CHAPTER 1: INTRODUCTION

Aggression in schools is one of the most pressing issues in the current generation. Aggression is generally defined as a behavioural act that results in hurting or harming others. Berkowitz (1993), defined aggression as a behaviour directed toward the goal of harming or injuring another living being, where the other person will be motivated to avoid the harm. This study identifies three different types of aggression using Direct-Indirect Aggression scale (Bjorkvists et al., 1992). Direct, indirect and verbal aggression. Children engaging in direct aggression usually display it in terms of being physical, like hitting, kicking, punching, biting and so on. Indirect Aggression is shown by exclusions, social isolations, spreading rumours, telling other’s secret and so on. Verbal aggression is displayed by using bad words, abuses, threatening others, calling names and so on.

Aggression is also commonly viewed as being proactive or reactive; covert or overt (Werner and crick, 2004). Children engaging in Proactive aggression typically use aggression to meet a goal. For example, if the child wants to have an object that belongs to another child, the proactively aggressive child will simply use aggression to take the object from the other child. These children use aggression to obtain social goals (Dodge, 1991). Reactively aggressive children on the other hand, do not seek to meet goals through aggressive behaviours. Instead they react negatively to perceived or actual threats and are easily irritated. (Lochman et al., 2009). This study takes into account the proactive ways of aggression, in all the three forms, i.e. direct, indirect and verbal aggression, where the aggressor has an intention of obtaining some tangible or intangible social goals in the process. And also reactive aggression, where a child in the intention of avoiding harm or securing oneself reacts in an aggressive way, which shows up as aggressive behaviour. Therefore in this study more than the intention or emotion behind it, the act of aggression, either proactively or reactively is considered.

Aggression is related to mental health problems in children, including externalizing disorders as Oppositional Defiant Disorder and Conduct Disorder, along with internalizing problems with Depression and Anxiety (American Psychiatric Association, 1994). Aggression is therefore seen as a dysfunctional aspect of a Child’s development and growth. Aggression is seen as a continuity from externalizing behaviour problems in childhood to risk taking behaviours in adolescence (Thompson et al., 2011; Nagin et al., 2003). Therefore it becomes very crucial to identify the problem behaviours early in the school age and provide
appropriate prevention mechanisms. Researchers in the west have shown that many of the aggressive symptoms and precursors of later aggressive behaviours and violence is evident in early childhood behaviours, which would be of milder forms (Tremblay, 2000). The studies have clearly indicated that aggression is a problem which continues through the adolescence and adulthood and hence it is just not a problem at that point of time.

A. THEORIES OF AGGRESSION

Anderson and Bushman (2002), in their article ‘Human aggression’ have given five main theories of aggression which they say guide most of the current research which mostly fall under cognitive and learned response theories.

Cognitive Neoassociation Theory

Berkowitz 1989, (as cited in Anderson and Bushman, 2002), has proposed a theory that negative feelings and experiences are the main causes of anger and aggression. He has proposed that negative affect produced by unpleasant experiences automatically stimulates various thoughts, memories, expressive motor reactions, and physiological responses associated with fight and flight tendencies. The fight associations give rise to feelings of anger, whereas the flight associations give rise to feelings of fear. Furthermore, this theory assumes that the situational cues which come into play during an aversive event becomes associated with the event and the cognitive and the emotional responses gets influenced by the cues present at that time.

This model is particularly suited to explain hostile aggression. It also includes higher order cognitive processes of appraising a situation and attributions made to it. Therefore the interpretations a person has on the motives of the people involved for him to act aggressively also makes it accessible to him to act on aggression.

Social Learning Theory

According to social learning theories (Bandura 1973), people acquire aggressive responses the same way they acquire other complex forms of social behaviour – it is by either observing directly or by observing others or imitating others, which they term as ‘modelling’. It could therefore be observational learning or vicarious learning. Social learning theories explains the
acquisition of aggressive behaviours, via observational learning processes and it provides a useful set of concepts for understanding and describing the beliefs and expectations that guide social behaviour. It could also be learnt through vicarious learning where, the child who observes others getting reinforced or rewarded for aggression learns to imitate the model who gets rewarded.

**Script Theory**

Huesmann (1986, 1998) proposed that when children observe violence in the mass media, they learn aggressive scripts. Scripts define situations and guide behavior. The person first selects a script to represent the situation and then assumes a role in the script. Once a script has been learnt, it might be retrieved at some later time and used as a guide for behaviour. This approach can be seen as a more specific and detailed account of social learning processes.

**Excitation Transfer Theory**

Excitation transfer theory (Zillmann, 1983) notes that physiological arousal dissipates slowly. It says that if there are two separate events which induce arousal and it is separated by a short amount of time, the first event may be misattributed to the second. If the second event is related to anger, then the additional arousal should make the person even angrier. The process of excitation transfer also suggests that even after the situation has passed, the anger may be extended over long periods of time if a person has consciously attributed his or her heightened arousal to anger. Thus, even after the arousal has dissipated the person remains ready to feel aggressive for as long as the self-generated label of anger persists.

**Social Interaction Theory**

According to Social interaction theory (Tedeschi & Felson 1994), an individual gets into coercive actions when he or she feels that they have been wronged or not given justice which may lead to grievance. The individual any then attempt to restore justice by absolving the other party of blame or by claiming restitution. The other party might also get into the same behaviour or engaging in a similar decision making process in responding to the claim. This leads to a character contest, which can escalate and lead to interactants attempting to manage impressions, save face and maintain certain desired identities. Tedeschi and Feson (1994), argue that certain behaviours are scripted or they would have become habitual, and therefore rationality in actions can be limited by strong emotions, in some cases even alcohol and drugs
create the same effect, or even the urgency to make a snap decision. They therefore say that social groups and larger social structures always have an implication in our social behaviour, including violent behaviours.

The above theories give us a broad understanding of the various theoretical perspectives of the aggressive behaviours through which it could be understood. These theories help us to get a deeper understanding of the various ways through which an aggressive act can come into play.

The present study has taken the GAM as the foundation to understand the various influences for aggressive behaviour.

**General Aggression Model (GAM):** The aggression in children could be looked into in our present study from the perspective of GAM (Anderson and Bushman, 2002). General Aggression Model is a social cognitive model that includes situational, individual and biological factors that interact to produce a variety of cognitive, emotional, physiological and behavioural outcomes. The key features include the ideas that knowledge structures (a) develop out of experience; (b) influence perception at multiple levels; (c) can become automatized with use; (d) can contain affective states, beliefs and behavioural program; (e) are used to guide people’s interpretation and behavioural responses to their social environment.

