



# Role of Psychosocial Factors in Criminal Behaviour in Adults in India

Mehak Sikand<sup>1</sup>

Dr. Ram Manohar Lohia Hospital, PGIMER, New Delhi, India

K. Jayasankara Reddy<sup>2</sup>

Christ University, Bengaluru, India

## Abstract

Over the years, there has been a steady increase in the number of crimes committed annually in India (Snapshots, 2014). The purpose of this paper was to delve into the psychological and social factors that contribute to the development of criminal behaviour in the Indian context. For the current research, concurrent embedded mixed research design was used. Twenty individuals with a criminal record were selected using purposive sampling and twenty individuals with no criminal record were matched on the basis of age, gender and socio economic status. Eysenck Personality Questionnaire- Revised was administered on them. A semi structured interview delving into understanding the social factors that contributed to the criminal behaviour was taken for six individuals who have a criminal record. Results revealed that there was no significant difference in the personality traits of extraversion, neuroticism, psychoticism and lie score between the two groups. However, various social factors like lack of social support, less emphasis on education and awareness, financial constraints and certain individual traits were found to be prevalent. Furthermore, an interactive effect of personality and environmental factors was established. A model was also proposed for providing interventions at an individual as well as societal level.

Keywords: Criminal Behaviour, Psychological Factors, Social Factors, Psychosocial Factors.

## Introduction

Criminal behaviour is any behaviour or act that is in violation of the criminal law, whereas crime is the particular action representing such behaviour (Kamaluddin, Shariff, Othman, Ismail, & Ayu, 2015). “It is not itself, or criminality that is innate; it is certain peculiarities of the central and autonomic nervous system that react with the environment, with upbringing, and many other environmental factors to increase the probability that a given person would act in a certain antisocial manner” (Eysenck & Gudjonsson, 1989) (Bartol & Bartol, 2005). The impact of the interaction of these factors has been found in a

<sup>1</sup> M.Phil Clinical Psychology Student, Department of Clinical Psychology, Dr. Ram Manohar Lohia Hospital, PGIMER, New Delhi, India. Email: sikand.mehak@gmail.com

<sup>2</sup> Associate Professor, Department of Psychology, Christ University, Hosur Road, Bengaluru - 560 032, Karnataka, India. Email: jayasankara.reddy@christuniversity.in.

few studies; however this remains an area that requires more research. The influence of family, personality, neighbourhood, socio economic status, peers and education has been focused upon.

### ***Psychological Factors***

Psychological factors encompass processes that take place at the individual-level as well as the meanings that one attributes to a particular situation which in turn affects our mental state (Upton, 2013). Cesare Lombroso (1810) viewed criminality as a product of abnormal psychological traits. This view was elaborated further by Hans Eysenck. Traits are more deterministic in nature as they are “dimensions of individual differences in tendencies to show consistent patterns of thoughts, feelings and actions” (Kamaluddin, Shariff, Othman, Ismail, & Ayu, 2015). Eysenck, in his theory of criminality, proposed that personality factors like extraversion, neuroticism and psychoticism are the prime causes of criminal behaviour and are the only “systematic method” available for the investigation of such behaviour. Personality traits contribute to one’s tendency to engage in criminal behaviour (Levine & Jackson, 2004; Egan, McMurrin, Richardson, & Blair, 2000; Listwan, 2001). He proposed that high neuroticism leads to higher persistence in people which makes crime a matter of routine that is continuously reinforced. The combined effect of high extraversion and high neuroticism interferes with learning social rules and conditioning, increasing the likelihood of criminal behaviour (Levine & Jackson, 2004). Psychoticism is believed to increase the rigidity of thought in a person and reduce sensitivity to guilt. The traits that correlate to form this super-ordinate trait include aggressive, cold, egocentric, impersonal, impulsive, antisocial, unempathetic, creative and tough minded (Ruch, n.d.)

Additional evidence of the role of underlying personality factors in criminal behaviour is provided by the Five Factor Model proposed by McCrae and Costa (1988) which represents a continuum between two extremes of these traits. It was found that neuroticism has shown positive correlation with criminal acts which is consistent with the findings of Eysenck’s PEN Model. McCrae and Costa found that Eysenck’s measure of P was related to the Big Five factors, Conscientiousness and Agreeableness (Zuckerman, Kuhlman, Joireman, Teta, & Kraft, 1993). In addition to personality factors, other individual variables like intelligence, emotional behaviour and academic achievements also determine the chances of an individual to indulge in criminal behaviour (Clarbour, Roger, Miles, & Monaghan, 2009; Koolhof, Loeber, Wei, Pardini, & D’Escury, 2007).

Listwan (2001) in her research supported the notion that personality is an important risk factor and can assist our understanding of offenders both theoretically as an explanation for behaviour and practically for the application of treatment. Despite the firm theoretical base of Eysenck’s theory in understanding criminal behaviour, situationalist theorists have often targeted its reliability. Theorists argue that behaviour varies not because of personality traits but due to the situation one is in and the characteristics of that situation (Smallbone & Cale, n.d.). Knowing the various circumstances, then, which may foster criminal behaviour is essential to be cognizant of.

### ***Social Factors***

Social factors encompass those that are present in the society and influence the individual by their structure and course (Upton, 2013). The social frames of reference for studying crime are individual, familial, peer factors, socio economic status and schools

(Leonard, 2013). Theoretical framework and research evidence has suggested that criminal behaviour is an outcome of various social factors, interactions and is related to various ongoing social processes (Leonard, 2013; Molidar, 1996; Johnson, Smailes, Cohen, Kasen, & Brook, 2004; Harris-McKoy & Cui, 2013; Sousa, et al., 2011; Robinson, n.d.).

*Community/ Neighbourhood.* As stated by Sutherland's differential association theory, overabundance of criminal contact is considered a necessary as well as a sufficient cause of criminal behaviour (Gorecki, 1974). McKay and Shaw's (1942) social disorganization theory focuses on the neighbourhood conditions like high unemployment, low socioeconomic status, less educational opportunities or deteriorated housing, that foster criminal behaviour (Dechant, n.d.; Kitchen, n.d.).

*Socio-economic Status.* Socio economic status (SES) refers to one's standing in the society in terms of education, income and occupation (Socio Economic Status). The strain theory argues that crime is a "function of the conflict between people's goals and the means they can use to obtain them". The Cultural deviance theory further merges the key elements of strain and social disorganization theory and suggests that criminal behaviour is a result of conformity to the lower class sub culture (Dechant, n.d.). Albert Cohen proposed that delinquent gangs emerge in economically deprived areas which define their norms and the types of gangs that are formed depend on the type of neighbourhood in which they develop (Adler, Mueller, & Laufer, 2012). This is in accordance to the assertions made by McKay and Shaw's Social Disorganization Theory.

