

Coping Strategies, Perceived Stress and Childhood Trauma Incurred among Juvenile Delinquents with Severity of Crime Committed: A Cross-Sectional Descriptive Study

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Abstract: Justice-involved youth and adolescents are more vulnerable to mental health issues. The ability to use different coping strategies decides whether any life situation will lead to excessive stress or not, and the probability of crime. Therefore, the present study aims to compare the experiences of childhood trauma, coping strategies and perceived stress among juvenile delinquents with the severity of crimes committed. After taking ethical clearance, standardized questionnaires (Perceived Stress Scale, COPE inventory and Childhood Trauma Questionnaire) were conducted at Juvenile Observation Home at Siroli, Agra, India. These participants were divided into two groups based on the severity of the crime committed i.e. non-heinous crimes (punishment <7 years) and heinous crimes (punishment >7 years). Results revealed a significant positive correlation between childhood trauma and perceived stress among the non-heinous crime group ($r=.253$, $p<0.05$). Further, there were no differences concerning perceived stress, coping strategies and childhood trauma among the two groups. The psychology as well as the rationale behind any crime is not decided by the perceived stress or the coping strategy used. Temperament may play an important role in deciding the severity of crime committed by juveniles.

Keywords: Coping strategies; perceived stress; childhood trauma; juvenile delinquents

1. Introduction

Justice-involved youth and adolescents need care and protection are more predisposed to mental health related problems (1)]. This vulnerable section of the society needs special

care. Children facing legal aid and issues faces various problems, this adds up to their sensitivity to mental issues. Juvenile delinquency is a complicated social issue with wide-ranging effects on mental well-being that necessitates a careful examination of coping strategies, stress perception, and traumatic experiences from early life for young offenders. Significant progress has been made in the last ten years in comprehending the psychological complexities of juvenile delinquency, highlighting the critical role that specialized coping skills and mental health support play in the rehabilitation process (2)]. One of the major risk factors for delinquency is stress. People's perception of stress is based on how they interpret their own level of capacity to cope with stress and whether they view it as threatening or not (3)]. Research suggests that there is a inverse relationship between perceived stress and personal autonomy (4)]. That is, the young offenders felt less stress as their level of personal autonomy rose. Stress may be crucial to the wellbeing of young people who are incarcerated since they lose practically all of their autonomy when they are admitted to juvenile hall (5),(6)].

Experiences of childhood trauma are associated with increased psychological vulnerability. The National Institute of Mental Health defines childhood trauma as: “The experience of an event by a child that is emotionally painful or distressful, which often results in lasting mental and physical effects (7)].” Past research suggests that childhood trauma might alter stress processing with a subsequent negative impact on mental health. Individuals may suffer similar negative life events but appraise the impact or severity of these to different extents as a result of factors such as personality, coping resources, and support (8),(9)]. Childhood trauma may have a significant effect on the development of these factors.

It is believed that coping acts as a mediator in the connection between stress and disease. Coping may be understood as the cognitive and behavioral strategies individuals employ in response to stress (10),(11)]. Adolescents, especially those between the ages of 11 and 18, learn coping mechanisms from four main sources: past experiences, observing how others handle stressors and the success that results, identifying personal vulnerabilities, and social pressure from parents and other important people (12)]. It becomes interesting to look at the coping mechanisms used by teenagers incarcerated because the sources of these strategies are now limited to other teenagers in prison, where they are subjected to severe stressors and have less options for coping (13)].

While these studies have contributed substantially to the field, there exists a notable gap in the literature concerning the coping strategies employed by juvenile delinquents within specific detention contexts, particularly in Agra. The unique sociocultural factors, combined with the distinct environment of Agra's juvenile detention center, necessitate a localized examination to discern the coping mechanisms employed by young offenders in this setting, along with perceived stress and childhood trauma incurred by juvenile

offender. Understanding these coping strategies, perceived stress and childhood trauma incurred is paramount, as they play a crucial role in shaping the psychological well-being of juvenile delinquents, influencing their behavior, and ultimately determining their successful reintegration into society. Therefore, the aim of the study was to understand and compare the relationship between the experiences of childhood trauma, perceived stress and coping strategies among justice involved youth with respect to severity of the crime committed. The objectives were as follows:

1. To study the perceived stress, coping strategy and childhood trauma among juvenile delinquents with heinous and non-heinous crimes.
2. To compare the perceived stress, coping strategy and childhood trauma among juvenile delinquents with heinous and non-heinous crimes.
3. To assess the relationship between perceived stress and childhood trauma among juvenile delinquents with heinous and non-heinous crimes.