Three relevant sub types of knowledge structures are (a) perceptual schemata, which helps to identify phenomenon, both simple and complex; (b) person schemata, which includes beliefs about certain groups and or persons; (c) behavioural scripts, which contain information about how people behave under varying circumstances. A knowledge structure contains links to experiential affect, like when a knowledge structure of anger is activated, anger is experienced. They also include knowledge about the affect, such as when a particular emotion is experienced, how emotions influence people’s judgement and behaviour, and so on. It also contains a script which may include affect as an action rule, for example, a person insult script may prescribe aggressive retaliation if only anger is at high level or fear is at low level.

GAM focuses on the ‘person in the situation’ called an episode, consisting of one cycle of an ongoing social interaction. The three main concerns are (a) person and situation inputs; (b) cognitive, affective, and arousal routes, through which these input variables have their impact; and (c) outcomes of the underlying appraisal and decision processes.
The inputs according to the author can be person factors, like attitudes, personality traits, genetic predisposition, sex, beliefs, and values and so on. Situational factors could be aggressive cues, provocation, frustration, pain and discomfort, and incentives. Routes can be through cognition via hostile thoughts and scripts; it could be through affect, via mood and emotion, and expressive motor responses like arousal. And the outcomes include immediate appraisal of the situation, which is automatic, which is relatively effortless, spontaneous and occurs without awareness.

The present study takes into consideration the General Aggression Model to understand the processes of aggressive behaviour which leads into certain behaviour and outcome. As seen in the model, the aggressive child has an inbuilt knowledge structure, which is supported by the script stored in the structures and influenced by other variables like personal and situational factors. This study therefore tries to understand the aggressive behaviour in children, where the study does not have any control on the person or the situational factors, but tries to understand the influence of the situational variables (home and parents) which can lead the child to store certain scripts in the schemata, displayed through certain ‘routes’, like aggressive thoughts and feelings, and the outcome which could be automatic leading to displayed aggressive behaviours.

**B. FACTORS OF AGGRESSION**

A wide spectrum of factors has been associated with the development and persistence of aggressive behaviour in children. Theoretical models of developmental psychopathology, including the development of aggressive behaviour are multi-factorial: Child, parenting, familial and extra-familial variables are related to problem behaviours in children. Below are the variables which have been studied in the west largely

**CHILD TEMPERAMENT**

Temperament has been conceptualized as a set of inherited personality traits that appear in infancy (Buss and Plomin, 1984). A child’s temperament usually describes the way in which the child behaves and reacts to others. It is an inbuilt part of a person’s nature. Many researchers have revealed the relationship between early temperamental disposition and behaviour problems later in life (Olweus, 1980; Kingston and Prior, 1995). In these studies it was seen that a child with a ‘hot-headed’ temperament developed into an aggressive youngster compared to a child with a ‘quieter’ disposition (Olweus, 1980). Temperament
predicted the way parents react to the child, their approach and parenting styles. Therefore temperament in childhood was seen as an important predictor for later behaviour problems either directly through uncontrolled behaviour later or indirectly through parental stress and perceived negativity about the child.

**FAMILY FACTORS AND FAMILY FUNCTIONING**

Literature shows that family factors play an important role in developing aggression in children. Studies indicate that lack of supervision, parental rejection, parent-child involvement. Also important predictors are marital relations and parental criminality (Loeber and Stouthamer-Loeber, 1986). Research shows that family history of criminality is a strong predictor of aggression in children and antisocial behavior in youths. Farrington (1995) has shown family history of family criminality, that children are more likely to become delinquent if one or both parents have been involved in crime, or if they have a sibling, who is, or was, delinquent

**PARENTAL STRESS**

The effect of socio demographic variables such as poverty and unemployment is mediated through, and has its effect on, parent-child interactions through causing increasing levels of parental stress. It is seen that a longitudinal reciprocal effects emerged between parenting stress and externalizing behaviours and there was an indirect effect that suggested that parenting stress both is affected by and affects parent and child behaviour (Mackler et al., 2015). This could be so because parenting stress may impair the quality of parenting and lower the threshold of parental reaction to child misbehaviour. Studies show that single parenthood, divorce, reconstituted families, poverty, maternal depression, alcohol and substance abuse, all have been positively related to children’s aggressive behaviours.

**PARENTAL DISCIPLINING STYLES**

Studies have identified four major parenting styles: Authoritative, Authoritarian, permissive and neglectful parenting styles. It has been researched that authoritative parenting, which is characterized by parents who are nurturing and responsive, but still hold high expectations for behaviour, is the most successful in raising children who are both academically and emotionally strong. Therefore the way the parent approach their child in terms of discipline, communication, negotiation has taken a very important place in the research area.
MARITAL CONFLICT/DISCORD

Marital discord or conflict between parents has been extensively researched to evaluate the impact on children. It has been studied that children from homes who witness domestic violence are more likely to exhibit borderline to severe behaviour problems, had low adaptive behavioural skills (Mathias, Mertin, & Murray, 1995). It is also seen that conflict and discord has been studied under various hypotheses like exposure hypothesis, Emotional Security Hypothesis, Spillover Hypothesis, where conflict has been studied to have an indirect impact through parenting styles of the parents and hence affecting the externalizing or internalizing behaviour of children.

ANTISOCIAL PARENT ATTITUDES

One of the contributing factors for aggressive behaviours, conduct disorders or antisocial behaviour in children and adolescent also is seen as antisocial parent attitudes (Farrington, 2005; Smith and Farrington, 2004). The studies show that there is a continuity of antisocial attitudes and behaviours from parents to children and it is mediated by parenting variables.

POOR PARENTAL SUPERVISION

Parental supervision is an aspect of parenting which involves looking after, or monitoring a child’s activities. It is about knowing where your children are, what they are doing and who they are with. The authors of parental monitoring and prevention of problem behavior, Dishion & McMohan (1998) in their article propose that parental monitoring or supervision is particularly relevant to prevention science because of its critical role in the behavior change process and the fact that it is a potentially malleable parenting behavior. They say that adequate parental monitoring is necessary but not the sufficient condition for effective parenting and improved adaptation for the child. It serves as a protective factor for children living in high risk settings. Farrington (1995) has quoted that one of the predictors of delinquency at ages 8-10 were poor parental supervision, along with other factors like family history of criminality, low family income, harsh and authoritarian parenting.

PEERS

Peers, as a factor, influencing aggression in children have been studied extensively by researchers in the West. A study by Dodge et al., (2003) has highlighted the finding that being rejected by peers in early elementary school plays an incremental role in the later development of aggressive behaviour problems. In addition these findings support the
hypothesis that this effect is moderated by a child’s disposition towards aggression. They say that mere peer rejection does not serve as an early marker of later behaviour problems. They also say that social rejection or peer rejection acts as a stressor to exacerbate antisocial development only among children who are initially predisposed towards aggression. Among the children who are below the median in the initial levels of aggression, the experience of social rejection does not increase aggressive behaviour nor does it exacerbate withdrawal. They also concluded that a significant portion of peer rejection is accounted by the child’s tendency to develop biased patterns of processing social information processing as a consequence of being rejected by peers.