*Family/ Quality of Relationships.* Sampson and Laub (1993) emphasized on the role of quality relationships or marriage in individuals' likelihood of engaging in criminal behaviour in their life course perspective as preventive factors (Listwan, 2001). Social control theory, as proposed by Travis Hirschi (1969) proposed that lack of social relationships lead to lack of understanding of societal rules and norms which increases the probability of criminal activities (Listwan, 2001; Harris-McKoy & Cui, 2013). Influence of family members, especially mothers, has been emphasized on as being a prime factor in manifestation of criminal behaviour (Johnson, Smailes, Cohen, Kasen, & Brook, 2004).

*Education/ Occupation.* The age graded theory of informal social control proposed by Sampson and Laub (1993) proposed that individuals with higher educational qualifications and stable employment are more likely to abstain from engaging in criminal activities (Devers, 2011). Snowball and Hunter (2006) found that 20% of the individuals imprisoned for engaging in criminal act were unemployed as compared to 5.8% of them who were employed (Robinson, n.d.).

The theoretical basis of the role of social factors in criminal behaviour provides an in depth understanding. Individual's choice to commit a particular crime, exposure to criminal cues, disorganized neighbourhood conditions, socialization, and lower socio economic status foster criminal behaviour among individuals.

### ***Psychosocial Factors***

Even though various theories suggest either a psychological or a social underlying mechanism for criminal behaviour, the true essence is derived only by understanding the additive influence of these factors on an individual. The Lifestyle Theory proposed by Glen Walters proposes that criminal behaviour is a choice conditioned by the interaction of individual traits and environmental circumstances. The choices that an individual makes are made within the boundaries of one's environmental and biological conditions which

eventually lead to the development of cognitions. Lifestyle criminals are characterized by irresponsibility, impulsiveness, self-indulgence, negative interpersonal relationships, and the chronic willingness to violate society's rules (Psychosocial Theories: Individual Traits and Criminal Behaviour, 2006). This theoretical framework accurately describes the rationale of this research which is to understand these conditions, cognitions and choices.

Pabbathi, Naik, Mandadi and Bhogaraju (2014) found a link between personality factors and crime as well as highlighted that many of the offenders were from rural areas, low socio-economic status, had lower level of education and were experiencing family and marital discord (Pabbathi, Naik, Mandadi, & Bhogaraju, 2014).

Even though the above stated research explains the psychological as well as the social factors that contribute to criminal behaviour, no formal assessment was conducted to determine the social factors. The statistics were formulated using preliminary data about the participants. There is a need to determine the impact of the social factors using a valid assessment which is the aim of the present research.

In addition, the statistics published by the National Crime Records Bureau indicate that "the rate of murder has increased by 238.7 percent, of rape by 1255.3 percent, of abduction by 1144.3 percent, of robbery by 279.8 percent and of riots by 251.3 percent from 1953 to 2013" in India (Sikand & Reddy, 2016). The urgency to understand the reason behind such a drastic elevation in these incidences can be inferred from the statistics stated above. Also, in light of the evidence presented above, one can conclude that there is substantial influence of psychological and social factors on criminal behaviour. Examining the role of these factors in the Indian context is the purpose of this study.

### **Objectives of the Study**

The major objective of this research study is to gain an in depth understanding of the role that psychological and social factors play in contributing to criminal behaviour.

The specific objectives are as follows:

1. To understand the difference in the personality types of people with criminal record and those with no criminal record.
2. To understand the role of social factors in criminal behaviour.

### **Hypotheses**

To study the role of personality traits in criminal behaviour, the following has been hypothesized by the researchers:

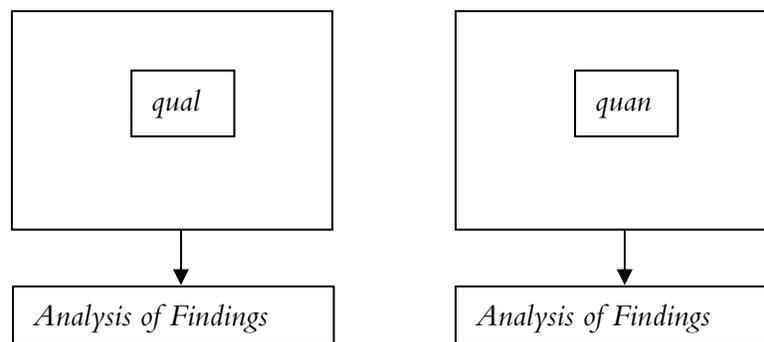
- H1: Individuals with a criminal record will score higher on extraversion on the Eysenck Personality Questionnaire- Revised compared to those who do not have a criminal record.
- H2: Individuals with a criminal record will score higher on neuroticism on the Eysenck Personality Questionnaire- Revised compared to those who do not have a criminal record.
- H3: Individuals with a criminal record will score higher on psychoticism on the Eysenck Personality Questionnaire- Revised compared to those who do not have a criminal record.

## Method

The methods used to carry out this research included a concurrent embedded research design, with experimental design for the quantitative aspect and social constructivist paradigm for the qualitative aspect. Forty participants were selected for the administration of Eysenck Personality Questionnaire Revised- Short Version and six participants were selected for the semi structured interview. Independent sample t test, Mann Whitney U test and thematic analysis were employed for analysis.

### Research Design and Research Paradigm

**Figure 1: A diagrammatic representation of Concurrent Embedded Mixed Design (Creswell, 2009)**



The present study was conducted using the mixed research design. For the quantitative research design, experimental design was employed. This was done by dividing groups on the basis of criminal or no criminal record. This was the independent variable for the study. The dependent variables were the scores on the domains of extraversion, neuroticism and psychoticism. For the qualitative design, social constructivist paradigm was used. This would help in understanding how criminal behaviour is contextualized in the Indian society.

### Data Collection Method

*Eysenck Personality Questionnaire- Revised Short Version.* It is a self report inventory which measures personality. It contains of 48 items, 12 for each traits of neuroticism, extraversion, psychoticism, and a lie scale. The questionnaire was back translated into Hindi and back translated in to English by bilingual Indian nationals (Tiwari, Singh, & Singh, 2009). The coefficient of reliability was found to be 0.766 for extraversion subscale; 0.772 for the neuroticism subscale; 0.238 for the psychoticism subscale; 0.624 for the lie score subscale. The corrected item-total correlation ranged from 0.201 to 0.538 for extraversion, from 0.196 to 0.556 for neuroticism, from 0.109 to 0.449 for lie scale and from 0.020 to 0.284 for psychoticism subscale of EPQR-S (Tiwari, Singh, & Singh, 2009).

*Interview.* The interview schedule was validated by three professors of the Department of Psychology, Christ University, Bengaluru, India. It was translated in Hindi by a

professional. The interview schedule was used to determine the social factors that contribute to criminal behaviour. Information was audio taped with the consent of the participants and was then be transcribed for the purpose of analysis.

*Kuppuswamy's Socio-Economic Status Scale.* The Kuppuswamy scale was proposed in 1976 and revised in 1998 then 2007. It calculated the socio economic status (SES) on the basis of three variables, namely; education, occupation and income of the head of the family (Maheshwaran, 2014).

