



Psychosocial Profile of Juvenile Delinquents

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Authors' contributions

This work was carried out in collaboration between both authors. Author RTG designed the study, wrote the protocol, supervised the data collection, analysis and manuscript writing. Author PP performed the data collection, statistical analysis and wrote the first and final draft of the manuscript. Authors PP and RTG managed the literature searches. Both authors read and approved the final manuscript.

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ABSTRACT

Juvenile delinquency has become the most important subject matter of discussion in various fields. The disarray and destruction due to deviant behavior is assuming alarming proportions which is an awakening call to the society. The present study aims to assess various psychosocial factors which play a crucial part in the exhibition of delinquency behavior. Purposive sampling was implemented to collect data after obtaining informed consent from a sample of 30 juveniles (15 heinous and 15 non heinous offenders). Independent sample t test is used to see the difference of the different variables between heinous and non heinous offenses and product moment correlation is used to find the relationship between the different variables. Results indicated that resilience factors like emotional insight, empathy, and availability of the family, connectedness with family, negative cognition and social skills are found to have correlation with delinquent behavior. Temperamental characteristics like activation control, attention, inhibitory control and perceptual sensitivity is negatively correlated

with the delinquent behavior while aggression is positively correlated. Significant difference is also found in these factors between heinous and no heinous offenses. It is also found that attachment with mother and peers play an important role in exhibiting delinquent behavior.

Keywords: Juvenile delinquency; temperament; attachment; resilience; social skill; inhibitory control.

1. INTRODUCTION AND REVIEW

A juvenile can be referred as a child who has not attained a certain age (18 years) at which he can be held liable for his criminal acts like an adult person and have committed certain acts which are in violation of any law. Due to alarming increase of the rate and gravity of delinquent behaviors, juvenile laws have been reviewed in many countries and have been made sterner. It is necessary to understand why a minor commits a crime to prevent future crimes from happening. Addressing the issues such as interpersonal relationships, peer pressure, stressful environments and personality traits that could lead to the choices that the minor child has made can help them change their actions in the future.

One of the important factors to be assessed that is quite imperative for an individual's growth is resilience. It can be defined as a person's capacity to positively adapt or attain success despite having faced adverse situations like abused or neglected, witnessing violence, or living in poverty which can lead to many negative outcomes such as delinquency [1]. Two broad sets of factors related to a general framework for understanding the development of resiliency: (1) intrinsic strengths or personality characteristics or attributes of the individual and (2) extrinsic strengths or interpersonal settings or environments [2].

Factors like emotional maturity, self esteem, parental models and patterns of parental authority, the coping mechanisms of adolescents, the trends to not adapt and psychopathology play an important role in the development of resilience [3].

Another factor that is to be examined is temperament which plays a major role in inculcating delinquency behavior. It can be defined as early developing individual behavior tendencies that are biologically rooted, present from infancy onward, relatively stable over time and situations, and are manifested in the context of social interaction [4]. A difficult temperament, which in their study is measured by fighting, peer rejection, hyperactivity, and difficulty to manage

the child, is associated with an early onset of antisocial behavior [5].

Attachment can be defined as a deep and enduring emotional bond that connects one person to another across time and space [6]. The attachment relationship with primary caregivers is very important as it provides infants with comfort and reassurance when threatened as well as form a secure base which helps them to explore the world around them.

The accumulation of these factors might increase the probability of delinquency behavior. Hence, it is crucial to understand its role in an individual's personality in order to be aware and to utilize these factors in a more productive approach.

2. METHODOLOGY

2.1 Aim

To assess the psychosocial factors which play a crucial role in exhibiting the delinquent behavior of juveniles.

2.2 Objectives

- i) To find the pattern of temperament factors in juveniles exhibiting delinquent behavior.
- ii) To find the pattern of resilience factors in juveniles exhibiting delinquent behavior.
- iii) To find the pattern of attachment factors in juveniles exhibiting delinquent behavior.
- iv) To find the relation of resilience, temperament and attachment factors with the delinquent behavior of juveniles.
- v) To find the difference of resilience, temperament and attachment factors between heinous and non heinous offenses.

2.3 Research Design

Cross sectional research design was used for the study. This involves collection and comparison of data of many different variables from the representatives of the population of interest at a particular time.

