

CHAPTER 3

**REVIEW OF SCIENTIFIC
LITERATURE ON PARENTING
STYLES AS PREDICTORS OF
ADOLESCENT DELINQUENCY, AND
YOGA INTERVENTION TO
ADDRESS DELINQUENCY**

A good number of studies on parenting styles and their impact on adolescent delinquency have time and again been held to be beyond dispute. More importantly, there is an interest to identify methods to manage these, where yoga is found to one of the important methods to address the adolescent delinquency. A scrutiny of the literature review leads to the following grouping:

3.1 Parenting processes and child delinquencies

3.1.1 Parental adversity index namely, education levels, socioeconomic background, and under privilege as predictors of adolescent delinquency.

3.1.2 Adolescent - parent communication levels as predictors of delinquency.

3.1.3 Research dismissing the direct parental control as empirically irrelevant.

3.1.4 Parental rejection of child as a significant cause of child depression and delinquency.

3.1.5 Parental violence, personality traits as significant predictors.

3.1.6 Parental style leading to adolescent criminality and substance abuse.

3.2 Addressing adolescent aggression and violence through the intervention of yoga

3.1 Parenting processes and child delinquencies

3.1.1 Parental adversity index namely, education levels, socioeconomic background, and under privilege as predictors of adolescent delinquency.

In the following studies, parental adversity index regarding education levels and socioeconomic background as predictors of developmental trajectories of adolescent delinquency are brought out.

In one of the British studies the impact of parenting on child delinquency was studied. The study demonstrated that structure of family, parental relationships, family regulation, and monitoring affect child delinquency. Three most important paths through which parental intervention would prevent child delinquency are parental knowledge and supervision, children's pre-nursery education in case of under privileged families, and support for under privileged parents. In spite of the fact that there are indeed no methodical assessments of such intervention programs, precious knowledge and details are available from the USA. Many of the studies on parent knowledge, parent education, and Social Learning Center program have demonstrated lower levels of aggression that could last for at least one year. There is no evidence of similar influences regarding later deviance or delinquency. However, the Project of Michigan Perry Preschool targeted the children from under privileged parents. The follow-up programs revealed that in respect of academic performance, delinquency rates, and behavior, children between 15-19 years of age showed noteworthy improvements as against the control group. Another intervention strategy at Yale, by name 'Yale Child Study Centre program' is providing a vast array of services to under privileged parents. Follow-up assessments at the age of 13 years demonstrated improvements in academic achievements and reduced risk of delinquency (Graham, 1989).

A study by Coley & Medeiros (2007) used a representative sample of minority adolescents having low-incomes (N=647, age group of 10-14 years) and tested bidirectional longitudinal associations between parental involvement by non-resident fathers and adolescent delinquency. The non-resident father 'involvement' is defined as responsibility for adolescents' behavior and care. The study found that higher involvement of non-resident fathers predicted future reduction in delinquency particularly for the adolescents with known history of delinquency. However, adolescent delinquency could not predict future changes in non-resident father involvement. Further, as adolescent delinquency escalated, father involvement also increased, indicating that non-resident fathers might raise their parental involvement in line with adolescent delinquency (Coley & Medeiros, 2007).

A study by Tzoumakis et al (2014) explored the maternal parenting methods and related correlates along with maternal offending and delinquency, psychological wellbeing, and physical aggression by children. Further, the objective of this study was to recognize early risk factors and preventive methods for delinquency in the early developmental stage. Maternal practices of 287 mothers with their preschool children were studied with the help of some latent class methods. Three types of parenting patterns surfaced: positive, negative, and alternating. These patterns were linked to many of the vital developmental variables including ethnicity, maternal education levels, maternal psychological wellbeing, and child physical aggression frequency. More significantly, maternal negative parenting was also based on various positive practices. Thus the study suggests that parenting style is affected by maternal immediate conditions and perspective, which may be the interventional target (Tzoumakis, Lussier, & Corrado, 2014).

Another study used structural equation model and examined the effect of economic or financial hardship or strain in a longitudinal design on externalizing conduct and substance abuse of younger siblings (122 + 122 younger sisters and younger brothers from 244

families). It was assumed that mothers' authoritarian parenting would influence the delinquency of younger siblings through the mediation of delinquency of older siblings and in line with this the findings demonstrated that these indirect influences varied as a function of financial worries or strain. Further, the findings also suggested that older siblings' delinquency had highly detrimental effect on the younger siblings in financially strained families (Low, Sinclair, & Shortt, 2012).

This study of 864 youth and parents structured on ecological model theorized that parenting is influenced by family context and parenting influences the behavior of adolescents. It was demonstrated that problematic neighborhood, social loneliness, absence of support from partner, life distress were all correlated with defunct parenting which in turn escalates delinquency. The financial adversity was not correlated with defunct parenting. Delinquency and parenting are influenced by macro-environmental conditions of the family, thus implying that the interventions may address the parenting situations at micro-environmental processes (Stern & Smith, 1995).

A study used a sample of 699 families and their adolescent children to find out the effects of parenting styles on start/onset of drinking habits, adolescent delinquency, and other related behaviors. The study also oversampled 211 Black families to ensure meaningful study. Having accounted for separate reports from adolescents and parents, the study examined the association between parenting forms and adolescent behaviors, and other mediating variables like socioeconomic status, gender, race, age, peer affiliation, family history, and family constitution. The study revealed that parental monitoring and support are vital predictors of adolescent outcomes. Further, peer affiliation was a significant predictor of drinking, deviance and adolescent relations with parents (Barnes & Farrell, 1992).

Another study by Chung (2005) explored the associations among parenting styles, nature of neighborhood, adolescent peer affiliations, and adolescent delinquent behavior. Characteristics of neighborhood were measured by using the 2000 census, whereas neighborhood social association, parenting and peer group variables were measured through interviews with youths and parents/guardians. Male adolescents (N=566, aged 14-17 years), who were adjudicated for felony-grade charges by Philadelphia court, self-reported on their involvement in disruptive and non-disruptive activities. The study interviews (conducted mainly at detention centers or their homes) revealed that neighborhood characteristics are linked to social functioning of the community, in such a way that increased poverty and residential volatility are related to higher likelihood of neighborhood chaos and poor social capital. Even though the neighborhood characteristics had no strong links with delinquency than many of the proximal variables, like parenting styles or peer associations, community social methods demonstrated significant indirect associations with adolescent delinquency. Weaker community social association was linked to poor parenting and adolescent spending time with delinquent peer, which again was related to increased instances of violent and nonviolent offending. Thus, the study revealed that patterns of neighborhood social association might be related to adolescent delinquency in a variety of methods. High level of community chaos was associated with ineffective parenting, which again was related to higher level of antisocial conduct. The level of social capital was linked to parenting styles and adolescent delinquency level, and time spent by adolescents with friends. This outcome guides the need for studies to distinguish conditions where neighborhood social patterns can have a positive influence on youth development, where beneficial patterns may affect adolescents at risk for unfavorable results. In all, the outcome shows that parenting must be the focus of study in child delinquency research and preventive intervention. Significantly,

parenting method was related to violent and non-violent antisocial conduct in many ways, whereas, it was a strong predictor of adolescent delinquency (Chung, 2005).

Children (aged 6 and 10 to 12) from poor socioeconomic background were rated on somatic violence by their school teachers and graded according to constancy of fighting: constant high fighters, high fighters with delayed inception, abstaining from high fighting, changeable or uneven high fighters, and those who never fight. These groups differed regarding family background as well as parenting styles. Logistic regression analysis showed that fighter group interaction X parental punishment along with parental monitoring significantly predicted self-reported delinquent behavior. Thus the outcome revealed that developmental trajectories of somatic violent conduct for males from poor socioeconomic background were linked to parental adversity and they accounted for highest delinquency (Haapasalo & Tremblay, 1994).

Correlation between three modes of parenting namely, behavioral control, supportive, and psychological control, with delinquency, adolescent depression, and academic performance were measured in this study involving random samples of African American youth in US southeastern metropolitan regions. The study demonstrated negative relationships between fathers' support and depression; and a negative correlation between fathers' behavioral control and adolescent delinquency. The study revealed no age or socio-economic status differences (Bean, Barber, & Crane, 2006).

In a longitudinal study that used structural equation model, role of economic strain on micro-social factors affecting delinquency (substance use and externalizing behavior) of younger siblings from 244 families (122 younger sisters, 122 younger brothers) was studied. The study showed that maternal inconsistent and insensitive parenting style and delinquency of older sibling affected delinquency of younger sibling through aggression and delinquent peer

association. Thus, the study demonstrates that, as a function of financial strain, indirect mechanisms vary. Sibling aggression was found to have significant detrimental influence on delinquency in economically deprived families, thus suggestive of economic strain, parenting styles, peer affiliations as transmitters of delinquency to adolescents (Low et al., 2012).

The experiences of poor children are more distressful than their counterparts. In this study, the associations among poverty, time spent in poverty, parental methods, and psychological wellbeing of children were measured. The study revealed that persisting or continual poverty notably predicted internalizing signs far more than the impact of children's current poverty. However, current poverty alone predicted externalizing signs. Lack of maternal emotional warmth and repeated corporeal punishments explain the children's distress more than the persisting poverty. The associations among poverty, methods of parenting, and psychological wellbeing of children were not influenced by race or ethnic differences. Thus the study supports the existing body of knowledge and calls for higher emphasis on parenting processes (McLeod & Shanahan, 1993).

3.1.2 Adolescent-parent communication levels as predictors of delinquency.

A 4-wave study investigated parental solicitation, adolescents' disclosure, and parental supervision and their relations with delinquency among 309 Dutch adolescents through self-report. Every year, parents reported these variables; and adolescents reported their involvement in delinquency and parental monitoring. Latent growth curve showed a reduction in parental supervision between 13 and 16 years of age. Disclosure by adolescents also gradually declined. L-shaped and V-shaped patterns were found in paternal and maternal reports respectively. Escalation in delinquency was associated with decline in parental and adolescent disclosures. The associations between disclosure levels and delinquency were significant in families with good parental supervision. In families with poor parental

supervision, a sudden decline in parental monitoring was linked to a significant escalation in delinquency. In families having good parental support, stronger decline in adolescent self-reported parental supervision was linked to weaker escalation in delinquency (Keijsers et al., 2009).

Another study examined role of gender, age, parenting style, and parent-child relations in smoothing out the link between exposure to violent video games and direct aggression in 2 years Finnish longitudinal survey involving adolescents aged 12 to 15 years (N=316). It was hypothesized in the study that both synchronously and longitudinally, violent video game is associated with direct aggression. Further, this correlation was smoothed out/moderated by parent-child communication with the interaction of age and gender. Thus, the outcome demonstrates that moderating effect of parent-child communication will be altered with adolescents' increasing age. Poor communication between parent and child is found to be one of the significant variable factors reinforcing the negative impact of violent video games. Further, study suggests that violent video game is one of the significant variable risk factors; and in the long run, not even positive communication between parent and child could protect the adolescent (Wallenius & Punamki, 2008).

This study reviewed two suggestions of Gottfredson and Hirschi's (1990) related to general theory of offense (crimes). About 750 African American adolescents were examined to find out if self-control mediates adolescent delinquency due to parenting processes. It was found that low self-control is directly related to the engagement in delinquencies. However, in contrast to Gottfredson and Hirschi's suggestions, the researchers found that self-control is only partly related to the negative parenting. The four social relationships namely, attachment to the school teachers, improving parenting styles, encouraging communication between

parent and child, association with anti-social peers, and association with non-deviant or pro-social peers explained most of the attributes of theory of self-control (Burt et al., 2006).

Most of the recent research studies reveal that what parents know about the whereabouts and peer association of their adolescent children is through self-report (self-disclosure) rather than details gathered via authoritative parental supervision. Thus the parental knowledge about their adolescent children and absence of good communication between child and parents is spuriously guided by least information disclosed through self-disclosure, where the adolescents have most to hide. This spurious link was tested using data on nationally representative sample of US women. The study revealed that the limits set by parents on activities and peer associations at 14-15 years of age could neither mediate nor moderate the link between parental knowledge and behavioral delinquency. But predicts future delinquency among children living in high-risk neighborhoods. Thus, the study suggested that the link parental knowledge has with future delinquent behavior is not solely spurious, but both limit fixing and parental knowledge are significant predictors of future delinquency (Lahey, Van Hulle, D'Onofrio, Rodgers, & Waldman, 2008).