### ***Process***

An interview schedule was constructed to delve into the social factors that may have influenced the participants' lives. A pilot study was then conducted with two participants who had been imprisoned for the past ten years. Certain modifications were made in the schedule after which the study was carried out. Twenty individuals with a criminal record who have received a punishment of more than three years of imprisonment were selected using purposive sampling from the Central Jail, Bengaluru. EPQR-S was administered on them. Twenty individuals with no criminal record were selected and matched with the 20 criminals on the basis of their age, educational qualification, and gender. EPQR-S was administered on them as well.

A semi structured interview was taken for the six individuals chosen randomly from the 20 who had a criminal record. The semi structured interview delved into understanding the social factors that contribute to criminal behaviour. Thereafter, the scores of the individuals with a criminal record on the three domains were compared to the scores of those with no criminal record using Mann Whitney U test or Independent sample t test depending on the normality of the data. The interviews were analyzed using Thematic Analysis technique to inspect and record patterns or 'themes' within the data. From the global theme, various organising themes were derived, from which basic themes were further inferred. These themes provided a better understanding of the contribution of social factors in criminal behaviour.

### ***Validation***

For the qualitative aspect of the research, face validation of the interview schedule was done by three experts in the field. The changes proposed were incorporated and verified by them. For the purpose of establishing the validity of data collected, the technique of audit. The process of auditing included providing an audit trail to experts who then closely examined the product as well as the process of the research study.

### ***Ethical Considerations***

The research was conducted on a sensitive population, various ethical guidelines were followed to protect the participants, both psychological as well as physically. The Researchers had sought permission from the concerned authority and the participants were informed about their rights. Written permission was also taken to audio record the interviews for the purpose of analysis. The researchers ensured that the participants were neither physically nor psychologically harmed during the process of data collection. The data collected was used for the purpose of the current study. After the completion of the research, the participants were informed about the nature, results and conclusion of the research through the in charge of the central jail (Ethical Principles of Psychologists and Code of Conduct, 2010). Analysis was done carefully to ensure an error free interpretation

of the obtained results. Social as well as psychological implications of the results were taken into consideration (SRCD Governing Council, 2007).

## Results

### *Psychological Factors*

**Table 1. Mean and standard deviation of the age of participants**

N	Min	Max	Mean	SD
40	29	61	39.20	8.561

The participants (N=40, Mean age= 39.20, SD= 8.56) were male and between the age group of 29 and 61, as depicted in Table 1. The standard deviation was 8.56.

**Table 2. Mean and S D of the Domain of Extraversion, Neuroticism, Psychoticism and Lie Score**

Domain	Group	N	Mean	S.D.
Extraversion	C	20	7.2	2.98
	N	20	7.6	2.44
Neuroticism	C	20	5.45	3.32
	N	20	6.85	3.28
Psychoticism	C	20	2.50	1.39
	N	20	3.30	1.87
Lie Score	C	20	8.65	2.39
	N	20	7.60	1.98

*Note.* C is abbreviation for individuals who have criminal record and N is abbreviation for individuals who do not have a criminal record.

The descriptive statistics revealed that the mean score of individuals who have never engaged in criminal behaviour (Mean= 7.6, S.D.= 2.44) is higher on the domain of extraversion compared to those individuals who have engaged in criminal behaviour (Mean= 7.2, S.D.= 2.98) (Table 2). On the domain of neuroticism, the mean score of individuals who have never engaged in criminal behaviour (Mean= 5.45, S.D.= 3.31) is higher compared to those individuals who have engaged in criminal behaviour (Mean= 6.85, S.D.= 3.28). The mean score of individuals who have never engaged in criminal behaviour (Mean= 2.50, S.D.= 2.1.39) is higher on the domain of psychoticism compared to those individuals who have engaged in criminal behaviour (Mean= 3.30, S.D.= 1.87). On the domain of Lie Score the mean score of individuals who have never engaged in criminal behaviour (N) (Mean= 7.60, S.D.= 2.39) is lower compared to those individuals who have engaged in criminal behaviour (C) (Mean= 8.65, S.D.= 1.98).

**Table 3. Mann Whitney U Test to Compare the Scores on the Three Domains by the Two Groups**

	Group	N	Mann Whitney U	Asymp Sig
Extraversion	C	20	179.50	.574
	N	20		
Lie_Score	C	20	137.00	.083
	N	20		

Note. C is abbreviation for individuals who have criminal record and N is abbreviation for individuals who do not have a criminal record.

For H1, the data for individuals who have engaged in criminal behaviour (C) was not normally distributed and the data for individuals who have not engaged in criminal behaviour (N) was normally distributed on the domain of extraversion. Therefore, analysis using Mann- Whitney U test was conducted. The analysis is represented in Table 3. The results indicated that the scores of individuals who have engaged in criminal behaviour (C) was not significantly higher from the scores of individuals who have not engaged in criminal behaviour (N) responses (U= 179.50) in the domain of extraversion. Hence, H1 was rejected.

For H4, the data for individuals who have engaged in criminal behaviour (C) was not normally distributed and the data for individuals who have not engaged in criminal behaviour (N) is normally distributed on the domain of lie score. Therefore, analysis using Mann- Whitney U test was conducted. The analysis is represented in Table 3. The results indicated that the scores of individuals who have engaged in criminal behaviour (C) was not significantly higher from the scores of individuals who have not engaged in criminal behaviour (N) responses (U= 137.00) in the domain of lie score. Hence, H4 was rejected.

**Table 4. Independent sample t test to compare the scores of C and N on the domains of neuroticism and psychoticism**

	T	df	Sig.	Mean D	95% CI
N	-1.342	38	.188	-1.40	-3.51 .711
P	-1.535	38	.133	-.80	-1.85 .257

Note. N is abbreviation for neuroticism and P is abbreviation for psychoticism.

For H2, the data for individuals who have engaged in criminal behaviour (C) and for individuals who have not engaged in criminal behaviour (N) was normally distributed. Therefore, analysis using Independent Sample t test was conducted (Table 4). It was found that the scores obtain on the domain of neuroticism for individuals who have a criminal record (Mean = 5.45 and SD = 3.31) was not significantly higher than the score obtain by individuals who do not have a criminal record (Mean = 6.85 and SD = 3.28113) (t= -1.34) with a difference of -1.47 (95%CI, -3.51, .711). H2 was rejected.

For H3, the data for individuals who have engaged in criminal behaviour (C) and the data for individuals who have not engaged in criminal behaviour (N) were normally distributed. Therefore, analysis using Independent Sample t test was conducted (Table 4). It was found that the scores obtain on the domain of neuroticism for individuals who have a criminal record (Mean = 2.50 and SD = 1.39) was not significantly higher than the score of individuals who do not have a criminal record (Mean = 3.30 and SD = 1.86) ( $t = -1.535$ ) with a difference of  $-.80$  (95%CI,  $-1.85, .257$ ). H3 was therefore rejected.