2.4 Sample

Thirty juveniles who are involved in delinquent activities are selected by using purposive sampling from observation home in Ahmedabad and Surat. The age ranges from 10-17 years. Out of 30 juveniles, 15 have committed heinous crimes which are rape and murder; and 15 have committed non heinous offenses which are burglary, theft, kidnapping, physical assault and cyber crime.

2.5 Inclusion Criteria

The age range of the juveniles that has been selected for the data collection—was between 10 to 17 years and their minimum education qualification was kept as 4th standard.

2.6 Exclusion Criteria

The age range of the juveniles cannot be less than 10 years or more than 17 years and education qualification cannot be less than 4th standard.

2.7 Tools Used

The following tools were used for the study.

2.7.1 Early Adolescent Temperament Questionnaire (EATQ-R)

The 65-item short form of the Early Adolescent Temperament Questionnaire—Revised (EATQR; Ellis & Rothbart, 2001) is a revision of a measure developed by Capaldi & Rothbart (1992). The revised questionnaire assesses 10 aspects of temperament related to self-regulation in adolescents, including activation control, affiliation, attention, fear, frustration, high-intensity pleasure, inhibitory control, perceptual sensitivity, pleasure sensitivity, and shyness. Scales measuring aggression and depressive mood are included to facilitate examination of relationships between temperament and traits relevant to socialization. The revised measure was developed with a sample of 177 adolescents ages 10-16. Items are rated on a 5-point scale. Internal consistency estimates (Cronbach's coefficient alpha) ranging from .65 to .82 for the 10 temperament scales, .80 for the aggression scale and .69 for the depressive mood scale [7]. There is a scoring key available for the scoring and interpretation.

2.7.2 Adolescent Resilience Questionnaire (ARQ)

The Adolescent Resilience Questionnaire (ARQ) is developed by Deirdre Gartland (2011) which provides a comprehensive and multidimensional assessment of the resources associated with resilience in adolescents. The majority of scales are in the individual domain, reflecting the range of personal characteristics identified as important for resilient outcomes. An adolescent's connectedness and the availability of support in the external domains of family, peers, school and community are also assessed. Items are rated on a 5 point scale and have 5 sections. First section has statements regarding oneself. The second and third section includes statements about family and friends and the last two sections consist of statements about school and community. Results confirm the factor structure based on 12 scales. Internal consistency was generally adequate which is between .60 and .90.

2.7.3 Inventory of parent and peer attachment (Gay Armsden, Mark T. Greenberg; 1987)

The IPPA was developed in order to assess adolescents' perceptions of the positive and negative affective/cognitive dimension of relationships with their parents and close friends. Three broad dimensions are assessed: degree of mutual trust; quality of communication; and extent of anger and alienation. The instrument is a self-report questionnaire with a five point likert-scale response format. The original version consists of 28 parent and 25 peer items, yielding two attachment scores. The revised version (2005) (Mother, Father, Peer Version) is comprised of 25 items in each of the mother, father, and peer sections, yielding three attachment scores. For the revised version, internal reliabilities (Cronbach's alpha) are: Mother attachment, .87; Father Attachment, .89; Peer attachment, .92 [8].

2.8 Procedure of the Study

The aim of the study was explained to each of the sample and consent is taken by signing in the consent form. Rapport is formed with each of the juveniles as they might not feel comfortable enough to speak about their offenses and their views and thoughts related to it. After ensuring their comfortable level and answering their doubts, the questionnaires including socio demographic details were given to mark their

answers following the explanation of the instructions of each questionnaire. The data collected was analyzed statistically.

2.9 Statistical Analysis

Quantitative analysis done. Descriptive statistics and inferential statistics were computed by the use of SPSS 20. Percentages were used to express the relative frequency of the responses obtained. Independent sample t test was used to see the difference of the different variables between heinous and non heinous offenses and product moment correlation was used to find the relationship between the different variables.

3. RESULTS AND DISCUSSION

This study was intended to identify the patterns and relations of resilience, temperament and attachment factors in delinquency behaviors of juveniles and also evaluate the difference in these factors between heinous and non heinous offenders.

