

BIO-PSYCHO-SOCIAL CORRELATES OF DELINQUENT SEXUAL OFFENDERS

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Abstract: With the increased complexities of society, the crime rate is also increasing day by day. In such situations when an adolescents come across such crimes which are a shortcut to fulfilling needs or get engaged in criminal tendencies. Among them one such serious crime is sexual assault especially distressing and concerning issues is delinquent sexual offenders. The study attempts to investigate the bio-psycho-social aspect of delinquent sexual offenders. For this review of scientific literature was done using google scholar database. The findings of the study present the biopsychosocial correlation between juvenile sexual offenders and the interventions that may be incorporated to rehabilitate them to lead a normal life. These findings will be useful for the counsellors identify the perpetrator at an early stage so that proper guidance and support can irradiate the issues and help the individual to have healthy adolescence.

Keywords: Delinquent; Sexual Offenders; Bio-Psycho-Social; Sexual Assault.

INTRODUCTION

Adolescents is an age of turmoil undergoing through lot varied life events in their environment. They often feel a huge pressure; while making life decisions impulsivity, confusion lead them towards favourable and unfavourable decisions. Unfavourable life decisions and choices may lead them to engage into antisocial behaviours, juvenile delinquency, and even adult crimes if not checked and intervened at initial stages. Juvenile Delinquency is an outcome of various environmental disruptions including family, social maladjustments may be responsible for their criminal actions. It starts with conduct disorders at initial stages of child development or antisocial behaviour in adolescent where they persistently refuse to follow social rules and engage in violent and aggressive activities that are illegal and socially unacceptable (ICD-10). The word delinquency is derived from the Latin word “delinquere,” where “de” means “away” and “linquere” means “to leave or abandon.” Juvenile delinquents are minors who engage in any type of offense, including violence, gambling, sexual offenses, rape, bullying, stealing, burglary, murder, and other forms of antisocial behavior. Among these, delinquent offenders is various issue to the

society. Especially those who indulge in sexually improper behaviour during adolescence. Such offenders are not only menaces to society; they are also victims of more massive systemic problems that affect their development, such as biological, psychological, and social factors. Santrock (2002) defined juvenile delinquent as an adolescent who breaks the law or engages in any criminal behavior which is considered as illegal.

With the increasing complexities in the family and social environment of adolescents create pressure of adolescents deviating them into varied developmental trajectory. The underlying causes behind these socially inappropriate behaviour are complex to be explained. Sexual offenses are of great concern because they have a strong impact on the victims, their families, and communities (Schmucker & Lösel, 2023). Preventing such crimes and rehabilitating those who commit them needs a multifactorial approach. The current review of literature attempts to investigate two major questions first that what are the multifactorial aspects that lead to juvenile sexual offences for this the literature will focus on biopsychosocial perspective which is critical area to explore? What are the possible intervention and measures to that may be taken for rehabilitation of juvenile sexual offences?

METHOD

To address above two questions literature review will be done using Google Scholar database was searched using keywords Delinquent, Sexual Offenders, Bio-psycho-social, Sexual Assault.

BIO-PSYCHO-SOCIAL APPROACH TO JUVENILE DELINQUENCY

The bio-psycho-social model is a convenient and comprehensive framework which sheds light on how biological, psychological and social factors are involved in development of delinquent sexual offenses. It underscores the concept that an individual's behavior, be it criminal or non-criminal, is not only the result of one factor alone but is combination of factors operating within internal mechanisms and life events. This model claims that antisocial conduct develops from an interplay between biological, psychological, and social elements. It is vital to recognize that in the biopsychosocial model, these connected components impact each other (Jansen, 2022; Van Goozen *et al.*, 2022).

BIOLOGICAL FACTORS

The biological factors of delinquent sexual offenders examine the way in which physiological, neurological, and hereditary factors contribute to the behavior of a delinquent sexual offender. Ramiao *et al.* (2023) reports associations between sexual assaults and neurological variables. Link to various behavioural aspects with biological factors may be presented under following heads:

Impulsivity: The tendency to act impulsively, without reflection on potential consequences, characterizes impulsiveness that could predispose to sexual inappropriate behavior. The impulsive tendencies may be one of the biggest contributing factors towards juvenile sex crimes, and so, it is one of the most vital biological aspects as it relates to impulsiveness. (Phillips, 2023)

Genetic abnormality: Aggression, abnormal sexual behavior, and criminality are associated with genetic diseases like XYY syndrome and Klinefelter syndrome (XXY) as well as low activity of MAOA and deficiency in serotonin. When not treated properly victims of such diseases are more prone to violent and antisocial behaviors. These genetic factors lead to increased impulsivity

and aggression, which puts the individual at risk of violent behavior, especially under unfavorable circumstances (Jagadeesan *et al.*, 2021).