Potential links between violent victimization, nature of parent-adolescent relationship, and inception of violence were studied by using National Longitudinal Study of Adolescent Health. On the basis of acts of violence committed before wave 1, the subjects were formed into violent and non-violent sets. The outcome revealed that wave 1 victimization predicted inception of violent delinquency at wave 2 among non-violent adolescents at base line. However, prior victimization had no impact on adolescents who were violent at base line. Parental relations with adolescents worked as shielding factor from being aggressive. Further parent-adolescent relations' buffering impact was clear for adolescent boys but not for adolescent girls (Aceves & Cookston, 2007).

This article by De Coster (2012) suggests a theoretical model linking gendered beliefs (ideologies), work and maternal role to delinquency. Using covariance structural study and National Survey of Children, this hypothesis was tested. The study revealed that children of employed mothers who have nontraditional beliefs, and the children of homemakers who have traditional beliefs are less likely to be delinquent. The reason is that such mothers are less likely to be vulnerable to distress that enables them to promote emotional bonds with their kids. This emotional bond finally saves youth from being delinquent and affiliated to delinquent peer (De Coster, 2012).

This study aimed at establishing the parental child-rearing method that is linked to optimum adolescent outcomes among Spanish families (N=1,416, aged 12 to 17 years, 42.8% males). The adolescents' parents were grouped into four categories (indulgent, authoritative, neglectful, and authoritarian). The adolescents were also divided into four groups (self-esteem, psychosocial maladjustments, personal competence, and problematic conduct). The outcomes demonstrated that indulgent as well as authoritative child-rearing methods were linked to positive outcomes as compared to neglectful and authoritarian methods. Thus the results endorsed the notion that in Spain the optimum method of parenting is clearly indulgent style because adolescents outcomes in the four groups were either equal or more than the authoritative method (Garc & Gracia, 2009).

This study verified the association between parenting methods and self-disclosure. Further, the study also compared three models explaining the associations among parenting: perceived parental awareness, self-disclosure, and problematic behavior, in a sample of 10th - 12th grade adolescents, parents, and peers. The study revealed that high level of responsiveness, high levels of behavioral control, and low levels of psychological control are significant predictors of self-disclosure. Further, the parenting method is directly as well as indirectly linked to

perceived parental awareness but not directly associated with problem behavior or delinquent peer affiliation (Soenens, Vansteenkiste, Luyckx, & Goossens, 2006).

This study verified the moderating impact of impulsivity on the links between positive family factors (warmth and knowledge), school, and neighborhood with delinquency on adolescents (N=2978, 6th to 8th graders) from 16 schools in US. Little more than 50% were non-Caucasians (41% males; mean age=12.48). The multilevel modeling analyses revealed that impulsivity was directly linked to adolescent delinquency. Parental warmth, reciprocation, knowledge, and connectedness (not neighborhood cohesion) were inversely and independently associated with delinquency. Impulsivity moderated the associations between warmth and knowledge with adolescent delinquency but not link between attachment and neighbor cohesion with adolescent deviance. Further, parental knowledge was significantly linked to lower levels of delinquency suggesting higher levels of impulsivity. Moderating impact of impulsivity was not different for boys and girls or minority and non-minority subjects. Thus the outcomes suggest that impulsivity may have significant influence on adolescents' vulnerability to positive parental impacts than to promotional variable factors from neighborhood or school environments (Chen & Jacobson, 2013).

To find out the nature and magnitude of association between delinquency and parenting process a meta-analysis of 161 research papers was done. A strong association was noticed for psychological control, parental process, hostility and rejection. The dimensions of parental warmth and support were highly significant variable factors in many of the studies. Less than twenty percent of the studies considered fathers' behavior though the effect of inadequate support by fathers was highly significant as compared to the effect of inadequate support by mothers (MacHteld Hoeve et al., 2009).

3.1.3 Research dismissing the direct parental control as empirically irrelevant.

‘Parental direct controls’ (e.g., time spent interacting with one’s parents) have been totally dismissed by some of the researchers as empirically irrelevant. They have opined that though research demonstrates that different ‘parental direct controls’ are associated with delinquency, these correlations are considered as not strong and not significant. But by re-conceptualizing the term ‘parental direct control’ so that specific variables – normative regulations, supervision and punishment are also included, the result shows that ‘parental direct controls’ do have a greater influence on delinquency similar to ‘indirect controls’ and ‘parental warmth and attachments.’ The results also suggested that the association between direct controls and adolescent delinquency is complex, if not direct and non-linear (Wells & Rankin, 1988).

3.1.4 Parental rejection of child as a significant cause of child depression and delinquency.

A meta-analysis examined longitudinal and concurrent studies describing the association of family factors with juvenile behavioral problems and deviance. This study revealed that family variables like parental rejection, poor parental monitoring, parent-child poor involvement, are most significant predictors of conduct disorders and delinquency in adolescents. Temperate (moderate/medium) predictor variables are marital relations and criminality of parents. Weaker predictor variables are parental indiscipline, parental deficiency, and parental health for both girls and boys. Comparative analysis of delinquents and non-delinquents and aggressors and non-aggressors revealed that the findings are mostly consistent. Parental child socialization values are relatively less significant, whereas parental rejection of child and child’s rejection of parents are of higher significance. Very small percentage of families was generating a disproportionate number of children with high

delinquency. If one child is delinquent or aggressive or covert in a family, the probability that the remaining children would also have the similar conduct was very high. Poor parenting skills were related to child's gravity of delinquency. The study also confirmed that systematic transformation in parenting styles could decrease the conduct problems of children; and to an insignificant extent decrease delinquency (Loeber & Stouthamer-Loeber, 1986).

A study considered the association between parental perceptions, morality, self-reported deviance, and delinquency in undergraduate students; and demonstrated that many of the aspects of parental perceptions were associated with moral reasoning, whereas parental rejection perception was associated with deviance. Analysis done separately for boys and girls demonstrated an identical pattern. The vital predictor of self-reported delinquency was respondents' gender. When boys and girls were separately considered, the perception of parental over-protection was associated with self-reported delinquency in the case of boys, whereas, self-reported delinquency to moral reasoning in the case of girls (Palmer & Hollin, 1996).

Another longitudinal study examined the early adulthood delinquency prediction via family variables and maternal parenting expertise in early adolescence. From 132 Caucasian families, interpersonal friction, marital status, adolescent-mother compatibility, the depressive mood of mothers, maternal problem-solving abilities, and communication skills were measured through behavioral observations and self-report in early adolescence. Data on minor and severe delinquency were gathered after six years during early adulthood. The analysis showed an association between severe delinquency, detentions, and predictors. There was an interaction between poor maternal problem-solving abilities, lack of good communication skills, poor family variables with higher instances of delinquency. On the other hand interaction of good problem solving, good communication skills and positive

family variables were related to decreased delinquency rates (Klein, Forehand, Armistead, & Long, 1997).

Another study by Barry et al (2008) obtained separate reports from children and parents on parenting styles to predict child delinquency, internalizing, and externalizing features. Totally 98 children (47 female and 51 male; age 9-15 years) participated in the study. The results demonstrated that as against parent reports, parenting practices reported by children were significantly associated with a good number of delinquency indices and conduct crisis. In a three years follow-up also as against parent reports, parenting styles reported by children revealed significant relation with delinquency, whereas, from both the reports, negative parenting was concomitantly correlated to children's internalizing features (Barry, Frick, & Grafeman, 2008).

Another study by Steinberg et al. (1994) verified whether the commonly observed positive association between authoritative parenting and youth modification is moderated by environmental factors. An ethnically, socially and economically diverse sample of 10,000 students studying in high schools completed measures related to parental conduct, family background, and four pointers of adjustments namely, academic performance, psychological anguish, conduct delinquency, and self-reliance. The sample was divided into 16 environmental groups by socioeconomic standing, ethnicity, and structure of family. The analyses showed that the positive links of authoritative parenting style rose beyond family structure and socioeconomic standing. Regardless of ethnicity, grades, marital status of parents, children whose parents were warm, reliable and sharing, displayed higher academic performance, exhibited lower levels of depression and anxiety, and were highly self-reliant and expectancy of their involvement in delinquency was less likely (Steinberg et al., 1994).

Effects of parenting on adolescent depression and delinquency were examined by cross-sectional design on 276 Australian high school children (Median age = 15 years) and their biological parents (N=274). The measured variables were personality self-reports of adolescents, parental bonding from the perspective of adolescents and parents, self-report on parenting and personality. As hypothesized, delinquency and depression were considerably associated. The predictors of these variables were vastly different. The personality scores of adolescents were found to be significant predictors of outcome variables (Heaven, Newbury, & Mak, 2004).

Family is the primary socialization institution and family has been considered very vital for adolescent delinquency prediction. Though social control theory takes into account the impact of parental behavior on delinquency of adolescents, it has failed to focus on the impact of adolescent delinquency on parental behaviors. In one of the studies by Gault-Sherman (2012), this particular problem has been addressed by approximating 18 important models that examine the bidirectional association between violent, property, and general delinquency of the adolescents and parental involvement, parental monitoring and parental attachment. Data from 12505 youth (aged 12 – 17 years; mean 14 years; boys 50%, girls 50%), predominantly white (65%), taking part in Add Health Study, was used to study the magnitude of both child and parent effects. The cross-lag regression displayed that parental attachment affected adolescent delinquency; in turn, the parental attachment was also affected by adolescent delinquency. Further, the study showed non-significant parental effects of involvement or monitoring on adolescent delinquency. Thus the study showed strong evidence of a mutual association between delinquency and parenting that is consistent with interactional and transactional models or mutual child-parent relations (Gault-Sherman, 2012).

George Herbert Mead and other 'Interactionists' have drawn behavioral principles to explain the theory of self which in turn explains delinquent behavior. This integrated approach was verified with the help of a causal model which supported the general theory of delinquency, wherein, studied appraisals of self were significantly affected by parental processes and early on delinquency. In addition to this, as a rule violator, later delinquencies were significantly affected by studied appraisals. It was also found that reflected appraisals mediated the effects on adolescent delinquency (Matsueda, 1992).

Gottfredson and Hirschi have recognized gender variations in the levels of self-control, where males exhibit lesser self-control. However, there is a vacuum in the empirical literature, i.e., whether parental differential treatment can account for this gender-related levels of self-control. This study used 356 brother-sister pairs to examine the differences in parenting methods within the family are in any way linked to gender differences in self-control between brother and sister and if these variations explain gender differences in deviance. The outcomes showed that differential maternal warmth and rejection were strongly linked to gender differences in self-control. The gender differences in self-control were significantly linked to gender variations in delinquency. Gender differences in self-control mediated the link between differential maternal rejection and deviance. However, the differential maternal contact was indirectly linked to elevated levels of deviance for males through low levels of self-control (Boisvert, Vaske, Taylor, & Wright, 2012).

In a longitudinal study involving 451 families having one child in 8th grade, three important research questions were addressed. First, how the fathers and mothers differ in parenting styles? Second, how individual parenting patterns collectively shape family parenting styles? Third, how these styles are associated with depression, delinquency and school commitment among adolescents? The outcome revealed that the commonest family parenting styles are those where both mother and father demonstrate identical parenting style. When both mother

and father are authoritative, the adolescent displays highly positive behavior. When one of the parents is authoritative, in most of the cases, the parenting style can buffer harmful consequences which are normally related to poor/authoritarian parenting (Simons & Conger, 2007).

In a randomly stratified-cluster method and nested regression to gather the data, a study by Tan & Tung (2010) compared the effect of parenting on self-concepts and delinquency of 784 senior high school students residing in Taipei, Kaohsiung, and Taichung - Taiwan metropolitan region. Research also focused on constructions to study the impact of self-concepts on the link between parenting method and adolescent delinquency, and effect of adolescent self-concept on 'ego-resilience', 'moral direction,' and 'self-esteem.' The study showed that parenting style, parental warmth, care, and moral course have direct influence on the delinquency of adolescents. As against adolescent self-concepts, parental warmth is more powerful to predict adolescent delinquency development. Moral course significantly affects the association between parenting method and adolescent delinquency (Tan & Tung, 2010).