It was also seen that rejection and friend’s relational aggression predicted increases in relational aggression in girls, whereas, rejection and friend’s physical aggression predicted increases in boy’s physical aggression (Werner and Crick, 2004).

A longitudinal study by Cowen et al., (as cited in Dodge et al., 2003)) also which predicts peer sociometric status as a mark of later antisocial outcomes.

NEIGHBOURHOOD

It has been researched in the west that children from disadvantaged neighbourhoods are more prone towards aggression during childhood. Therefore there are many research conducted to find a consistent relationship between high risk neighbourhoods and children’s later conduct problems.

Ingoldsby & Shaw (2002) have in their paper suggested that middle childhood may represent a critical developmental period during which children are at heightened risk for neighbourhood based effects on antisocial behavior problems. Vanfossen et al., (2010) in their study have highlighted the findings that the neighbourhood sources of the development of child aggression are independent and different from early childhood experiences. Problems with neighbours were associated with an increased risk for being a bully-victim over and above the socioenvironmental factors and children’s behaviour problems (Bowes et al., 2009).

MEDIA AND GAMES

Huesmann et al., (2003), has done a study on longitudinal relations between children’s exposure to TV violence and their aggressive and violent behavior in young adulthood. It was a follow up of the 3 year longitudinal study conducted by Huessmann and his colleagues. The
results of the study revealed that early childhood exposure to TV violence predicted aggressive behaviour for both males and females in adulthood.

Research in this area has consistently shown that television and media violence contribute to both short-term and long-term increase in aggression and violence in young viewers. It has also been researched that video games are capable of producing short-term increase in aggression and violence, but not many long-term longitudinal studies have been conducted to demonstrate the long term effects.

The above shown are some of the factors having a relationship with aggression that have been well researched in the past in the west. Taken from the researches in the Western counterparts, the present study tries to find the influence of factors related to family and home, like parenting styles, supervision, marital conflict resolution tactics, television watching and gaming habits on the display of aggressive behaviour of children in elementary schools.

The next section provides an insight into the variables that have been chosen in the present study and its relevance and meaning taking the past researches and theoretical models into consideration.

C. FACTORS CHOSEN FOR THE STUDY

The factors which are considered in this study to have an influence on the aggressive behaviour of children are discussed in the following section.

**Parenting styles:**

It is seen in the past literature, mostly in the Western studies, parenting styles is one of the variables studied very vastly in relation to child’s positive or negative behaviour. The present research has chosen Baumrind’s (1967, 1971) classification of parenting styles, which is categorised as Authoritative, Authoritarian and Permissive parenting styles in the Parenting Styles and Dimensions Questionnaire (PSDQ, Robinson et al., 1995), to understand its relationship with aggressive behaviours in children. Baumrind (1966) in her classification describes that *authoritative* parents are those who attempt to direct the child’s activities in a rational, issue oriented manner. They encourage verbal give and take, share with the child the reasoning behind their policy, and solicit his objections when he refuses to conform. The authoritative parent affirms the child’s present qualities, but also sets standards for future
conduct. As cited in Pettit et al., (2001), Authoritative parents promote psychological autonomy, yet firm in establishing behavioural guidelines. They are lesser on psychological control and higher on behavioural control, whereas Authoritarian parents are high on demandingness accompanied by low levels of warmth and psychological autonomy. They attempt to shape, control and evaluate the behaviour and attitudes of the child in accordance with a set standard of conduct, usually an absolute standard. Parent values obedience as a virtue and favours punitive, forceful measures to curb self-will at points where the child’s actions or beliefs conflict with what she thinks is right conduct. Parent believes in keeping the child in its right place, in restricting the autonomy, and believes that the child should accept her word for what is right. Permissive parent according to Baumrind (1971), attempts to behave in a non-punitive, acceptant, and affirmative manner toward the child’s impulses, desires and actions. They consult with him on policy decisions and gives explanations for family rules. They allow the child to regulate his own activities as much as possible, avoid the exercise of control, and do not encourage him to obey externally defined standards. They attempt to use reason and manipulation, but not overt power, to accomplish their ends. A permissive parent is low on psychological control and behavioural control according to the author.

Parenting Style and Dimension questionnaire (PSDQ), with 62 items evaluated using 5 points was used for fathers and mothers to evaluate their attitude to frequency of their child’s behaviour, aiming to understand their parenting styles. Three parenting styles, authoritative, authoritarian and permissive styles were further divided into 11 dimensions or factors. Authoritative parenting included 27 items which were divided into 4 factors: (a) warmth/involvement (i.e., give praise when child is good), b) reasoning/induction (i.e., explains the consequences of child’s behavior), c) democratic participation (i.e., allows the child to give input into family rules), d) good nature/easy going (i.e., shows patience with the child). Authoritarian parenting included 20 items which were further divided into 4 factors: a) verbal hostility (i.e., explodes in anger towards the child), b) corporal punishment (i.e., uses physical punishment as a way of disciplining the child) c) non-reasoning/punitive strategies (i.e., punishes by taking away privileges with little explanation if any), d) directiveness (i.e., tells the child what to do). Permissive parenting included 15 items (among of which 3 were reverse scoring) which was divided into 3 factors: a) lack of follow through (i.e., states punishments to the child and does not actually do them), b) ignoring misbehavior (i.e., allows
the child to annoy someone else), c) self-confidence (i.e., appears unsure on how to solve the child’ misbehavior).

Parenting style in the Western literature has in itself different dimensions and typologies, as quoted by Skinner, Johnson and Synder (2005), that parenting researchers have repeatedly suggested that three dimensions can be considered as a set of core features of parenting style. They are Warmth vs. Rejection, structure vs. Chaos, and Autonomy vs. Coercion. According to Skinner et al., (2005), in his motivational model, the key aspect is that interacting with parents who support children’s basic psychological needs serves as an energetic function. The children thus supported by parents are motivated to constructively engage with parents, to cooperate with the parental agenda, and to internalize the behaviours and values promoted by the parents. These children, they say, are ready to be socialized. In contrast, children whose parents are hostile, chaotic, and coercive become disaffected from parent. In other words, they resist socialization. Their motivational model emphasizes that compared to three bipolar dimensions, six dimensions better reflect the dimensionality underlying parent and child report of warmth, rejection, structure, chaos, autonomy support and coercion. They concluded that parenting constructs are of multiple dimensions (Unipolar), which provided a better fit than the traditional bipolar models.