History of Severe Head Injury (SHI): SHI is common among young criminals in Scotland and results from violent offenses such as assault and fighting. Chronicity can sometimes cause repeated mild head injuries that eventually lead to neurodevelopmental and cognitive impairments that affect behavior, often impulsiveness and self-regulation, which are associated with criminal behavior (McMillan *et al.*, 2023).

Skin Conductance Reactivity and Cortisol: Higher chances of impulsive and violent crimes have association with skin conductance reactivity and cortisol. It results from emotional arousal or anger (Armstrong *et al.*, 2024).

Testosterone: The positive relationship between testosterone and violent or impulsive crime increases as basal ANS activity, for example, heart rate declines, suggesting that testosterone is linked to criminal behavior through increasing sensation seeking and reward salience (Armstrong *et al.*, 2024).

PSYCHOLOGICAL FACTORS

Psychology factors emphasize the cognitive and affective components of the mental processes that lead to delinquent sexual behavior. The following are the major aspects that are linked with juvenile delinquency and sexual offenses:

Emotional problem: The three primary reasons for the wrong choice are inferiority, superiority, and jealousy. A child who at such a tender age cannot distinguish between right and wrong is on the wrong path of a horrible conclusion for him as well as for the community and environment in which he lives. Mental health issues have been identified as a significant contributing factor to delinquency. Children who do not receive enough love and affection from their parents or who behave against their treatment are primarily delinquent (Murali, 2022).

Mental Health Pathology: The behavior of juvenile sex offenders (JSOs) influenced by the mental health disorders they frequently exhibit. Researchers investigated connection of Mental health disorders like depression and psychosis with adolescent sex offenders (Carvalho *et al.*, 2022).

Personality traits and impulsivity: Impulsivity is related to an increased likelihood of criminality, especially child sexual abuse, and other conduct problems. Child sexual abusers are also more likely to show psychological characteristics such as elevated neuroticism, psychopathy, and antisocial traits besides impulsive behavior and decision-making (Lim *et al.*, 2021).

Empathy, affective and cognitive: Whereas the overall teenage population differed, JSO in this study reported higher levels of general empathy. They may have high general empathy but little to no specific empathy for their victims. Their criminal behavior might be determined by this imbalance in empathy (Siria *et al.*, 2020).

SOCIAL FACTORS

Family plays a major role towards the development of adolescents. Social aspects focus on how interpersonal, cultural, and environmental factors affect the emergence of delinquent sexual practices. The following are the social aspects of juvenile delinquency and sexual offences.

Childhood Trauma: Baglivio and Wolff (2021) states that childhood trauma, including abuse and neglect, increased the likelihood of crimes committed against siblings and other victims. Crimes against a range of victim groups were substance abuse in the home, suggesting that childhood trauma affects the types of people that youth target for sexual assaults.

Parenting style: parental interaction with their children has an impact on the way juvenile sexual offenses develop (Sitney and Kaufman, 2021). Different parenting style, for example, authoritative versus authoritarian approaches, are associated with different rates of juvenile criminality. Higher delinquency is associated with authoritarian (severe punishment, control) and authoritative (supporting, leading) styles, which are often protective (Van der Put *et al.*, 2024).

Sexual Arousal and the Use of Pornography: A study by McKibbin *et al.* (2024) identified deviant arousal patterns and inappropriate sexual behaviors are determined by early exposure to sexual content, including pornography. Intake of explicit information distorts perceptions of relationships and sexuality, which in turn leads to the development of harmful sexual behavior.

Peer pressure and negative relationships with peers: These are factors that increase teenagers' likelihood to commit delinquent behaviors. A teenager who enjoys close association with delinquent friends and feels pressured to live up to their expectations is likely to become involved in risky or illegal acts. Inability to abstain from undesirable behaviors because of peer acceptance enhances the influence of deviant peers (Chrysoulakis, 2020; Davis & Allen, 2021; Yeng *et al.*, 2023).