### Social Factors

*Participants.* Participants selected for the semi structured interview were between the ages of 29 years and 61 years from the lower, upper lower and lower middle socio economic status.

**Table 5. Demographic details of the participants**

Name	Age	Education	MS	SES	AOC
P1	29	B.Com.	U	L	21
P2	61	11 <sup>th</sup>	M	LM	41
P3	29	B.Sc.	U	LM	24
P4	32	5 <sup>th</sup>	U	L	24
P5	39	SSC	M	UL	33
P6	43	12 <sup>th</sup>	M	LM	33

*Note:* MS is abbreviation for marital status, U for unmarried, M for married, SES for socio economic status, L for lower class, LM for lower middle class, UL for upper lower class, AOC for age of conviction.

*Themes.* The global theme presented in the data was social factors. From the global themes, various organizing themes derived were; presence and lack of support of family, poor neighbourhood conditions and relations, low socio economic status and occupational difficulties, individual factors, educational background and interest, negative peer influence, lack of awareness (Conway & McCord, 2002; Ikaeimol, Laukkanen, Hakko, & Rasanen, 2013; Johnson, Smailes, Cohen, Kasen, & Brook, 2004; Leonard, 2013; Molidar, 1996).

**Table 6. Global, Organizing and Basic Themes Derived from Data**

Global theme	Organizing Themes	Basic Themes
Social Factor	Presence and lack of support of family	<ul style="list-style-type: none"> <li>● Lack of Family Support</li> <li>● Absence of Father Figure</li> <li>● Poor Relationship with Extended Family</li> <li>● Home Environment</li> <li>● Attachment with Mother</li> <li>● Marital Discord</li> <li>● Poor Emotional and Physical Health of Family</li> </ul>
	Poor neighbourhood conditions and relations	<ul style="list-style-type: none"> <li>● Underdeveloped Neighbourhood</li> <li>● Lack of Safety</li> <li>● Poor relationship with neighbours</li> <li>● Negative impact of labelling by the society</li> </ul>
Social Factor	Peer influence	<ul style="list-style-type: none"> <li>● Negative peer influence</li> <li>● Temporary nature of friendship</li> </ul>
	Low socio economic status and occupational difficulties	<ul style="list-style-type: none"> <li>● Need for financial security</li> <li>● Inability to meet one's needs</li> <li>● Eagerness to earn money</li> <li>● No external source of financial support</li> <li>● Occupational stress</li> </ul>
	Educational background and interest	<ul style="list-style-type: none"> <li>● Low interest in studies</li> <li>● Less emphasis on education</li> </ul>
	Lack of Awareness	<ul style="list-style-type: none"> <li>● Lack of awareness of consequences</li> <li>● Inability to think of consequences</li> <li>● Causes of Crime</li> <li>● Interventions</li> <li>● Attitude of Police Personnel</li> </ul>
	Individual Factors	<ul style="list-style-type: none"> <li>● Rigid pattern of thinking</li> <li>● Need for power</li> <li>● Personality traits</li> </ul>

*Presence and lack of support of family.* Most of the participants had significant stressors in terms of their interaction with the family. Lack of family support, family health, emotional state of family members, absence of father figure, discord with family, relationship with extended family, home environment, strict moral values of family, attachment with mother and marital discord were the basic themes extracted from the interviews.

... you are roaming here and there with friends. You are really a burden to this family, this thing, they are simply shouting at me. (P2, personal communication, December, 2016)

*mere baap ke relations se koi nahi hai. maa ka relations hai lekin waha nahi jaata... lekin abhi mai jail mai aane ka karke koi hume saath nahi diya karke maa bhi udhar jaana chhodke* (there is no relative from my father's family. My mother's relatives are there but I don't go there...but after coming to jail no one supported us so mother also stopped going there). (P4, personal communication, December, 2016)

*humara maa devta hai. meri maa jo hai maa nahi devta hai* (my mother is a goddess. My mother is not human, she is a goddess). (P5, personal communication, December, 2016)

*ab ghar lena hai, wo lena hai, yeh lena hai, unn sab ko chhod do. Aisa bolti thi...ladai hota tha mere saath. Biwi ka mere saath* (now we have to buy a house, that we have to take, this we have to take, leave them now. She used to say this ... fight used to happen with me. My wife used to fight with me). (P5, personal communication, December, 2016)

*Poor neighbourhood conditions and relations.* These conditions influenced other factors like emphasis given to education or negative peer influence. Underdeveloped neighbourhood, lack of safety, and poor relationship with neighbours were the basic themes extracted from the interviews.

*haan paani ki dikkat hota tha, idhar ghar ke paas mai. Paani ka hum, peene ka paani ke liye door se leke aate the...* (yes, there is used to problems related to water supply, near the house. For the water, we used to get drinking water from some place far...). (P4, personal communication, December, 2016)

*yeh jo 8<sup>th</sup> se +2 tak jis jagah mai mairahtha tha woh jagah utna develop nahi tha, underdeveloped tha. Who jagah hu mai abhi zyada facilities nahi thi, zyada education ka mahatva nahi diya jaa raha tha...* (the place I did my 8<sup>th</sup> to 12<sup>th</sup> from was underdeveloped. There were not many facilities in that place, education was not given that much importance). (P3, personal communication, December, 2016)

*toh jis area mai hum gaye the jab tak pehla saal tha, uss time pe bohot khatarnaak tha* (the area that we went to, in the first year, that time it was very dangerous). (P3, personal communication, December, 2016)

*Negative Peer Influence.* In addition to infrastructural inadequacy and poor relations with neighbours, another important factor that had a major influence on the participants was negative influence of peers. This was further exaggerated by the low socio economic status of participants as well as their need for financial security. The basic themes derived from the interviews were; support from peers, temporary nature of friendship and negative peer influence.

*dil mai yeh bhi tha ki bhai karenge kuch, ghar ko sambhalna hai, apni zindagi sambhalna hai...iss hi pareshaani mai, ekj aise dost mile, who kahi kisi firm mai kaam kiya karte the... tab jaake yeh kisike through, matlab doston ke through yeh kaam mil gaya* (in my heart I felt that I have to do something, have to manage the house, have to manage my life... in this difficulty, I found friends you were similar, they used to do some work in some firm... that is how through someone, through friends I got this work). (P1, personal communication, December, 2016)

*Low socio economic status and occupational difficulties.* One factor that the previous themes have had interaction with is the participant's socio economic status. The basic themes derived from the data were; need for financial security, inability to meet one's needs, eagerness to earn money, no external source of financial support, occupational stress and dissatisfaction with work.