In a study examining the relationship between parenting (parental peer approval, parental monitoring, parental warmth, parental closeness), low self control, violent attitude and aggression, Ozdemir et al (2013) found that closeness of the mother, parenting process of father were found to have positive correlation with self-control and indirect relation with low control and adolescent aggression. The study subjects were 546 adolescents (aged 14-18 years) from state-owned high school, Turkey. The researchers also found that self-control and parenting processes together explained 21% of the aggression variance (Ozdemir et al., 2013).

In another study cross-sectional data was gathered involving 1359 boys and girls aged 10 to 14 years. The study aimed at investigating if parenting behavior in any way related to

depression, low self-esteem, stress levels, aggression levels, and delinquency in adolescence. The existing findings say that these are negatively related to parenting behavior that is characterized by strict control, strict monitoring, very less use of psychological control, and parental acceptance. The study revealed that self-control to a certain degree mediated parenting behavior and adolescent behavioral and emotional tribulations. In contrast to the earlier findings, self-control was in no way related to enhanced psychological problems (Finkenauer et al., 2005).

In a longitudinal study, children were followed for eight years into their early adolescence and investigated how different ways of child abuse (sexual abuse, parental victimization and harsh parenting, witnessing domestic violence) and parenting styles in adolescence affect shame (disgrace) and guilt proneness. The study also examined if reduced sense of guilt or increased feeling of shame were in any ways associated with delinquency and depression during late adolescence. The results demonstrated that punitive/harsh parenting style was associated to adolescent shame proneness. This association was mediated by rejection of adolescents by parents. The study also confirmed that adolescents who were rejected by parents were more prone to shame and less prone to guilt as against other youth. When considered after two years, shame-proneness was related to higher depression and guilt-proneness was associated with decreased delinquency. Thus, the study suggests that guilt and shame as mediators might offer vital clues for preventive interventions in addressing delinquency and depression in adolescence (Stuewig & McCloskey, 2005).

Parenting processes of both mothers and fathers as predictors of adolescent domains like social competence, self-worth, and sympathy was studied in a study involving 180 adolescents. It was found that perceived maternal support and highly strict control were the consistent predictors. These three adolescent domains were associated with high level of

perceived maternal support and low levels of strict maternal controls. As against this, control and support from father were not associated with these three adolescent domains. When the child reports high perceived support from the father, maternal support was unrelated to adolescent sympathy. As against this, when the child reports low perceived support from the father, perceived maternal support was a statistically significant predictor of adolescent's sympathy (Laible, 2004).

The earlier researches have more or less overlooked the developmental changes in childhood that explain the association between delinquency and parenting. Simons et al (2007) used data from the longitudinal study and structural equation model involving hundreds of African-American families to find out the explanations of different theories regarding emotional factors and socio-cognitive factors which mediate the effect of parental behavior on delinquency. The research outcome more or less supported these earlier theories. The effect of discipline and monitoring was indirect via acceptance of deviance and stumpy self-control. The impact of rejection and hostility was indirect via hostile relations, low self-control, and acceptance of deviance. Further, dimensions of parenting were not related to delinquent peers and behavioral problems. The effect of parenting styles was mediated totally by four cognitive variables. However psychological factors could not mediate relationships between the caretaker role in anti-social behavior and child behavioral problems (Simons, Simons, Chen, Brody, & Lin, 2007).

The present research study suggests that association between parenting and child delinquency should be examined by considering developmental and interactional view points. It is currently hypothesized that the association between child and parent would change in due course, partially due to mutual causal effects existing between them. In this work, data from 838 urban dwelling adolescents was examined to find out whether (i) affective ties and

monitoring, (ii) adolescent delinquency and parenting styles are mutually correlated. The study revealed that parental monitoring and delinquency are bi-directionally correlated, whereas, affective ties seem to be outcomes rather than delinquency causes during middle adolescence. Thus the authors conclude that bi-directional relationships of these variables are highly complex as compared to unidirectional suppositions (Jang & Smith, 1997).

With an objective of verifying the influence of familial risk (FR) to externalizing conduct (Ext), the perception of parenting methods, and their relations with the prediction of early adolescent externalizing conduct, 2230 preadolescents (10-12 years) in Netherlands were studied. Regression analyses showed that lifetime parental externalizing psychopathology and parenting methods (refusal, emotional affection/warmth, and excessive protection) were related to adolescents' perceptions. The important effects of familial risk and externalizing behavior, emotional affection or warmth, overprotection, and refusal were almost consistent. Further, emotional warmth was the significant and steady predictor out of the remaining outcomes. Interaction effects were present for Fr-Ext, and parental overprotection and adolescent perceived parental rejection. The remaining interactive relations between parenting methods and FR-Ext were not significant. Perceived parenting methods and FR-Ext were not correlated or very low correlations. The core effects of parental method perception and FR-Ext separately account for preadolescent externalizing conduct signifying that both are independent causal domains (Buschgens et al., 2010).

Some longitudinal studies have verified the trajectories through which parental violence causes dating violence. In this study, three waves of data were gathered from adolescents studying in 8th and 9th grades (n=1965). It was hypothesized that the potential exposure to family violence and corporal dating violence is mediated by three measures: (i) normative beliefs about dating violence, (ii) anger management, and (iii) depression. The outcome showed that association between being beaten up by a family adult and dating violence is

mediated not by depression, but by variations in anger management. There was no confirmation of indirect impact from exposure to family violence to dating violence via any mediators. Thus the study recommends that anger management and normative beliefs are likely targets in dating violence prevention interventions for those adolescents who are exposed to familial violence (Luz Mcnaughton Reyes et al., 2015).

A study by You & Lim (2015) verified the long-term association between abusive/violent parenting and mental health of adolescents and pathways to behavioral delinquency. Longitudinal data from adolescents studying in 5th to 7th grades from Korean Children and Youth Panel Survey was studied to test if parental abuse could predict early adolescent delinquency through mediating factors like depression and aggression. The results of the study are summed up as under: Parental abuse in the form of both physical and emotional abuse had significant influences on psychosocial factors of children (under psychosocial factors, depression and aggression were considered for study). Parental physical and emotional neglect had a significant influence on only depression. Aggression significantly affected violent and non-violent behaviors. Depression exerted a significant effect on non-violent delinquent behaviors. Adolescents' psychosocial factors like depression and aggression significantly mediated between early abusive parenting and delinquency. In the case of adolescents dwelling in families where grandparents were also present, pathways from abusive parenting styles, psychosocial factors and later delinquency were not significant, thus demonstrating that grandparents play a defensive or protective role in family relationships (You & Lim, 2015).

Another study compared the impact of child and adolescent abuse on delinquency, violent and non-violent criminal involvement. Data was collected from 1539 deprived/neglected minority subjects in the Chicago Longitudinal Study. The outcomes threw light on delinquency rate, violence, drugs use, escalated offending in childhood and abuse of victims.

Childhood and adolescent abuse were strongly related to delinquency, thus demonstrating that abuse at any age point is detrimental and increases the potential risk of later delinquency. Further, all through the childhood as well as adolescence if the parents could invest in strategic intervention and prevention, crime and delinquency might reduce (Mersky, Topitzes, & Reynolds, 2011).

3.1.5 Parental violence, personality traits as significant predictors.

This study moved beyond interactional theory and investigated to what extent the legal sanctions function as mediators between parenting styles and delinquency. The study also investigated if legal sanctions would lead to escalating future deviance and poor parenting behaviors. Three sets of data were collected from the 4-wave longitudinal study involving 407 eighth to tenth graders. The mean ages were 13.5, 14.5, and 15.5 years respectively. The matching parents consisted of fathers in the age range 31 - 68 years and mothers in the age range 29 - 53 years. Every family was asked to complete a set of questionnaires. While the family was engaged in many of the study structured interaction jobs, it was fully videotaped. Further, adolescents were asked to complete 19 item checklist of delinquency, designed by National Youth Survey. To assess the theoretical hypotheses, structural equation model was applied. The results displayed that legal sanctions fully mediated the effect of behavioral delinquency on parenting and moderately mediated the effect of parenting on deviance or delinquency. Earlier authoritarian or inadequate parenting led to escalated delinquency and earlier adolescent delinquency gave way to increasing in inadequate or authoritarian parenting. The outcome explained both commotion in parenting styles and continuing antisocial involvements of the adolescents (Stewart et al., 2002).

Abdi et al. (2010) compared personality attributes and examined parenting of delinquent and non-delinquent adolescents aged 12 – 18 years. The study gathered data from parents of 60

delinquent adolescents, and through cluster sampling of 60 parents of non-delinquent adolescents. The shorter version of '5-factor personality test of parenting' by Diana Baumrind was used for the present study. The outcome showed that there is significant variation between parents' personality traits of both the groups ($P < 0.01$). The same significant difference was noted for parenting between both the groups ($P < 0.01$). A meaningful association was observed between personality traits and parenting styles (authoritative, authoritarian, and permissive) as shown by high correlation coefficient index (Abdi, Jalali, & Mirmehdy, 2010).

Adolescent delinquency and its association with parental cohesion (warmth), peer influence, self worth was studied by Church et al (2012) in a 14 years longitudinal analysis from a mobile youth survey involving primarily Black American adolescents ($N=5400$) who were living in Alabama. Results showed that there was an overall significant increase in the delinquency of male adolescents and an overall significant decrease in the delinquency of female adolescents over time. The study also demonstrated negative correlation between both parental cohesion and self worth, with adolescents' delinquency. Gender difference mediated the influence of peer influence with delinquency – males exhibiting steady increase while females were demonstrating steady decrease. The study also demonstrated that maternal cohesion and self-worth increased the rate of peer influence and significantly increased the self-worth (Church et al., 2012).

An intergenerational study of three generations (G1, G2, G3) considered multiple effects on 102 fathers' (of 181 children) positive parenting styles by employing multi-method and multi-agent approach. The study measured positive parenting of G1 and G2 (supervision, behavioral discipline, participation, and warmth), constructive adolescent adjustment of G2, and problem behavior in G1, G2, and G3; externalizing difficulties and problem temperament of G3 in early as well as middle childhood. The pathway model demonstrated a direct

influence of G1 positive parenting of G2 in late childhood to the G2 positive parenting of G3 during middle childhood. G1 parenting indirectly affected G2 parenting via G2 constructive modifications but not through the adolescent delinquent behavior of G2. G1 parenting style affected G2 parenting style of G3 during early as well as middle childhood. Further, G2 parenting style affected G3 behavioral problem but not other way round. Even when related factors were considered, intergenerational parenting influences continued, thus demonstrating that transmission pathways are not restricted to life-course hardships, rather authoritative parenting is more or less influential (Kerr, Capaldi, Pears, & Owen, 2009).

Another study by S. Miller et al (2009) verified the concurrent and longitudinal links between parenting methods, peer delinquency, and behavioral problems among African American and European American girls aged 7 to 8 years (N=588). These subjects were a part of the study on girls' conduct problems. The analyses showed that affiliations with delinquent peers were very clear among girls and these affiliations were with both boys and girls. Despite the concurrent prediction of peer delinquency, the peer gender did not add to behavioral problems of females. Punitive parenting and absence of parental warmth revealed concurrent as well as prospective links with females' delinquent conduct. Similar links were found for African American as well as European American females. The outcomes demonstrated that peer and parental risk factors are vital contributors to the early growth of behavioral patterns of young girls. Further, the results also reinforce the present understanding of violence, antisocial conduct, and risk factors among girls (Miller et al., 2009).

This study by Conger & Conger (1994) verified the effect of parental aggression during early and middle adolescence on siblings' deviance by middle to late adolescence. Data (adolescent self-reports) was collected from 359 families in a longitudinal study. The outcome showed that both maternal and paternal hostility had a significant impact on sibling delinquency at a

later stage and siblings exposed to very high parental hostility demonstrated highest deviant conduct at Time 2 (Conger & Conger, 1994).

Baumrind suggests four types of parenting, namely, permissive, authoritative (reliable), authoritarian (strict) and traditional. With the help of a longitudinal research study she established that authoritative (reliable) parenting produces most competent children. Her study results are: not to be too bad controlling but it is better to be responsive. Her 'Rebuttal of attribution theory' is to be clear with the children about what is right; not to be manipulative. The impact of any parenting depends on the contextual factors (Baumrind, 1989).