Poverty and Economic Deprivation (ED): Poverty and ED are the two primary contributing factors to juvenile crime. Economically degraded places have a higher percentage of people with low cash in hand, which raises the possibility of delinquent behavior. The purpose of the study conducted currently is to examine how the rate of adolescent offending is associated with poverty (Bhuiyan *et al.*, 2024).

Media Violence Exposure: Stress, anxiety, nightmares, and delinquency are outcomes for children and teenagers in watching murder mystery films with violent content. This very easily penetrates children and tends to increase chances of more crime commitment (Kuriakose & Samuel, 2021).

INTERVENTION

Certain interventions are effective in reducing as well as in treating delinquent sex offenders and help them develop coping mechanism.

Cognitive behavioral therapy: It is a common therapeutic approach with sex offenders, especially over the last ten years according to the study by Rocha & Valença (2023). The study highlighted CBT as a vital strategy for the population and underscored that it is necessary to measure its effectiveness in terms of the outcomes of the treatment, irrespective of the lack of consensus over the standard model for the CBT-based interventions. CBT is the primary intervention for sex offenders (Lussier *et al.*, 2020).

Multi-Systemic Therapy (MST): According to a study conducted by Satodiya *et al.* (2024) it was found that in comparison with youngsters undergoing treatment as usual or other therapies, participants receiving MST had fewer offenses and arrests, thus indicating effectiveness in reducing problematic sexual behavior, arrests, and recidivism among juvenile sex offenders.

Coordinated High-Risk Offender Management (CHROME): According to the relapse prevention paradigm, the Coordinated High-Risk Offender Management (CHROME) program provides sex offenders with intense supervision. The program helps people understand their criminal cycle and develop coping mechanisms to end it (Barros *et al.*, 2022).

Motivational Interviewing: The purpose of this intervention is to help offenders overcome their ambivalence about treatment by increasing their drive for change (Barros *et al.*, 2022).

Education and curriculum: Integrating sexual justice into the social work curriculum on issues of sexuality and human rights, may help in reducing sexual malpractice (Turner, 2024).

CONCLUSION

Juvenile delinquency as well as delinquent sex offenders results from a complex interplay of social, psychological, and biological elements. Biological effects include hormone abnormalities, neurological disorders, and examples of impulsiveness. Psychological difficulties, such as mental illness and a lack of empathy, also play a role in criminal behavior. Social factors such as peer pressure, strict parenting, and exposure to violent media also exacerbate delinquent tendencies. Effective treatments to reduce

recidivism and promote rehabilitation include cognitive behavioral therapy, multisystemic therapy, and customized programs. These findings emphasize the need for effective, tailored prevention and rehabilitative efforts.

LIMITATION

This research has limitations as it is based on secondary data where community support and cultural influence is unexplored. Secondly, the study is not based on firsthand experience of offenders themselves; hence, a deep understanding of personal reasons for their behavior is unexplored. Lastly, the reported works are cross-sectional in nature, hence causal relationships are not identifiable.

IMPLICATION

Findings reveal that the effective treatments of juvenile delinquency will target the biological, psychological, and social aspects. Interventions include Cognitive Behavioral Therapy and Multisystemic Therapy that may prove to reduce recidivism. Early intervention will be a priority for those who have mental health problems and will strive to strengthen parenting and socioeconomic conditions. Studies in neurology and genetics may explore neurological and genetic factors contributing to delinquent conduct. A complex, tailored approach to rehabilitation can help at-risk adolescents avoid future offenses.

