

A COMPARATIVE STUDY ON AGGRESSION AMONG  
SCHOOL GOING ADOLESCENTS OF RURAL AND  
URBAN AREA OF JHANSI (U.P.)

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**ABSTRACT**

**Introduction-** Adolescence is a period of immense physical, mental and social changes. Aggression is very common feature in this period in the present day world. The present study was an effort to conduct an empirical investigation on aggression in school going adolescents in rural and urban area.

**Objectives-** 1. To assess the prevalence of aggression among school going adolescents in rural and urban area  
2. To analyse the predisposing causes of aggression among school going adolescents.

**Materials and Method-** It was a community based cross sectional study conducted from October 2014 to January 2015 among adolescents aged between 14 to 19 years in two schools

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(one from rural and one from urban area) of Jhansi. Direct and Indirect scale (DIAS) was used for data collection and to assess aggression. SPSS version 16.0 was used for the analysis of data.

**Results-** On the basis of DIAS analysis, the adolescent boys of age group of (17 to 19 years) of rural school scored very high on DIAS scale as compared to boys of similar age group in urban school. Poor economic condition was found to be most common predisposing cause among rural children.

**Conclusion-** The present study able to give a meaningful explanation and understanding of aggression prevailing among rural and urban school going adolescents in their ecological context. There must be the need of counselling and teachers must play an important role to handle children to counter there aggression.

**Keywords** – adolescence, aggression, rural, urban, DIAS.

**Introduction-** WHO has defined adolescence period from 10 to 19 years of age. Dollard *et al* [1] defined aggression as any sequence of behaviour directed towards a person to commit intentional injury. Berkowitz, 1981[2] defined aggression as “behaviour directed toward the injury of some target”. It may be of direct or indirect type. Direct aggression again may be physical or verbal. Physical aggression includes hitting; punching, pushing, slapping, kicking etc. It has often been suggested that males are in general more physically aggressive than females [3, 4, 5]. On the other hand, verbal aggression means abuse, spreading of rumour, malign etc. Any aggressive behaviour that is carried out via another person is considered as indirect aggression. Although indirect, relational and social aggressions have many common elements, certain nuances differentiate one from the other. In indirect aggression the aggressor remains hidden and tries to harm the other in an undercover manner by, for example, gossiping, spreading rumours or inciting the members of the group to exclude him/her, or physically, by wrecking or stealing his/ her property. Relational aggression is characterized by acts that harm the individual’s social relations, circle of friends, etc. Finally, social aggression aims to harm the

self-esteem and social status of the person attacked [6, 7]. Nevertheless, studies have provided support for the distinctiveness of indirect and physical aggression [8] and the increased risk of emotional and behavioural adjustment problems related to indirect aggression above and beyond physical aggression, particularly for girls [9]. Given what we know about the significant and complex role of family processes in the development of childhood physical aggression, it is imperative to examine whether family risk factors are similarly or differently associated with indirect aggression as well. However, there are social, economic, cultural and situational factors that increase and decrease aggression. Literature review revealed that there is little amount of work on aggression among adolescents in India especially in rural and urban schools. Different factors related with aggressive behaviour of Indian adolescents have not been studied in details. Considering this backdrop, we conducted the present study which aims to assess the prevalence of aggression among school going adolescents in rural and urban area and to analyse the predisposing causes of aggression among school going adolescents.

### **Material and Methods-**

Type of study: It was a community based cross sectional study conducted from October 2014 to January 2015.

Study area and Study population: Adolescents aged between 14 to 19 years were enrolled in the study from two schools of district Jhansi (one from rural and one from urban area). The school selected from rural area of Jhansi was from village Chirgaon which comes under field practice area of MLB medical college, Jhansi. The village is 20 km away from city of Jhansi. The school was selected from the urban area that comes under urban health training centre which is 2 km away from medical college.

Sample size and Study design: After taking permission from the principal of the respective schools interested adolescents aged between 14 to 19 years from two schools were included in the study. Total number of adolescents in this age group in these two schools was found to be 359. Out of them, 217(boys= 117, girls=100) adolescents were selected from urban school and 142(boys=97, girls=45) were from rural school. Out of 217 adolescents from urban school

among them 30 (boys=17, girls=13) adolescents were not present at the time of survey even after repeated visits. Similarly in rural school out of 142 adolescents among them 14(boys=11, girls=3) were not present during the study. So a total of 315 adolescents (urban= 187 and rural= 128) were studied.