Considering the social disorganization theory, Roche et al (2007) verified the way perceived neighborhood settings change the relationship between parenting style, deviance, and delinquent behavior among 800 African American and Latino 10-14 years children in three cities. The study showed that disengaged and permissive parenting style, mother's participation and punitive parenting style were related to outcomes in different ways based on perceived neighborhood and child's ethnicity, gender, and race. Neighborhood influences on styles of parenting were very significant for African Americans as against Latinos and males compared to females. Further, punitive parenting style is weakly associated with poor child outcomes when there is a maternal perception that the neighborhood is more threatening (Roche, Ensminger, & Cherlin, 2007).

Developmental psychologists, social scholars and law are persistently focusing on finding out the authenticity of researched figures from different angles. In a structural equation model, by studying the association among different parenting methods, parental authenticity and changes in adolescent delinquency and deviance over time, this study by Trinkner et al (2012) aimed at bridging these fields of studies. The study hypothesized that parental

authenticity mediates the association between the style of parenting and later delinquency. The data was collected from middle school and high school children three times in 18 months time span. Parenting method adopted and behavioral delinquency was assessed at time 1, parental authenticity at time 2, and behavioral delinquency at time 3. The study results revealed that authoritative parenting was positively associated to parental legitimacy; authoritarian (dictatorial) parenting was negatively correlated to parental legitimacy; parental legitimacy was negatively related to later delinquency. Further, the relation between parenting method and delinquency changes over the study period was mediated by parental legitimacy (Trinkner, Cohn, Rebellon, & Gundy, 2012).

Correlation between delinquency and peer and family influences is one of the key factors to define useful interventions. In one of the studies, the longitudinal association among insensitive punishment, authoritative parenting, peer delinquency, adolescent delinquency was investigated by using data from Pittsburgh study. A total of 622 adolescent girls (53% African American, 42% European American) from low-income families were sampled. The effects for race/ethnicity were controlled. Single parent family, insensitive punishment, delinquency of peer during early adolescence was positively correlated to mid-adolescence delinquency. However, no significant effects of authoritative parenting were noticed. There were no interaction effects between peer delinquency and parenting styles. The study revealed that effects of insensitive parenting and delinquency of peer are not dependent/interdependent factors. Instead, they are independent and additive. Further, the study shows the sustained importance of aiming at both peer associations and parenting styles to address adolescent girls' delinquency (Henneberger, Tolan, Hipwell, & Keenan, 2014).

Experiencing family of origin violence during childhood is significantly associated with later perpetration of intimate partner violence. In a longitudinal Health and Nutrition Survey, this study examined the impact of inter-parental aggression among Filipino adolescents (aged 21-

22 years) through self-reports. Perpetration and victimization were verified from 2005 survey whereas, exposure to inter-parental aggression during childhood was verified through self-reports from survey in 2002. The study revealed that nearly 13% of female adolescents and 4% of male adolescents were involved in psychological violence towards intimate friends. Nearly 4% of both the genders were found to be victims, whereas 14% of female adolescents and 3% of male adolescents had exposure to bidirectional psychological violence. During childhood, nearly 44% of female adolescents and 47% of male adolescents experienced mutual inter-parental physical violence, which significantly predicted among males bidirectional friend psychological violence. Exposure to inter-parental aggression did not considerably predict perpetration of friend psychological violence among females. Thus study concludes that adolescent delinquency prevention interventions must take into account family oriented interventions also (Mandal & Hindin, 2013).

Family data and criminology literature were investigated to find out the long-term effects of family risk factors and observed parenting styles in respect of male young adult delinquent behavior in a study. Two longitudinal data namely, Pittsburgh Youth Study (474 young adults) and Family and Child-rearing in Netherlands (128 young adults), with a study period of minimum ten years were investigated. The absence of organized and systematic activities in the families during childhood was a strong predictor of deviances during young adulthood. However, no correlation was noticed between later deviance and authoritarian/authoritative parenting. Previously recorded family factors like socioeconomic standing, monitoring, punishment, and intimacy was not associated with behavioral delinquency exhibited during young adulthood (Machteld Hoeve et al., 2007).

Family violence studies have considered spouse and child physical abuse but more or less overlooked the third important kind: parent abuse. This study used data from National

Sample of Adolescents to verify the socio-demographic measures and causes of aggression/violence on parents. The study showed that adolescents engaged in aggression/violence are highly likely to have peers who also physically assault their parents and endorse aggression and violence (Routt & Anderson, 2011).

Findings related to behavioral genetics point to the significant role of parenting influences. By using the data of twins from National Longitudinal study of adolescent health Wright et al (2008) studied the relationship between parenting styles, self-control of children, peer delinquency, and deviance. The outcome indicated that genetic effects and unshared environmental factors accounted significantly (Wright, Beaver, Delisi, & Vaughn, 2008).

In a longitudinal study Sunday et al (2011) verified the likelihood of young adults (aged 23 to 31 years) having parental physical abuse history (n=67) during adolescence to be more aggressive against intimate partners as compared to their counterparts who had no abuse history from their parents (n=78). Multivariate logistic regression analyses revealed that young adults having abuse history showed significantly higher verbal aggression and intimate partner physical hostility than their counterparts. Alcohol addiction, jealousy, and perception that one's partner is dominating were also significantly linked to verbal as well as physical violence. Thus the study findings emphasize the significance of checking the adolescent abuse as a preventive measure of reducing the likelihood of intimate partner physical violence perpetration during adulthood (Sunday et al., 2011).

In a study, Smith & Farrington (2004) report the findings: antisocial G1 parents could predict problem behavior in both G2 and G3 children. Problem behavior in G2 children could not predict conduct problems in G3 children. But G2 children behavioral problem predicted G2 adult disruptive (antisocial) attitude, which in sequence predicted G3 problem behavior. Parental frictions and strict (authoritarian) parenting styles were linked to childhood behavior

problems in the next two generations. Relatively, very less continuity was noticed between G1 and G2 parenting styles; but inadequately monitored males in G2 were themselves fathers with poor supervising skills. The study concludes that within-generation and between-generation continuities were present, albeit study of such continuity is highly difficult in the light of study design limitations and measuring problems. Parenting style partially mediated the effect of the antisocial conduct of parents on the antisocial conduct of children across two consecutive generations; but the link between antisocial parents and antisocial children is not completely mediated by parental variables (Smith & Farrington, 2004).

Another study verified the variables that predict delinquency of Asian American youth. The study considered Asian cultural ideals which have been more or less ignored in delinquency research. These Asian American values claim that they would influence both parenting methods and adolescent problem behavior. Hence, the present study particularly focused on Asian American high school adolescents' (N=101) perceptions related to social support offered by parents and their delinquency prediction. In contrast to the outcomes of previous studies and hypothesis, the findings of the present study suggested that Asian American adolescents had not perceived low parental support and this factor was not having any influence on delinquency. Thus the result demonstrated that peer delinquency is the most significant predictor for delinquency in the case of Asian American adolescents (Kim & Goto, 2000).

Machteld Hoeve et al (2011) have examined 330 Dutch families' longitudinal and cross sectional correlations between parenting styles and adolescent (aged 14-22 years) delinquency with an interval of five years. The study demonstrated a clear link between delinquency and parenting styles with a sex interaction. The higher level male adolescent delinquency was related to violent and neglectful parenting, whereas higher level female

adolescent delinquency was related to permissive parenting. Long term relationship was observed between male adolescent delinquency and neglectful parenting of fathers. The study also demonstrated higher level adolescent delinquency when both the parents are neglectful and lower level adolescent delinquency when at least one of the parents offers authoritative parenting. Thus the study indicated the close relation between nature of parenting and adolescent delinquency (Machteld Hoeve et al., 2011).

Many research studies have decisively established family functioning as an important cause for behavioral and social development of youngsters (Capaldi et al., 2003; Farrington et al., 2001). The researchers have shown time and again three parenting processes as very crucial namely, supervision, proper discipline, and warmth. In one of the studies, Palmer (2000) proposed that the early experiences affect later modifications with the mediation of social information processing (cognitive processes).

One of the studies says nearly one-third of children are born to mothers who are unmarried and more than one-half of children live in a single-parent family (Western statistics). Single father families are increasing rapidly in number than the single mother families. Demuth et al (2004) have used data from 1995 National Longitudinal Survey of Adolescent Health, to investigate delinquency in single father families. They also aimed at finding if the delinquency is a function of single parent family (single mother or single father) or a function of parent gender. The study results revealed that children in single-parent families are significantly delinquent as compared to the children living with both the married/biological parents. Thus they concluded that family processes are responsible for level of adolescent deviance (Demuth & Brown, 2004).

Parental psychological aggression was verified (through self-administered questionnaire) as possible risk variable factor for 278 adolescents' (7th - 9th grades; mean age: 14.2 years)

behavioral problems. Parental violence during childhood, present family violence, and family constituents were considered for the present study. Parental psychological violence was linked to externalizing and internalizing problems of children (Melançon & Gagné, 2011).

Parental supervision measured as parental awareness of child behavior is one of the consistent predictors of behavioral problems. Some of the recent researches have shown that parental knowledge has got lot to do with children's self-disclosure as against vigorous parental supervision. Though these outcomes imply that parents have very little influence on deviance of adolescence, the authors are of the opinion that this wrapping up is too premature as self-disclosure by children will be affected by parenting style. In the current study two issues were examined: (i) Association between parenting style and child self-disclosure, (ii) Analyzed three models that describe association among style of parenting, perceived parental knowledge, self-disclosure, and child behavioral problem. The data from 10th – 12th grade children, parents, and peers, showed that strict behavioral supervision, high sensitivity, and low psychological monitoring were independent predictors of child self-disclosure. Parenting style is both directly as well as indirectly related to perceived parental knowledge, but is not directly associated with delinquent peer affiliation and behavioral problem (Soenens et al., 2006).

The impact of family violence on adolescent aggressive conduct has been the focus of many research studies. But the results are ambiguous in respect of three domains: (i) the impact of adolescent-aimed aggression and adolescent-witnessed aggression on aggressive conduct; (ii) Family violence as a cause of aggression; (iii) Gender based impact of family violence. The study used a sample of adolescents from a town in the Philippines and examined the impact of adolescent-directed and adolescent-witnessed aggression. The outcome showed that adolescent-witnessed as well as adolescent-directed aggressions are directly and significantly

associated with self-reported aggression. However, adolescent-witnessed aggression was an important variable factor for adolescent aggression and both the variable factors of family violence did not interact with gender (Maxwell & Maxwell, 2003).

The present study by Pine et al (1996) tested the cross-sectional relation between Platelet membrane serotonin 2A receptor variables in children and parents' characteristics that have positioned the children at danger of antisocial delinquency. In this study 38 younger brothers of imprisoned delinquents produced their samples of platelet. However, samples of 34 boys having a mean age of 8.3 years were only usable. The results showed that Bmax was significantly less in those boys whose parents had the history of imprisonment and substance abuse. Further, Bmax was inversely correlated to punitive parenting style. Boys brought up by parents who offered frequent corporeal punishment had significantly low levels of Bmax. However, Bmax had no relations with disruptive attitude of boys. Thus, it is concluded that density of 5-HT_{2A} receptor platelets in boys having an antisocial behavioral risk is inversely linked to parental variables which can position the children at a threat of antisocial delinquency (Pine et al., 1996).

This longitudinal study of kindergarten students in Quebec examined the impact of socioeconomic factors, parenting factors, family factors, and individual innate factors to predict aggression and the coexisting risk variables linked to physical/verbal aggression (directed at mothers) in male and female adolescents aged 15 to 16 years. It was revealed that physical aggression in childhood is the strongest predictor of adolescent risk factor directed toward mothers by way of verbal and somatic aggression. Violent punishment awarded by parents in the previous six months could significantly predict the verbal and physical aggression toward the mother. Further, childhood experience of aggression and violence ends up in physical/verbal aggression aimed at mothers during youth. Given this cumulative effect

of childhood mal-parenting, added exposure to punitive parenting during adolescence escalates the aggressive tendency during adolescence irrespective of gender differences (Pagani et al., 2004).

