

## Causes of Students' Aggressive Behavior at Secondary School Level

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#### Abstract

The article addresses the causes of aggressive behavior among secondary school students. Data for the study was collected from secondary school teachers through structured interviews. Findings reveal that boys use abusive and foul language and involve in destructive activities as compare to girls who were rarely observed in abusive language or physical fight. Negative home and family environment (broken and divorced parents and family problems), unfriendly parents' behavior, authoritative and dishonest behavior of teachers, poor teacher-student interaction, pressure of studies, unfriendly relationships with peers, injustice in society are the major causes of aggressive behavior of students at secondary level in students. Finding depicts no freedom of choice in subject selection makes boys aggressive and gender baseness in society makes girls aggressive. There is need to address the aggressive behavior among students at schools on top priority basis by arranging counseling services for students at school level to provide them psychotherapy for relaxation from aggressive behavior. The role of parents at home, and parents-teacher interaction, strong teacher- student interaction, cooperative learning activities for students and their moral and religious training, scrutiny of presenting movies on promotion of aggression, and need of teachers' training for providing counseling to aggressive students are some measures which can improve the situation. Strict rules may be implemented to keep check and balance on media for presenting material through various means of media.

**Keywords:** aggression, aggressive behavior, causes of aggressive behavior, secondary school students, solution of problem

## 1.1 Introduction of the Causes of Students' Aggressive Behavior at Secondary Level

The life of human beings is a combination of different positive and negative emotions. Aggression is one of these emotions, manifested throughout life, but in different forms at different stages.

## **Aggression and Aggressive Behavior**

Aggression can be defined as an emotion that tends to hurt, harm or destroy something or someone. In case of persons, the intention of harm can be physical or psychological. Aggressive behavior involves conflict between individuals of equal level (Roland and Idsoe, 2001). The manifestation of such emotion is known as aggressive behavior which is usually overt, and varies from mild to severe and it can be manifested against oneself or others around. According to Nelson (2006), whenever there is a conflict of interests between individuals there is a chance of aggressive behavior to be observed. Generally the terms aggression and aggressive behavior are used to refer negative emotions and behaviors respectively. They are considered part of antisocial behavior; something morally, ethically or legally unacceptable (Moeller, 2001).

However, according to Tesser (1995) as cited by Poggenpoel and Myburgh (2002), aggression can be expressed through both constructive and destructive behaviors. Constructive, if is used for individual and collective welfare, and destructive, if used for individual and collective distortion.

#### **Causes of Aggressive Behavior**

Aggressive behavior is a very complicated behavior with a variety of multidimensional causes. In past, social factors were mainly the center of attention for the researchers as causes of aggression in humans. But, with recent scientific and technological advancements, researchers are now trying to explore new areas, including biological factors. Nelson (2006) in his book has summarized the recent advancements in finding a relationship between biological factors and aggression. The major areas of interest include; molecular biology, genetics, nervous system, 5-HT, monoamines, neurotransmitters, nitric oxide (NO), the stimuli and situational factors, stress and drug abuse. The studies included in the book are based on genetics, biochemistry, neuropsychology, brain imaging, and psychophysiology, and it is concluded that individual biological differences lead humans to antisocial behavior according to their own environmental contexts.

Shores, Jack, Gunter, Ellis, DeBriere, & Wehby (1993) identify that behavior of teacher relating to



student-teacher interactions can promote proper behavior and reduced improper behavior. Therefore, Spaulding, A. (2005) describes that teachers should willingly demonstrate respect for students. Respect means that teachers became role models for their students and admit their mistakes by even apologies to students for their mistakes.

Stoff & Cairns (1996) have analyzed genetic, neurobiological and biosocial approaches to the biological study of human antisocial, aggressive, and violent behaviors. They believe that aggressive behavior cannot be studied alone. It requires an interdisciplinary understanding of economics, sociology, politics, psychology, sociology, criminology, biomedicine, and other related disciplines. It is impossible to separate the effects of biology on experience and context, and vice versa. Disturbing behavior in schools has been a source of concern for teachers and head teachers for several years and Rose & Gallup, (2005) observe that teachers generally have been found for asking assistance related to behavior problems in classroom management.