*bina jaane bas yehi, ki bas thakgaye the uss samay ghar ki problem dekhke. Ummer bhi aisi thi ki bhai kuch karoo, kuch banu, kuch kamake doo gha rpe.* (without knowing, just this that I was tired at that time seeing problems at home. Age was also like that that I felt that I have to do something, become something, earn something and give it at home). (P1, personal communication, December, 2016)

*kaam poore hi nahi ho rahe the, kisiki khushiyan, khwaish पूरी hi nahi ho rahithi.* (work was not getting completed, no one's happiness, dreams were being fulfilled). (P1, personal communication, December, 2016)

financially family was too weak to be frank with you... I never enjoyed my childhood. (P2, personal communication, December, 2016)

*baad mai mai socha mai bola tha ki khaali unko maarna waarna kuch nahi hai. maarne se kya hota hai. tum ko kya chahiye, paisa chahiye, sirf paise se matlab hai...* (later on I thought about it and I said we do not have to kill her, what will happen by killing her, you want money, only be concerned about the money...). (P4, personal communication, December, 2016)

*Educational Background.* The focus of this theme is on the importance given to education. The primitive way of understanding it is by taking into consideration the qualifications of the participant. However, the data collected from the interviews also focuses on the participants' personal interest in studies, emphasis given on education and how these factors are influenced by the socio economic status as well as neighbourhood conditions.

*lekin mai padhne ka mera yeh nahi, mereko deemag mai aata hi nahi tha padhna. School jaata tha lekin school mai jo bhi deemag mai betha hi nahi tha. (but for studying I did not, in my brain it never used to come that I should study. I used to go to school but whatever happened there I never used to understand). (P4, personal communication, December, 2016)*

*second year tak poora kiya. Uske baad ghar pe padane ki taakat nahi thi. matlab who nahi padha sakte the aage... unki gareebi dekhke humai bhi padhne ki ichha nahi hui... (I completed till second year. After that, I could not financially afford studying further, they could not afford it...seeing the financial problems I also did not feel like studying). (P1, personal communication, December, 2016)*

*yeh jo eighth se plus 2 tak jis jagah mai mai rahta tha who jagah utna develop nahi tha, underdeveloped tha... zyaada education ka mahatva nahi diya jaa raha tha toh wahape... (that place where I used to stay between my 8<sup>th</sup> to plus 2 wasn't that developed, it was underdeveloped... education was not given that much importance). (P3, personal communication, December, 2016)*

*Lack of awareness.* Lack of awareness of consequences and inability to think of consequences were inferred as being the basic themes. Awareness about possible intervention strategies, causes of crime and attitudes of police personnel are being incorporated in this theme.

*humai nahi pata tha ki yeh fraud kaam kya hota hai, do number kaam kya hota hai...dekhke bhi nahi the revenue stamps aur postal. (I did not what this illegal activities were, what is this work... I had never even seen revenue or postal stamps before). (P1, personal communication, December, 2016)*

*lekin aisa karke hum ko maloom hi nahi tha. Kanoon ke bare mai hum ko maloom hi nahi tha...yeh poora hume idhar aane ke baad maloom chala. (but it was like this I did not know. I did not know about the law...all this I got to know after coming here). (P4, personal communication, December, 2016)*

*uss waqt darr nahi tha, uss waqt khushi duniya ki... (that time there was no fear, that time there was all the happiness in the world...). (P1, personal communication, December, 2016)*

*aaj jo kuch film aa rahi hai, yeh bohot worst film hai. kisika gun rehta hai, ...yeh kya ho raha, ... sabhi issiko highlight kar raha hai, yeh kya ho raha hai, sabhi dekh dekhke log conversion ho raha hai... (the films that come out these days, they are the worst. Someone has a gun, ... what is happening, everything on tv...everything is highlighting this, what is happening is, by watching it people are talking about it...). (P5, personal communication, December, 2016)*

*galat kaam karne se kya problem hai, yeh subject bhi india mai hona bohot zaroori hai. isse bachpan se hi insaan jaan lega ki hume kahaan kidhar kadam rakhna hai. (what is the problem in doing wrong things, this subject is very important in India. by this, since childhood, people will know where to step...). (P1, personal communication, December, 2016)*

*Individual Factors.* Most themes stated above put light on the external factors that may have an effect on the criminal behaviour of individuals. From the data obtained during the interviews, certain personal characteristics of the participants also played a prominent role. The basic themes prominent in the text were of; young adults, external locus of control, rigid pattern of thinking, high risk taking tendencies, need for power, personality traits. The participants were

... *bachpan se mereko ego zyada hai.* (since childhood I have had more ego) (P3, personal communication, December, 2016)

*kyunki mai bada aadmi hoo, poora khaandaa nmai, mai ek line daal ke koi bhi paar nahi karega. Aaj tak koi bhi nahi paar kar paya...* (because I am the eldest man, in the whole family, if I put any limit no one crosses it. No one has been able to do it till date) (P4, personal communication, December, 2016)

## Discussion and Conclusion

The results of the present study revealed that there is no significant difference in the personality traits of individuals who have a criminal record compared to those who do not. Eysenck's theory proposed that the former population is high on the domains of extraversion, neuroticism and psychoticism which has been further confirmed in numerous studies earlier (Adler, Mueller, & Laufer, 2012; Levine & Jackson, 2004). However, when compared to the other population, no consensus has been reached on whether they are higher, lower or equal (Schuessler & Cressery, 1950). The situational theory of personality gives a perspective on how behaviour is primarily influenced by external, situational factors rather than internal traits. There is a possibility, therefore, that the results of the present study can be explained using Mischel's theoretical understanding of personality and behaviour. There is consensus among professionals of this field that behaviour can be accurately understood only in terms of additive effect of individual dispositions as well as situational factors (Smallbone & Cale, n.d.).

As the results of the present study indicated the important role of interactional effect, it is imperative to understand how factors like individual characteristics, social support, socio economic status influence each other in contributing towards criminal behaviour. Sun, Triplett and Gainey (2004) revealed that neighbourhoods with low socio-economic status, high residential mobility, racial heterogeneity, and family disruption should have sparse local friendship networks, low organizational participation, and unsupervised youth groups (Review of the Roots of Youth Violence: Literature Reviews, 2010). Economic deprivation has been seen to play an important role not only on peer relations but also on violence among the youth (Eamon, 2001). This effect is mediated by the social disorganization of the community one is living in which consequently increases the tendency of engaging in criminal behaviour (Seepersad, 2013). Along with the traits and environmental factors, having poor coping skills and resources also put people at a higher risk of engaging in such behaviour (Seepersad, 2013). The overall understanding of the interaction effect suggested that personality may not be the sole contributor and that the social factors interact with personality traits to determine a person's behaviour in a particular situation. The participants of the present study did not have access to basic facilities in their neighbourhood which was accompanied by an inability to meet the basic needs due to financial constraints. As most of them did not have an authoritative parental

figure, the guidance that was required at an early age was not available. This in turn, supports the study stated above in terms of presence of unsupervised youth groups (Review of the Roots of Youth Violence: Literature Reviews, 2010). The financial constraints of the family made them choose job over education which also influenced their awareness. Lack of awareness was in turn, amplified by their inability to assess the long term consequences of their actions. Given the social scenario, the factor that had an additive effect was their impulsive nature and rigid thought processes.