2. Materials and Methods

Participants

The sample consisted of 100 children-in-conflict with law who had been detained in the Observation Home, Siroli, Agra, Uttar Pradesh. These participants were divided into two groups based on the severity of the crime committed i.e. non-heinous crimes (N=39) and heinous crimes (N=61). The participants have been selected as per the following inclusion criteria:

Inclusion criteria

1. Juvenile delinquents residing in juvenile detention center, Siroli for correction and rehabilitation.
2. Age range between 12-18 years.
3. Juveniles with basic proficiency in Hindi language.

Exclusion criteria

1. Juvenile delinquents with any prior psychiatric condition as per the diagnostic guidelines of ICD-10, including intellectual difficulties.
2. Participants below 12 years and above 18 years.

Description of tools

General Health Questionnaire (GHQ): It is developed by Goldberg in 1970s, it is a self-report questionnaire which is used for screening psychological well-being.

The Perceived Stress Scale (PSS): The Perceived Stress Scale is a 10-item questionnaire developed by Cohen, Kamarch, & Mermelstein in 1983. It is a self-reported questionnaire that was designed to measure the degree to which situations in one's life are appraised as stressful. A total PSS-10 score ranges from 0 to 40, on a 4-point Likert scale. The PSS-10 can be used by children aged 12 and above (e.g. Kechter et al. 2019).

Childhood Trauma Questionnaire: The scale is developed by David P. Bernstein and Laura Fink (1998) is used to measure diverse forms of childhood maltreatment. The scale has 28-item and responses are based on the 5-point Likert scale. There are three items that examine minimization or denial in order to detect participants who may under report maltreatment.

COPE Inventory: It consists of 60 items and 15 first-order factors (four items each) and is developed by Carver, Scheier and Weintraub in 1989. The responses are based on a 4-point Likert scale. It has a good internal consistency ranged between 0.62 and 0.92, test-retest reliability coefficient ranges from 0.46 and 0.86 (14)].

Procedure

After an extensive literature review, the objectives of the study along with the variables to be studied were formulated. Based on thorough review of questionnaires, perceived stress scale, childhood trauma questionnaire and Cope inventory were finally decided upon. The institutional ethics committee, Institute of Mental Health and Hospital, Agra approved this research proposal (Ref. no.: 0092, Date 09/01/2023) and then informed consent and approval were taken from CMO Agra and In-charge (Detention Centre) Siroli, Agra. After this, participants were identified by verifying juvenile delinquency records. The participants were divided into two groups namely juveniles who committed heinous crimes (punishment for more than 7 years) and non-heinous crimes (punishment less than 7 years). The data was then collected by administering the questionnaire on the participants at the detention center. The participants were selected by applying General health questionnaire and brief psychiatric rating scale. After collecting the data, data was analysed using SPSS software and was interpreted accordingly.

Statistical Analysis

Data was analysed using SPSS. Means and standard deviations were computed for continuous variables. Chi-square and percentages were used for the categorical variable. The comparison of means of two groups were carried out using t-test for continuous variables. The relationship between the variables were computed using Pearson's correlation.