Darling and Steinberg (1993), proposed an integrative model, where they say that parenting style is best conceptualized as a context that moderates the influence of specific parenting practices on the child. They argue that only by maintaining this difference between parenting style and parenting practices can researchers address questions concerning socialization process. They say that researchers have argued that the values parents hold and the goal towards which they socialize their children are critical determinants of parenting behaviour. The socialization goals include the child’s acquiring specific behaviours and skills and their acquiring global qualities like curiosity, critical thinking, independence and so on. Darling and Steinberg propose that the attributes of parenting influenced by the goals, wherein goals include both the child’s acquisition of specific skills and behaviours and the child’s development of more global qualities, are at least of two distinct types: Parenting styles and Parenting practices. They postulated that in order to understand the processes through which parents influence their children’s development, researchers should maintain this distinction between practice and styles. They say that practice is behaviours defined by specific content and socialization goals. Attending school meetings or functions and spanking are both examples of parenting practices. They say that parenting practices are best understood as
operating in fairly circumscribed socialization domains, such as academic achievement, independence, or cooperation with peers.

The second class of parenting attributes influenced by parent’s goals and values is parenting style. Parenting style, according to the authors is a constellation of attitudes towards the child that are communicated to the child and create an emotional climate in which parent behaviours are expressed. They include aspects of behaviours that encompass parenting practices as well as other parent child interaction that communicate the emotional attitude. Thus they infer that parenting style is expressed partly through parenting practices, because these are behaviours from which the children infer the emotional attitudes of parents. Their integrative model says that each of these parenting attributes influences the child development through different processes. Parenting practices have a direct effect on the development of specific child behaviours, where parents directly help their child to attain socialization goals. In contrast, the primary processes through which parenting style influences child development are indirect. Parenting style alters the parent’s capacity to socialize their children by changing the effectiveness of their parenting practices. They say that from this perspective parenting style can be best thought of as a contextual variable that moderates the relationship between specific parenting practices and specific developmental outcomes. Therefore they postulate that the extent to which children manifest a particular psychological or behavioural characteristic varies as a function of (a) the extent to which the practices that parents use are correlated with the specific outcome (b) the extent to which the style the parents use is effective to the child in general. Therefore the supporters of this model say that an integrated approach which has both the aspects of parenting has the best results.

Maccoby and Martin (1983), has further updated Baumrinds parenting style by defining parenting style using two dimensions: parental demandingness (control, supervision, maturity demands) and parental responsiveness(warmth, acceptance, involvement). The interaction between the two dimensions produced four distinct parenting styles. A primary difference between Baumrinds parenting style typologies and Maccoby and Martins parenting style typologies is that Baumrind discussed on “permissive” parenting while Maccoby and Martin differentiates between two types of permissive parenting.

Authoritarian parents according to Maccoby and Martin are characterized by high in demandingness but low in responsiveness. Authoritative parents are characterized by high on both demandingness and responsiveness. The two types of permissive parenting as discussed
by Maccoby and Martin (1983) are indulgent parents and neglecting parents. Indulgent parents are characterized by low on demandingness but high on responsiveness while neglecting parents are characterized by low on both demandingness and responsiveness. Indulgent parents are warm, accepting, and tolerant but make few demands for mature behaviours, exercise little authority, and allow children to self-regulate as much as possible. Neglecting parents do not care much of their children’s behaviour and parents are often too preoccupied by their own problems and thus neglect their children. Neglecting parents often neglect their parental responsibilities.

The above parenting dimensions and models show that the area of parenting has a wide spectrum and different typologies that can be studied. The present study has used the parenting style typology of Baumrind (1971), which has been quite popular in the Indian context also, and has been used widely in the Indian studies too.

As seen in the literature review, there are many studies which support that parenting approaches and problem behaviour in children are significantly associated. There are quite a few studies which shows that harsh parenting, corporal punishments, spanking are all positively correlated to child’s aggressive behaviour (Chang, Schwartz et al., 2003; Mulvaney and Mebert, 2007; Brenner & Fox, 1998; Shawna, Inna and Elizabeth, 2013). It is also seen that behaviour control exercised by parents, has a better impact on children than psychological control (Aunola & Nurmi, 2005; Barber et al., 1994; Barber et al., 2005; Hart et al., 1998; Hart, Nelson et al., 1998; Pettit et al., 2001; Bean, Barber and Crane, 2006). It is seen that psychological control was associated with depression in adolescents, and behaviour control by parents was associated primarily with lower antisocial behaviour (Barber et al., 2005). It was seen that monitoring or behaviour control was anteceded by proactive parenting style and psychological control was anteceded by harsh parenting and by child’s externalizing behaviours (Pettit et al., 2001). A negative relationship between parental support and depression and between parental behaviour control and delinquency in adolescents was seen (Bean et al., 2006).

There are also lot of studies available in the West which supports the authoritative parenting as the best in terms of child outcome compared to authoritarian and permissive parenting (Querido, Warner and Eyeberg, 2002; Robison et al., 2005; Dornbusch et al., 1987; Simons & Conger, 2007), Authoritarian and permissive styles were negatively associated with grades, while authoritative parenting were positively associated with grades (Dornbusch et al., 1987).
Having two authoritative parents is associated with the most positive outcomes for adolescents in terms of delinquency, depression and school commitment, and there is evidence that having one authoritative parent can buffer a child from the deleterious consequences associated with less optimal styles of parenting (Simons & Conger, 2007).

To contradict these findings there are a handful of studies which reveals that there has not been a significant association between parenting styles and aggressive or externalizing behaviours in children (Veenstra et al., 2005; Shayesteh, Hejazi, and Foumany, 2014; Elvis Fili 2016; Underwood et al., 2008; Laura McKee, et al., 2008). Therefore the associations between parenting styles and externalizing behaviours are still getting various view points and contradictory evidences in the literature.