3.1 Socio Demographic Details

As seen in the table, 66.7% of the sample (N=30) belong to the age (M=15.76, SD=1.43) of 16-17 years old. All the 30 samples are male out of which 86.7% Hindu. Sixty three percent are the

rural inhabitants, only 36.7% live in urban areas. In terms of education (M=6.13, SD= 1.94), 46.7% studied till 4-5th standard and 33.3% studied till 6-8th standard. Some of the juveniles were still pursuing their studies. 53.3% of the juveniles live in nuclear families and 60% have 1-3 siblings and 23.3% have 4 to 5 siblings. Seventy six percent (76.7%) have their own income (M=3233.33, SD= 2132.39) and fifty six percent were involved in substance abuse.

Child delinquents compared with juveniles with a later onset of delinquency, are at greater risk of becoming serious, violent, and chronic offenders and have longer delinquency careers [9]. It has been found that majority of the offenders in the sample were rural inhabitants. In India, along with ethnic diversity there could be other reasons associated with it like less education as it has been found that majority of the juveniles have studied till 4-5th standard only which is similar finding like in previous studies [10].

Juveniles that live in nuclear families with 1-3 siblings; majority of them are middle child or younger sibling (make it clear it with percentages). Many of the offenders have 4-5 siblings too. Age and family size impacted the relationship between family structure and crime and delinquency [11].

Table 1. Showing the descriptive statistics and frequency of the socio demographic details collected from the sample (N=30)

Factors	Frequency	Percentages
Age (mean=15.76, SD=1.43)	10-12 years	1
	13-15 years	9
	16-17 years	20
Gender	Male	30
Religion	Hindu	26
	Muslim	4
Domicile	Rural	19
	Urban	11
Education (Mean=6.13, SD=1.94)	4-5 th standard	14
	6-8 th standard	10
	9-11 th standard	6
Family type	Nuclear	16
	Joint	8
	Extended	6
Siblings (mean=2.76, SD=1.75)	None	2
	1-3 siblings	18
	4-5 siblings	7
	6-8 siblings	3
Income of the offenders (mean=3233.33, SD=2132.39)	Yes	23
	No	7
Substance abuse	Yes	17
	No	13

3.2 Correlation and Pattern of Resilience, Temperament and Attachment Factors with Delinquent Behavior

3.2.1 Resilience

Many factors of resilience correlated with delinquent behavior. Emotional insight is significantly negatively related with delinquent behavior ($r = -0.509, p = 0.004$) suggesting that more the level of emotional insight is, the less is the probability of exhibiting delinquent behavior. Behavioural symptoms of delinquent adolescents can be predicted from their emotional intelligence. The adolescents with higher in emotional intelligence were lower in behavioural symptoms [12]. Similarly, empathy also shows significant negative relation ($r = -0.79, p = 0.00$) with delinquent behavior which means that juvenile offenders lack empathy. Delinquents are significantly delayed or arrested in the

development of empathy. Moral judgment and empathy were positively correlated and both measures were negatively correlated with cognitive distortions which increase the probability of acquiring delinquency behaviour [13].

Negative cognition ($r = 0.50, p = 0.004$) and social skills ($r = 0.57, p = 0.001$) were found to be positively correlated with delinquency behavior. The incarcerated juveniles evidenced higher levels of negative cognition. Most notably, self-serving cognitive distortions specifically related to externalizing behaviors, whereas self-debasing cognitive distortions specifically related to internalizing behaviors [14].

In terms of family, school and peer factors, it is found that availability of the family ($r = -0.35, p = 0.05$) and connectedness with the school ($r = -0.38, p = 0.034$) were negatively

Table 2. Showing the descriptive statistics and correlation of all the subscales of resilience, temperament and attachment factors with delinquent behavior