REFERENCE

- [1] Abhishek, R., & Balamurugan, J. (2024). Impact of social factors responsible for Juvenile delinquency – A literature review. *Journal of Education and Health Promotion*, 13(1). https://doi.org/10.4103/jehp.jehp_786_23
- [2] Aebi, M., Krause, C., Barra, S., Vogt, G., Vertone, L., Manetsch, M., Imbach, D., Endrass, J., Rossegger, A., Schmeck, K., & Bessler, C. (2022). What Kind of Therapy Works With Juveniles Who Have Sexually Offended? A Randomized-Controlled Trial of Two Versions of a Specialized Cognitive Behavioral Outpatient Treatment Program. *Sexual Abuse*, 34(8), 973-1002. <https://doi.org/10.1177/10790632211070804>
- [3] Allen, C. H., Shold, J., Maurer, M. J., Reynolds, B. L., Anderson, N. E., Harenski, C. L., Harenski, K. A., Calhoun, V., & Kiehl, K. A. (2023, February 8). Aberrant resting-state functional connectivity associated with childhood trauma among juvenile offenders. OpenEmory. <https://open.library.emory.edu/publications/emory:w58zx/>
- [4] Armstrong, T. A., Boisvert, D. L., Wells, J., Lewis, R. H., Cooke, E. M., Woeckener, M., Kavish, N., Vietto, N., & Harper, J. M. (2024). Hormones, autonomic nervous system activity, and criminal behavior. *Journal of Crime and Justice*, 1–18. <https://doi.org/10.1080/0735648x.2024.2382985>
- [5] Atrey, I., & Singh, D. B. (2023, June 6). An Analysis of Juvenile Delinquency in Rajasthan: Risk Factors and Protective Factors. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4786088
- [6] Bachmann, C. J., Scholle, O., Bliddal, M., dosReis, S., Odsbu, I., Skurtveit, S., Wesselhoeft, R., Vivirito, A., Zhang, C., & Scott, S. (2024). Recognition and management of children and adolescents with conduct disorder: a real-world data study from four western countries. *Child and Adolescent Psychiatry and Mental Health*, 18(1). <https://doi.org/10.1186/s13034-024-00710-6>

- [7] Baglivio, M. T., & Wolff, K. T. (2021). Adverse Childhood Experiences Distinguish Violent Juvenile Sexual Offenders' Victim Typologies. *International Journal of Environmental Research and Public Health*, 18(21), 11345. <https://doi.org/10.3390/ijerph182111345>
- [8] Barros, S., Oliveira, C., Araújo, E., Moreira, D., Almeida, F., & Santos, A. (2022). Community intervention programs for sex offenders: A systematic review. *Frontiers in Psychiatry*, 13. <https://doi.org/10.3389/fpsyt.2022.949899>
- [9] Bastos, K. R. P., Eusébio, A. M. L., De Almeida Pereira, K. N., Da Silva, T. O. S., & Costa, L. F. (2021). Características dos adolescentes ofensores sexuais e de suas vítimas: um estudo de processos judiciais. *Saúde E Sociedade*, 30(1). <https://doi.org/10.1590/s0104-12902021181112>
- [10] Islam Bhuiyan, M.R., Milon, M.N., Hossain, R., Poli, T.A., & Salam, M.A. (2024). Examining the Relationship between Poverty and Juvenile Delinquency Trends in a Developing Country. *Academic Journal of Interdisciplinary Studies*. <https://doi.org/10.36941/ajis-2024-0193>
- [11] De Carvalho, J., & Garner, D. (2022). Characteristics of Juvenile Sex Offenders and Recidivism. In *Research Institute for Progression of Knowledge, International Journal of Humanities and Social Science Review* (Vol. 8, Issue 2, pp. 28–29). <https://ijhssrnet.com/wp-content/uploads/2023/01/4.pdf>
- [12] Fox, Bryanna & Burckley, Jacquelyn & Corona, Alexandria. (2021). Psychological Profiling and Sex Offenders: A Review of the Research and Recommendations for Police Investigations. https://doi.org/10.1007/978-3-030-79968-7_3
- [13] Gorli, M. & Andhra University. (2022). Psychological Factors Affecting Juvenile Delinquency [Journal-article]. *International Journal of Creative Research Thoughts*, 10(7), e146–e148. <https://ijcrt.org/papers/IJCRT2207546.pdf>
- [14] Holper, L., Mokros, A., & Habermeyer, E. (2023). Moderators of Sexual Recidivism as Indicator of Treatment Effectiveness in Persons With Sexual Offense Histories: An Updated Meta-analysis. *Sexual Abuse*, 36(3), 255–291. <https://doi.org/10.1177/10790632231159071>
- [15] Ibis, E. (2022). Characteristics of Juvenile Delinquency with Special Emphasis on Juveniles as Child Sexual Abusers. <https://doi.org/10.2478/seeur-2021-0009>
- [16] Jagadeesan, Poorvaja & Jagadeesan, Rahul & Ramachandran, Radha. (2021). Nature versus Nurture: Are Criminals Born or Raised? -A Comprehensive Analysis.
- [17] Kuriakose, F. A. (2021, June). Juvenile offences and social work intervention: A study on the influence of mass media on children in committing crimes. *Educere BCM Journal of Social Work* Vol 17 Issue 1 June 2021.
- [18] Li, Y. (2024). Practical Pathways and Strategies of Family Social Work in Juveniles Sex Education
#8212; Based on Erikson's Theory of Personality Development. *Creative Education*, 15(12), 2404–2417. <https://doi.org/10.4236/ce.2024.1512146>
- [19] McKibbin, G., Green, J., Humphreys, C., & Tyler, M. (2023). Pathways to Onset of Harmful Sexual Behavior. *Victims & Offenders*, 19(5), 739–777. <https://doi.org/10.1080/15564886.2023.2208579>
- [20] McMillan, T. M., McVean, J., Aslam, H., & Barry, S. J. E. (2023). Associations between significant head injury in male juveniles in prison in Scotland UK and cognitive function, disability and crime: A cross sectional study. *PLoS ONE*, 18(7), e0287312. <https://doi.org/10.1371/journal.pone.0287312>
- [21] Pegu, C. (2021). Identifying risk factors associated with juvenile offenders' recidivism in India: a theoretical understanding. *so02.tci-thaijo.org*. <https://doi.org/10.14456/hasss.2021.32>
- [22] Phillips, K. M. (2023). Biological Versus Social Factors of Juvenile Sex Offenders: A Meta-analysis. *STARS*. <https://stars.library.ucf.edu/honorstheses/1493/>
- [23] Ranga, A., & Kavita, Ms. (2021). Psychological and Theoretical Perspectives on Juvenile Delinquency. In *Himachal Pradesh National Law University & Centre of Human Rights and Duties, Indian Journal of Psychological Science* (Vol. 14, Issue 2)
- [24] Ratkoceri, V., & Ibis, E. (2021). Characteristics of Juvenile Delinquency with Special Emphasis on Juveniles as Child Sexual Abusers. <https://www.semanticscholar.org/paper/Characteristics-of-Juvenile-Delinquency-with-on-as-Ratkoceri-Ibis/891028d7c7ca0ba4987b34afc5fa96e84cceb13a>
- [25] Rocha, I. C. O., & Valença, A. M. (2023). The efficacy of CBT based interventions to sexual offenders: A systematic review of the last decade literature. *International Journal of Law and Psychiatry*, 87, 101856. <https://doi.org/10.1016/j.ijlp.2022.101856>
- [26] Rosa, M., Fox, B., & Jennings, W. G. (2018). Do Developmental and Life-Course Theory Risk Factors Equally Predict Age of Onset Among Juvenile Sexual and Nonsexual Offenders? *Sexual Abuse*, 32(1), 55–78. <https://doi.org/10.1177/1079063218797714>
- [27] Satodiya, R., Bied, A., Shah, K., Parikh, T., & Ash, P. (2024a). A Systematic Review of Multisystemic Therapy in Adolescent Sex Offenders. *PubMed*, 52(1), 51–60. <https://doi.org/10.29158/jaapl.230117-23>