There are studies in the Indian context which study adolescent depression and parenting style, Parenting style and academic performance in school children (Sharma et al., 2011; Radhika and Joseph, 2013), which shows there is a significant relationship between authoritarian style and depression, and negative relationship between permissive style and depression and children of authoritative parents have a better outcome on academics than children of authoritarian or neglectful parents. One study by Shayetesh, Hejazi and Foumany (2014) indicated that there is no significant relationship between adolescent aggression and parenting styles. One study by Johal and Kaur(2015), showed that there is a significant positive correlation between aggression among adolescent boys and democraticism of parental behaviour, which means that more freedom, independence and democracy might lead to more aggression in boys and there was a significant positive correlation to aggression in adolescent girls and dominance dimension of parents. A study by Bakhla et al., (2013), found that most of the adolescents perceived their parents ‘Democratic’, high anxiety was significantly associated with female gender and there was a significantly higher anxiety among students who perceived their parents as authoritarian. It was seen that there was a significant difference in the parenting approaches of delinquents to non-delinquents (Moitra and Mukherjee, 2010). They concluded that parenting styles of mothers and fathers were linked to delinquency and authoritative style of parenting was the best approach, whereas neglectful and authoritarian parenting was positively related to delinquency. One study by Sharma and Sandhu (2006), which studied the association between parenting dimensions and externalizing behaviours in children found that correlations between non reasoning, verbal hostility, physical coercion, autonomy and indulgent parenting dimensions and externalizing behaviours were significantly positive, whereas regulation and connection parenting
dimensions showed significant negative correlation with externalizing behaviours. Regression analysis showed that autonomy, non-reasoning and indulgence parenting dimensions predicted externalizing behaviours.

In the Indian context these are the few published studies that have studied the aggressive behaviour in relation to problem behaviour in adolescents and children. So there are definitely not as many studies in India to understand the school aggressive behaviour in children and their association to parenting and home.

**Marital conflict:**

Marital conflict and its influence on child’s development and behaviour has been a topic of interest in the research areas. There are many theoretical and empirical studies which have pointed towards the deleterious effect of intense, consistent and prolonged conflict among parents on children. Marital conflict has been studied under various hypotheses, where the researchers try to identify certain ways through which conflict affect children. One of the hypotheses is Emotional Security Hypothesis by Davies and Cumming (1994) which is built on the attachment theory. They argue that children’s concern about emotional security play a role in their regulation of emotional arousal and organization and in their motivation to respond in the face of marital conflict. Over time these response processes and internalized representations of parental relations that develop have implication for children’s long term adjustment. Emotional security is seen as a product of past experiences with marital conflict and as a primary influence on future responding. They proposed that emotional security is comprised of three main components: children’s emotional reactivity to conflict, regulation of parental affect, and internal representations of marital relations. There are certain studies which has tested this Emotional Security Hypothesis on their outcomes of children behaviour (McCoy, Cummings., & Davies, 2009; Davies and Cummings, 1998; Harold, Shelton, Goeke-Morey, Cummings, 2004; Cummings et al., 2006;) It is seen that children’s emotional security acted as an intervening variable between both constructive and destructive marital conflict and children’s prosocial behaviour (McCoy et al., 2009). Emotional reactivity and internal representations were most closely linked with marital relations and child adjustment, especially with regard to internalizing symptoms (Davies and Cumming, 1998). It was indicated that children’s emotional security about inter parental conflict, mediated the relationship between marital conflict and children’s security about parenting (Harold et al., 2004). In support of Emotional security model, it was indicated that emotional security in the
context of interparental conflict was mediating or intervening process linking interparental discord and subsequent child adjustment problems (Cummings et al., 2006).

Grynch and Fincham (1998), proposed a cognitive-contextual frame work for understanding children’s response to marital conflict. According to the frame work, the features of the conflict that are proposed to have greatest impact on children are its intensity, content, duration and resolution. The frame work proposes that, conflicts of a greater ‘intensity’ cause greater distress to children. The intensity of the conflict may be determined by a number of factors, including the degree of negative affect or hostility expressed, and physical aggression. The ‘content’ of conflicts can vary widely but certain conflicts, such as those concerning the child or the state of marriage may be more upsetting to children than other less threatening topics. They say that although ‘duration’ of conflict episodes have not received much attention in the literature, longer lasting episodes may lead to greater distress for children because they increase the length of time children are exposed to a stressor. They also suggest that conflicts that lack satisfactory resolution may upset children more than conflicts that are successfully resolved. They also propose that although ‘context’ of a conflict may encompass a broad range of factors including the physical setting of the conflict, the psychological aspects of ‘context’ (e.g., child’s memory of past conflicts) may be most important influences on children’s response to marital conflict. Distal context refers to relatively stable or slowly changing factors and includes such elements as children’s memory of past episodes of conflict. Proximal content, in contrast, refers to the thoughts and feelings experienced by the children immediately before their processing of the conflict episode. Therefore this framework give us a broad understanding of the nature of influence of marital conflict on children and their responses which vary depending on the children’s understanding of the conflict, which varies as a function of characteristics of the conflict, contextual factors and the level of cognitive development.

Cummings et al., (2004), proposed an exposure hypothesis in marital conflict and its impact on children’s aggressive behaviours. He examined children’s immediate responding to marital conflict, where he concluded that exposure to destructive conflict tactics and negative parental emotionality increased the likelihood of aggressive behaviour in children when they witnessed a marital conflict, whereas constructive conflict tactics and positive parental emotionality decreased the probability of aggression. Therefore the authors proposed that exposure to conflict have a direct impact on the aggressive responding of children immediately. There are many studies which has tested and supported the exposure hypothesis
which has indicated that being a witness to violence puts a child at risk for a number of serious mental health and other problems, regardless of the socioeconomic status (Straus, 1990a). It has also been analysed that witnesses had significantly worse outcome relative to non-witnesses and children from verbally abusive homes (Katherine, Noni, Aimee, &, Erin, 2003). Young people reporting high levels of exposure to inter parental violence had elevated rates of adjustment problems at age 18. While father initiated violence was associated with anxiety, conduct disorder, property crime; mother initiated violence was associated with later alcohol or dependence behaviours (Ferguson and Horwood, 1998). These studies indicate that more a child is a direct witness to the conflict or violence, worse the outcomes are. Therefore in this context, for a parent to display constructive conflict tactic is the best way to help a child to gain better understanding and control.

There have been quite a few studies in the area of marital conflict and child outcomes supporting the spillover hypothesis, Erel and Burman, (1995), has referred it as the transfer of mood, affect or behaviour from one setting to another (as cited in Katz and Gottman, 1996). This process involves the expression of feelings and behaviour in one system, of feelings that were generated in another system; marital hostility linking to father’s rejecting parenting which predicts child’s aggressive play and husband’s emotional withdrawal from the marriage linking to mother’s rejecting parenting, which predicts child’s internalizing behaviour (Katz and Gottman, 1996). Meta analytic reviews also suggested that there existed a linkage between marital conflict and child outcomes, moderated by parent-child relationships (Erel & Burman, 1995; KrishnaKumar and Breuler, 2000). These meta-analytical reviews suggested that the link between marital and child-parent relations as stable force in predicting child outcomes. A longitudinal study by Gerard, Krishnakumar and Breuler, 2006, had found a concurrent association between marital conflict and youth externalizing problems mediated by harsh discipline and parent youth conflict in both wave 1 and wave 2. The internalizing problems and marital conflict was partially mediated at both waves through parent-youth conflict. It was also suggested that father’s parenting may be more strongly related to internalizing behaviours and mother’s parenting may be more related to externalizing behaviour in boys (Kaczynski et al., 2006). Therefore it is seen that parent gender also moderates the relationship between conflict and child outcomes through parenting behaviours.