Another review paper verified the role of aggression and violence among homeless parents' children and probable links to parental violence, adolescent delinquency, and problems of social rejection. Violence exposure seems to derive from violence in homeless families and disturbed parent-child associations. Violence exposure culminates in serious negative end results due to social seclusion it brings about. Multiple negative end results of aggression and violence among homeless children include psychological problems, violence in peer associations, and social seclusion arising out of mal parenting. Violence among homeless children is aggravated by escalated vulnerability to violence. Diverse theories in respect of adolescent violence interventions finally culminate in predicting violence among homeless adolescents. Thus the review paper highlights the necessity of addressing homeless children's violence in intervention programs (Anooshian, 2005).

Stress responses play a significant role in psychopathology development. Family stress may also have an important effect on the growth of stress response system. One possible way of change is by altering the thresholds to activate stress response, i.e., reduced threshold to respond might enhance stress sensitivity. The aim of the research was to study the interaction between parasympathetic nervous system response (measured regarding relaxing respiratory arrhythmia (RA) and insensitive parenting to predict the development of adolescent delinquency and substance use. Another attempt was to assess whether resting RA would get changed over a period in response to insensitive parenting and stress measured regarding RA. The study aimed at evaluating the moderating effect of gender. The longitudinal data was collected from 251 adolescents (age 8 to 16 years). RA and mother reports were collected for all age points. The adolescents' self-report on substance abuse was also gathered at 16 years

of age. Family stress indexes were measured with the help of adolescent-reported insensitive parenting styles. Marital frictions/clashes and changes over time were controlled in insensitive parenting. Reduced resting RA was able to predict enhanced delinquency and increased likelihood of substance use about insensitive parenting particularly for male adolescents. Insensitive/authoritarian parenting was related to descending resting RA for adolescents who showed more RA withdrawal to stress response. These findings show that resting parasympathetic nervous system (PNS) as a moderator can be changed over time (Hinnant, Erath, & El-Sheikh, 2015).

3.1.6 Parental style leading to adolescent criminality and substance abuse.

A paper tested hypotheses related to variations in determinants of adolescents' early versus late onset of criminal activities. Data was collected in four waves from 177 male adolescents dwelling in small towns in Midwest. The study revealed that in the case of late delinquency starters, the parenting style was able to predict association with offending peers and in turn this was related to involvement in criminal activities. The delinquent behavior was neither related to affiliation with offending peers nor with involvement in criminal involvement, whereas, in the case of early starters, the nature of parenting predicted adolescent defiance. The pattern of adolescent behavior could predict affiliation with delinquent peers and involvement in criminal activities. The study supported that involvement in criminal activities was very significant for the adolescents who were delinquent and were having delinquent peers. Thus, the study supported correlation between various ways to criminal behavior as well as detention on the grounds of early and late adolescent delinquencies (Simons, Wu, Conger, 1994).

Another study aimed at investigated offending three generations (grandfathers, grandmothers, fathers, mothers, uncles, aunts, sons, daughters) and demonstrated that there was a high

concentration of offenders in anti-social families. If one of the relatives is arrested on criminal grounds, there was a high likelihood of another relative's arrest. If one of the senior family members (grandfathers, grandmothers, fathers, mothers, uncles, aunts) is arrested, there was a high likelihood of boy exhibiting delinquency. Among these senior members of the family, father's arrest predicted the delinquency of boy more than the rest (Farrington et al., 2001).

A study by Petts (2009) considered the life-course approach testing if family and religious practices affect delinquency during early adolescence through early adulthood. The data was gathered from NLSY79. The results suggested that living with both the parents would prevent adolescent delinquency. Supportive parenting style decreases the involvement in delinquency during early adolescence. Family and religion interact and predict adolescent delinquency. Religion increases the influence of parental warmth and helps to prevent delinquency and alleviates the risk of high delinquency for adolescents living with a single parent. Further, findings suggest that delinquency is not immutable. Family/parental transitions are related to an escalation in delinquent rates and their criminality. But participation in religious activities during adolescence and early adulthood deter delinquency, thus signifying that family and religious practices affect the adolescents' delinquency rates highly favorably (Petts, 2009).

A study examined the association between mothers' and fathers' parenting behavior and delinquency of male adolescents living in Kolkata, India. The study involved 200 adolescents (50% delinquents, 50% non-delinquents) aged 11-18 years. A significant difference existed in parenting styles. Parenting modes of fathers and mothers were associated with delinquency. Authoritative parenting style was the excellent parenting style. Poor parenting styles like neglectful parenting and authoritarian parenting styles were positively correlated to children's delinquency and criminal behavior. Age of the delinquent children was inversely related to

delinquency. Early adolescence was positively related to delinquency. No relation was noticed between delinquency and religion. Thus, the study outcome has implications in respect of parenting and its impact in reversing the delinquency (Moitra & Mukherjee, 2010).

Adolescent problems namely, cigarette smoking, alcohol abuse, and delinquency might be influenced by parenting styles and rituals followed in families. In a face to face interview data was collected from 420 randomly chosen families (single parent, one teen age 13-14 years) in Bangkok's seven districts, Thailand. Variables namely parental supervision, parental warmth, parenting method, family rituals, and parental communication were measured. The outcome revealed that alcohol abuse exposed the adolescents to perils of family rites. Less cigarette usage was found among adolescents who had positive parenting. Significantly higher levels of delinquency are linked to risks in rites observed by families, only in case of girls. The lower delinquency rate is linked to lesser punitive parenting. Hence association between rituals and adolescent behavior needs additional exploration (Miller et al., 2011).

Alcohol addiction and youth delinquency are considered to be the growing concerns. Poor parenting, disrupted families, specific factors attributable to one's personality, and psychopathology are attributable to alcohol abuse and adolescent antisocial activities. Youth delinquency represents a high risk factor, and alcohol abuse is more pronounced in adolescence. Hence the present study aimed at comparing personality differences, parenting variables and psychopathology in adolescent delinquency with and without alcohol use and to verify the relations between alcohol addictions, personality, and parenting variables after to controlling for co-morbid psychopathology. Alcohol addiction and psychopathology were measured through psychiatric interview of 229 Russian imprisoned male adolescent delinquents. Parenting variables, personality, and alcohol abuse were measured through self-reports. Results showed that delinquents having alcohol abuse (n=138) scored considerably higher on the emotional warmth of mothers, quest for novelty and increased levels of

psychopathology as against delinquents having no alcohol abuse (n=91). Having controlled for co-morbid psychopathology, parenting and personality factors were significantly linked to alcohol use. Delinquents having alcohol abuse were at a very high risk for varied mental disorders and alcohol use was linked to parenting and personality factors. Early corrective interventions for high risk adolescents might decrease the alcohol use and psychiatric disorders (Koposov, Ruchkin, Eisemann, & Sidorov, 2005).

An empirical study investigated three theoretical approaches to predict adolescent delinquency namely, individual differences, social contextual model, and social interactional approach. Hypotheses were derived for each of these three perspectives and tested on early adolescents with the help of 2 independent samples studied over a period of 4-years. At time one, 667 children (6th grade) along with their parents were sample No.1; 451 children (7th grade) along with their parents and close-aged siblings were sample No.2. The results demonstrated that the social contextual approach was the best fit and absence of authoritative parenting indirectly predicted children's delinquency by enhancing earlier detected deviant peer association and antisocial attitude. Further, the antisocial behavior predicted a decrease in authoritative parenting in due course. The deviant peer association and antisocial behavior at time 2 predicted the deviance after one year (Scaramella, 2002).

Parenting and family intervention impact on adolescent delinquency, conduct disorder was considered in this meta-analysis of 8 RCTs involving 749 adolescents in the age group of 10 to 17 years, with known history of delinquency and conduct disorder. The study evaluated criminality, mental health, problem behavior, academic performance, employment opportunities, parental mental well-being, peer relations, and family functioning. The results showed that parenting and family interventions significantly decreased the number of days spent by juvenile offenders in institutions. The risk of a delinquent adolescent being rearrested significantly reduced and even when they are rearrested subsequently, the time

spent in institutions was significantly less. Thus, the results suggest that parenting and family interventions have significant benefits for juvenile offenders. Families are also benefited regarding reduced time spent by juvenile offenders in institutions for their criminal activities. Further, along with these evident benefits, it could be cost saving to the society at large (Woolfenden, Williams, & Peat, 2002).

A study tested the hypotheses of the way positive parenting and collective effectiveness combine to address the risk of deviant peer association and engaging in behavioral delinquency by using two waves of data on several hundreds of African-American origin caretakers and their children. A rise in collective effectiveness was related to increasing in positive parenting. Both these served to discourage association with a delinquent peer, delinquent behavior involvement, and criminal behavior. There was evidence to show that positive effect of authoritative parenting on delinquency and association with delinquent peer was amplified when co-administered with collective efficacy within the community (Simons, Simons, Burt, Brody, & Cutrona, 2005).

This three-wave longitudinal study examined the main and interaction influences of parental measures (warmth, supervision, and psychological monitoring) and closest friend deviance on 433 Dutch adolescents that had mutual friendships during the 'year one' of secondary school education. Structural equation model showed that adolescent deviance affected the delinquency of their best friends. Increase in the levels of parental supervision and support and a decrease in the levels of psychological control are linked to reduced levels of adolescent deviance and reduced levels of substance abuse. However, multi-group examination revealed no moderating impact of parenting on the longitudinal links between best friends' deviance and adolescent deviance (De Kemp, 2006).

Association between two variables namely delinquency and risk-taking is clearly defined in criminology. Though this association is extensively researched, it is mostly restricted to western perspective, very less is known particularly for Japan. In this study, Bui (2014) examined this association in the Japanese context. Review of literature related to risk-taking showed that parenting had a significant effect on delinquency/deviance and risk-taking of youth. The study also significantly supported the mediating effect of high risk-taking between delinquency and parenting styles. Further, high risk-taking explained the reason for poor maternal attachment and supervision associated with delinquency, but the study failed to explain the association in its entirety (Bui, 2014).

Behavioral disorders and aggression are issues of conduct concerning violation of laws, social conduct, and rules. It is observed that behavioral disorders and delinquency reach a peak point during mid-to-late adolescence and continue for a considerable length of time. Many studies on behavioral disorders and delinquency have considered longitudinal designs, personal interviews, and large community samples, the measure of some risk factors, both from self-reports and official records. The significant risk factors to predict behavioral disorders and delinquency are low intelligence quotient, low academic performance, inadequate/poor parenting, punitive parenting, erratic parental conduct, impulsiveness, child physical abuse, parental clashes or frictions, and antisocial behavior of parents, large family size, low socioeconomic background, delinquent peer association, and high crime neighborhoods. However, for most of the risk factors, it is not understood if there are causal influences or not. Future research studies may verify changes in variable risk factors and changes in behavioral disorders to recognize the causal risk factors and markers of risk processes (Murray & Farrington, 2010).

Being public health problems, violence and aggression are to be addressed through risk decrease and prevention. Aggression and violence theories focus on psychosocial and

biological causes during adolescence. But, there is an inadequate focus on the examination of multiplicative and interactive influences of these causes. Further, hardly any attention is given to pre and postnatal periods. Preventive interventions might yield positive outcomes. Early risk factors which might affect negative conduct comprise of pre and postnatal nourishment, smoking and maternal despair, pregnancy complications, and child's inherent problems. There is abundant research literature to indicate that the early risk factors might escalate the chances of juvenile externalizing behavior, hostility, juvenile delinquency, adult antisocial behavior, aggression, and violence (Liu, 2011).

Bruce (2002) raised a research question: among adolescents (aged 10 to 17 years) with delinquency and conduct disorder, whether parental interventions improve adolescent behavior, parenting styles, family performance and psychological wellbeing of parents. Data were collected from randomized control trials in any language in Medline, CINAHL, ERIC, EMBASE, Excerpta Medica, Sociofile, Healthstar, PsycINFO, Cochrane Controlled Trial Register, Bibliographies, experts' opinion on unpublished data (up to Sept 1999). The outcomes considered for the study included behavior of adolescents, parenting method, parental psychological well-being, family performance, long term psychosocial variable outcomes, and familial relations. Totally eight studies involving 749 adolescents and their parents were there in this meta-analysis. Short duration family workshops, parent guidance programs, multi-dimensional therapy, and adolescent pastime programs were the parenting and family interventions. In the follow-up, it was found that adolescents were less likely to be arrested in the intervention group as against control group. Further, intervention group's self-reported delinquency showed improvements and adolescents were less likely to be sent to institutions. The control group and the intervention group were not different with respect to youth behavior, parental psychological well-being, family performances, the risk of imprisonment, and peer affiliations. Thus, the study concluded, parenting interventions would

reduce the delinquency, conduct disorder, likelihood of arrest, self-reported delinquency, and time spent in institutions among adolescents aged 10 to 17 years (Bruce, 2002).