	Factors	Mean	Standard deviation	Correlation (r)	p value
Resilience	Confidence	21.50	3.57	-.085	.654
	Emotional insight	15.53	3.46	-.509**	.004
	Negative cognition	22.56	5.79	.509**	.004
	Social skills	20.06	5.63	.577**	.001
	Empathy/tolerance	15.80	4.25	-.797**	.000
	Connectedness (family)	19.30	4.67	-.036	.849
	Availability (family)	7.76	1.99	-.357*	.051
	Connectedness (peers)	24.50	5.40	.759**	.000
	Availability (peers)	22.20	5.06	.656**	.000
	Supportive environment	17.76	3.34	.253	.177
	Connectedness (school)	14.46	4.01	-.388*	.034
	Connectedness (community)	15.03	3.96	.265	.156
Temperament	Activation control	12.86	2.87	-.382*	.038
	Affiliation	13.33	4.19	.337	.069
	Aggression	21.66	4.93	.450**	.012
	Attention	16.03	3.15	-.384*	.036
	Depressive mood	13.70	3.71	.048	.800
	Fear	12.76	5.13	.040	.835
	Frustration	21.96	5.76	.337	.069
	Inhibitory control	10.63	2.78	-.420*	.021
	Pleasure sensitivity	15.26	4.00	.283	.130
	Perceptual sensitivity	9.16	2.10	-.420*	.021
	Shyness	8.10	2.23	.057	.766
	Surgency	18.66	4.36	.129	.498
Attachment	Mother	66.16	13.91	.367*	.046
	Father	59.93	11.60	.088	.645
	Peers	77.73	12.11	.498**	.005

** Correlation is significant at the 0.01 level. *Correlation is significant at 0.05 level

correlated. It indicates that the family members of the adolescent should be available for them both emotionally and physically and if the adolescent is feels connected with the teachers and other school members, it diminishes the chance of acquiring delinquent behavior. Poor parental supervision is the strongest predictor of offending [15]. On the other hand, connectedness with the peers and availability of the peers is significantly positively correlated with the delinquent behavior. It is more prevalent when the peer group has a negative influence on the adolescent which help them in learning delinquent behaviour. Youth at risk for engaging in violence often establish an imbalance, having more unconventional than conventional forms of connectedness [16].

The factors which are scored highest in the entire sample (N=30) are negative cognition (M=22.56, SD= 5.79), connectedness with the peers (M=24.50, SD= 5.06), availability of the peers (M= 22.30, SD= 5.06), social skills (M= 20.06, SD= 5.63) and confidence (M=21.50, SD=3.57). The factors where the lowest scores are obtained are availability of the family for the adolescent (M= 7.76, SD= 1.99), emotional insight (M=15.53, SD= 3.46), empathy (M= 15.80, SD=4.25) and connectedness with the school (M= 14.46, SD= 4.01).

3.2.2 Temperament

In temperament scale, factors such as activation control, that is, the capacity to stop performing an action when there is a strong tendency to avoid it; is negatively correlated ($r = -0.38$, $p=0.03$) with the delinquent behavior of the juvenile. It indicates that if the juvenile lack in activation control then he would be more susceptible to delinquent behavior. The direct effects of activation control on peer rejection, association with deviant peers and delinquency were found, while activation control remained a significant predictor of delinquency net of association with deviant peers.

It has been also found that attention is negatively correlated ($r = -0.38$, $p = 0.36$) with delinquent behavior. If the juvenile have problem in the capacity to focus attention as well as to shift attention when desired then it might turn into a risk factors for acquiring delinquent behavior. Higher levels of defiant and/or aggressive behavior lead to antisocial acts as compared with lower levels of defiance and antisocial acts [17]. Likewise, inhibitory control ($r = -0.42$, $p = 0.02$) and perceptual sensitivity ($r = -0.42$, $p = 0.02$) was also negatively correlated with delinquent

behavior. When negative emotionality and tendency to experience aversive affective states is accompanied by weak constraint or poor inhibitory control, negative emotions may be translated more readily into antisocial acts [18].

On the other hand, aggression ($r = 0.45$, $p = 0.01$) is positively correlated with delinquency behavior. Both reactive aggression and proactive aggression significantly and positively predicted delinquency (after controlling for proactive aggression and reactive aggression, respectively), with proactive aggression being a stronger predictor [19].

The highest scores obtained on subscales are aggression (M=21.66, SD= 4.93), frustration (M= 21.96, SD= 5.76) and surgency (18.66, SD= 4.36) for the entire sample (N=30). The factors which have obtained lowest score are shyness (M= 8.10, SD= 2.23), perceptual sensitivity (M= 9.16, SD= 2.10), inhibitory control (M= 10.63, SD= 2.78) and activation control (M=12.86, SD= 2.87).