		Non-Heinous crime		Heinous crime		Chi-square	p-value
		Frequency	Percentage	Frequency	Percentage		
Educatio	Illiterate	8	20.5	10	16.4	1.489	.685
	Primary sc	9	23.1	12	19.7		
	Middle sch	13	33.3	18	29.5		
	High scho	9	23.1	21	34.4		
	Total	39	100	61	100		
Occupati	Student	11	28.2	18	29.5	2.720	.257
	Unemploy	7	17.9	19	31.1		
	Employed	21	53.8	24	39.3		
	Total	39	100	61	100		
Religion	Hinduism	34	87.2	56	91.8	.565	.452
	Islam	5	12.8	5	8.2		
	Total	39	100	61	100		
Family ty	Nuclear	30	76.9	49	80.3	3.102	.376
	Joint	8	20.5	10	16.4		
	Broken	1	2.6	0	0		
	Extended nuclear	0	0	2	3.3		
	Total	39	100	61	100		
Residenc	Urban	15	38.5	18	29.5	.762	.383
	Rural	24	61.5	42	68.9		
	Total	39	100	61	100		

3. Results

Table 1

Table depicting socio demographic details of the participants

Table 1 demonstrates the sociodemographic details of the participants from the non-heinous crime and heinous crime groups. The total number of participants in the study were 100 (39 in non-heinous crime group and 61 in heinous crime group). All the participants were males. With respect to the educational qualification, in the non-heinous crime group, majority of the participants (33.3%) were educated up till middle school, and in the group for participants with heinous crime, participants with education up till high school were in majority (34.4%). 28.2% of the participants in the non-heinous crime group, whereas 29.5% % of the participants in the heinous crime group, were

students at that time. 17.9% were unemployed and 53.8% were employed in the non-heinous crime group; whereas, in the heinous crime group, 31.1% were unemployed and 39.3% were employed. The participants belonging to Hinduism as their religion were 87.2% in the non-heinous crime group and 91.8% in the heinous crime group, and, 12.8% belonged to Islam in the non-heinous crime group and 8.2% in the heinous crime group. In the non-heinous crime group, 76.9% lived in a nuclear family set-up, 20.5% in a joint family set-up and 2.6% were from broken homes, whereas in the heinous crime group, 80.3% of the participants lived in a nuclear family setup, 16.4% in a joint family and 3.3% from extended nuclear families. Majority of the participants in the non-heinous crime group (61.5%) and heinous crime group (68.9%) were from rural area.

Table 2

The mean, standard deviation, t value and significance (p value) for each subscale of COPE of heinous and non-heinous participants

	Non-heinous crime		Heinous crime		t(98)	p-value
	M	SD	M	SD		
Positive Reinterpretation & Growth	10.307	2.82	10.344	2.52	.067	.946
Mental Disengagement	8.71	1.94	9.22	2.30	1.148	.254
Focus on and venting of emotions	9.66	2.70	9.32	2.35	-.662	.509
Use of Instrumental Support	10.53	2.72	10.59	2.03	.108	.914
Active Coping	11.00	2.69	10.57	1.97	-.910	.365
Denial	7.02	2.27	7.01	2.40	-.019	.985
Religious	11.79	3.37	11.09	3.94	-.910	.365
Humour	6.05	2.69	5.81	2.57	-.430	.668
Behavioural Disengagement	7.02	2.04	7.26	2.02	.568	.571
Restraint	9.92	2.81	9.96	2.45	.083	.934

Use of Emotional Social Support	10.07	3.26	9.55	3.15	-.792	.430
Substance Use	6.94	3.17	6.91	3.58	-.044	.965
Acceptance	9.87	2.70	9.14	2.79	-1.279	.204
Suppression of Competing Activities	9.64	2.24	9.67	2.006	.072	.943
Planning	10.48	2.11	10.55	2.14	.160	.873

The Table 2 depicts the Mean, Standard Deviation and t-test scores for each subscale of COPE of heinous and non-heinous crime groups. The participants in the non-heinous crime group obtained higher scores on focus on and venting of emotions [9.66±2.70], active coping [11±2.69], denial [7.02±2.27], humour [6.05±2.69], use of emotional social support [10.07±3.26], substance use [6.94±3.17] and acceptance [9.87±2.7]. And, the participants in the heinous crime group obtained higher scores on the other sub-scales like positive reinterpretation & growth [10.34±2.52], mental disengagement [9.22±2.35], use of instrumental support [10.59±2.03], religious [11.09±3.94], behavioral disengagement [7.26±2.02], restraint [9.96±2.45], and suppression of competing activities [9.67±2.006]. However, the results were not found to be statistically significant.