Therefore it can be seen that there are direct effect models that suggest that child maladjustment is directly related to the child’s exposure to overt marital conflict which can
impact through child appraisal and reaction to the conflict as discussed in the exposure hypothesis and emotional security hypothesis. And also there are studies which show the indirect effects of conflict through parenting behaviours as discussed above.

In the Indian context there are no published studies in the area of marital conflict and child adjustment and hence it is perhaps in its nascent stage.

The present study has tried to understand the presence of conflict in a couple through Conflict Tactic Scale (CTS original, Straus, 1990a) and its association with school aggressive behaviours in children. CTS Original measures the frequency and intensity of conflict resolution tactics used by couples in the past 6 months as a referent period.

**Parental Supervision:**

Parental Supervision or monitoring is one of the grey areas in research which has not received much of an attention. Although in many ways parenting behaviours and approaches can overlap each other, supervision is a term which is just not parenting but a little more than that. Parental monitoring or supervision is a set of correlated parenting behaviours involving attention to and tracking of the child’s whereabouts, activities and adaptations (Dishion and McMahon, 1998). As quoted by Laird et al., (2003), most often parents of young children obtain their knowledge through direct supervision, however as children grow older, children spend more time outside direct supervision. It therefore becomes important for a parent to shift from in-person supervision to more distal forms of monitoring, like parent initiated conversations about activities and friends, knowing the child’s friends, who they are going with or playing with and so on. The present study has a focus on the middle childhood, where children are slowly drifting away from direct supervision approaches. Hence, the aim of this study is to understand the ways in which supervision practices are carried in the present context in terms of knowing, communicating, sharing, and knowledge of the child and so on. Dishion and McMahon (1998), in his conceptual and empirical formulation has quoted that parental monitoring or supervision and child problem behaviour has been established in three areas, namely, safety and injury, antisocial behaviour and substance abuse. There are a few studies in the West which shows that early monitoring habits among parents have a positive influence on the child in the later years also (Petit et al., 2001). It is seen that decreases in knowledge about adolescents lead to increase in parent-reported delinquent behaviour. It was seen that parental knowledge appears to inhibit adolescent’s future involvement in delinquent behaviour (Laird et al., 2003). Stattin and Kerr (2000), made a suggestion that tracking and
surveillance was not the best prescription for parental behaviour, but a new prescription should rest on an understanding of the factors that determine child disclosure. Therefore they suggest that a part of the monitoring or supervisory practices rest on the parent effort, and a part also come from child’s spontaneous and willing divulgence of information.

Many of the empirical studies focus on the parental supervision and its outcome on adolescent behaviours (Jacobson & Crockett, 2000; Pettit et al., 1999; DiClemente et al., 2001; Borawski et al., 2003; Dishion & McMahon, 1998; Clark, Thatcher and Maisto, 2005; Li, Stanton, Fiegelman, 2000; Daniel et al., 1999; Ary et al., 1999) It was seen that parental monitoring had strong associations with all the indicators of adjustment for both boys and girls, (sexual activity, depression, minor delinquency, grade point average), except for boy’s depression (Jacobson & Crockett, 2000). Unsupervised peer contact, lack of neighbourhood safety, and low monitoring incrementally predicted grade 7 externalizing behaviour (Pettit et al., 1999). It was seen that adolescents perceiving low parental monitoring were more likely to have a sexually transmitted disease, have risky sex partners, use marijuana more often, greater alcohol consumption, have a history of arrests and tend to be more violent (DiClemente et al., 2001). In males, high parental monitoring was associated with less alcohol use and consistent condom use (Borawski et al., 2003). Adolescents with inadequate supervision were significantly more likely to drink alcohol in a variety of situations and more likely to have Alcohol Use Disorder (AUD) in the initial assessment (Clark et al., 2005). Parental monitoring was inversely related to unprotected sex, drug use and drug trafficking cross-sectionally and longitudinally (Li, Stanton, Fiegelman, 2000). Those spending unsupervised time with peers reported higher levels of aggression, delinquency, substance abuse and susceptibility to peer pressure, and lower levels of parental monitoring, than did adolescents at home with parents (Daniel et al., 1999). Poor parental monitoring, and association with deviant peers were strong predictors of engagement in problem behaviours such as substance abuse, antisocial behaviour, academic failure, and risky sexual behaviour in adolescent boys (Ary et al., 1999)

From all the above studies we can understand that there are a lot of studies supporting the inverse relationship with high parental supervision and adolescent problem behaviours like drug abuse, substance abuse, trafficking, violence, aggression, delinquency and so on.

It is also seen in some of the studies that it is very important to begin the practices of supervision early in childhood, continuing into adolescence as a preventive medicine against
delinquency and antisocial behaviours in adolescence (Patterson and Stouthamer-Loeber, 1984; Loeber and Stouthamer-Loeber, 1986; Laird, et al., 2003; Eaton et al., 2009; Fischer, 1983; Hoeve et al., 2009; Cookston, 1999; Li, Stanton, Fiegelman, 2000; Reid and Patterson, 1989; Farrington, 2005). They have consistently shown that parental supervision, parental rejection and parent-child involvement are the most powerful predictors of juvenile behaviour problems and delinquency. Hoeve et al., (2009), found that the strongest links for delinquency were from parental monitoring, psychological control and rejection and hostility from parents. Neighbourhood crime rates were found to moderate the effects of supervision on children’s behaviours, peer relations, locus of control and language achievement. Children with low supervision and dangerous neighbourhood showed lower self-efficacy. (Coley and Hoffman, 1996). It was seen that for boys both low and medium levels of supervision indicated higher problem behaviours, while for girls it served as a protective factor against problem behaviours (Cookston, 1999). Irritable, ineffective discipline and poor parental monitoring were the most proximal determinants of the early development and maintenance of antisocial behaviour (Reid and Patterson, 1989). The major early risk factors for antisocial behaviour include impulsiveness, low intelligence and low school achievement, poor parental supervision, child physical abuse, punitive discipline parental conflict, antisocial parents (Farrington, 2005).

From the above empirical studies it can be seen that parental supervision in early childhood is one of the very stable predictors of later antisocial behaviour or delinquency, and also it serves as a protective factor against problem behaviours in children.