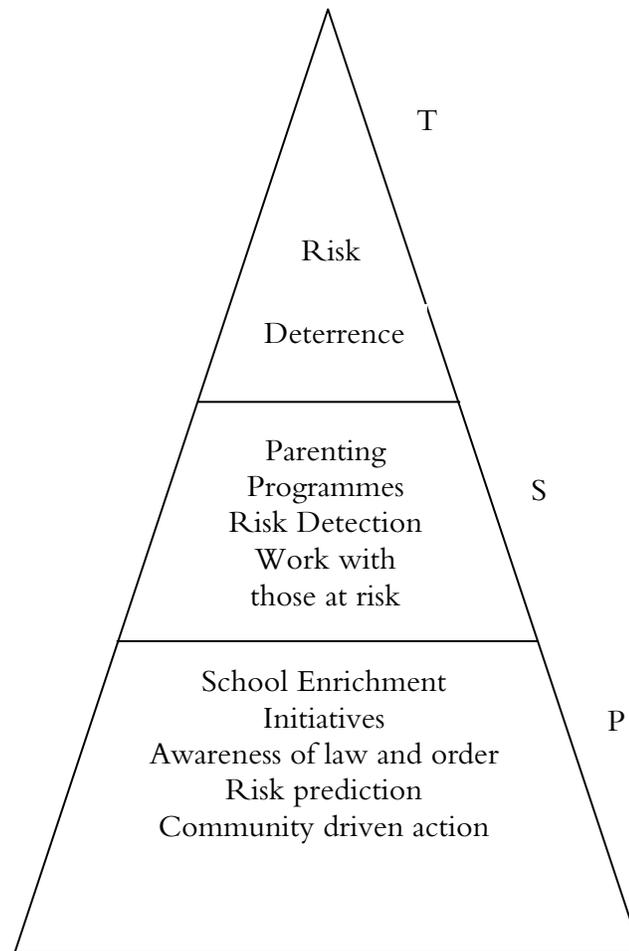
Understanding the role of the psychological and social factors is one aspect but the eventual purpose is to use the knowledge of the contributory factors to curb the increasing rate of crime. Prevention is better than cure and for a society, where the crime rate is increasing at alarming rate prevention is the need of the hour. Bromfield and Holzer (2008) adapted Brantingham's (1976) idea of a conceptual model of crime prevention which proposed that intervention is required at three levels; primary, secondary, tertiary (Harper, 2015). It is essential to see prevention in terms of the target population as well the source of problem. Bromfield and Holzer's (2008) conceptual model has been modified to incorporate Clancey's developmental, social and situational model for understanding the interventions required. From the data of the present study, it was found that each of the themes derived were essentially disclosing inadequacies present in the participants' lives. These delved into the social support that they received from family, neighbourhood, community, and peers, the quality of education and its effects on one's awareness as well as individual traits of impulsivity.

Integrating these three aspects, Bromfield and Holzer's model, Clancey's models and the data obtained from the current study, helped in designing interventions at each level of the hierarchy which also would target the exact sources of problems (Figure 2).

- (1) At the primary or universal level (P), interventions at the developmental stage can incorporate school enrichment initiatives or risk detection in the presence of certain possible predictors like age, personality traits and environmental circumstances. At the social stage, community driven action is recommended which would include adequate housing and basic facilities being universally accessible. At the situational stage, risk prediction in terms of the current scenario of a neighbourhood or family, reducing the perception of rewards for offending by improving the judicial system and increasing the efficiency of punishment for a crime. Knowing the adverse consequences of one's behaviour can help reduce such behaviour.
- (2) Changes at the primary level (P) will lead to some transformation at the secondary level (S) as well. At the developmental stage, the responsibility of risk detection can be given to the parents and via parenting programmes, knowledge can be imparted as to how to decrease the influence of such risk factors. At the social level, initiatives like working with those individuals who have been detected as being high at risk and mobilizing the community members to take responsibility for the safety of their community and being vigilant for any possible threats present can be beneficial. At the situational level, risk detection and prevention in problem situations is important.
- (3) The tertiary level (T) is primarily concerned with law enforcement and rehabilitation. At the developmental level, risk deterrence can be implemented

by seeking professional help of a counsellor for children experiencing maltreatment or who have certain “risk factors” that make them more susceptible to turn toward crime. However, this can only be done when certain steps are taken at the social stage to increase support for such individuals and targeting the issue of labelling by the society and stigma attached. Having leaders for each community and holding awareness campaigns in neighbourhoods may increase awareness and in turn reduce the possibility of being stigmatized. As this level is also for preventing recidivism, rehabilitation and acceptance into the society is critical which again can be achieved by spreading awareness and sensitivity and preventing such individuals from getting socially ostracized.

**Figure 2: Model depicting interventions required at each level for crime prevention**



(adapted from Bromfield and Holzer’s model (2008) and Clancey’s Model of Crime Prevention)

This model aims at bringing about a change not only at an individual level but also at a universal level. It also highlights the role of counsellors and professionals in risk deterrence and helping children who may have a higher chance of engaging in such behaviour. The importance given to the community is of prime importance as it should be understood that the responsibility of one's safety lies in the hands of the entire community. This not only increases the interaction and bonhomie among neighbours but also increases the sense of accountability. As there is a tendency for people to engage in social loafing when numerous people are present, assigning roles to each member can be highly useful. Thus, by integrating roles of government, society, neighbourhood, and family, it is possible to curb the increasing rate of crime and bring about reformation in the society.

