CHAPTER-VI

Summary & Conclusions

Aggressive and problem behavior in children cause great distress on part of parents, care givers, teachers and other adults who live and work with such children. Children with severe problem behavior are not only the perpetrators but also the victims of their own behavior. Such children may be rejected by their 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 continue 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.

Peer relationships are important for adolescents and increase in importance, as children grow older. Children who lack friendships or who have difficulty with peer relationship miss out on their many benefits. Friends provide companionship and support each other in times of stress, such as during parental divorce or when they are having trouble in school. Friends are source of fun and stimulating recreational activities, they are loyal allies during tough interactions on the playground and holder of secrets. Because 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.

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.

6.1 Sample and Sample Size

The current study has undertaken a sample size of 271 girls and 280 boys from class 7, 8 & 9th standard (Fig.-4.1). 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.

The result of t-test concludes that the socio-economic status of both the genders i.e. boys and girls in the sample is same.

6.2 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.

6.2.1 Level of Aggression - Direct and Indirect Aggression Scales (DIAS)

To study the Aggression level or inventory an instrument called “Direct and Indirect Aggression Scales (DIAS) “developed by renown psychologist Bjorquist, Lagerspetz & Osterman, (1992) based on peer nomination technique has been used.
6.2.2 Peer relationship - Dimensions of Friendship Scale

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”, modified to capture single value of peer relationship.

6.2.3 Socio-economic Status

An Instrument designed in association with Dr. Saraswati Singh in a questionnaire form, which captures the personal information, economic status, intra-familial interactions & perception of the participant regarding the socio-economic status has been used for the purpose of the study.

6.3 Results

6.3.1 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.

6.3.1.1 Physical Aggression – Gender differences

The level of physical aggression in boys is higher as compared to girls at 0.001 level of significance.

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.

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.

### 6.3.1.2 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.

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.

### 6.3.1.3 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.

In our study to find gender differences in the level of indirect aggression, a t-test was performed with level of confidence of 95% (Table-5.6). 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. (Fig. – 5.13 & 5.14). 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.

6.3.1.4 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.

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).

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 (Fig 5.16 and Fig. 5.17). 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.

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

- 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. Scattered graph and Regression line for SES & PA in girls is exhibited at Fig.- 5.19.

- Correlation for the socio – economic status (SES) & Verbal Aggression is weak but statistically significant for girls. Scattered graph & Regression line for SES & VA in girls is exhibited at Fig.- 5.20

- Correlation for socio – economic status (SES) & Indirect Aggression is moderately strong and statistically significant for the girls. Scattered graph and Regression line for SES & IA in girls is exhibited at Fig.- 5.21.

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.

6.5 Correlation between Age, Peer relationship & Aggression

- Weak correlation exists between Age and Peer relationship as well as Physical Aggression in girls which is statistically significant also.
Scattered graph and Regression line for Age and DFS in girls is exhibited at Fig.- 5. 22 and Age and Physical Aggression is shown in Fig.-5.23.

6.6 Correlation between Peer relationship & Aggression

- 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 finding 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.
6.7 Impact of Medium of Instruction – Aggression, Peer relationship

(i) Peer relationship which as per the earlier finding of this study has not been found significantly correlated to socio-economic status (SES) as per table 5.12, is found to be insignificantly different in English medium and Hindi medium schools in both genders (Table 5.14 & 5.15). 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 (Table -5.7) 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 (Fig. 5.25, 5.29 ). 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 (Table -5.8 ) 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 (Fig. 5.26,5.30 ). 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 (Table -5.9) 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 (Fig. 5.27,5.31 ). 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.

### 6.8 Verification of Hypothesis

<table>
<thead>
<tr>
<th>Hypothesis -I</th>
<th>There will be significant difference in the level of Physical Aggression in early adolescent boys and girl.</th>
</tr>
</thead>
</table>

*This has been accepted vide table -5.7. Level of physical aggression in boys is higher as compared to girls at 0.001 significance level.*

<table>
<thead>
<tr>
<th>Hypothesis -II</th>
<th>There will be significant difference in the level of Verbal Aggression in early adolescent boys and girl.</th>
</tr>
</thead>
</table>

*This has been accepted vide table – 5.8. Level of Verbal Aggression for boys is more than the mean value of Verbal Aggression for the girl’s sample at 0.001 significance level. 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. (See Fig. – 5.12)*
<table>
<thead>
<tr>
<th><strong>Hypothesis -III</strong></th>
<th>There will be significant difference in the level of Indirect Aggression in early adolescent boys and girl.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>This has been accepted vide table -5.9.</strong> Level of Indirect Aggression for boys is more than the mean value of Indirect Aggression for the girl’s sample at 0.001 significance level.</td>
<td></td>
</tr>
<tr>
<td><strong>Hypothesis -IV</strong></td>
<td>There will be significant difference in the Peer Relationship in early adolescent boys and girl.</td>
</tr>
<tr>
<td><strong>This has been accepted vide table -5.10.</strong> Level of Peer relationship score (DFS) for boys is less than the Peer relationship score for the girls at 0.001 significance level.</td>
<td></td>
</tr>
<tr>
<td><strong>Hypothesis –V</strong></td>
<td>The level of Physical Aggression and age will have significant relationship i.e. boys and girls with more age will have less Physical Aggression as compared to boys and girls of younger age.</td>
</tr>
<tr>
<td><strong>Partially accepted</strong> i.e. level of Physical Aggression and age has significant relationship for girls (Significance level : 0.046 ) and it shows that the Physical Aggression for girls increases with the Age following a power trend line but not for boys vide Table – 5.12, Fig. 5.7, 5.8 &amp; 5.23.</td>
<td></td>
</tr>
<tr>
<td><strong>Hypothesis -VI</strong></td>
<td>The level of Verbal Aggression and age will have significant relationship. i.e. boys and girls with more age will have slightly more Verbal Aggression as compared to boys and girls of younger age.</td>
</tr>
<tr>
<td><strong>Rejected vide Fig. Table -5.12 &amp; 5.10 &amp; 5.11</strong> as no significant relationship has been found for both girls and boys.</td>
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</tr>
</tbody>
</table>
**Hypothesis - VII**  
The level of Indirect Aggression and age will have significant direct relationship i.e. with boys and girls with more age will have significantly more Indirect Aggression as compared to boys and girls of younger age.