**TV watching and Aggressive behaviours in children**

TV watching and its influence on aggressive behaviours in children has been an area which has been well researched in the past decade. There have been a lot of theoretical and empirical studies which points out to the direct relationship between TV watching among children and aggressive behaviours displayed by them. The present study also explores the relationship between the duration of TV watching and contents watched and the aggressive behaviours displayed in children in schools. For this, the researcher designed a survey questionnaire, administered to the parent and the child to understand the TV watching habits of children. Since there has been a lacunae in the published studies in this area in the Indian set up, the present study has framed a null hypothesis to understand the association between TV watching and aggressive behaviour in children.
There are certain very prominent theoretical researches that lead the path into this research and Huesmann (1986, 1988) has been one of the pioneers in this area of research which is briefly discussed below.

Huesmann (1986), (as cited in the book, aggressive behaviour: current perspectives), developed the information processing theory intended to explain the stability of aggressive tendencies overtime and the role of media violence in promoting aggressive behaviour. Huesmann’s theory adopts the premise that social behaviour is controlled to a great extent by programs for behaviour that are established during a person’s early development. These programs are described as cognitive scripts that are stored in a person’s memory which are stored in the person’s memory and are used as guides for behaviour and social problem solving.

According to Huesmann, the process through which scripts are formed is a learning process involving both observational and enactive components. He theorized that primary learning processes is one in which the child observes sequences of behaviour by others and encodes these sequences into a cognitive script. This he called it as observational learning. The secondary process occurs when the child utilizes this script to guide his or her own behaviour and is reinforced for the resulting response. They say that these processes may alter the structure of the script, affect the strength with which it is encoded, and its connections to other elements in the child’s cognitive schema. Cognitive rehearsal of the script will also strengthen its encoding and connectedness.

According to this theory it is clear that the child’s observation of dramatic or real violence in childhood could contribute to the construction of lasting cognitive structures that would affect the child’s behaviour in adulthood and when he or she was grown.

Huesmann (1986), formed a developmental theory to account for the linkage between increased exposure to media violence and increased aggressive behaviour. It is argued that the effect of media violence on individual differences in aggression is primarily the result of a cumulative learning process through childhood. Aggressive scripts for behaviour are acquired from observation of the media violence and aggressive behaviour itself stimulates the observation of media violence.

The proposed model describes how the reciprocal process, once started, can become self-perpetuating, with more and more aggressive scripts learnt and employed. They say that the parents play an important role in dampening the cycle once it starts. Parents can intervene to
moderate their child’s viewing, to convince their children that the violent solution to social problems portrayed on television is not realistic and that the violent television heroes are not the ones that the children should emulate. This would reduce the likelihood that the children would encode the aggressive scripts they see. Parents could also intervene to help children learn prosocial scripts that will compete with the aggressive scripts as guides for behaviour. They concluded that, however, that while parents’ behaviour, the child’s sociocultural environment, and many other factors contribute to both the child’s aggressive behaviour and the child’s television habits, none if these variables can ‘explain away’ the relation between violence viewing habits and aggression as an artefact or unimportant to the development of long lasting aggressive habits.

The above models of Huesmann, helps us to understand the impact of media on children, both short term and long term and the need to have parental intervention and control of what is being watched and how much. There are many empirical studies which are in line with the theoretical models (Bushman and Huesmann, 2006; Huesmann et al., 2003), it was concluded that short term effects are mostly due to the priming of existing well-encoded scripts, schemas or beliefs, which adults have more time to encode. In contrast long term effects require the learning of scripts, schemas or beliefs. Children can encode new scripts, schemas and beliefs via observational learning with less interference and effort than adults (Bushman and Huesmann, 2006). It was also seen that early childhood exposure to TV violence predicted aggressive behaviours for both males and females in adulthood (Huesmann et al., 2003).

Albert Bandura (1971), Social Learning theory, is also one of the theories which are seen to play a role in the children’s learning of aggressive behaviour from media violence. The theory assumes that modelling influences produces learning principally through their informative functions and that observers acquire symbolic representations of modelled activities. They is it is governed by four interrelated sub processes namely:

Attentional processes: A person cannot learn much by observation if he does not attend to, or recognize, the essential features of the models behaviour. One of the component functions in learning by example is therefore concerned with attentional processes. Simply exposing persons to models does not in itself ensure that they will attend closely to them, that they will necessarily select from the models numerous characteristics the most relevant ones, or that they will even perceive accurately the aspects they happen to notice. Attention to models they
say is channelled by interpersonal attraction. Models who possess interesting and winsome qualities are sought out, whereas, those who lack pleasing characteristic tend to be ignored and rejected, even though they may excel in other ways.

Retention processes: A person cannot be much influenced by observation of the model’s behaviour, if he has no memory of it. A second major function involved in observational learning concerns long term retention of activities that have been modelled one time or the other. If one has to reproduce the model’s behaviour when the latter is no longer present to serve as a guide, the response pattern must be represented in the memory in symbolic form. By this it means past influence has some degree of permanence.

Motoric reproduction processes: The third component of the modelling is concerned with processes whereby symbolic representations guide overt actions. To achieve behavioural reproduction, a learner must put together a given set of responses according to the modelled patterns. The amount of observational learning that a person can exhibit behaviourally depends on whether or not he has acquired the component skills. If he possesses the constituent elements, he can easily integrate them to produce new patterns of behavior, but if the response components are lacking, behavioural reproduction will be faulty. In most everyday learning, people usually achieve rough approximation of new patterns of behaviour by modelling and refine them through self-corrective adjustments on the basis of informative feedback from performance.

Reinforcement and motivational processes: A person can acquire, retain, and possess the capabilities for skilful execution of modelled behaviour, but learning may rarely be activated into overt performance if it is negatively sanctioned or otherwise unfavourably sanctioned or otherwise unfavourably received. When positive reinforcements are provided, observational learning, which previously remained unexpressed, is promptly translated into action. Reinforcement influences not only to regulate the overt expressions of matching behaviour, but they can affect the level of observational learning by controlling what people attend to and how they actively code and rehearse what they have seen.

