitation programs, and supportive social policies to reduce the long-term impact of childhood trauma. Addressing trauma at an early stage can help reduce the risk of criminal behavior and support better rehabilitation outcomes.

Recommendations

Based on the findings of this research, the following recommendations are proposed:

Clinical / Psychological recommendations:

1. Implementation of ACE screening in forensic and correctional surroundings to identify individuals with significant trauma histories.
2. The development of trauma-informed rehabilitation is strongly recommended, addressing the psychological effects of childhood adversity among offenders.
3. Gathering of psychological therapy and mental health services within correctional facilities to support trauma-affected individuals.

Policy level recommendations:

1. Policy level should focus on early childhood protection and prevention of abuse and neglect.
2. Integration of trauma-informed assessment in criminal profiling and investigation processes.

Community-based recommendations:

1. Community based protective interventions should be planned to support susceptible families and reduce the risk of adverse childhood experiences.
2. Training of law enforcement and forensic professionals in trauma-informed practices should also be prioritized.

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