Effect of Aggression Level Upon Peer Relationships In Early Adolescence

SUMMARY

Aggression is a normal reaction in children. They let out their angry emotions when they feel they need to protect their safety or happiness. Aggressiveness is a natural outgrowth of development during school aged children. Displays of aggression are common and are a means of communicating desires and wishes.

Aggressive in children cause great distress on part of parents, care givers, teachers and other adults who live and work with such children. Such children are not only the perpetrators but also the victims of their own behavior. Such children may be rejected by peers, receive frequent punishment by the adults in their lives, suffer from unpleasant and dysfunctional family relationships and experience failure in school. Moreover, if such behavior continues into adolescence, these children are much more likely than others to dropout of school to abuse drugs and alcohol and to become involve in juvenile delinquency when they reach adulthood, they are at higher risk of fatal accidents, alcoholism, drug addiction, unemployment, divorce, psychological illness and early death.

School going age in children is a time of transition, characterized by a decreasing dependency on adults, growing influence of peers, rapidly developing intellectual potential and gradual adaptation to group life both in and out of school. Friends and peer group constitute a major influence in children’s life.

Peer relationships are important for children and increase in importance, as they grow older. Those who lack friendships or who have difficulty with peer relationship miss out on many benefits such as companionship and support in times of stress, e.g. during parental divorce or trouble in school. Friends are source of fun, stimulating recreational activities & are loyal allies during tough interactions during play & holder of secrets. As peer relationship benefits children
immensely, practitioners and researchers are interested in understanding the processes by which peer reject certain children and developing interventions for children who lack friends.

These peer relations contribute substantially to both social and cognitive development and to the effectiveness with which children function as adults. Children with poor peer relations (so called rejected children) are more aggressive, hostile and disruptive then those with good peer relations (popular children), have lower self esteem and exhibit poorer school performance.

On the other hand children develop ideas about how to express emotions (Russel 1989), primarily through socio interactions in their families and when confronted with every day anger conflicts, resort to using aggression in the classroom (Hennessy et al, 1994) One of the factor which can contribute to such negative emotions could be the socio economic status of the family. Skinner. et al (1992) also observed that, economic hardship influences children through its effect on the parents. Financial difficulty is related to discipline situation evoke expressions of aggression in children.

In western-culture studies males were found to be much more aggressive than females. Bjorkqvist (1994) questioned the conclusions that boys were more aggressive than girls. Bjorkqvist pointed out that earlier studies were observational in nature & were conducted with mostly kindergarten aged children in schoolyards where rough-play was considered aggression, limiting the definition of aggression to only observable behaviors. As Bjorkqvist (1994) stated that There is no reason to believe that females should be less hostile and less prone to get into conflicts than males. But being physically weaker, they simply have to develop other means than physical ones in order to reach successful results.

Earlier studies also found out that Young girls start out using more direct forms of aggression, and as they develop social skills and peer groups, which occur
earlier with girls than with boys, end up using more indirect forms of aggression (Lagerspetz, Bjorkqvist & Peltonen, 1988). Thus, age may be an important factor when assessing the type of aggression used by girls.

Present study makes an attempt to find the interrelationship between Physical, Verbal, & Indirect Aggression, Peer relationship, Socio-economic status in early adolescent children of Doon Valley. The study aims at gender differences in Aggression & Peer relationship, Correlation between Socio-economic Status Aggression & Peer relationship, Correlation between Age & Aggression & Peer relationship, Correlation between Peer relationship & Aggression, Effort has also been made to see the effect of medium of instruction on these variates.

1.0 Sample and Sample Size

The current study has undertaken a sample size of 271 girls and 280 boys from class 7, 8 & 9th standard. In all six schools in the Dehradun were visited. The mean age for the boys and girls in sample is equal i.e. 13 years and difference in socio-economic status is insignificant i.e. 14.74 & 13.52 respectively.

2.0 Instrumentation

Primarily three instruments were administered to the subjects in the sample to gather the information related to Aggression, Peer relationship and Socio-Economic status.

To study the Aggression level or inventory an instrument called “Direct and Indirect Aggression Scales (DIAS) “developed by renown psychologist Bjorkqvist, Lagerspetz & Osterman , (1992) based on peer nomination technique has been used.
Peer relationship in the current study has been measured using standard instrument designed by Sunanda Chandna & N.K.Chandna (1986) called “Dimensions of Friendship Scale” (DFS), modified to capture single value for peer relationship.