Researches Bandura, Ross, and Ross 1963; Roden 1971 as cited in James (2010) show that watching aggressive cartoons, television plays and games negatively affect students and they start learning and behaving aggressively through the imitation of either from real-life or media based visuals. Current research in New Zealand found instances of physical fighting and weapon carrying among high school students in Dunedin were equal to that of rates for the United States of America (Marsh, L., 2006).

Poggenpoel & Myburgh (2002) proposed a list of psycho-social factors investigated by different researchers from time to time that can possibly lead humans to aggressive behavior. These factors include: frustration, economic pressures, exposure to violence through media, aggression in parents, uncomfortable home environment, socio-economic status, and non-compatibility with peers. Van Acker, Grant, and Henry (1996) describe following important findings relating to students' aggressive behavior: Schools can adversely affect student behavior as there is connection between school environment and students' behavior; teachers may transfer their own anger and aggression against students; and lack of positive teacher feedback for appropriate student behavior can create undesirable behavior in students.

## Aggressive Behavior in Children and Youth

Youth aggressive and antisocial behavior has become a major problem throughout the world and therefore, a major research area for investigation. Researchers have defined many types and forms of aggressive behaviors. Hunt (1993) describes five patterns of aggressive behavior in students (Zirpoli, 2012):

- 1. Over aroused aggression; high levels of activity resulting in accidents and aggressive incidents.
- 2. Impulsive aggression; quietness and passiveness but very low tolerance for frustration, resulting in violent or destructive activities
- 3. Affective aggression; characterized by severe rage, anger, begrudge and enmity.
- 4. Predatory aggression; waiting for a chance and taking revenge from others.
- 5. Instrumental aggression; bullying, intimidating and threatening others, to achieve the desired goals.

Moeller (2001) has studied the contribution of genetic, biological, temperamental, family, social, and cultural factors in causing aggressive behavior in children and youth under 18 years of age. Television and media violence have also taken into account. He has mentioned different researches stating that male children and youngsters are more aggressive than female, and that physical aggression is exhibited by males more than females. However, female aggression is also increasing gradually.

## **Statement of Problem**

The basic purpose of this study was to investigate the causes of secondary school students' aggressive behavior, in an urban Pakistani context as perceived by teachers of secondary schools. The study further aims to investigate teachers' opinions about solution of aggressive behavior of students.

In the present study term "aggressive behavior" refers to behaviors like a) complaining against teachers (b) grudges with teachers and with peer groups, c) physical fighting d) using abusive and foul language e) not doing the assigned work, f) no tolerance for criticism, g) unwilling to accept defeat, h) torturing themselves and others. While the term "secondary school students" used refers to only the students of class 9<sup>th</sup> and 10<sup>th</sup>.

#### **Research Questions**

Followings were the research questions through which the researcher tried to find out the answer of these questions:

- 1. What are the major types and main causes of students' of aggressive behavior of students (girls and boys) at secondary level as perceived by teachers?
- 2. What are the possible solutions to minimize it according to the teachers' opinions?

## **Objectives of Study**

The study was carried out to:

1. to identify the types, and the most important and common causes of students' aggressive behavior at



secondary level;

to explore teachers' perceptions about the possible solutions of the aggressive behavior o students at school.

#### **Delimitation**

This study was delimited to only the secondary schools of Islamabad. Data was collected randomly, according to the researcher's convenience during fall 2012, as the researchers had very limited resources (time, finance, physical and human resources). If in future, any funding agency supports us we can conduct a comparative study on major scale involving some more countries from Asia and Europe.

## Significance of the Study

The findings of the study has implication for teachers of secondary level in particular and for policy makers and readers in general to understand the reasons and causes of secondary school students' aggressive behavior at local level as well as the possible solutions for prevention and cure.

#### Methodology of the study

## Research Approach and Design

The current study was and descriptive study and qualitative approach adopted for the study.