Table 3

The mean, standard deviation, t value and significance (p value) for scores of childhood trauma and perceived stress of heinous and non-heinous participants

	Non-heinous crime		Heinous crime		t(98)	p-value
	M	SD	M	SD		
Childhood trauma	68.07	8.41	66.54	8.20	-.904	.368
Perceived stress	18.38	5.07	18.96	5.02	.563	.574

The Table 3 indicates the mean, standard deviation and t-test for scores of childhood trauma and perceived stress of heinous and non-heinous crime groups. The participants in the non-heinous crime group obtained higher scores on childhood trauma [68.07±8.41], whereas the participants in the heinous crime group obtained higher scores on the perceived stress scale [18.96±5.02]. However, the results were not found to be statistically significant.

Table 4

Table depicting correlation between Perceived stress and childhood trauma among heinous crime participants and non-heinous crime participants

Heinous crime		Non-heinous crime	
	Childhood Trauma		Childhood Trauma
Perceived Stress	.184	Perceived Stress	.253*

*Correlation significant at 0.05 level

Table 4 depicts the correlation obtained between perceived stress and childhood trauma among heinous crime groups. An insignificant positive correlation was found between childhood trauma and perceived stress in the heinous crime group. Further, a significant positive correlation was obtained between childhood trauma and perceived stress among the non-heinous crime group ($r=.253$, $p<0.05$).

4. Discussion

The present study was designed with the aim of comparing and studying the correlation in perceived stress, coping and childhood trauma amongst the juvenile delinquents who have committed heinous and non-heinous crimes. A total of 100 male children in-conflict with law were selected, and GHQ, Perceived stress scale, COPE and Childhood trauma questionnaire were administered.

A statistically non-significant difference was found with severity of childhood trauma in heinous and non-heinous groups suggesting that severity of childhood trauma does not decide the seriousness of crime. The delinquents doing serious crime is expected to have comparatively more severe childhood trauma including abuses and neglect. A significant relationship between childhood traumas and violent tendencies was found in one study suggesting that childhood traumas had an impact on the tendency to be violent (15)]. Another study suggests that serious, violent, and habitual offenders had a 13-times lower likelihood of having no childhood adversities (16)]. The present study findings were supported by one study which explored relationship between childhood traumatization and criminal behavior in terms of subsequent offending, but not in terms of severity of the subsequent offense (17)]. The present study is unique as it contained delinquent children as participants in contract to other studies mentioned in which adult criminals have been taken. As the childhood trauma has recently been faced by the participants, hence the chances of having recall bias are less in this study.

The perception of stress in criminals committing serious offence is supposed to be more in term of anger, frustration, nervousness, hopelessness and helplessness and this is supported by the study which suggested that adolescents who reported experiencing

anxiety or depression had a higher likelihood of participating in delinquent activities (18)]. These findings were supported by Agnew's general strain theory which claims that stress or strain from daily life can lead to negative emotions, and that delinquency might be a coping mechanism to lessen these strainful feelings (19)]. The results in the present study showed that perceived stress is no statistically different in the two groups is interesting to look at, due to the age group selected in the study. As the psychology of adolescent criminals is different from adult criminals, the perception to stress may not be different in those committing serious crime than those doing less serious one. This result could be understood in terms that perceived stress does not decide the action of adolescent under stress. The crimes by them are less pre-planned and more impulsive.

The various coping strategies used among the two groups were not different statistically. This could be explained by that the ability to cope with stress has no role in the criminal activity in the minors. Minors are more driven by their temperament. According to Le Blanc, personality traits play a role in both personal control and offense control. According to Forrest et al. (20)], low self-control increases the probability of an individual engaging in criminal activities when presented with suitable opportunities (mainly because they are unable to ignore or anticipate the potential long-term consequences of their actions) (21)]. As per the theories of Agnew (22)], Lahey and Waldman (23)], and DeLisi and Vaughn (24)], personality traits have independent impacts and may interact, which should increase the risks beyond those of each trait evaluated separately. According to all of these theories, environmental factors that have to do with family, friends, school, and work adjustment are also significant deciding factors. These factors interact with one another and are also somewhat influenced by personality qualities, which can either enhance or decrease the possibility that criminal and antisocial behavior will manifest (25)].