The above theories give a strong foundation for the violence viewing and aggression in children, where the processes that lead to aggressive behaviour can be understood from the above theoretical frameworks. There are studies in the west which has shown that media exposure in early childhood has an impact on their aggressive behaviours (Ostrov, Gentile and Crick, 2006; Gentile, Coyle and Waish, 2011; Gentile Mathieson and Crick, 2011). It
was seen that media exposure were associated with relational aggression for girls and physical aggression for boys (Ostrov et al., 2006), and also lesser prosocial behaviour later in the school (Gentile et al., 2011), Media violence exposure was related to lower reactive relational aggression, higher proactive relational aggression, and higher reactive physical aggression (Gentile, Mathieson and Crick, 2011). Eron (1963), found a causal circular effect, where TV violence had an affect on sample’s aggression and aggressive samples watching more violence on TV. They say that the important intervening variables in the TV violence–aggression relationship are samples identification with aggressive characters and the extent to which sample believes TV portrays reality. There are also studies which show that there is a longitudinal relationship between TV viewing in childhood and adult aggressive behaviours (Huesmann et al., 2003; Eron, 1972; Huesmann et al., 1984; Johnson et al., 2002), they also say that for both males and females this relationship holds good. They also suggested that identification with aggressive TV characters and perceived realism of TV violence also predicted later aggression. No evidence was found that those samples predisposed to aggression or those with aggressive parents were affected more by TV violence. However, a number of other variables (e.g., strong identification with aggressive characters) were correlates of aggression and violence viewing (Huesmann et al., 1984). There was a significant amount of association between the amount of time spent watching television during adolescence and early adulthood and the likelihood of subsequent aggressive acts against others and this association remained significant after previous aggressive behaviours, childhood neglect, family income, neighbourhood violence, parental education, and psychiatric disorders were statistically controlled (Johnson et al., 2002). A meta-analytical study found a consistent evidence that violent imagery in television, video and computer games had a substantial short-term effects on arousal, thoughts and emotions increasing the likelihood of aggressive behaviour in young children, especially boys (Browne and Catherine, 2005).

All the above mentioned studies very clearly indicates that violent TV viewing and aggressive behaviours are associated longitudinally, and also that Violent TV viewing is one of the factors which has had a strong variance compared to other variables or when they are even statistically controlled. The above results indicate that there is indeed a very direct impact of the content of TV watching and child problem behaviours.
Gaming on gadgets and aggressive behaviour in children

In recent times, the advancement of gaming technology has led to a rise in the popularity of video games and virtual reality. As all of us have seen, this has consumed a considerable amount of time and energy in an individual’s daily life. In children, especially, as noticed, gaming is seen to become addictive and this is a cause of concern in the present day, where it is seen that children tend to get hooked on to gaming gadgets and slip away from reality into the fantasy world.

There are several empirical studies, meta-analytical and longitudinal studies in the West which says that there is a definite short term and long term impact of video gaming on the aggressive behaviours of children. Anderson and Dill (2000), found that real-life video game play was positively related to aggressive behaviour and delinquency and also exposure to graphically violent video games increased aggressive thoughts and behaviour. Therefore they concluded that exposure to violent video games will increase aggressive behaviour in both short term and long term. Meta analytical studies by Anderson (2004), Anderson et al., (2010), revealed that exposure to violent video games is significantly linked to increase in the aggressive behaviour, cognition, aggressive affect and cardiovascular arousal. It was also seen that in the cross cultural comparison also, video game effects was a causal risk factor for increased aggressive behaviour, cognition and affect and for decreased empathy and prosocial behaviour. Gentile et al., (2004), studied that adolescents who expose themselves to greater amounts of video game violence were more hostile, reported getting into arguments with teachers more frequently, were more likely to be involved in physical fights and performed poorly in schools. They found that hostility mediated the relationship between violent video game exposure and outcome. Silvern and Williamson (1987), also revealed that there was no difference between the television and video conditions and concluded that violent video games arouse children in much the same way as violent television. An experimental study by Bartholow and Anderson, (2002), also showed that playing violent video games would result in more aggression than playing a non-violent video game. Polman et al., (2008), through an experimental study found that specifically for boys, playing a violent video game leads to more aggression than watching television violence. Bushman and Anderson (2002), tested the General Aggression Model on the effect of playing violent video games on hostile expectations. They concluded and the results supported the model that people who played a violent video game perceived others as more aggressive, thinking of more aggressive thoughts and feeling angrier than did people who played a non-violent video game.
and Ford (1986), revealed in their experimental studies that high-aggression games, led to increased hostility than the mild-aggression game. Students playing high-aggression games were also more anxious compared to students playing mild-aggression game.

A longitudinal study by Anderson et al., (2008), in Japan and the US, revealed that habitual video game players early in the school years predicted later aggression. Those who play a lot of violent video games became relatively more physically aggressive. They concluded that playing violent video games is a significant risk factor for later physically aggressive behaviour and that this effect on youth generalizes across very different cultures.

All the above studies quoted shows that, one, most of the studies are experimental and meta-analytical in nature, measuring the short term effects and effect sizes of the meta-analytic studies, which reveals that there is a definite short term effect on arousal, hostility, aggressive thoughts which lead to aggressive behaviour. There are only a few studies which is longitudinal in nature, to understand the long term impact of violent gaming. All the studies found that habitual, addictive violent video game play has a definite effect on the aggressive behaviour.

There are also a handful of studies which has some different results and findings contradictory to the above studies. Sherry (2001), in a Meta-analytical study found that there is a smaller effect of violent video games on aggression than has been found with television violence on aggression. Unsworth and Ward (2001) show the inconsistencies in the findings from a vast body of research and they say that the rate of growth of video technology make it difficult to draw any conclusions about the relationship between exposure and aggressive behaviour. Fleming and Wood (2001), found that arousal significantly increased after playing the violent game, but there was no significant increase in the aggressive mood scores for either boys or girls after playing the violent game. Wiegman and Schie (1998), found that there was no significant relationship between video game use in general and aggressive behaviour, but a significant negative relationship with prosocial behaviour was supported. It also showed that especially boys who showed a preference for aggressive games were more aggressive in nature and showed less prosocial behaviour. And also that children who preferred playing aggressive games tended to be less intelligent. Schie and Wiegman (1997), concluded that there was no significant relationship between the times spent playing video games and aggressive behaviour, but a negative relationship was found between the times spent paying videogames and prosocial behaviour. In the similar lines Cooper and Mackie
(1986), found that there was no significant effect on either boys or girls free play after playing either an aggressive video game or a video game with little aggression. Neither violent video game exposure, nor parental involvement predicted bullying and delinquent behaviour in young adolescents, but trait aggression and stress levels predicted the same (Ferguson et al., 2014). It was also noted that neither past exposure to violent games or randomized exposure made any differences in aggression, compared to the impact of trait aggression, family violence and male gender on aggression and violent crime (Ferguson et al., 2008). Individuals who are already at risk for violent behaviour may respond more negatively to violent games than the majority of individuals, and according Ferguson (2007), increase in aggressive thoughts through gaming, might not lead to aggressive behaviour, but it might lead to increases in visuospatial cognition in individuals, which can help in a positive way.

The above quoted studies show that effect of violent video game did not result in aggressive behaviour. Therefore as seen from the literature in the area of video gaming and aggression there are mixed and contradictory results which are seen and hence to draw an inference from these results might be difficult and hence it is a space where still there is a lot of work happening to draw conclusions on the same.