#### **Research Tools**

Structured interviews were conducted to collect the desired data. The respondents (secondary school teachers) were asked the following questions:

- 1. Do you observe aggressive behavior among your secondary school students?
- 2. If yes, what is the type of this aggressive behavior of students?
- 3. What are the main causes of aggressive behavior of secondary school students in your opinion?
- 4. What are the possible solutions in your opinion of aggressive behavior of secondary school students? The data for the present study was obtained through conducting structured interviews with secondary school teachers. The collected data about the presence of aggressive behavior among secondary school students has been analyzed separately for male and female students to find out gender wise answer to each question.

#### **Population**

All secondary schools of Islamabad affiliated with FBISE (Federal Board of Intermediate and Secondary Education) were considered as the population of this study.

#### Sample

Data was collected from a randomly selected sample of 30 teachers who were teaching in class 9<sup>th</sup> and 10<sup>th</sup>. The data was collected from 4 schools located in Islamabad. The data for the study was collected by personal visits of the schools through conducting structured interviews for secondary school teachers teaching class 9<sup>th</sup> and 10th. The main reason behind selecting teachers as respondents of the study was the fact that teachers had more exposure and experience with students coming from different backgrounds and handling various types of disruptive behaviors in the classroom. Therefore, they can give more practical and generalized solutions for the problem of youth aggression.

## **Demographic Information of the Sample**

#### Name and Type of Institutions

The four schools selected for data collection included government, semi-government and private schools. The details of the schools are shown in Table No. 1.

**Table No. 1 Name and Type of Institutions** 

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Serial	Name of Institution	Type	Students at
No.			Secondary Level
1	CDA Model School I-9 Markaz Islamabad	Semi-government (Autonomous)	Girls
2	Islamabad Model School for Boys I-9/4 Islamabad	Federal Government	Boys
3	Islamabad Model College for Girls I-9/1 Islamabad	Federal Government	Girls
4	Islamabad Science School and College F-8/2 Islamabad	Private	Girls + Boys

## **Gender of Respondents**

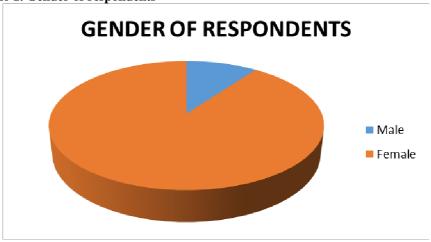


30 teachers; 3 male and 27 female, were interviewed during the study.

**Table No. 2 Gender of Respondents** 

Gender of Respondents	Number	Percentage (%)
Male	3	10
Female	27	90
Total	30	100

Figure no 1. Gender of respondents



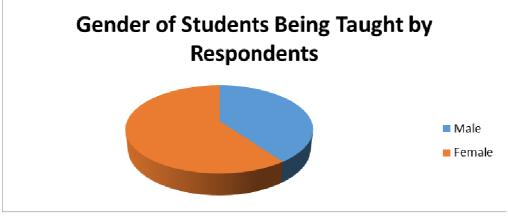
## **Gender of Students Being Taught by Respondents**

Out of 30 teachers, 12 teachers were teaching boys, while 18 were teaching girls in different schools.

Table No. 3 Gender of students being taught by respondents

Gender of Students	Number	Percentage (%)
Male	12	40
Female	18	60
Total	30	100

Figure No. 2 Gender of students being taught by respondents



## Age of Respondents

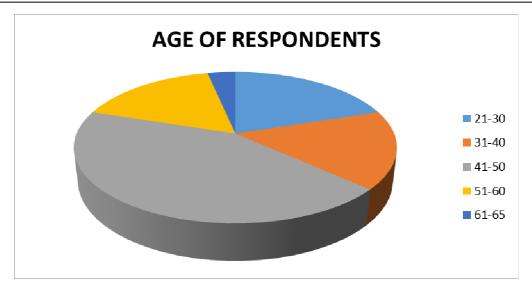
The age of the teachers interviewed varied from 21 years to 65 years approximately.