*This has been rejected* as no significant relationship seen vide table 5.12.

**Hypothesis - VIII**  
There will be significant relationship between Physical Aggression in children and Socio Economic Status.

*This is partially accepted* as for girls relationship between SES & Physical Aggression is *extremely weak* \((r = 0.03)\) but significant (Significance level 0.0001) vide Table – 5.11 & Fig. – 5.19. No significant relationship has been found for boys.

**Hypothesis - IX**  
There will be significant relationship between Verbal Aggression in children and Socio Economic Status.

*This is partial accepted* as for girls relationship between SES & Verbal Aggression is *weak* \((r = 0.16)\) but significant (Significance level: 0.0001) vide Table – 5.11 & Fig. – 5.20. No significant relationship has been found for boys.

**Hypothesis - X**  
There will be significant relationship between Indirect Aggression in children and Socio Economic Status.

*This is partial accepted* as for girls relationship between SES & Indirect Aggression is *moderately strong* \((r = 0.26)\) and significant vide Table – 5.11 & Fig. – 5.21. No significant relationship has been found for boys.

**Hypothesis - XI**  
There will be significant relationship between Physical Aggression and Peer relationship in children.

*This is accepted* vide Table 5.13 relationship found significant for both boys \((r = -0.27)\) & girls \((r = -0.15)\).
<table>
<thead>
<tr>
<th>Hypothesis -XII</th>
<th>There will be significant relationship between Verbal Aggression and Peer relationship in children.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>This is accepted</strong> vide Table 5.13 relationship found significant for both boys (r = -0.235) &amp; girls (r = -0.167).</td>
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<tr>
<td>Hypothesis -XIII</td>
<td>There will be significant relationship between Indirect Aggression and Peer relationship in children.</td>
</tr>
<tr>
<td><strong>This is accepted</strong> vide Table 5.13 relationship found significant for both boys (r = -0.287) &amp; girls (r = -0.21).</td>
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<tr>
<td>Hypothesis -XIV</td>
<td>There will be significant relationship between peer relationship and Socio-Economic Status of family.</td>
</tr>
<tr>
<td><strong>This is rejected</strong> vide Table 5.11 for both boys &amp; girls.</td>
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</tr>
<tr>
<td>Hypothesis -XV</td>
<td>There will be differential pattern of Aggression in school children of Hindi &amp; English medium of instruction schools.</td>
</tr>
<tr>
<td><strong>This is partially accepted for girls as per Table – 5.14 for girls and rejected for boys as per Table – 5.15.</strong></td>
<td></td>
</tr>
<tr>
<td>Hypothesis -XVI</td>
<td>There will be differential pattern of peer relationship in school children of Hindi &amp; English medium of instruction schools.</td>
</tr>
<tr>
<td><strong>This is rejected for girls as well as boys as per Table – 5.14 and Table – 5.15 respectively.</strong></td>
<td></td>
</tr>
<tr>
<td>Hypothesis -XVII</td>
<td>There will be differential pattern of Aggression in school children studying in different classes.</td>
</tr>
<tr>
<td><strong>This is accepted vide Table 5.2 &amp; Fig. 5.1 for both boys &amp; girls.</strong></td>
<td></td>
</tr>
</tbody>
</table>
Hypothesis - XVIII

| There will be differential pattern of peer relationship in school children studying in different classes. |

This is accepted vide Table 5.2 & Fig. 5.1 for both boys & girls.

6.9 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 which could have bearing on the aggression and could have added another dimensions to the study as such sociological factors also have large impact on the rearing practices, learning models and behavior patterns of the children. Interplay of all these factors play very dominant role in deciding the response of children for conflict resolution and show a Aggression and pear relationship in a very different light. Inclusion of these factors, even though would add not only to the complexity to Aggression model but also adds another direction, which could be socio-ethnic in nature. This opens up another vista for future research in this area.
• The study has also looked into the Age variable for Aggression and peer relation. However, a longitudinal study could have been better with Age as a variable as it gives many more controls and must have nullified and cancelled many sociological, familial, geographical, racial, religious factors. The impact of any exceptional event etc. also could be tackled in such type of study. This also opens up scope for future study linking Age related correlates with Aggression and peer relationship.