An Instrument designed in association with Dr. Saraswati Singh in a questionnaire form, which captures the personal information, economic status, intra-familial interactions as well as perception of the participant regarding the socio-economic status has been used as Socio-Economic Status Scale (SESS) for the purpose of the study.

3.0 Results

3.1 Gender Differences in Aggression & Peer Relationship

To validate gender differences for Indian settings, the collected data was sorted for all girls and boys. As the mean age of boys and girls in the sample is equal and mean socio-economic status nearly matches, the differences due to age and socio-economic status gets nullified.

3.1.1 Physical Aggression – Gender differences

The level of physical aggression in boys is higher as compared to girls at 0.001 level of significance (table 3.1). The finding is in line with the findings of other researchers that early adolescence boys have more physical aggression as compared to girls.(Maccoby and Jacklin -1974; Parke & Slaby, 1983; Cotten et al., 1994; Hausman et al., 1994; Saner & Ellickson, 1996). However, there are two studies which found no gender differences in types of aggression (Finkelstein et al., 1994; Nahulu et al., 1996) were from England and Hawaii, respectively.
However, the finding is contrary to the finding of some of the researchers such as research by Burbank in 1987; Fry in 1988, 1990, 1992; Cook in 1992 which were primarily anthropological studies.

Table 3.1a - Gender differences in Aggression for Boys & Girls

<table>
<thead>
<tr>
<th></th>
<th>Boys</th>
<th>Girls</th>
<th>Significance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Aggression</td>
<td>6.26</td>
<td>2.65</td>
<td>0.001</td>
</tr>
<tr>
<td>Verbal Aggression</td>
<td>4.760</td>
<td>2.478</td>
<td>0.001</td>
</tr>
<tr>
<td>Indirect Aggression</td>
<td>10.49</td>
<td>7.50</td>
<td>0.001</td>
</tr>
<tr>
<td>Peer relation Ship</td>
<td>45.01</td>
<td>49.01</td>
<td>0.001</td>
</tr>
</tbody>
</table>

3.1.2 Verbal Aggression- Gender differences

The Verbal Aggression in boys is more than the Verbal Aggression for the girl’s at 0.001 level of significance (table 3.1). The findings is contrary to the findings of other researchers (Bjorkqvist, Lagerspetz, & Kaukianen, 1992; Owens & MacMullin, 1995; Pakaslahti & Keltikangas-Jarvinen, 1998).

Another important finding is that adolescent girls display almost half the level of verbal aggression as against boys, with many of them exhibiting nil verbal aggression.

3.1.3 Indirect Aggression- Gender differences

The Indirect Aggression in boys is more than the Indirect Aggression for the girl’s at 0.001 level of significance (table 3.1). In our study to find gender differences in the level of indirect aggression, a t-test was performed with level of confidence of 95. The result of t-test indicate that the mean Indirect Aggression for boys is more than the mean value of Indirect Aggression for the girls’ sample. This is not in line with the findings of Paquette & Underwood, 1999, who found
that Younger, adolescent girls exhibit a higher rate of indirect aggression than boys.

We have found that the Boys have high level of Indirect Aggression with increasing trend from age 11 to 15 and the similar trend is available for girls. Bjorkqvist, et. al. (1992) also showed that indirect aggression increases drastically at about the age of 11, especially among girls. However, also among boys, the mean level of physical aggression decreases during late adolescence, to be replaced mainly by verbal, but also indirect means of aggression.

**Fig. 3.1 : Age trends of Aggression for Boys & Girls**
3.1.4 Peer relationship – Gender differences

The peer relationship in boys is less than the peer relationship for the girl’s at 0.001 level of significance. (Table 3.1b)

Table : 3.1b - Gender differences in Peer relationship for Boys & Girls

<table>
<thead>
<tr>
<th></th>
<th>Boys</th>
<th>Girls</th>
<th>Significance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peer relation</td>
<td>45.01</td>
<td>49.01</td>
<td>0.001</td>
</tr>
<tr>
<td>Ship</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This implies that Boys have significantly weaker peer relationship than girls which is inline with the findings of the above mentioned researchers. Other researchers have also found same conclusions in various studies (Bjorkqvist, Lagerspetz, & Kaukiainen, 1992; Grotpeter & Crick, 1996; Bjorkqvist & Niemela, 1992).