Study tool: Direct and Indirect scale (DIAS) [10] was used for data collection and to assess aggression. It contains 24 questions with 5 options for each question. The scoring is as per 5 point Likert scale [20] (0-1-2-3-4). The options ranged from “0 = never, 1 = seldom, 2 = sometimes, 3 = quite often, 4 = very often”. The questionnaire contains 7 items for physical aggression, 5 items for verbal aggression and 12 for indirect aggression. On the basis of DIAS score different types of aggression were scored and were classified as normal, mild, moderate and severe. The questionnaire was translated into Hindi for rural school adolescents (local language) & retranslated back to check validity. A pre designed, pre tested, anonymous, semi structured questionnaire was used to collect data regarding the socio-demographic variables like age, sex, religion, caste, type of family, working status of mothers of adolescents, and per capita monthly income of the families from which the adolescents belonged. The questionnaire also includes the causes responsible for aggression. The scale is checked for reliability using Cronbach alpha, and the Cronbach alpha value (0.92) is found to be above 0.60, representing the internal consistency of the scale. Thus, the validity and reliability of the scale are established.

Statistical analysis: Data were entered into a Microsoft Excel spreadsheet and then transferred to Statistical Package for Social Sciences (SPSS®) ( trial version 16.0), was used to analyze data in this study and prevalence was determined.

## **Results-**

Table1 describes the basic socio-demographic characteristics of the study population. The study population comprised of 315 adolescents taken from one rural (128) and one urban school (187). Majority of individuals belongs to age group of 17years in both boys (16.3%) and girls (4.6%) in rural and 19 %( boys) and 14 %( girls) in urban. Majority of adolescents belong to Hindu religion in both rural (28%) and urban (61%) schools. 25.4% of adolescents in rural and 70% in urban school belong to nuclear family. Majority of adolescents belonged to general caste.

Mothers of 7% of adolescents in rural school were working while 25% mothers of urban adolescents were working. In urban school majority of adolescents belong to above 1000 monthly income per capita.

Table2 shows the different types of aggression score according to DIAS scale. 12% of boys and 7% girls of rural school while 20% of boys and 36% of girls of urban school scored normally on physical aggression. Almost 26% of boys of both urban and rural school scored between (11-15). Severe physical aggression is more in rural boys (21%) as compared to urban boys. Verbal aggression score is more in urban school boys and girls in all categories when compared to rural school boys and girls. Mild {urban boys (41%), girls (21%)} indirect scores are more as compared to rural boys (28.3%) and girls (6.7%). Similarly severe indirect score is more in urban school boys and girls as compared to rural school.

Table3 shows different types of aggression according to age. Physical aggression is most common seen in age group of 17 years in rural boys (15.4%) while it is common 16 years of age in urban boys(17%), rest age group in both the schools for physical aggression is nearly the same, in girls urban school girls are more physically aggressive (9%) than rural school girls. Verbal aggression is more in urban school boys and girls; majority is seen in 18 years age group (boys-17%, girls-12%) as compared to rural school children. In rural school verbal aggression is common in 17 years of age in both boys and girls. Indirect aggression is most common seen in 17 years of age in both rural (13%) and urban (14%) boys, while for girls urban girls show more indirect aggression as compared to rural girls.

Table4 shows the predisposing causes of aggression among the study participants. Living in poor conditions is found to be the most common cause of aggression among rural school boys and girls followed by susceptibility to illness. Among urban school boys and girls future anxiety was found to be the most common cause followed by educational dissatisfaction. Substance abuse was found to be equally important cause for both rural and urban boys.

