

## Adolescent violence: the genesis

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### Abstract

**Introduction:** Recently the “Blue Whale Experience” has put the adolescents on fire. The surge in adolescent violence has become a matter of great concern in the last few decades. The inter-personal conflict builds the foundation block, which generates the spark of violence, if it is not resolved in gentleman manner. A dance between genes and environmental experiences really shape the child’s developing brain. A rapid period of brain development can be fostered by quality of responsiveness of caregivers and community environment. Numerous studies uncover a link between cognitive skills and adolescent violence. In the light of these facts this study was designed to know the environmental factors which correlate with the indulgence of violence. **Material and Method:** 480 students aged 10-18 years were surveyed regarding the indulgence in violence during last one year. The characteristics of different interacting environmental factors were also drilled. **Results:** The prevalence of violent act was 27.91% in which boys and girls were 13.75% and 14.16% respectively. Boys were outnumbered than girls as perpetrators while girls were victimized more. The interacting proximal environmental factors viz upper lower SES, mother and father education <high school, nuclear family and staying with both parents and the peer influence reflected in the habits of alcohol, smoking and tobacco chewing, TV watch >2hr and academic failure which correlate with the indulgence in violence of students in our study point an inappropriate and low quality responsiveness. Which are perceived by the adolescents during their early years of life. These children react according to such memory and cognition in any situation inappropriately ie antisocially and indulge themselves in violence during their adolescence. They accept a socially disapproved ideology to form a negative identity formation. **Discussion:** These factors can be used at school level to mark the students at risk to offer the available preventive tools to achieve the best results.

**Key words:** Adolescent violence, Genesis, Environmental responsiveness

### Introduction

Recently the “Blue Whale Experience” has put the adolescents on fire. The surge in adolescent violence has become a matter of great concern in the last few decades. Violence has been declared as a leading public issue [1]. The inter-personal conflict builds the foundation block, which generates the spark of violence, if it is not resolved in decent manner.

Violence is defined by the World Health Organization in the WRVH as “the intentional use of physical force or power, threatened or actual, against oneself, another person, or against a group or community that either results in or has a high likelihood of resulting in injury,

death, psychological harm, maldevelopment or deprivation [2]. The spectrum of violence ranges from the verbal harshness to the cold-blooded murder. The degree of offence depends upon the perpetrator’s mind content while the tolerance or reaction of aggression by victim reflects one’s maladjusted mindset [3].

The ‘storm and stress’ concept of adolescent development depicts adolescence as a time of turmoil and angst (anxiety and depression), really derives from 18th and 19th century Romanticism and utilized in the developmental theories of psychoanalysis [4,5]. Erikson believed that the most important and the first conflict is faced by an adolescent in the life is an identity crisis. It is the time of intensive analysis and exploration of different ways of looking at oneself.

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Early childhood is a period in development where environment basically has an important impact on determining how the brain grows and develop. Environment affects not only the number of brain cells and number of connections among them but also the way these connections are 'wired'.

The process of elementary excess neurons and synapses from dense, immature brain, which continues well into adolescence, is most dramatic in early years of life and it is guided to a large extent by child's sensory experience of the outside world [6]. Scientific evidence suggests that if the brain does not receive the appropriate stimulation during this crucial window, it is very difficult for brain to rewire itself at the time [7].

A dance between genes and environmental experiences really shape the child's developing brain. Early interactive experience with environment and the complex interplay of genes have a decisive impact on the architecture of brain. Early interaction doesn't create a context; they directly affect the way that brain is 'wired'. A rapid period of brain development can be fostered by quality of responsiveness of caregivers and community environment [8].

Kolb reported that the caregiver's behavior is transferred to the child epigenetically and affects the lifelong health. Managing the factors that affect brain development is similar to an insurance policy that is only available early in life [9]. When caregivers are sensitive and responsive to a young child's signals and needs, they provide an environment rich in serve and return experiences [10]. The environmental expression of developed ability is muted in disadvantaged contexts [11]. Numerous studies uncover a link between cognitive skills and adolescent violence [11, 12, 13].

In the light of these facts this study was designed to know the factors which decline the quality of interaction between the child and environment which ultimately transforms the adolescent's mind into a violent state.

## Aims & Objectives

1. To know the prevalence of adolescent violence
2. To explore the environmental factors which correlate with adolescent violence

## Results

The prevalence of adolescent violence was 27.91 %. About 15.83% was of 10-14 years while 12.08% was of 14-18 years. (Table 1). The interacting proximal environmental factors which correlate with the indulgence in violence of students found in our study are upper lower SES (43.28%), mother and father education <high school (61.19% & 49.25%),

## Material and Method

**Setting:** The study was conducted in two schools Career convent school and Career inter college at Lucknow district during study period.