## References

- Adler, F., Mueller, G. O., & Laufer, W. S. (2012). Explaining Criminal Behaviour. In *Criminal Justice: An Introduction* (6th ed., pp. 90-94). McGraw-Hill Global Education Holdings, LLC.
- Alexander, M. B., Clarkson, J. J., Hirt, E. R., & Jia, L. (2010). When Perception Is More Than Reality: The Effects of Perceived Versus Actual Resource Depletion on Self-Regulatory Behavior. *Journal of Personality and Social Psychology*, 29-46.
- Bartels, L. (2011). Crime Prevention Programs for Culturally and Linguistically Diverse Communities in Australia. *Research in Practice*, 2-14.
- Brantingham, P. J., & Faust, F. L. (1976). A Conceptual Model of Crime Prevention. *Crime and delinquency*, 284-296.
- Clancey, G. (n.d.). *Models of Crime Prevention*. Retrieved March 6, 2016, from Garner Clancey Crime Prevention: [http://garnerclancey.com/pdfs/fs\\_Models-of-Crime-Prevention.pdf](http://garnerclancey.com/pdfs/fs_Models-of-Crime-Prevention.pdf)
- Clarbour, J., Roger, D., Miles, J. N., & Monaghan, R. (2009). Individual differences in young offender emotional behaviour. *Legal and Criminological Psychology*, 227-240.
- Classification of Offences as per CrPC and Recommendations of Malimath Committee Regarding it.* (2014, January 26). Retrieved from IAS OUR DREAMS: <http://swapsushias.blogspot.in/2014/01/classification-of-offences-as-per-crpc.html#.Vcvz0XGqqko>.
- Conway, K. P., & McCord, J. (2002). A Longitudinal Examination of the Relation Between Co-Offending With Violent Accomplices and Violent Crime. *Aggressive Behaviour*, 97-108.
- Corno, L. (2013, February 13). *Peer Effects on Criminal Behavior*. Retrieved from Norface Research Programme on Migration: [http://www.norface-migration.org/publ\\_uploads/NDP\\_15\\_12.pdf](http://www.norface-migration.org/publ_uploads/NDP_15_12.pdf).
- Creswell, J. W. (2009). *Research Design* (Third ed.). London: SAGE Publications, Inc.
- Dechant, A. B. (n.d.). *The Psychology of Criminal Behaviour: Theories from Past to Present*. Retrieved from Coastline Journal: <http://coastlinejournal.org/2009/04/13/the-psychology-of-criminal-behaviour-theories-from-past-to-present/>.
- Devers, L. (2011, November 9). *Desistance and Developmental Life Course Theories*. Retrieved from Office of Justice Programs: <https://www.bja.gov/Publications/DesistanceResearchSummary.pdf>.
- Dogra, S. K., & Chauhan, J. K. (2009). *Criminal Justice Administration in India*. New Delhi: Deep & Deep Publications Pvt. Ltd.

- Eamon, M. K. (2001). Poverty, Parenting, Peer, and Neighborhood Influences on Young Adolescent Antisocial Behavior. *Journal of Social Service Research*, 1–23.
- Egan, V., McMurrin, M., Richardson, C., & Blair, M. (2000). Criminal cognitions and personality: what does the PICTS really measure? *Criminal Behaviour and Mental Health*, 170–184.
- Ethical Principles of Psychologists and Code of Conduct*. (2010, June 1). Retrieved from American Psychological Association: <http://www.apa.org/ethics/code/>.
- Fagan, P. F. (n.d.). *The Real Root Causes of Violent Crime: The Breakdown of Marriage, Family, and Community*. Retrieved from The Heritage Foundation: <http://www.heritage.org/research/reports/1995/03/bg1026nbsp-the-real-root-causes-of-violent-crime>.
- Forensic & Criminal Psychology*. (2004). Retrieved September 3, 2015, from Psychology Campus: <http://www.psychologycampus.com/forensic-criminal/>
- Fuller, K. L. (2012, May ). *Personality and Crime: An Examination Of the Influence of the Five Factor Model on Offending and Co Offending* . Retrieved from Indiana University of Pennsylvania: <https://dspace.iup.edu/bitstream/handle/2069/729/Kenethia%20L.%20McIntosh%20Fuller.pdf?sequence=1>.
- Gorecki, J. (1974). Crime Causation Theories: Failures and Perspectives. *The British Journal of Sociology*, 461–477.
- Hall, S. (2001, April 5). *Crime linked to absent fathers*. Retrieved from The Guardian: <http://www.theguardian.com/society/2001/apr/05/crime.penal>.
- Harper, K. (2015, March 12). *Crime prevention approaches, theory and mechanisms*. Retrieved from Burlington Crime and Community: <http://cdonohue.com/burlington-crime-community/?tag=crime-prevention>.
- Harris-McKoy, D., & Cui, M. (2013). Parental Control, Adolescent Delinquency, and Young Adult Criminal Behavior. *Journal of Child & Family Studies*, 836–843.
- Ikaeimol, O., Laukkanen, M., Hakko, H., & Rasanen, P. (2013). Association of Family Structure to Later Criminality: A Population-Based Follow-up Study of Adolescent Psychiatric Inpatients in Northern Finland. *Child Psychiatry & Human Development*, 233–246.
- Jobs, P. C., & Donnermeyer, J. F. (2000). A Qualitative and Quantitative Analysis of the Relationship between Community Cohesiveness and Rural Crime.
- Johnson, J. G., Smailes, E., Cohen, P., Kasen, S., & Brook, J. S. (2004). Anti-Social Parental Behaviour, Problematic Parenting And Aggressive Offspring Behaviour During Adulthood: A 25 year Longitudinal Investigation. *The British Journal of Criminology*, 915–930.
- Jones, C. M. (2005, February). *Genetic and Environmental Influences on Criminal Behavior*. Retrieved from Great Ideas in Personality: <http://www.personalityresearch.org/papers/jones.html>.
- Kamaluddin, M. R., Shariff, N. S., Othman, A., Ismail, K. H., & Ayu, G. (2015). Linking Psychological Traits with Criminal Behaviour: A Review. *ASEAN Journal of Psychiatry*.
- Kapelos-Peters, A. (2008, February 13). *Sutherland's Differential Association and its nine propositions*. Retrieved from musings: <http://www.alexandrakp.com/text/2008/02/sutherlands-differential-association-and-its-nine-propositions/>.