3.2.3 Attachment

It can be seen that attachment of mother with the juveniles are positively correlated ($r=0.36$, $p=0.46$) with delinquent behavior. As it is reported by the delinquents itself, which comprises of letting them do what they want and understanding their perspective too. Some of the juveniles are more attached to their mother as their father is not available for them.

It has also been found that there is positive correlation of delinquency behavior and attachment with peers ($r=0.49$, $p=.005$). Adolescents tend to get influenced easily by observing behaviors especially from those who are attached with them and those from whom they seek acceptance. Many juveniles are in a group while involving in such acts. Their new deviant friends encourage and reinforce them to participate in deviant behaviors. Some children begin to affiliate with delinquent friends during adolescence because it can be deemed as normal [20].

3.3 Difference of the Patterns of Resilience, Temperament and Attachment Factors between Heinous and Non Heinous Offenses

It is important to assess to see the difference of resilience, temperament and attachment factors

between heinous offenses which involved rape and murder and non heinous offenses which include burglary, theft, kidnapping, cyber crime and physical assault.

3.3.1 Resilience

As we can see from Table 3, emotional insight is less in heinous offenses (M = 13.80, SD = 3.62) than non heinous offenses (M = 17.26, SD = 2.28). The juveniles who are involved in heinous offenses have difficult in controlling their emotion and managing them and they go by the instinct more than thinking whether that act is appropriate or not. They lack in the aspect where there is awareness of their own emotions and even others. Social skill is found to be very low in heinous (M = 16.86, SD = 3.99) compared to non heinous offenses (M = 23.26, SD = 5.28). The

juveniles lack in productive communication and perceive the environment in an odd and weird manner. They lash out at others frequently and display inappropriate behavior [21].

Negative cognition is high in heinous (M = 25.46, SD = 4.83) and low in non heinous offenses (M = 19.66, SD= 5.31). Empathy is also very low in heinous (M = 12.46, SD = 2.79) than in non heinous (M = 19.13, SD = 2.41). Juveniles cannot objectively grasp the relationship between themselves and those around them, they tend to cling to their own beliefs, negative feelings towards others and have excessive feelings of being unnecessarily persecuted.

In family, peers and school section, availability of the family is low in heinous (M = 7.06, SD = 1.79) than in non heinous (M = 8.46, SD = 1.99).

Table 3. Showing the difference of the all the factors between heinous and non heinous offenses

	Factors	Heinous		Non heinous		T	P value
		Mean	SD	Mean	SD		
Resilience	Confidence	21.80	3.70	21.20	3.54	0.45	0.65
	Emotional insight	13.80	3.62	17.26	2.28	-3.13**	0.004
	Negative cognition	25.46	4.83	19.66	5.31	3.12**	0.004
	Social skills	16.86	3.99	23.26	5.28	-3.74**	0.001
	Empathy/tolerance	12.46	2.79	19.13	2.41	-6.98**	0.000
	Connectedness (family)	19.46	5.39	19.13	4.01	0.19	0.84
	Availability (family)	7.06	1.79	8.46	1.99	-2.02*	0.05
	Connectedness (peers)	20.46	3.88	28.53	3.24	-6.16**	0.000
	Availability (peers)	18.93	3.73	25.46	4.03	-4.60**	0.000
	Supportive environment	16.93	2.73	18.60	3.77	-1.38	0.17
	Connectedness (school)	12.93	3.67	16.00	3.85	-2.23*	0.03
	Connectedness (community)	14.00	3.35	16.06	4.35	-1.45	0.15
	Temperament	Activation control	17.00	6.03	13.13	4.79	2.14*
Affiliation		12.93	2.73	15.20	3.74	-1.89*	0.05
Aggression		22.40	5.23	19.53	4.24	1.64	0.11
Attention		14.86	3.81	17.46	2.53	-2.19	0.36
Depressive mood		14.20	3.50	13.86	3.64	0.25	0.80
Fear		15.20	4.82	15.57	3.79	-0.21	0.83
Frustration		14.06	9.42	19.13	4.29	0.50	0.77
Inhibitory control		14.26	6.52	12.06	2.86	1.19	0.24
Pleasure sensitivity		17.80	2.67	16.13	3.15	1.55	0.13
Perceptual sensitivity		13.13	4.79	9.80	2.17	2.45*	0.02
Shyness		9.00	3.96	9.33	1.63	-0.30	0.76
Surgency	17.73	5.16	16.53	4.37	2.10*	0.03	
Attachment	Mother	63.33	14.99	71.54	9.61	-3.01*	0.05
	Father	58.93	11.33	60.93	12.18	-0.46	0.64
	Peers	71.80	9.74	83.66	11.56	-3.10*	0.05