**Type of study:** A cross-sectional survey was conducted by using a pretested self-report questionnaire [13, 14]. This was administered to 480 students aged 10-18 years of urban schools.

**Sampling method:** The convenient sampling technique was adopted for the present study. Sample size was 480.

**Sampling technique:** Simple random sampling technique used for the study

**Inclusion Criteria:** The study includes:

- Adolescent Students of selected schools.
- Who were willing to take part in the study
- Who were able to understand Hindi or English

**Exclusion Criteria:** The study excludes:

- Adolescents who were not a resident of Lucknow district
- Adolescents who are not willing to participate in the study.

**Statistical Analysis:** Descriptive statistical method was used for data analysis. Frequency, percentage distribution, was used for physical violence experienced or done personally over the last one year.

**Ethical consideration:** Permission was taken from the ethical committee of the institute before starting the study. Permission was taken from the principals of the schools before starting the study in school. Verbal consent was taken from all the participants before starting study.

The characteristics of different interacting environmental factors were explored. The process was done in a sensitive and confidential manner. All respondents were stressed at the time of questioning that they should respond 'yes' only in the case of non-play situations. A two point scale (yes / no) was used to know the details.

nuclear family and staying with both parents (74.62% & 54%). The peer influence reflected in the habits of smoking, alcohol, tobacco chewing and TV watch >2hr 73.13%, 47.76%, 5.9% and 67.16% respectively. Their failure in academics was found in 53.73% (Table II, III).

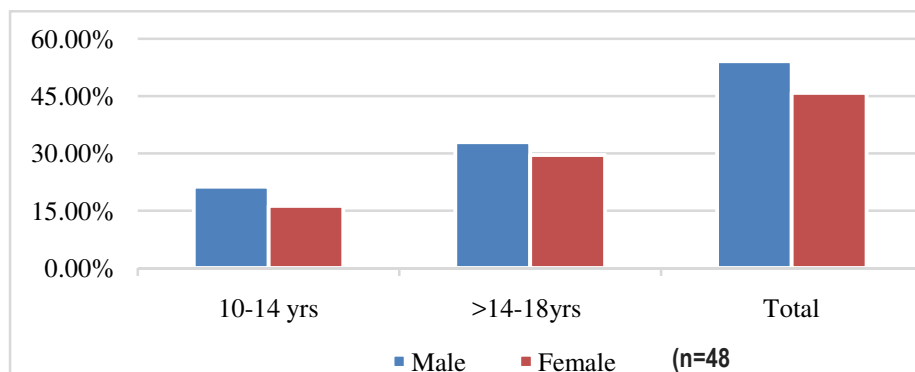


Figure-1: Population and Sex Distribution

Table-I: Prevalence of violence (n=480)

Age group	Involved in violence
10-14yr	76 (15.83%)
>14-18yr	58 (12.08%)
<b>Total</b>	<b>134 (27.91%)</b>

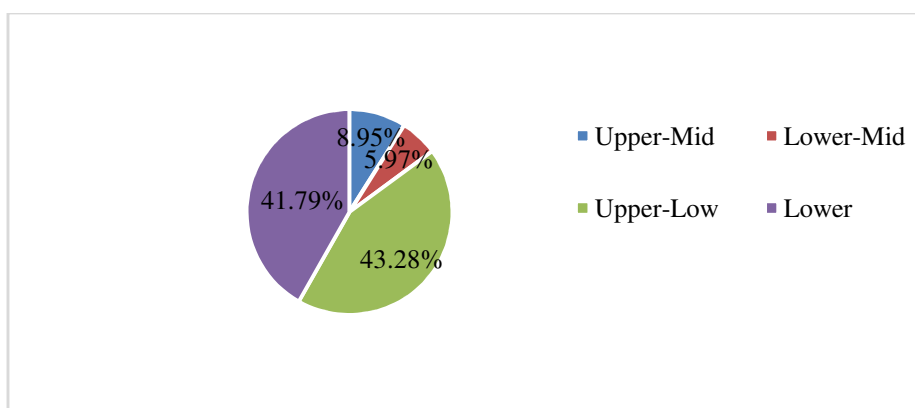


Figure-2: Socio-Economic Status (SES) of students involved in violence According to modified Kuppuswamy classification 1962

Table-II: Father & Mother’s Education of students involved in violence

S No		Father Education		Mother Education	
		n	%	n	%
1	<High School	66	49.25%	82	61.19%
2	High School	44	32.83%	34	25.37%
3	Graduate	18	13.43%	14	10.44%
4	Post-Graduate	06	04.47%	04	02.98%
	<b>Total</b>	<b>134</b>	<b>100%</b>	<b>134</b>	<b>100%</b>