As per findings of juvenile delinquents in non-heinous group, it was seen that childhood trauma was significantly correlated with perceived stress, which was in-significant in the other group. Perceived stress is directly related with mental health problems. This finding in non-heinous group was corroborated with the finding of Yoder et al. (26)] which also concluded significant relationship in childhood traumatic events and mental health problems in juvenile delinquents. Even when delinquents in Heinous group experience more childhood adversities, trauma does not have influence on perceived stress. This could be due to some specific personality and temperament in this group. As the subjects here are children below 18 years of age, it is important to see the relationship between childhood trauma and perceived stress in both the groups later in life. It is possible that delinquents in heinous group need more time to critically analyze the childhood traumas, and the perceived stress become positively correlated with childhood trauma when they grow old.

As the present research only focused on quantitative research method for data collection, other methods like qualitative or mixed method could have been used to provide a rich source of data in the study. The present study also lacked gender representation. Inclusion of both the gender would have provided good amount of information to study gender differences in the concept. Moreover, participants could have been selected from different geographical regions, thereby proving an opportunity to understand the role and influence of region on the concept being studied.

By means of this study, researchers wanted to find out that whether childhood trauma, perceived stress and coping strategy can play a role in deciding the seriousness of crime in the juveniles. As temperament play a crucial role in deciding the crime's gravity, it would be very interesting to see it in the juveniles in further study. As this is study in male juvenile observation home, it opens the scope to do research in the female juveniles as well. The crime committed by detainees here in the observation home is still not proven and they are under trial, hence it becomes important that researchers follow up the juveniles in future to see the sentence they receive later by the honorable court. The comparison can once again be done later when sentence is announced in all the enrolled juveniles.

5. Conclusion

Crimes can be reduced if we properly know the reason behind it. Psychology and thinking behind any crime of juveniles can be different from adult prisoners. Crimes in them are more driven by their in-built nature and temperament (trait) rather than their level of coping and perceived stress (state).

Author Contributions:

Conceptualization, R, M.J., G.K., D.S.R. and A.K.S.; methodology, R,Y.S., M.J., S.V., Z.P., P.S., M.S. and L.S.; software, S.D. and Y.S.; validation, R, M.J., Y.S., D.S.R., A.K.S., G.K. and S.V.; formal analysis, Y.S., and S.D.; investigation, R, M.J., Y.S., D.S.R., A.K.S., G.K. and S.V.; resources, Y.S., Z.P., S.V., M.S., P.S. and L.S.; data curation, S.V., R, M.J. and S.D; writing—original draft preparation, R, M.J., Y.S. and Z.P.; writing—review and editing, R, M.J. and Y.S.; visualization, R., M.J., D.S.R., G.K., A.K.S. and Y.S.; supervision, R., M.J., G.K., D.S.R. and A.K.S.; project administration, R., G.K., D.S.R., A.K.S. and M.J.; All authors have read and agreed to the published version of the manuscript.

Funding: Please add: This research received no external funding.

Institutional Review Board Statement: “The study was conducted in accordance with the Declaration of Helsinki, and approved by the institutional ethics committee, Institute of Mental Health and Hospital, Agra (Ref. no.: 0092, Date 09/01/2023).

Informed Consent Statement: As the subjects involved in this study were minor, hence informed consent and approval were taken from Chief Medical Officer, Agra and In-charge of detention centre, Siroli, Agra.

Acknowledgments: We would like to thank Dr. Sujit Kumar Kar (Additional Professor), Department of Psychiatry, KGMU, Lucknow for his unconditioned and continuous guidance throughout this research project.

Conflicts of Interest: The authors declare no conflicts of interest.

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