- [28] Siria, S., Echeburúa, E., & Amor, P. (2020). Characteristics and risk factors in juvenile sexual offenders. *Psicothema*, 3(32), 314–321. <https://doi.org/10.7334/psicothema2019.349>
- [29] Turner, G. W. (2024). Positioning sexual justice within social work teaching on human rights: countering contemporary sexuality oppression. *Social Work Education*, 1–18. <https://doi.org/10.1080/02615479.2024.2358821>
- [30] Van Der Put, C. E., & Assink, M. (2024). Interrelatedness of Family and Parenting Risk Factors for Juvenile Delinquency: A Network Study in U.S. and Dutch Juveniles. *International Journal of Offender Therapy and Comparative Criminology*. <https://doi.org/10.1177/0306624x241240697>
- [31] Więcek-Durańska, A. (2023). Characteristics of Juvenile Sex Offenders in Poland. *Aps-pl*. https://www.academia.edu/111802144/Characteristics_of_Juvenile_Sex_Offenders_in_Poland
- [32] Yeng, K. Y., & Mohamad, Z. S. (2023). A Case Study on Peer Influence and Peer Pressure in Juvenile Delinquency. <https://www.semanticscholar.org/paper/A-Case-Study-on-Peer-Influence-and-Peer-Pressure-in-Yeng-Mohamad/8cc5b936caefd399726b0af4c96f97b1d192c3d>

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