- Kitchen, P. (n.d.). Exploring the Link between Crime and Socio-Economic Status in Ottawa and Saskatoon: A Small-Area Geographical Analysis. *Research and Statistics Division/ Department of Justice Canada*, 1-98.
- Koolhof, R., Loeber, R., Wei, E. H., Pardini, D., & D'Escury, A. C. (2007). Inhibition Deficits of Serious Delinquent Boys of Low Intelligence. *Criminal Behaviour and Mental Health*, 274-292.
- Kop, N., Euwema, M., & Schaufeli, W. (1999). Burnout, job stress and violent behaviour among Dutch police officers. *Work & Stress: An International Journal of Work, Health & Organisations*, 326-340.
- Leonard, L. (2013, October). *Major Risk Factors for Antisocial and Delinquent Behaviour among Children and Youth*. Retrieved from Public Safety Canada: <https://www.publicsafety.gc.ca/cnt/rsrscs/pblctns/2013-mjr-risk-fctrs-ntscl/index-eng.aspx>
- Levine, S. Z., & Jackson, C. J. (2004). Eysenck's theory of crime revisited: Factors or Primary Scales? *Legal and Criminological Psychology*, 135-152.
- Listwan, S. (2001). *Personality and Criminal Behaviour: Reconsidering the Individual*. Retrieved from College of Education, Criminal Justice & Human Services: [http://cech.uc.edu/content/dam/cech/programs/criminaljustice/docs/phd\\_dissertations/2001/ShelleyJohnson.pdf](http://cech.uc.edu/content/dam/cech/programs/criminaljustice/docs/phd_dissertations/2001/ShelleyJohnson.pdf).
- Lochner, L., & Moretti, E. (2004). The Effect of Education on Crime: Evidence from Prison Inmates, Arrests, and Self-Reports. *American Economic Review*, 155-189.
- Lynch, J. P. (2000). *Criminology*. Retrieved from University of Colorado: <http://autocww2.colorado.edu/~toldy3/E64ContentFiles/LawAndCourts/Criminology.html>.
- Madon, N. (2013, September 3). *Social Control and Self-Control Theories*. Retrieved from Ontario Ministry of Children and Youth Services: [http://www.children.gov.on.ca/htdocs/English/topics/youthandthelaw/roots/volume5/chapter12\\_social\\_control.aspx](http://www.children.gov.on.ca/htdocs/English/topics/youthandthelaw/roots/volume5/chapter12_social_control.aspx).
- Maheshwaran, G. (2014). Kuppaswamy's Socio-Economic Status Scale- A Revision of Income Parameter For 2014. *International Journal of Recent Trends in Science And Technology*, 01-02.
- Mellor, A. K. (1988). Usurping the Female. In Methuen, *Mary Shelley: Her Life, Her Fiction, Her Monsters* (pp. 115-126). New York.
- Molidar, C. E. (1996). Female Gang Members: A Profile of Aggression and Victimization. *Social Work*, 251-257.
- Mottus, R., Guljajev, J., Allik, J., Laidra, K., & Pullmann, H. (2011). Longitudinal Associations of Cognitive Ability, Personality Traits and School Grades with Antisocial Behaviour. *European Journal of Personality*.
- O'Toole, L. L. (1997). *Gender Violence: Interdisciplinary Perspectives*. New York: NYU Press.
- Pabbathi, L. R., Naik, U. S., Mandadi, G., & Bhogaraju, A. (2014, January-June). Personality assessment of offenders and mentally ill offenders. *APJ Psychological Medicine*, 15, 55-59.
- Psychosocial Theories: Individual Traits and Criminal Behaviour*. (2006, November 14). Retrieved from SAGE: [http://www.sagepub.com/upm-data/13434\\_Walsh\\_Chapter\\_7.pdf](http://www.sagepub.com/upm-data/13434_Walsh_Chapter_7.pdf).

- Review of the Roots of Youth Violence: Literature Reviews.* (2010, April 27). Retrieved from Ontario Ministry of Children and Youth Services: [http://www.children.gov.on.ca/htdocs/English/topics/youthandthelaw/roots/volume5/chapter08\\_social\\_learning.aspx](http://www.children.gov.on.ca/htdocs/English/topics/youthandthelaw/roots/volume5/chapter08_social_learning.aspx).
- Review of the Roots of Youth Violence: Literature Reviews.* (n.d.). Retrieved from Ontario Ministry of Children and Youth Services: [http://www.children.gov.on.ca/htdocs/English/topics/youthandthelaw/roots/volume5/chapter04\\_social\\_disorganization.aspx](http://www.children.gov.on.ca/htdocs/English/topics/youthandthelaw/roots/volume5/chapter04_social_disorganization.aspx).
- Robinson, C. (n.d.). *The Relationship between Low Socio-Economic Status & Incarceration Rates.* Retrieved from PUB209healthcultureandsociety: <https://pub209healthcultureandsociety.wikispaces.com/The+Relationship+between+Low+Socio-Economic+Status+%26+Incarceration+Rates>.
- Ruch, W. (n.d.). *The Sense of Humor: Explorations of a Personality Characteristic.*
- Sauvola, A. (2001). The Association between Single Parent Family Background and Physical Morbidity, Mortality and Criminal Behaviour in Adulthood.
- School of Psychology - Leading Psychological Science, Scholarship and Practice.* (n.d.). Retrieved from The University of Auckland: <http://www.psych.auckland.ac.nz/en/about/our-research/research-groups/thematic-analysis/about-thematic-analysis.html>.
- Schuessler, K. F., & Cressery, D. R. (1950). Personality Characteristic of Criminals. *American Journal of Sociology*, 476-484.
- Seepersad, R. (2013, September 3). *Strain Theories*. Retrieved from Ontario Ministry of Children and Youth Services: [http://www.children.gov.on.ca/htdocs/English/topics/youthandthelaw/roots/volume5/chapter06\\_strain.aspx](http://www.children.gov.on.ca/htdocs/English/topics/youthandthelaw/roots/volume5/chapter06_strain.aspx).
- Sikand, M., & Reddy, J. R. (2016). Psychosocial Factors Influencing Interpersonal Violence among Adults in the Indian Context: A Pilot Study. In K. Jaishankar, & N. Ronel (Eds.), *Proceedings of the Third International Conference of the South Asian Society of Criminology and Victimology (SASCV)* (pp. 34-35). Tirunelveli: SASCV & Department of Criminology and Criminal Justice, Manomaniam Sundaranar University.
- Smallbone, S., & Cale, J. (n.d.). *Situational Theories.* Retrieved from [http://c.ymcdn.com/sites/www.ispcan.org/resource/resmgr/events/situational\\_theories\\_submitt.pdf](http://c.ymcdn.com/sites/www.ispcan.org/resource/resmgr/events/situational_theories_submitt.pdf).
- Snapshots (1953-2013).* (2014, June 30). Retrieved from National Crime Records Bureau: <http://ncrb.gov.in/CD-CII2013/snapshots%2053-13.pdf>.
- Socio Economic Status.* (n.d.). Retrieved from American Psychological Association: <http://www.apa.org/topics/socioeconomic-status>.
- Sousa, C., Herrenkohl, T. I., Moylan, C. A., Tajima, E. A., Klika, J. B., Herrenkohl, R. C., & Russo, M. J. (2011). Longitudinal Study on the Effects of Child Abuse and Children's Exposure to Domestic Violence, Parent-Child Attachments, and Antisocial Behavior in Adolescence. *J Interpers Violence*, 111-136.
- SRCD Governing Council. (2007, March). *Ethical Standards in Research.* Retrieved July 23, 2015, from Society for Research in Child Development: <http://www.srcd.org/about-us/ethical-standards-research>.
- Tittle, C. R. (1983). Social Class and Criminal Behaviour: a critique of the Theoretical Foundation. *Social Forces*, 334-358.

- Tiwari, T., Singh, A. L., & Singh, I. L. (2009). The short-form revised Eysenck personality questionnaire: A Hindi edition (EPQRS-H). *Indian Psychiatry Journal*, 27-31.
- Ulmer, J. T., & Steffensmeier, D. (n.d.). *Age and Crime: Social Variation, Social Explanation*. SAGE.
- Upton, J. (2013). Psychosocial Factors. *Encyclopedia of Behavioral Medicine*, 1580-1581.
- Zillman, D., & Weaver, J. B. (2007). Aggressive personality traits in the effects of violent imagery on unprovoked impulsive aggression. *Journal of Research in Personality*, 753-771.
- Zuckerman, M., Kuhlman, D. M., Joireman, J., Teta, P., & Kraft, M. (1993). A Comparison of Three Structural Models for Personality: the Big Three, the Big Five and the Alternative Five. *Journal of Personality and Social Psychology*, 757-768.