Criminologists have identified parenting style as a significant cause for adolescents' conformity or deviance from the normative values. They have also explained the processes that restrain or promote delinquency of adolescents through monitoring, coercion, and parental attachment. In the present study, the researcher proposed hypotheses connecting adolescent delinquency to parental support through well-known theoretical mechanisms like peer affiliations and self-control. The National Longitudinal Survey of Youth (1979) data suggests that early supportive parenting is associated with delinquency. However, the nature of association relies on psychological, behavioral or communicative nature of autonomy – supportive parenting and also depends on the phase of adolescence (Brauer, 2012).

Data from National Longitudinal Study of Adolescent Health was used to assess the association between parenting styles and adolescent (N=11044) peer affiliation network. Overall, the study demonstrated that choice of a neighborhood because of school location, quality of child-parent rapport, and parents' monitoring were all positively related to the social network. Thus the study suggested that parents do have the potential to influence the nature of adolescent peer networks and their social behavior even if the adolescents have chosen their friends on their own (Knoester, Haynie, & Stephens, 2006).

Bronte-Tinkew et al (2006) used data from National Longitudinal Study of Youth (1997) to test the fathers' parenting method and father-child relationship as predictors of adolescent substance use and delinquency (N=5,345). The study showed that optimistic relation between father and child predicted decreased risk of involvement in several delinquencies. When the father is involved in authoritarian parenting, involvement in substance use and delinquent activities increased. The negative influence of authoritarian parenting decreased when fathers

had optimistic relations with the adolescents as indicated by two-way interactions. Authoritarian parenting predicted lower problem behavior when there was positive relationship between father and child. Further, the study also revealed that the positive effect of father-child association on problem behavior was stronger for male adolescents as against females (Bronte-Tinkew, Moore, & Carrano, 2006).

Childhood antisocial/problem behavior is one of the important risk factors for adolescent delinquency and youth criminality for the rest of life. To address this issue, among other ancillary benefits, early parental training has been identified as a key prevention intervention. There are many theories to explain the reason. Behavior problem prevention is one of them. That is the main focus of a review paper by Piquero et al (2009). The study consisting of some analog, ANOVA and weighted least square regression model, indicated that early parental counseling and parenting is one of the most effective interventions to address antisocial/problem behavior in young children. The study also revealed that early family or parental counseling/training was significantly effective in decreasing delinquency and criminality in late adolescence and adulthood. The researchers of this study suggest that future research studies may focus on causal mechanisms of theories of early parental counseling which supports a reduction of delinquency and criminality by employing superior quality designs involving long period follow-ups (Piquero, Farrington, Welsh, Tremblay, & Jennings, 2009).

Findings have shown a strong correlation between antisocial behavior and empathy of adolescents and the parenting styles. This was tested on 244 undergraduate students studying in an urban university. The self-report questionnaires were administered to these students. The study results showed that permissive parenting of mothers contributed to the antisocial behavior through the mediation of empathy and cognitive levels of the adolescents (Schaffer, Clark, & Jeglic, 2009).

From National Longitudinal Survey of Adolescents Tyler et al (2011) tested the influences of inadequate or neglectful parenting on dating violence among 900 females and males. Results showed that higher level of corporeal maltreatment and low parental warmth were related to higher levels of substance use and increased rates of deviance. Neglectful parenting, a higher level of delinquency, and low parental warmth were having direct positive influences on dating violence. Further, delinquency mediated the relation linking dating violence and victimization and low parental warmth thus supporting social learning theory as well as antisocial orientation perception (Tyler, Brownridge, & Melander, 2011).

Griffin et al (2000) studied the way parenting factors were related to adolescent behavioral problems in minority youth dwelling in urban regions and the extent to which said relations were moderated by gender and parental and family structures. Totally 228 students in 6th grade reported number of times they used alcohol, smoked cigarettes, engaged in deviant/aggressive attitudes. A guardian/parent also reported parenting policies adopted. The outcome revealed that male adolescents and adolescents of single-parent families were involved in more deviant activities. Increased parental supervision was related to less number of overall delinquencies and boys were less likely to drink alcohol. Collective eating of dinner (along with parents) was related to overall less aggression, and youth (both genders) delinquency in single-parent families reduced significantly. Whereas, unmonitored time was directly correlated to smoking in girls only (Griffin, Botvin, Scheier, Diaz, & Miller, 2000).

Hay (2001) says though Self-control theory has been extensively tested in empirical studies in the recent past, effects of parenting on delinquency and self-control have not been studied much. However, the data collected from urban high school adolescents supports a positive relationship between parenting processes and self-control and negative relation with delinquency (Hay, 2001).

In a cross-sectional analysis, 2837 Colombian adolescents (aged 12-17 years) were interviewed in their homes to identify the risk and defending factors related to marijuana abuse and adolescent delinquency in the domains of peer association, personality, culture, ecology, and family, and to investigate the defending role of parent-child relation in moderating the risk factors related to ecology and culture, which could decrease deviance and abuse of marijuana. The study showed that many of the risk factors like acceptance of delinquency and longing for sensual pleasure were linked to deviance and marijuana abuse which suggests that a common cause is responsible for the inclination to involve in various conduct problems. While some risk factors were responsible for more engagement in deviance, other factors were significantly associated to use of marijuana. When violence is widespread and prohibited drugs are freely accessible, parental warmth could deter the risk factors, resulting in lesser delinquency and marijuana abuse. Thus the study has implications for the countries where delinquency and drug abuse are rampant (Brook, Brook, De La Rosa, Whiteman, & Montoya, 1999).

In an epidemiological sample, it is demonstrated that conduct problems of the children and time spent by fathers with their children are negatively associated, when the father is pro-social. As against this, when the father is highly anti-social, these two variables were found to be positively associated with two fronts namely genetic and environmental. Marriage was not a solution for the sufferings of children who were living in single-parent families unless fathers become dependable for financial and emotional support (Jaffee et al., 2003).

Another study involved Chinese adolescents (N=199) in Hong Kong, who responded to scales measuring perceived parenthood attributes (parental support, parenting methods, relational patterns with parents) and psychosocial modifications (mental health, deviance, substance abuse). The outcomes demonstrated that parenthood factors were concomitantly

related to variables of adolescent mental health and conduct problems at time 1 and 2. Whereas time 1 parenthood attributes predicted modifications only in adolescent boys' health and deviance at time 2. Time 1 parenthood attributes of mothers predicted changes in psychological wellbeing and conduct problems in only adolescent girls at time 2. However the hypothesis that adolescent modifications affect perceived parenthood attributes in the course of time was not strongly supported. But the revelations are that the effects of parenting methods on modifications of Chinese adolescents during economic crisis differ with the adolescent gender (Shek, 2005).

In another study, American Indian and white high school adolescents were studied. American Indian adolescents were having lower self-control, personal offending, significantly poor parenting, and high rate of vandalism (other than property vandalism). The regressions measured on race-specific analysis displayed that self-control was significantly influenced by parenting in case of white but not for American Indians. However, all the three forms of delinquency were significantly affected by self-control in both the races. For both the races, vandalism, and property offending were significantly predicted by parenting styles, but not personal offending. Thus, the study suggests that parenting effect on delinquency of American Indian adolescents is little different from that of white adolescents (Morris, Wood, & Dunaway, 2007).

In the criminological literature, parenting styles are significant predictors of adolescent delinquency and are intimately linked to adult antisocial behavior also. However, the existing body of research findings has not methodically verified the long-term influences of parenting on adult criminal behavior, or the association between parenting and criminal activities, by race. In the present study, researchers verified to what extent experiences related to minority status affect the relationship between parenting and adult criminal behavior apart from the study of mediating variables. The study results revealed that the parenting styles not exerting

high impositions show positive and significant influences on adult criminal behavior among the Black sample. Parenting methods put forth little long-term influences on criminal behavior in case of the White sample. Unhelpful emotionality, i.e., anger extensively mediates the link between neglectful parenting style and criminal behavior for both Black and White adults, whereas depression is a mediator only for White sample. Further, adult social attachments did not mediate the link between parenting during childhood and adult criminal behavior (Schroeder, Bulanda, Giordano, & Cernkovich, 2010).

In the recent past, an increasing consideration is being shown by the countries in respect of the role of parents towards prevention of juvenile offenses. Many countries have passed legislations to reprimand the parents for their neglectful parenting and failure to correct the children's delinquencies. In one of the articles, clearly defined parental responsibilities have been discussed along with the areas where the state could be made accountable (Bessant & Hil, 1998).

Japanese adolescents (N=946, 5th to 9th grades) and their biological parents were examined to find out the extent to which parenting variables (parenting bond) and adolescent personality (character and temperament) are linked with two variable factors of externalizing – aggression and delinquency. Regression analyses revealed that (i) delinquent adolescents were stronger in novelty seeking and lower in injury avoidance, (ii) violent and delinquent adolescents were featured by inferior mother care, over-protection by parents. Thus it is suggested that adolescent novelty seeking may be predicted by the poorer parental warmth and inferior protection by fathers and high maternal overprotection. Further, the adolescent aggression levels and delinquency may be, to a certain degree, forecasted by their temperament and parenting methods (Hiramura et al., 2010).

Li (2013) opines though family religiosity is one of the protective factors against child delinquency albeit very less is understood about the effect of familial religiosity on delinquency. To address this gap, he investigated the way family participation in collective religious performances is associated with delinquency and criminal behavior during early adolescence. The data gathered from two waves of National Longitudinal Survey of Youth 1997 was analyzed on structural equation model. The study found a negative correlation between familial religiosity and child delinquency. Further, this relationship is mediated by marital relationship mechanisms, parenting styles, and familial attachments (Li, 2013).

Many of the researchers have demonstrated that antisocial children have numerous causal etiologies, like ineffective or poor parenting, capable of producing psychopathic persona. This study involving 136 Hispanic girls found that poor or ineffective parenting predicted poor behavioral traits and psychopathology. Hence successful scientific interventions to address low self-control, antisocial or criminal behavior of the adolescents should necessarily target on improving parental quality through parental interventions (Vitacco, Neumann, Ramos, & Roberts, 2003).

Many of the studies have revealed that study of parenting styles is very important in the study of self-control theory. With the help of a national probability sample and structural equation, Higgins (2009) studied the relation between child low self-control, parental low self-control and child delinquency. The data revealed that low parental self-control is related to child low self-control and in turn to child delinquency and lack of sociability. Further, self-control mediated the relation between child delinquency and low self-control of parents (Higgins, 2009).

By socialization model, Hoffman et al (2006) hypothesized that adolescent trajectories namely alcohol use, delinquency, and substance use are influenced by peer delinquency,

parental supervision, and support. In an interview of 506 children, six waves of data were verified. The results demonstrated that parental monitoring significantly predicted early adolescent alcohol use, delinquency, and child problem behavior. Delinquent peer significantly predicted behavioral problems initially and their rate of increase. Thus, the study provided strong evidence that both avoidance of delinquent peer affiliation and authoritative parenting are highly significant factors in the prevention of adolescent behavioral problems (Barnes, Hoffman, Welte, Farrell, & Dintcheff, 2006).

Palmer et al (1997) studied a sample of young adolescents to find the relationship between parental style having moral reasoning, self-reported deviance, and causal factors for criminal behavior. The study demonstrated that the perceived parental rejection, affection, and causal factors were significantly correlated to adolescents' self-reported deviance. Paternal emotion, warmth and causal factors like mental instability were significant predictors of adolescent delinquency (Palmer & Hollin, 1997).