** Correlation is significant at the 0.01 level. *Correlation is significant at 0.05 level

Similarly, heinous offenders find less supportive environment ($M = 16.93$, $SD = 2.73$) than non heinous ($M = 18.60$, $SD = 3.77$). Availability of family is important and the result indicated that the more heinous the crime is, the less available the family members are for the offenders [22]. Family can be less available due to number of factors like more number of children to take care of, broken families, death of one parent etc. Peers also play a crucial role as they influence the adolescent a lot and have the capability to pressurize and convince the juvenile to act out some delinquent behavior. In the present study, there are many juveniles in the sample who are being forced to commit some delinquent behavior majorly the non heinous offenses like burglary and theft.

3.3.2 Temperament

In temperament scale, activation control is found high in heinous ($M = 17.00$, $SD = 6.03$) than in non heinous offenses ($M = 13.13$, $SD = 4.79$). The probable reason based on the available neuro-scientific data, the frontal lobe, especially the prefrontal cortex, is among the last parts of the brain to fully mature. The frontal lobes are responsible for impulse control, in charge of decision-making, judgment and emotions and therefore crucial when fixing "culpability" in the case of juvenile delinquency. Teenagers tend to be impulsive and prone to mood swings because the limbic system which processes emotions is still developing [23].

There is significant difference found in affiliation factor and it is found low in heinous offenders than in non heinous offenses. Juveniles involved in heinous offenses have low need to feel a sense of involvement and belonging within a social group which also supports the other findings of the study where it is found that they are low in other factors like connectedness and availability of peers and social skills. Moreover, antisocial individuals choose to affiliate with deviant peers, and that affiliating with deviant peers is associated with an individual's own delinquency [24]. Perceptual sensitivity is high in heinous ($M = 17.80$, $SD = 2.67$) than in non heinous offenders ($M = 16.13$, $SD = 3.15$) and surgency is relatively high in heinous offenders ($M = 17.73$, $SD = 5.16$) when compared to non heinous offenders ($M = 16.53$, $SD = 4.37$) in the entire sample ($N = 30$). Heinous offenders is high in perceptual sensitivity which means they are aware of the slight, low intensity stimulation in the environment due to which they might feel aroused to act according to their instinct which

could be hard for them to control as they are found to be high in high intensity pleasure (surgency). Adolescents characterized by high temperamental surgency were more likely to exhibit hyperactivity and aggression [25].

3.3.3 Attachment

Significant difference is found between heinous and non heinous offenses in attachment of mother ($t = -3.01$, $p = 0.05$) and attachment of peers ($t = -3.10$, $p = 0.05$) with the offenders ($N = 30$). Both mother's and father's separate communication and their interaction effect was linked to the development of delinquent behavior.. High attachment with non delinquent peers can also play an important role in curbing delinquency behavior of an adolescent.

4. CONCLUSION OF THE FINDING

This study focuses on the relationship, difference in pattern and the role of the resilience, temperament and attachment with heinous and non heinous delinquent offenders. The objective of the study is met as the pattern and relation of resilience, temperament and attachment is found along with the differences in these factors between heinous and non heinous crimes. The findings might help to focus on these factors and manage it in order to inculcate more productive behavior. The probable grounds behind those acts and might help in forming a rectifying plan for them in order to reform them into responsible citizen of the society. However, as the sample size is small ($N=30$), it might be difficult to generalize the findings.

Hence, in future, a larger randomized sample could be taken and intervention techniques can also be incorporated.

CONSENT

The aim of the study was explained to each of the sample and consent is taken by signing in the consent form.

ETHICAL APPROVAL

Approved by the ethical committee of the University.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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