Table No. 4 Age of respondents (secondary school teachers)

Age (years)	Number	Percentage (%)
21-30	6	20
31-40	5	16.67
41-50	13	43.33
51-60	5	16.67
61-65	1	3.33
Total	30	100

Figure No. 3 Age of respondents





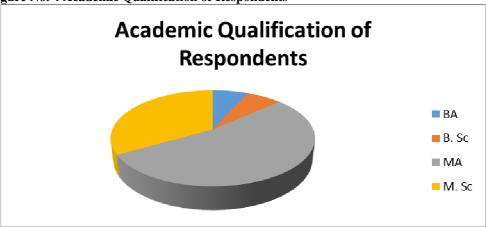
## **Academic Qualification of Respondents**

The minimum academic qualification of the teachers included in the sample was graduation and maximum masters.

Table No. 5 Academic Qualification of Respondents

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Academic Qualification	Number	Percentage (%)
BA	2	6.67
BA B. SC	2	6.67
MA	16	53.33
M. SC	10	33.33
Total	30	100

Figure No. 4 Academic Qualification of Respondents



## **Professional Qualification of Respondents**

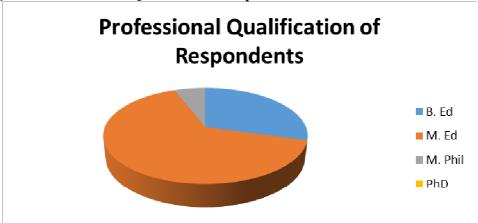
The professional qualification of the respondents is shown in Table No. 6. Out of 30 teachers, 17 possessed a professional degree.

**Table No. 6 Professional Qualification of Respondents** 

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Professional Qualification	Number	Percentage (%)	
B. Ed	5	29.41	
M. Ed	11	64.71	
M. Phil	1	5.88	
PhD	0	0	
Total	17	100	



Figure No. 5 Professional Qualification of Respondents



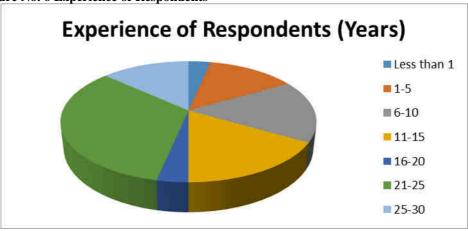
## **Experience of Respondents**

The sample ranged from newly hired teachers to teachers having almost 30 years of experience.

Table No. 7 Experience of Respondents

Table No. 7 Experience of Respondents			
Experience (years)	Number	Percentage (%)	
Less than 1	1	3.33	
1-5	4	13.33	
6-10	5	16.67	
11-15	5	16.67	
16-20	1	3.33	
21-25	10	33.34	
25-30	4	13.33	
Total	30	100	

Figure No. 6 Experience of Respondents



# Aggressive Behavior Observed Among Secondary School Students Data Analysis and interpretation

The data for the present study was obtained through conducting structured interviews with secondary school teachers. The respondents (secondary school teachers) were asked the following questions:

- 1. Do you observe aggressive behavior among your secondary school students?
- 2. If yes, what is the type of this aggressive behavior of students?
- 3. What are the main causes of aggressive behavior of secondary school students in your opinion?
- 4. What are the possible solutions in your opinion of aggressive behavior of secondary school students?

The collected data about the presence of aggressive behavior among secondary school students has been analyzed separately for male and female students to find out gender wise answer to each question. The answers of respondents were interpreted in such a way to answer research questions of the study.



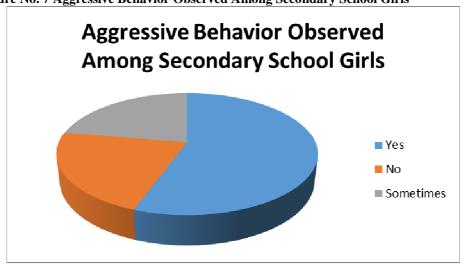
## Aggressive behavior observed among secondary school girls

Table No. 8 Aggressive behavior observed among secondary school girls

Aggressive Behavior Observed	Number	Percentage (%)	
Yes	10	55.55	
No	4	22.22	
Sometimes	4	22.22	
Total	18	100	

The above table shows that 55.55% teachers agree that they observe aggressive behavior among girls whereas 22.22 % observe that they sometimes or never observe aggressive behavior among girls.