Parental style has been recognized as a core domain in the research related to early childhood delinquency. During adolescence, peer affiliation becomes a very strong influence. This study verified the effects of parental and peer associations on adolescent delinquency, by using preadolescents as subjects. Path analysis was done to verify the effects of parental monitoring, parental warmth, and family arrangements on severe delinquency and to find out if a family life style has distinctive influence on serious delinquency, or if family relations are mediated by friends affiliations. The study suggested that parental factors are indirectly linked to later severe delinquency, and deviant peer affiliation puts forth a significant direct influence. Thus, the study describes the roles familial relations and peer affiliations play in understanding the delinquency. Furthermore, the study demonstrates the necessity of preventive interventions which can encourage adolescent pro-social relations (Ingram, Patchin, Huebner, McCluskey, & Bynum, 2007).

Paterson and Sanson (2001) studied interactions of family variables, parenting and specific temperament to predict behavioral problems and children's social skills. The study subjects were 74 children (aged 5-6 years; 40 girls, 34 boys). Outcomes revealed that each of the behavioral outcomes was predicted by different variable combinations. The child's goodness of fit at home was the strongest predictor of social skills and externalizing behavior, and there was an interaction between punitive parenting and temperamental inflexibility. Thus, the study focuses on the importance of using specific indices related to temperament, family and parenting functioning and studying the interactions in assessing the behavioral development of children (Paterson & Sanson, 2001).

Authoritarian parenting is one of the risk factors for the development of health and behavioral difficulties during childhood. It is also a predictive factor for poor or delinquent outcomes. Reciprocally, parenting is affected by factors like characteristics and behavior of children, psychological well-being, stress levels, and health of the parents. One of the important causes of parental stress is surely parenting difficulties, whereas as a buffer against this parenting stress, parenting self-efficacy acts. In a study by Bloomfield et al (2012), that aimed at exploring whether attending parenting program in any way changes parenting self-efficacy and are they in any way associated with child behavior and parenting stress, 63 parents having one child of less than ten years were studied. The study revealed clear association between parenting stress and parenting self-efficacy. Parents who felt less efficacious experienced high levels of stress. Thus the study showed clear evidence that the parental measures are the reliable measures of effectiveness of the parenting programs, more than the adolescent outcomes in the short run (Bloomfield & Kendall, 2012).

Simons et al (2001) studied the association between late childhood oppositional-defiance, adolescent delinquency, changes in parenting styles, and association with deviant peers and

engaging in criminal activities. Data about incompetent parenting, affiliation to deviant peers, behavioral oppositional deviance, and delinquency was collected at the base year, followed by three annual follow-ups, from 306 adolescents aged 12 to 13 years and matching parents aged 29 to 68 years. The results revealed no direct relationship between behavioral oppositional-defiance in childhood and escalating involvement of adolescent association with deviant peers and delinquency. Early behavioral oppositional-defiance diluted effective parenting styles and poor parenting predicted delinquency and escalating affiliation of adolescents with deviant peers. However, improvement in parenting styles during adolescence indirectly reduced delinquency by decreasing the affiliation to deviant peers. Thus, the researchers concluded that deviant behavior in childhood would escalate the possibility of deviant behavior in adolescence owing to its harmful effects on quality of parenting. Thus, the life course development model clearly explains the association between deviant childhood and delinquent adolescence (Simons et al., 2001).

Several studies say, sex, the age of child, and parenting methods affect adolescent deviance and drug abuse. Some of the studies have verified the way these variables interact to influence delinquency. Data from 18,512 adolescents (Grades 6,8,10, and 12) showed that parental treatment towards boys and girls varied and younger adolescents self-reported more parental warmth as against older adolescents. Parental factors for all grades and both genders were significantly linked to drug abuse and delinquency. But, individual parenting methods revealed sex and age variations in the level they were associated with outcomes, which demonstrates that intricacies in parent-adolescent relations that should be considered while verifying the grounds for adolescent delinquency and while planning preventive interventions (Fagan, Van Horn, Antaramian, & Hawkins, 2011).

Some of the studies have shown that cognitive impulsivity might escalate delinquency during childhood. But the effect of cognitive impulsivity depends on environmental as well as social

risk factors. From Pittsburgh Youth Study, 412 boys' (13-29 years of age) delinquency was measured using the official arrest records. Intelligence and cognitive impulsivity were measured for boys aged 12-13 years. Parenting styles (diligent disciplining, parental understanding, positive support), delinquent peer association were measured for boys aged 10-13 years. Results demonstrated that the influence of cognitive impulsivity on behavioral delinquency was dependent on parental behaviors. The interactive effect was noticed among cognitive impulsivity, delinquency of peers, and intelligence, thus suggesting that low intelligence and high cognitive impulsivity were related to escalated engagement in delinquency for boys brought up in good environmental and pro-social conditions but not for those brought up in poor conditions (Menting et al., 2015).

Studies have broadly accepted that adolescents exposed to inter-parental hostility are at higher risk of encountering adjustment difficulties. Moderated mediation model study examined the intervening factor namely, adrenocortical reactivity on mediation competence of emotional uncertainty obtained during lab sittings attended by fathers, mothers, and adolescents (266 adolescents; aged 12-16 years; 52.5% males). An undeviating association was noticed between parental aggression and internalizing conduct crisis of adolescents. Emotional uncertainty mediated the link between parental hostility and adolescent fretfulness and depression. However, adrenocortical reactivity smoothed out the mediation of emotional uncertainty and adjustment (Bergman, Cummings, & Davies, 2014).

Studies have demonstrated that children of substance abusing parents are at a very high risk for commotion in familial composition and for engaging in delinquent behavior. This study examined if multiple familial variables predict the delinquency and substance abuse among children of parents receiving methadone therapy for opiate dependence. The baseline delinquency, parental frictions, child uniqueness, parents' depression, and parental criminal background were controlled in the study. It was revealed that higher number of instances of

parenting disruptions during study period was linked to higher likelihood of delinquency. Adolescent sex moderated the impact of parental outcomes. After considering the baseline substance abuse and possible confounding variables, only adolescent girls had high chances of substance abuse when the parental commotion increased. Further age was significantly linked to substance abuse for adolescent boys. A small group of adolescents exposed to abnormal parental commotion during this longitudinal study period were at a tremendous risk for delinquency (Keller, Catalano, Haggerty, & Fleming, 2002).

In one of the studies, the authors have adopted a dissimilar approach as against other researchers in respect of parenting. They begin with vigorous co-relational outcomes which others have normally ascribed to parental influences, besides demonstrating research evidence to show that they might be child influencers. By their short-term longitudinal study of 1283 mid-adolescents, they verified the likelihood that parental behaviors might influence adolescent delinquency. Delinquency, solicitation by parents, parental support, revelations by adolescents, parental supervision, and poor responses of parents were measured. Findings proved that direct parental control of activities and associations of adolescents were youth protective from deviant peer affiliation and criminality; and parental behaviors were effects (as reactions) of adolescent deviancy but not causes (Kerr & Stattin, 2003).

Theoretical models account for poor parenting and delinquent peer affiliation as the vital causes for increase in delinquency of adolescents and arrests on criminal grounds. This study tested the Oregon delinquency model in at-risk sample of 238 single mothers and their sons studying in elementary schools, in a randomized design. Delinquency was measured on official records of arrests and teacher reports, delinquent peer affiliation by focal boys, parenting styles by child-parent interactions. Analyses were done through nine year follow up. The study revealed that parental training significantly decreased delinquency as reported by teachers and official records of arrests. In line with the hypothesis the study demonstrated

that improvement of parenting styles and reduced affiliation with delinquent peers mediated reduced delinquency rates. Further, in experimental group, a significant postponement of arrests by criminal justice system was observed as compared to control group (Forgatch, Patterson, Degarmo, & Beldavs, 2009).

This longitudinal study used data from a racially dissimilar sample of 300 adolescents studying in 9th grade and verified the moderating impact of parenting methods on the association between gang affiliation and adolescent delinquency. The outcome showed that gang affiliation is a significant predictor of problem behavior like minor and major delinquencies and drug abuse. Three out of four parenting styles (behavioral monitoring, psychological monitoring, parent-child conflict, and warmth) moderated the association between gang affiliation and delinquency. However, most unfailing impacts were noticed for behavioral monitoring and warmth. These outcomes show that intervention efforts focused on lowering the effect of gang affiliation on adolescents may take into account factors which may lower the delinquent conduct outcomes linked to youth gangs (Walker-Barnes & Mason, 2004).

This longitudinal study used French-Canadian population data set to verify the effect of socioeconomic variable factors (education levels of fathers and family compositions); innate individual variable factors (gender, developmental trajectories of somatic violence, substance abuse); parental factors (parent-child relations, parental substance abuse) as predictors of adolescent aggression directed at fathers in the preceding 180 days. The results revealed that childhood conduct variable factors were the riskiest adolescent verbal and somatic aggressions aimed at fathers irrespective of gender. Parental verbal punishment in the last 180 days significantly predicted paternal directed aggression. Further childhood aggression may be most likely to end up in violence against fathers during adolescence. Above all, it appears

that insensitive parental verbal punishment culminates in adolescent aggression against fathers (Pagani et al., 2009).

This study by Farrington (1989) examined the adolescent aggression prediction (aged 12 to 14 years), violence in teen age (16 to 18 years), violence in adults (aged 32 years), and beliefs about aggression and violence. Normally, the significant predictors were low socio-economic conditions, parental criminality, poor parenting, poor academic performance, antisocial conduct of the child. Thus, it is suggested that aggression and violence predictors are identical with predictors of criminal and antisocial behavior (Farrington, 1989).

This study examined the longitudinal association between parental processes, family relationships, individual delinquency, violence and nonviolent deviance of peers by using data collected from 246 adolescent males. Parenting and family variables were collected when the subjects were 12 years old, peer delinquency when the subjects were 14 years old, and individual aberrant action when the subjects were 17 years old. Ordinal variables represented the family and parenting measured regarding extraordinary, i.e., emotional intimacy, positive parenting abilities, and beliefs in parenting values to besieged families, i.e., absence of emotional intimacy, delinquent beliefs, and authoritarian or poor parenting styles. Peer aggression predicted individual aggression and nonviolent deviance, whereas family types predicted peer delinquency, individual violence, and nonviolent deviance. The final outcomes slightly varied owing to gang affiliation and race differences (Henry, Tolan, & Gorman-Smith, 2001).

This study proposed (i) comparison of association between proactive and reactive violence for Caucasian children aged 13 years to delinquency-linked aggression and dating violence in adolescents (n=525; aged 16 and 17 years), (ii) study of moderating impact of parental monitoring and maternal and paternal love. The results revealed that proactive violence

inimitably forecasted delinquency linked aggression, whereas reactive violence distinctly predicted later violence in dating relationships. The link between proactive aggression and delinquency linked aggression was smoothed out by parental monitoring. The association between violence in dating relationships and reactive aggression was moderated by maternal care and love (Brendgen, Vitaro, Tremblay, & Lavoie, 2001).

This study verified if positive links between positive parenting and children adjustment can be moderated by ecological measures. A racially and socioeconomically dissimilar sample of 10,000 high school adolescents completed scales measuring variables namely, family setting, parental conduct, and four adjustment pointers: academic performance, mental distress, delinquent behavior and self-reliance. The adolescents were divided into sixteen ecological groups regarding socioeconomic conditions, races, and family compositions. The examinations were done for each group to compare the adolescent adjustment scores between authoritative and authoritarian parenting styles. The outcome revealed that the positive factors of authoritative parenting style transcended racial differences, socioeconomic conditions, and family compositions (Steinberg, Mounts, Lamborn, & Dornbusch, 1991).

This study examined the effects of adolescents' (n=149, aged 12-18 years having dating relationship) exposure to positive parental supervision and psychological monitoring as well as peer delinquency and victimization. Parental monitoring was a protective variable factor in decreasing the relational violence and dating victimization. Further, in dating relationships, there was a significant relocation of violence in peer affiliations to relational violence (Leadbeater, Banister, Ellis, & Yeung, 2008).

Another study verified the family experiences of males (N=194; aged ten years) as predictors of police detention by 17 years of age. Interactions for parental warmth, parental regulation, family constitution, and problem-solving by family on police detention were noticed with

aptitude, social status, economic status, peer affiliations as controls. The risk of deviance that started at 14 years of age more than doubled in single-parent families or stepfamilies but did not escalate the deviance that started between 14 and 17 years of age. The increased risks linked to delinquent peer associations and antisocial behaviors were stable across family constitutions. The impact of family crisis solving was noticed in both single-parent families and stepfamilies. Thus, the results threw light on age point and indirect nature of familial influences on delinquency (Coughlin & Vuchinich, 1996).