## **Discussion-**

In the rapidly changing world now the children as well as adolescents are much lonelier as compared to previous scenario. Aggression is a common phenomenon in this period of life particularly in the later part. In the present study aggression of adolescents aged 14 to 19 years of

age is assessed based on Direct and Indirect Aggression Scale (DIAS). Results from the present study confirm that there is difference in aggression of rural and urban adolescents. Overall the aggression score was significantly higher in adolescents aged 17-19 years as compared to 14-16 years. So, the older adolescents were found to be more aggressive both in rural and urban school. Physical aggression is a behaviour aimed at causing physical pain to any living being. It was found to be high in boys as compared to female in both rural and urban settings. But as far as age distribution with physical aggression was considered, it was revealed that it was high in 17 years old boys in rural school and 16 years in urban school. A study was conducted by Lee KH et al [11] among younger children (5- 11 years old) who also got higher prevalence of physical aggression among younger children. Verbal aggression is a behaviour aimed at causing psychological pain to any living being. This behaviour was found to be higher among older adolescents. Indirect aggression is a behaviour which is not done directly but via another person as a media. It was also found to be significantly higher among older adolescents and among adolescents whose mothers were working. Prior work that has found that males are in general physically and verbally more aggressive than females [12,21] and that females prefer to use indirect aggression [13,21] are consistent with these results, since they correspond with the principles of social cognition in the study of the perception and interpretation of aggression, as well as with research on gender stereotypes that has shown that males are perceived to be more aggressive in general than females, with males being perceived to be more physically aggressive [14,15] and females being perceived to be more indirectly aggressive. There is a strong relation of testosterone with aggression [16, 17, 20] which may be the reason of more aggressive behaviour among males. It is corroborative with the findings from a meta-analysis [18, 20]. It was also revealed in the present study that urban adolescents, whose mothers were working, scored higher than those whose mothers were housewives in urban settings. Not much difference shown in adolescents in rural settings. Those mothers are working, usually feels lonelier in the daytime and there is more scope to be engaged in anti-social activities. So, according to negative affect theory of aggression, there is more chance of these adolescents to be aggressive. The present study also highlights the same findings.

### **Conclusion-**

The present study highlights higher aggression among 17- 19 years in both rural and urban settings. In rural settings the girls are generally not allowed to go school as a result there prevalence towards aggression is quite low as compared to girls in urban settings. This study contributes substantially to the literature regarding aggression effected by family and personal causes, psychological causes, educational causes. An additional strength of this study is that it examines both rural and urban school adolescents in the same environmental situations. It is important to draw design of new prevention and intervention programs against the use of aggression, using different situations where aggression takes place, and also for the inclusion of activities in these programs to teach adolescents how to resolve conflicts using non-violent alternatives.

### **Recommendations-**

Following interventions and strategies [19] should be carried out to prevent aggression:

**Effective strategies** [19] - Group intervention programs, which are efficient in both time and cost, are often as effective as individual therapy in treating aggressive youth. Structured group programs can be used not only with youth presenting with aggressive behaviours, but also with those identified as at risk for aggressive behaviour problems in an effort to prevent negative outcomes.

**Parental involvement:** [19] the Adolescent Transitions Programs it includes a parent-focused curriculum that teaches family management skills, limit setting and supervision, problem solving, and improved family relationships and communication patterns. The Anger Control Program focuses on teaching the adolescents how to modify his or her own aggressive and impulsive behaviour when faced with aversive or stressful situations. Problem solving Skills Training (PPST), Parent Management Training (PMT) is the other parental training methods for preventing aggression.

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**Tables**

Table1: Socio- demographic profile of study participants.

CHARACTERISTICS	FREQUENCY(N=315)				
	RURAL(N=128)		URBAN(N=187)		
	BOYS (N=86) (%)	GIRLS (N=42) (%)	BOYS (N=100) (%)	GIRLS (N=87) (%)	
AGE(years)	14	17(14.6)	7(3)	15(15)	13(11.3)
	15	15 (13)	4(1.6)	17(17)	15(13)
	16	13(11)	5(2)	18(18)	15(13)
	17	19(16.3)	11(4.6)	19(19)	16(14)
	18	11(9.4)	8(3.3)	17(17)	15(13)
	19	11(9.4)	7(3)	14(14)	13(11.3)
RELIGION					
Hindu		52(44.7)	27(11.3)	67(67)	63(54.8)
Muslim		21(18)	13(5.4)	21(21)	17(14.7)
Others		13(11)	2(1)	12(12)	7(6)
CASTE					
General		50(43)	24(10)	72(72)	67(58.2)
Others		36(31)	18(7.5)	28(28)	20(17.4)
TYPE OF FAMILY					
Nuclear		46(39.5)	27(11.3)	79(79)	69(60)
Joint		40(34.4)	15(6.2)	21(21)	18(15.6)
WORKING STATUS OF MOTHER					
Working		16(13.7)	6(2.5)	32(32)	23(20)
Housewife		70(60.2)	36(15)	68(68)	64(55.6)