Figure No. 7 Aggressive Behavior Observed Among Secondary School Girls



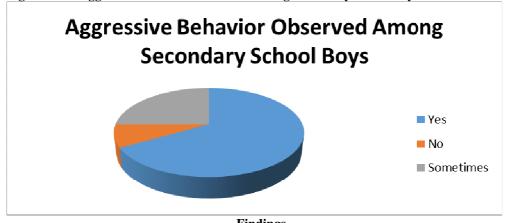
## Aggressive behavior observed among secondary school boys

Table no. 9 Aggressive behavior observed among secondary school boys

Aggressive Behavior Observed	Number	Percentage (%)
Yes	8	66.67
No	1	8.33
Sometimes	3	25
Total	12	100

The table no. 9 depicts that 66.67% teachers agree that they observe, 25% agree that they sometimes, while only 8.33% agree that they do not observe aggressive behavior in boys.

Figure no. 8 Aggressive behavior observed among secondary school boys



**Findings** 

The results show that although the percentage of aggression in girls is not very less but boys are comparatively more aggressive than the girls at secondary school level. The teachers who teach both boys and girls said that girls are usually found normal when compared to boys relating to aggressive behavior.



## Types of Aggressive Behavior Observed in Secondary School Students

The types of aggressive behavior analyzed during this study have been divided into two broader categories.

1. What are the major types and main causes of aggressive behavior of students (girls and boys) at secondary level as perceived by teachers?

The answer to the above mentioned question is presented in following pages of data analysis and interpretation:

## Types of Aggressive Behavior Observed in Girls

The data collected from the secondary school teachers, teaching girls in government, semi-government and private institutions shows the following major types of aggressive behavior in girls:

## Aggressive behavior with teachers

Through structured interviews with teachers about the types of aggressive behavior among girls that they observe in the classroom, it was found that there were consensus among teachers about the types of aggressive behavior. As it is reflected from following findings of the teachers structured interviews:

- 1. Students have no tolerance for criticism. As soon as the teacher says something or point out a mistake of the students, a very quick and strong reaction is observed. Their moods change, their facial expressions become very negative, and in some cases they start talking very rudely. Even some students, talk very rudely with their parents in PTMs (Parent Teacher Meeting).
- 2. Once they have grudge s with a specific teacher, they make groups against her. During her class, they taunt, argue and pass rude comments on her.
- 3. Another way of showing their aggression is non-cooperation. They start ignoring the assigned tasks i.e. do not do their class work or home work. Show resistance by not attending the school regularly, and do what they are asked not to do.
- 4. Students want to fulfill their demands and desires. If something happens against their will they immediately react against that.
- 5. The concept of success and failure is getting stronger, and nobody is willing to accept their defeat. They criticize the teachers, complaining against the decisions made by the teachers or school administration, mainly during events like annual inter house competitions.
- 6. Physical fight among girls is found very rare. According to some teachers they observed only once or twice in their whole career two girl students fighting physically. Usually it happens in years. On the other hand, verbal dispute is quite common among girls.

## Types of Aggressive Behavior Observed in Boys

The data collected from the secondary school teachers, teaching in government, semi-government and private institutions for boys shows the following major types of aggressive behavior in boys:

- 1. Boys also have no tolerance for criticism. Boys are at top in physical fight as compare to girls. Physical fight among boys is very common and it includes bulling, scratching faces, hitting and boxing. Boys are very short tempered, and become emotional and angry at trifles and begin to fight physically and use of abusive and foul language and exchange of hot words is normal in boys. Their tolerance level with their peers is far less as compared with the girls. As soon as a fellow says something, the other gets angry and starts fighting. They start quarreling on small issues, shouting and attacking each other angrily. They make groups on small clashes. The same happens while playing any game. Some students show their aggression by torturing themselves as well as their fellows.
- 2. Once they have grudges, they make groups against each other. These groups may be called as "Gangs". Then there are clashes between these groups of students. They also complain minor and irrelevant issues to the teachers about others.
- 3. Majority of students is selfish, self-centered and bossy. If something happens against their will they lose their temper, becoming restless, sad or extremely angry. They want to win, win and win and do not want to lose at all when compare to their fellows.
- 4. Boys usually misbehave with teachers by talking, answering and arguing very rudely or shouting. They also taunt and pass comments on teachers inside and outside classrooms. At times they make very weird voices during the class.
- 5. Although, in schools boys are not allowed to show their aggression very openly in front of teachers due to strict discipline and rules of the school administration. However, aggressive behavior is depicted indirectly in various forms. If something happens against their will they show it very clearly through their facial expressions and body language. Indirect expression against school administration or teachers includes propaganda and rumors against teachers, hiding their things,