This study analyzed the violent fantasies, empathy, and attitudes justifying violence as mediators of the impact of violence experiences and parental warmth on violence among 603 pre-adolescents (mean age = 12 years) who took part in this study comprising of 2 waves. In the first wave, they self-reported on violence exposure and parental warmth and in the second wave – three mediators and effect on aggression. Attitudes approving violence mediated the influence of exposure to violence and lack of parental warmth on aggression. Violent fantasies mediated the impact of exposure to violence and empathy mediated the influence of parental warmth. These mediation trajectories via which parental warmth was associated with violence varied across intensity of exposure to violence. In respect of intense violence exposure, parental warmth was linked to reduced aggression via higher empathy. When there was low violence exposure, the impact was mediated by higher violence disapproval (Su, Mrug, & Windle, 2010).

Though there are volumes of research on increasing number of adolescents' involvement in criminal activities, very less is researched on the causes or determinants of their involvement. In this study, the researchers have examined the relation between the change in parenting style and change in time used up by 603 adolescents (aged 12-19 years) in criminogenic environments in a multilevel longitudinal analysis. The study showed a negative correlation

between parental monitoring (which includes nature of adolescent-parent relationship) and time spent by adolescents in criminogenic environments. Thus the finding suggests the significance of parenting during the formative years of adolescents (Janssen et al., 2014).

Though there is overall consensus on the effect of parenting processes on children's behavior, some gaps remain unanswered particularly the issues relating to parenting styles and cultural background of the children, the mediators via which parenting forms affect the development of the child. On review of past research studies, Darling et al (1993) presented a model that can assimilate two socialization research traditions namely, the study that involves global parenting practices and the study that involves specific parenting characteristics. They argue that by drawing distinction between parenting practices and parenting styles the research studies address socialization processes (Darling & Steinberg, 1993).

Unnever et al (2006) tested two competing theories namely differential association and self-control, and why poor parenting matters and social learning is vital. The study demonstrated that some dimensions of parenting affected aggressive attitudes and low self-control, which in turn predicted deviance and effect of parenting on delinquency. The effect of self-control on deviance varied across different levels of aggressive behaviors. That is, adolescents having low self-control and aggressive behaviors were more likely to involve in antisocial and criminal activities. The study displayed that the poor and ineffective parenting leads to low self control and aggressive behavior through direct control, thus questioning the very claim made by Gottfredson and Hirschi, that they have found the true general theories of criminal actions (Unnever, Cullen, & Agnew, 2006).

Very common risk factors linked to extensively diverse undesirable developmental changes in youth are poor parenting and parental conflicts. The undesirable developmental outcomes are conduct problems, delinquency, drug use, and academic failures. Evidence reviewed by

Sanders (2003) showed that social learning approaches of parental interventions are highly effective. However, they have noteworthy limitations as far as their extent of population reach is concerned that obviously undermines their utility. To bridge this gap, an extensive targeting approach was made to disseminate the most effective evidence-based family interventions that included worksites at basic institutions, primary care services, media, and schools. Empirical evidence was also reviewed to identify most effective 'Positive Parenting Programs' as interventions. This review indicated highly significant effects across several variables of both parents and children (Sanders, 2003).

Very few studies have verified the mediation of self-control in respect of the impact of parenting style on children's delinquency beyond Western traditions and cultures. This study examined the applicability of Gottfredson and Hirshchi's self-control theory in Asian contexts by using a sample of 882 South Korean adolescents studying in middle and high schools. Structural equation model analyses demonstrated that association among parenting styles, adolescent self-control, and adolescent delinquency applies in South Korean culture too. Parenting style had an indirect impact through the mediation of self-control on adolescent delinquency. The study outcome demonstrates the existence of gender differences in the relationships among parenting styles, adolescent self-control, adolescent behavioral problems, and adolescent delinquency. Thus the study supports the cultural invariance of Gottfredson and Hirshchi's self-control theory. However, the researchers of this study recommend more studies to further validate the theory (Jo & Zhang, 2014).

3.2 Addressing adolescent aggression and violence through the intervention of yoga

Despite the increasing popularity, yoga has been mostly limited to a narrow segment of the society. There is a clear skew towards high income/high education groups, white collar jobs.

Further, despite the tall claims made by the Indian traditional texts on the positive effects of yoga on adolescent delinquency, not much has been researched and cross checked, particularly in the Eastern context. This could be because yoga therapy involves good expertise to teach yoga and the cost of employing the trained/certified yoga teachers in studies is also very high. But in the recent past, some efforts have gone into in this direction, and following section is an effort to bring out what has been done.

The three limbs of yoga are *āsana*, *prāṇāyāma* and *dhyāna* (meditation) and three limbs are proved to be effective in increasing positive affect and reducing negative effect (Nagendra H.R., 2000). One of the studies examined the effectiveness of mindfulness-based meditation program on aggression and its effect on quality of life on subjects (aged 18-25 years, who were able to read and write Kannada/Hindi/English) who had expressed difficulty in managing their aggression. The Buss-perry aggression questionnaire was used to measure the aggression scores. The intervention was for one month, each day's session was for 40 to 60 minutes. At the end of the study period, the subjects reported continuous feeling of well-being. They also reported improved personal relations with others, ability to recognize their reflections and better relaxation during distress. They felt reduced urge to resort to smoking during distress. One of the important limitations of the study is that there were no female subjects in the sample. The men and women have different temperaments and tolerance levels and the effect on men cannot be extrapolated to women. This research gap needs to be addressed by the future studies say the researchers of the present study (Manoj Kumar Sharma, Mahendra Sharma, 2016). Yoga intervention normally includes *āsana* practice and *prāṇāyāma* also. However, these aspects of yoga do not find a place in the present study.

Yoga has found to be effective in improving mood and psychological well-being. In one of the randomized, double-blind research study, subjects (males 88, females 72; all less than 60 years of age) were recruited from Engineering Department of a private organization (Pune) in

IT sector. The intervention was yoga for yoga group and PE for control group, for ten weeks, five days a week, one hour a day. The variable measured was 'Counter Productive Work Behavior', using CWB-C scale containing 45 items. At the end of the study period, the RMANOVA indicated that aggression levels reduced and PA increased significantly in the yoga group (Dwivedi. Sony Kumari. Akhilesh., 2015). But one important limitation of the study is that, though the data was available, the study has not verified the gender differences on the scores measured. Males and females do not behave identically in a given situation, and the study should have addressed this issue. Further, the impact of yoga on different types of aggression (covert or overt, verbal or physical) has not been studied.

Among the abnormal conduct, human aggression seems to be highly ubiquitous, distressing and influencing everyone. Unrestrained aggression and violence may cause an enormous toll on our society, affecting both the involved as well as the uninvolved. This deviant human conduct is highly discussed in Indian yogic scriptures which offer a notional construction to identify the causal factors, unfavorable impact, the necessity of peace and harmony, and methods to correct the delinquent behavior. Further, Indian scriptures also claim that yoga is the way for internal bliss and external consistency; and with this established technique, a sense of emotional constancy can be brought about. In their review paper, authors have brought out the studies where yoga intervention significantly demonstrated the positive changes in human aggression and violent conduct from the baseline scores (GovindarajaSetty et al., 2016).

This study examined the effectiveness of short duration practice of yoga on school children's (n=100) cognitive function and attitude towards violence. The subjects were randomly assigned to two groups: Yoga group and control group. The intervention for yoga group was ten days' of yoga. The outcome revealed that yoga intervention brought out significant positive changes in cognitive function. However, no significant result was noticed in attitude

toward violence (Reddy, 2015). The reason that could be attributed to lack of significant change in attitude towards violence scores is very short yoga intervention period (10 days), and the researchers have recommended for a detailed study to bring about tangible results.

Another study examined the verbal aggressiveness before and after eight weeks' yoga practice by using the self-reported verbal aggressive scale on 173 male participants (aged < 25 years). The paired sample t-test showed that baseline scores of the two groups were similar. Yoga group showed a significant decrease in verbal aggressiveness as compared to control group, thus demonstrating that eight weeks yoga intervention lowers verbal aggressiveness as against physical exercises (Deshpande, Nagendra, & Raghuram, 2008b). One important deficiency is that the study considers only verbal aggressiveness and there is need to clearly spell out the different kinds of aggressiveness, and overt aggressiveness may be addressed through the intervention of yoga.

The recent studies have demonstrated a clear escalation in stress impact on the younger generation. As against this, a few preventive intervention programs are offered for children that are mostly addressing stress-handling techniques aimed at behavioral corrections. This study offered yoga intervention covering relaxation techniques and measured self-control and stress-handling. Pre-post comparison at three-time points demonstrated that there was increased level of emotional balance, reduced levels of fear, helplessness, and aggression post intervention of yoga. Further, these changes were noticed beyond school situations (Gloeckner, 2005). Extant aggression literature has clearly established the difference between aggression and violence and effect of yoga on different kinds of aggression and violence needs to be understood. Thus the researchers have recommended for addressing this research gap in future research studies.

In another pre-post test, the effect of yogic exercises on different types of aggression was measured through ANOVA repeated measures. The study used a comprehensive package of counseling techniques on a sample of 100 school students (50 boys, 50 girls; aged 14 to 17 years) in Shimla District of Himachal Pradesh, India. The study showed that main impact of sex, group, and treatment was significant at .05 and .01 levels; and interaction effect of group, gender, and treatment showed a significant effect of yoga intervention on aggression levels (Sharma, 2012). Even in this study, the researchers have not brought out effect of yoga on different kinds of aggression/violence. The effect of yoga on one kind of aggression need not be the same on other kind, and thus, this gap needs to be addressed.

It is observed from many of the research studies that children from poor socioeconomic surroundings are at an increased risk of behavioral problems. This study verified the effectiveness of yoga intervention on children studying in poor-socioeconomic schools in Bogota, Colombia, in order to address aggression, anxiety, and depression. The subjects were randomized into two groups: yoga group and control group. The intervention was given to students (n=125, 5th, 8th, and 9th grades) twice a week for 12 weeks. Qualitative analysis was done on students' perceived beneficial effects from the interventional program. The outcomes showed that the yoga intervention could reduce adolescents' anxiety and aggression levels (Ana MariaVelasquez, MariaAdelalidaLopez, 2015). Besides aggression, 'Violent attitude' is said to be the latent inclination variable towards violence which is steered by one's evaluation. Thus, aggressive acts and violence are mostly dependent on one's violent attitude. This positive attitude towards violence can be the right predictor of aggressiveness or violence levels. Thus there is clear research gap that can be addressed in future studies.

Modern medical science is truly offering us solutions to deal with external injuries. However, the life-style disorders and stress are truly taking a toll on the people. This study examined the role of yoga in addressing the stress, enhancement of life satisfaction, and verbal

aggression. A total of 148 participants belonging to both genders were randomly allocated to yoga and control groups. The intervention for the yoga group was the practice of *āsanas*, *prāṇāyāma*, meditation, and lectures for one hour a day, six days a week, for eight weeks, whereas, the control group was just doing their regular work. The data on perceived stress, life satisfaction, and verbal aggression was analyzed pre and post intervention. The study results revealed that one's perceived stress and verbal aggression in the yoga group (experimental group) decreased significantly, whereas significantly enhanced in control group that was given no intervention. Further, life satisfaction increased in yoga group but decreased in control group. Thus the study supported the existing body of knowledge that yoga reduces perceived stress and verbal aggression and increases life satisfaction (Amaranath, Nagendra, 2015). The research study has considered only the verbal aggressiveness, and there is a need to know the effect of yoga on other kinds of aggression and violent behavior.

This study aimed at examining the effect of yoga on adolescent aggression. The subjects (n=30, studying B.A. and B.Sc.) were from Dev Sanskriti University, Haridwar, India. The yoga intervention was for 25 days. The aggression scale designed by Km. Roma Pal was used in the study. The study demonstrated a significant decrease in post aggression and anxiety levels compared to base line scores on 0.01 significance level (Singh, 2015). One clear research gap is that the study has not recognized different kinds of aggression or violent behavior.