Fig. 3.1 b : Age trends of Peer relationship (DFS) for Boys & Girls
In our study, mean score of peer relationship (DFS score) for the normalized sample of Boys & Girls for age group of 11 to 15 years was plotted. It can be seen that even though, the mean score of peer relationship for girls is higher than that of boys, and it has a decreasing tendency with the age. On the other hand in case of boys, the peer relationship is increasing from age 11 years to 13 years and thereafter attaining the peak at that age and then starts to decline. A very interesting “inverted U” shaped curve shows age effect on girls and boys.

The trend of peer relationship in boys clearly shows marked and steep fall in the values of peer relationship after the age of 13 years. Similar trend is available for girls as well. This signifies the importance of “13 years” in most of the early adolescent which is a transition period for most of the male & female adolescent as they are attaining puberty.

3.2 Correlation amongst Socio- Economic status, Peer Relationship & Aggression

Table 3.2 - Correlations (Pearson Coefficient) for SES

| SES with : | Boys | | Girls | | |
|------------|------|-------|-------|-------|
|            | Coefficient "r" | P value | Coefficient "r" | P value |
| DFS        | 0.11  | 0.067677 | 0.06 | 0.35 |
| PA         | -0.03 | 0.636 | 0.03 | 0.0001 |
| VA         | 0.01  | 0.91 | 0.16 | 0.0001 |
| IA         | 0.04  | 0.50 | 0.26 | 0.0001 |

Represents statistically significant (p< .05) correlation.

- Correlation for the socio – economic status (SES) & peer relationship (DFS ) is extremely weak and insignificant and SES & Physical Aggression is extremely weak but significant in girls. A linear regression line is seen for SES and Physical Aggression, indicating that girls become more physically aggressive with increasing socio-economic status.

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• Correlation for the socio – economic status (SES) & Verbal Aggression is weak but statistically significant for girls. A logarithmic regression line has been found for SES and Verbal Aggression for girls indicating increase in verbal Aggression for girls with improvement in socio-economic status.

• Correlation for socio – economic status (SES) & Indirect Aggression is moderately strong and statistically significant for the girls. A linear regression line is seen for SES and Indirect Aggression, indicating that girls having higher socio-economic status have higher indirect aggression.

The results are also supported by findings of Rezanur Rahman and M. Mozammel Huq (2005) who have conducted study in Bangladesh finding a relationship between SES and Aggression in Bangladeshi Adolescent boys and girls.

Socio-economic status (SES) has very weak and insignificant correlation with peer relationship (DFS) & with all forms of aggression in case of boys.

3.3 Correlation between Age , Peer relationship & Aggression

Table 3.3 - Correlations (Pearson Coefficient) for Age

<table>
<thead>
<tr>
<th>Age with</th>
<th>Boys r</th>
<th>Boys p</th>
<th>Girls r</th>
<th>Girls p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peer relationship (DFS)</td>
<td>-0.0045</td>
<td>0.939</td>
<td>(- ) 0.199</td>
<td>0.001</td>
</tr>
<tr>
<td>Physical Aggression</td>
<td>0.0878</td>
<td>0.142</td>
<td>0.121</td>
<td>0.046</td>
</tr>
<tr>
<td>Verbal Aggression</td>
<td>0.055</td>
<td>0.35</td>
<td>0.035</td>
<td>0.56</td>
</tr>
<tr>
<td>Indirect Aggression</td>
<td>0.047</td>
<td>0.43</td>
<td>0.02</td>
<td>0.71</td>
</tr>
</tbody>
</table>

 Represents statistically significant(p<.05) correlation.
• Weak correlation exists between Age and Peer relationship as well as Physical Aggression in girls which is statistically significant also.

A weak inverse linear regression line has been seen between Age & Peer relationship and an increasing power trend line as regression line between Age & Physical aggression for girls. This indicates that with increasing Age Girls tend to have less of peer relationship and there is increase in the physical Aggression.