damaging school property, problem creation for teachers during the class by distracting others, not paying attention, throwing, stealing or breaking things. Boys usually show their aggression by not attending the school regularly, showing no interest in studies or indulging themselves in violent and destructive activities.

#### Findings relating to types of aggressive behavior of boys and girls

Gender difference was found in existence; types and causes of aggressive behavior among secondary level students. It was found that existence of aggressive behavior is much higher in boys than girls. Both male and female students have no tolerance for criticism. As soon as they are criticized by teachers about their disruptive behavior they be they become aggressive. Verbal dispute were found common in girls whereas physical fight was found common in boys on trifles. Both start fighting on small issues, make groups against each other and keep grudges in their hearts.

Girls student make group against teachers with whom they have grudge s and become non-cooperative. Whereas boys students make group against their peers with whom they have disagreement or disputes on small issues. Both (boys and girls students) want to win and do not want failure at any cost, especially when compare to their fellows. Boys were found rude enough to show their aggressive behavior through body language and facial expression when something hurts them or is against their will. The major difference observed between the manifestation of aggression in girls and boys is the use of abusive language, physical fight and destructive activities. Girls almost rarely indulge in physical fight or destructive activities and they do not use so much foul language openly as boys do.

## **Causes of Aggressive Behavior in Secondary School Students**

The main causes of aggressive behavior in secondary school students studied during this research are discussed under four main headings; home, school, society, individual.

## Causes of Aggressive Behavior in Girls: Female teachers' Perceptions

The data collected from the female secondary school teachers teaching in government, semi-government and private institutions for girls shows the following major causes of aggressive behavior among girls:

## Home and Family background

Majority of teachers believe that the family background, parents' behavior and parents' relationship with their female children are one of the most important causes of aggressive behavior in students. All types of domestic problems experienced by students are very clearly reflected in their abnormal behaviors at school. If the home environment is disturbed or unstable, if the parents' relationship is not good and there is a constant dispute between them or other family members, if the father has divorced the mother, or the mother has left the father, if either of them has got married with someone else, or if the child is living with single parent, the student exhibits aggressive behavior at school. According to teachers, girl students with such domestic problems, especially of deprived families are usually more aggressive and intolerant as compared to those who have good and peaceful home environment.

#### Parents' behavior and parents-children relationship

With the changing times, the concept of "joint family" is being replaced by "nuclear family" system in our society. The trend of "nuclear family" system is in practice in 21<sup>st</sup> century. Parents (father and mother) are busy in doing their jobs, they do not have enough time for their children, and there is nobody else to compensate. Students with such background do not get proper attention and love at home. Their parents do not bother to understand their emotional needs and demands, nor do they have time to point out their mistakes or guide them properly. Instead of giving proper time and attention to their children, they compensate it by extra facilitation in terms of material things and too much pampering. They also favor non sharing attitude in siblings by providing every child his/her personal toy or possession so they do not have to intervene and solve issues. All these factors result in aggressive behavior.

On the other hand, unnecessary strict behavior of parents, especially of father, harsh remarks attacking/that damage their self-respect, favoritism and inequality of behavior between their male and female children cause a sense of rebellion and deprivation in children that lead to aggression.