MONTHLY INCOME (per capita)				
Upto 500	6(5)	10(4.2)	0(0)	0(0)
501-800	16(13.7)	16(6.7)	0(0)	0(0)
801-1000	24(20.6)	12(5)	2 (2)	4(3.4)
Above 1000	40(34.4)	4(1.6)	98(98)	83(72.2)

Table 2: Distribution of different types of aggression in the study participants according to DIAS scale

Physical aggression score	Frequency(N=315)			
	Rural		Urban	
	Boys (%)	Girls (%)	Boys (%)	Girls (%)
<=5(normal)	14(12)	17(7)	20(20)	41(35.6)
6-10(mild)	18(15.4)	18(7.5)	36(36)	29(25.2)
11-15(moderate)	30(25.8)	4(1.6)	26(26)	11(9.57)
>15(severe)	24(20.6)	3(1.2)	18(18)	6(5.22)
Verbal aggression score				
<=4(normal)	20(17.2)	8(3.3)	17(17)	17(14.7)
5-8(mild)	40(34.4)	22(9.24)	37(37)	22(19.1)
9-12(moderate)	16(13.76)	7(3)	33(33)	30(26)
>12(severe)	10(8.6)	5(2)	13(13)	8(7)
Indirect aggression score				
<=15(normal)	17(14.6)	11(4.6)	25(25)	29(25.2)
16-20(mild)	33(28.3)	16(6.7)	41(41)	24(20.8)
21-25(moderate)	25(21.5)	10(4.2)	19(19)	21(18.27)
>25(severe)	11(9.46)	5(2)	15(15)	13(11.31)

Table3: Distribution of different types of aggression according to age:

Age	Physical aggression				Verbal aggression				Indirect aggression			
	rural		urban		rural		urban		rural		urban	
	boys	girls	boys	girls	boys	girls	boys	girls	boys	girls	boys	girls
14years	10(8.6)	3(1.2)	13(13)	4(3.4)	7(6)	5(2)	11(11)	9(7.8)	8(6.8)	6(2.5)	10(10)	9(7.8)
15years	10(8.6)	4(1.6)	13(13)	7(6)	11(9.5)	3(1.5)	12(12)	12(10.4)	13(11)	3(1.2)	12(12)	11(9)
16years	12(9)	4(1.6)	17(17)	9(7.8)	12(9)	4(1.6)	15(15)	11(9.5)	13(11)	5(2)	13(13)	9(8.5)
17years	18(15.4)	3(1.2)	16(16)	7(6)	16(12.8)	10(4.2)	15(15)	11(9.5)	15(12.5)	7(3)	14(14)	10(8.7)
18years	11(9.4)	5(2)	11(11)	10(8.7)	10(8.6)	6(2.3)	17(17)	14(12)	9(8.3)	5(2)	14(14)	9(8.5)
19years	11(9.4)	6(2.5)	10(10)	9(7.8)	10(8.6)	6(2.3)	13(13)	13(11.3)	11(8.8)	5(2)	12(12)	10(8.7)

Table4: Predisposing causes of aggression in the study population:

Factors	Study participants			
	Rural		Urban	
	Boys	Girls	Boys	Girls
<b>Psycho-social causes*</b>				
Negative life event	12	10	22	17
Negative working condition	16	15	19	15
Susceptibility to illness	24	21	19	20
Future anxiety	18	19	35	36
<b>Educational causes*</b>				
Education dissatisfaction	17	12	28	32
Discrimination by teachers	11	8	11	7
<b>Family and personal causes*</b>				
Poor parenting practices	9	17	4	3
High rates of harsh	12	13	6	5
Inconsistent discipline	13	14	5	1
Living in poor	39	31	7	3
Working mothers	9	7	16	15

Housewives mothers	2	3	11	7
<b>Risk in adolescence*</b>				
Substance abuse	7	2	6	0
Delinquent acts	16	11	21	4

\*= multiple responses.