### 3.4 Correlation between Peer relationship & Aggression

**Table 3.4 - Correlations (Pearson Coefficient) for Peer Relation (DFS)**

<table>
<thead>
<tr>
<th>DFS with</th>
<th>Boys</th>
<th></th>
<th>Girls</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>r</td>
<td>p</td>
<td>r</td>
<td>p</td>
</tr>
<tr>
<td>Physical Aggression</td>
<td>-0.27</td>
<td>0.0001</td>
<td>-0.15</td>
<td>0.0126</td>
</tr>
<tr>
<td>Verbal Aggression</td>
<td>-0.235</td>
<td>0.0001</td>
<td>-0.167</td>
<td>0.0057</td>
</tr>
<tr>
<td>Indirect Aggression</td>
<td>-0.287</td>
<td>0.0001</td>
<td>-0.21</td>
<td>0.0004</td>
</tr>
</tbody>
</table>

Represents statistically significant(p<.05) correlation.

• Peer relationship is affected most negatively with the indirect aggression, then with verbal aggression, lastly and least with physical aggression in girls. In other words girls dislike indirect aggression most which has adverse affect on their relationships with others. Moreover, the verbal outburst such as shouting as indignant and will not like to extend friendships with such girls any more.

• Peer relationship is affected almost similarly with Physical , Verbal & Indirect aggression in boys in a very high degree. The concept of overtly aggressive boy as a popular member of the group gets challenged due to this negative relationship between peer relationship and all type of aggressions in boys.
Study by Lancelotta and Vaughn (1989) also concluded that aggression correlated negatively and significantly with peer acceptance among girls. The same held true among boys, except that provoked physical aggression was not correlated with peer acceptance. However, there are other works which report contrary findings such as Cairns, Neckerman, Gest, and Gariepy (1988) and some other researchers who conclude that indifference or insignificant relationship such as Bukowski & Hoza, 1989; Furman & Robbins, 1985; Parker & Asher, 1993.

3.5 Impact of Medium of Instruction – Aggression, Peer relationship

ANOVA for the Hindi medium and English medium Boys & Girls have been conducted. The results of the ANOVA are summarized below:

(i) Peer relationship which as per the earlier finding of this study has not been found significantly correlated to socio-economic status (SES), is found to be insignificantly different in English medium and Hindi medium schools in both genders. However, girls display higher level of peer relationship compared to boys in both English medium and Hindi medium schools.

(ii) Physical Aggression which has been found to be significantly higher in case of boys is also confirmed as both the English medium and Hindi medium schools boys display higher level of Physical Aggression as compared to the girls of both the medium respectively. However, Level of Physical Aggression in Hindi medium and English medium schools for both the genders is statistically same.

(iii) Verbal Aggression which has been found to significantly higher in case of boys is also confirmed as both the English medium and Hindi medium
schools boys display higher level of Verbal Aggression as compared to the girls of both the medium respectively. However, Level of Verbal Aggression in Hindi medium and English medium schools for both the genders is statistically same.

(iv) Indirect Aggression which has been found to significantly higher in case of boys is also confirmed as both the English medium and Hindi medium schools boys display higher level of Indirect Aggression as compared to the girls of both the medium respectively. However, the Indirect Aggression in English medium Girls is more as compared to Hindi Medium Girls whereas it is same in case of the Boys of Hindi as well as English medium schools.

(v) The outcome of higher level Indirect Aggression in the sample of English medium school girls is also supported by our earlier finding that the SES and Indirect Aggression has somewhat strong relationship i.e. correlation between the SES & IA is 0.263.

(vi) On the other hand, since earlier study had found relationship between the DFS & IA and derived the conclusion that with increase of Indirect Aggression in Girls will have a negative impact on peer relationship also gets challenged as during ANOVA for DFS on the group of Hindi & English medium girls there is no statistically significant difference and we can conclude that peer relationships in Hindi medium and English medium Girls is same.

4.0 Limitation of the study and future directions

- The geographical spread of the study has been Dehradun district due to logistic reasons. Much more diverse sample could have given better representation of Indian context.
• The sample spread on a socio-economic front, even though will definitely be a fairly good representation of Indian middle class, could not cover very high (NRI children, Children of Industrialists etc.) and very low rural families which deal with factors very different than normal Indian family.

• The sample also could not cover ethnicity, religion and many more sociological factors.