#### Teachers' behavior and teachers-students relationship

Like home and family, school environment and teachers behavior also plays a very important role in determining the nature of behavior of students. According to our respondents, teachers' behavior is very important for students in shaping their behavior. Teachers' behavior and teacher-student interaction is also a major cause of students' aggressive behavior. Teachers' discrimination in their behavior with students, inability to understand



students' learning or personal problems and their feelings are major causes of students' aggression. Respondents (teachers) themselves admit that some teachers adopt insulting behavior towards some students especially with those students who ask more questions in the class to clarify their concepts and students of low abilities. Sometimes teachers become authoritative, very strict with the students, do not allow them to speak, discourage questioning during lectures, pass insulting remarks about them, their family background or their class performance in front of the whole class, use abusive language with them, do not give importance to their self-respect, treat them unequally; favoritism with some students and grudges with others, students start disliking them. These negative attitudes of teachers also cause aggressive behavior in students because they cannot express their disliking directly and they need some way out. They behave aggressively as a negative reaction. However, in some cases, even when the teachers' behavior is normal, even friendly, if something happens against the students' will and their demands and desires are not fulfilled according to their needs, they start behaving aggressively. At times, change of a favorite teacher during the session, or with whom they are used to study from years, results in a strong aggressive reaction from students' side. They fail to accept the sudden change and show their aggression by non-cooperation with the new teacher.

#### **Student-student relationship**

Another important cause of aggressive behavior among students revealed by our respondent was negative peer relationship. It has been revealed during the study that students on the basis of small issues and personal grudges start negative competition against each other which results in jealousy. The concept of "success and defeat" in even minor issues is increasing day by day in children. For them the person on the other side whether their friend or class fellow is their opponent or enemy, and they have to win the competition at any cost. As a result they are unable to tolerate even small and ordinary things, and as a reaction become aggressive. Groups are also made against each other on the same basis leading to more aggressive behavior among students. Groups also appear unintentionally when there are two types of students in a class; ones, who are good in both studies and other co-curricular activities and are getting promotion and attention of all, and the others; weak in both, always unwanted and ignored. There also starts a negative competition which causes aggression especially in the weak students. Inappropriate behavior of friends is also one of the causes of aggressive behavior in secondary school girls. Selfishness, self-centeredness and dishonesty of close friends also results in sadness, loneliness and anger in students.

#### **Burden of Studies**

Lengthy syllabus, homework burden especially at weekends, test preparation, competition with others, stress of appearing and passing with good marks in board exams and many other related factors all the time pressurize majority of the secondary school students. In this stressful situation they consider any extra work as burden for them and are not willing to accept it and strongly react against any such work given to them. The students who are forced to study science by their parents but are unable to develop interest in those subjects or are weak in studies are under even more stress than the good or average ones, as they have to do something against their will and aptitude giving good results.

## **Society**

An individual's behavior cannot be studied without considering the context, environment and society in which he or she lives. Some of the society's aspects which lead to aggressive behavior in students according to the respondents are discussed here:

#### **Class Difference**

One of the main causes of aggressive behavior in students is the social class system of our society. Division of adults and society on the basis of gender and financial status leads towards many negative feelings among the girl students. In schools where students from different social classes and financial backgrounds come together, the students of upper class bring superiority complex and non-sharing attitude from their homes, while the ones with poor financial conditions come with inferiority complex and jealousy. The clash between these two types, results in severe aggressive behavior, especially in those who belong to lower class and their parents cannot afford to give all those things which the rich ones possess. In some cases this causes depression and in others leads to development of stealing habits in students. An important factor relating to students' care is respect for every students' feelings, beliefs, emotions, as well as his/her cultural and social values (Malik, Khatoon and Khurshid, 2011). Our respondents further reported that occasionally gender biasness also became a cause of aggressiveness among sensitive girl students. When they saw inequality of rights just for being a girl, then in such situations they became frustrated and began to behave aggressively. Female students' generally have psychological problems like inferiority complex, habit of telling lies, remaining worried all the time, being shy, introvert and reserved in the class and in school. In a society like Pakistan, people give top priority to their male



child. Hence it creates possibility for indulging female child into various types of psychological pressures (Malik, 2012).