**Table-III: Interacting Environmental factors.**

1.	Family type	Nuclear	100 74.63%
		Joint	35 25.37%
2.	Staying with	Both parents	54 40.29%
		With father	— —
		With mother	18 13.43%
		With relatives	26 19.40%
		Alone	36 26.86%
3.	Academic performance	>40%	24 17.91%
		<40%	72 53.73%
		Failed	38 28.35%
4.	TV watch	<1 hr	10 7.46%
		1-2 hr	34 25.37%
		> 2 hr	90 67.16%
5	Habits	Smoking	64 47.76%
		Alcohol	42 31.34%
		Tobacco Chewing	18 13.43%

**Table-IV: Interacting Environmental factors which decrease the quality of responsiveness: correlated with Violence.**

	Environmental Factors which respond in low quality of responsiveness	Highest Involvement in Violence
1.	Socio- Eco. Status Upper-Low	43.28% (58)
2.	Father's Education <High School	49.25% (66)
3.	Mother's Education <High School	61.19% (82)
4.	Alcohol	31.34% (42)
5.	Smoking	47.76% (64)
6.	Family Type Nuclear	74.62% (100)
7.	Staying with Both parents	40.29% (54)
8.	Academic Performance < 40%	53.73% (72)
9.	TV watch >2 hr	67.16% (90)

## Discussion

The prevalence of violence was found 27.91%, which was on lower side when compared to 53% by Cross-Tab Marketing Services & Telecommunications Research Group for Microsoft Corporation [15,16,], 33% in national CDC survey [17]. It was higher when compared to Sharma et.al. 13.5%, Deb et.al. 8% to 21% and 15% to 25% adolescent involvement in violence [18,19, 20]. The interactive quality of parents and other proximal environmental factors inevitably adjusts, improves or declines as children mature over long periods of time [21,22]. The interacting proximal environmental factors viz upper lower SES, mother and father education <high school, nuclear family and staying with both parents and the peer influence reflected in the habits of alcohol, smoking and tobacco chewing, TV watch >2hr and academic failure, correlate with the indulgence in violence of students in our study point an inappropriate and low quality responsiveness of environment. The early years matter because the interaction between early experience and gene expression shapes the maturing architecture of the mind.

A major ingredient in this developmental process is the serve and return interaction between children and their parents and other caregivers in the family or community. Healthy brain architecture depends on a sturdy foundation built by appropriate input from a child's senses and stable, responsive relationships with caring adults and environment. If the responses to a child are unrealistic, inappropriate, or simply absent, the developing architecture of the brain may be disrupted, and subsequent physical, mental, and emotional health may be impaired [10]. The adverse experiences early in life can impair brain architecture, with negative effects lasting into adulthood [23].

There are many different theories of information processing that focus on different aspects of perceiving, remembering, and reasoning. One of the most important agreements is that elaboration is a key to permanently storing information in a way that facilitates its quick retrieval when it is needed [24].

Cognitive information processing (CIP) theory is often referred to as simply "information processing." Information processing is not really the name of a single theory; it is a generic name applied to various theoretical perspectives dealing with the sequence and execution of cognitive events [25]. The low quality or inappropriate responsiveness is perceived by children

during their early years of life, reflects in their attitude at their adolescent age. Many young children who are physically and/or emotionally bullied become aggressive or vice versa. [26]. These children may face a multitude of adjustment issues at adolescence and unable to resolve the identity crisis for their good which leads towards the negative identity formation [22]. The spectrum of responses received from the environment is lodged in the minds of children conveyed from different paths of stimuli from prenatal to adolescent stage compile at their adolescence and form their attitude.

The conclusion of Boer's PhD thesis was that, smooth child mental development requires good interaction between the brains of mother and child antenatally [27].

These children act in any situation inappropriately i.e. Antisocially and indulges themselves in violence during their adolescence according to such memory and cognition developed in response of inappropriate or low quality responsiveness of the environment [21]. Their mind is inappropriately wired which makes them incapable to resolve the crisis at this vital age of expression and responsibility [13]. The resolution of the adolescent identity crisis has a profound influence the subsequent development [28].

Thus, they accept a socially disapproved ideology to form a negative identity formation inclined towards violence [29].

## Conclusion

The quality of environmental responsiveness in the process of interaction decides the way in which adolescent would resolve the crisis at this crucial age. The inappropriate or violent responsiveness finally forms an inappropriate or aggressive attitude of the adolescent. Under the umbrella of such attitude adolescent reacts in volatile manner in any situation.

These factors can be used in school to mark the students at risk to offer the available preventive tools to achieve the best results.

There is further corollary to utilize findings to suggest implementation of corrective and preventive measures by social groups, school authorities, parents, and law enforcement agencies and if needed the legal authorities to step in and invoke their influence to halt this social rot.

**What this study adds to existing knowledge:** The low quality or inappropriate responsiveness of the environment is perceived by children during their early years of life, reflects in their attitude at their adolescence and they react negatively / violently when they face the society.

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