#### Media

Many teachers were of the opinion that media is also playing a very negative role in our society by promoting aggressive in our youth. Especially television shows, cartoon, films and Television plays based on aggressive themes, cable and internet are promoting violence, aggression, immorality and abusive language in the society. The students are exposed all the time to news channels showing crimes and violence, aggressive and violent video games and movies. All those things that they are constantly getting through media also provoke aggression in them, as they tend to imitate all those scenes and events in their real life.

## **Changing values**

Open media, modern technology and explosion of knowledge through internet in the last few years has also changed the values of our society. One of the experienced teachers said: "Values have changed in the past few years, which have also affected the overall behavior of the students. Some years back the students were very obedient and respectful but now there is no respect for teachers and parents. For them the advices of teachers and parents are "boring lectures" which they do not want to listen any more. They are not ready to learn from others' experiences but want to experience the realities themselves." Another teacher recently appointed in the same school from where she did her SSC (Secondary School Certificate) some 7 years back also expressed her concern about the changing behavior of students and said: "The students' behavior has changed a lot. They are now bolder and want more freedom as compared to our time". Parents busy in their own lives do not have time to provide proper guidance, give them religious and moral education and introduce them to their own values. Teachers on the other hand have the responsibility of covering the required syllabus within time, as the students have to appear in the board examination. In the absence of proper guidance from parents or teachers, the students begin getting away from their own religion and values and get influenced by media, bad company etc. Moreover, the use of modern technology has isolated the youth from people around them. This loneliness and distance from their own roots and people around them also causes aggressive behavior in some students.

#### Individual

Apart from the environment where an individual lives, his/her own nature and personality also affects his/her behavior. First of all, if a student is facing any type of physiological, mental or psychological problem which is not treated properly, this can lead to aggression and abnormal behavior. Secondly, some students who are indulged in bad habits and do not want to be noticed or criticized by elders behave aggressively to hide their bad sides. On the other hand, some of them do it purposely to gain importance and remain the center of attention everywhere. Finally, the students who have no responsibility also sometimes get aggressive because they do not have some healthy activity to utilize their energies positively.

## **Causes of Aggressive Behavior in Boys**

According to the secondary school teachers teaching in government, semi-government and private institutions for boy following are the main causes of aggressive behavior in boys:

## Home: Family Background and Parents' behavior and parents-children relationship

Like the teachers teaching secondary school girls, the majority of boys' teachers are also of the same opinion that the parents' behavior, parents-child relationship, and especially family background are important causes of aggressive behavior in secondary school boys. According to teachers, the boy students facing any type of domestic problem and disturbed family affairs are usually more aggressive than others. If the students belong to broken family, if there is no discipline in their parents' life, if they keep on fighting and there is no peace in their personal life and home. If they are away from their family for some reason and are living in a hostel, all these factor lead to disturbed psychology and aggressive behavior in students. Parents' behavior and parents-children relationship also influences the behavior of youngsters. Unfriendly behavior, extra strictness or lack of attention from parents results in aggression among secondary school boys.

## Teachers' behavior and teacher-student relationship

Teachers' behavior and teacher- student relationship also plays a vital role in determining the behavior of boy students. Teachers' authoritative, strict and unfriendly behavior has a very negative effect on students' performance and behavior in class. According our respondents if a teacher is friendly and polite with boys he or she can tackle every type of behavior easily. But, if a teacher tends to be very strict and rude, hurts the self-respect of students, gives them insulting and harsh remarks, uses indecent language, and other such practices still followed by some of the very senior male teachers, the boys get annoyed and aggressive. In other cases, even



when the teachers' behavior is normal, rather friendly, if the teacher does not have enough knowledge and command on his/her subject, or if something happens against the students' will, they start behaving aggressively.

## Burden of Studies and problems relating to school administration

According to the study conducted, issues related to administration and studies are important causes of aggression, in case of boys. An important problem discovered in public sector schools during this study is the unavailability of arts or humanities subjects at secondary level. The teachers told the researcher that science is compulsory for all students and they have no other option. So, all the students are forced by both parents and administration to study science whether they have interest and aptitude for it or not. As a result, students with weak educational background and no understanding of science subjects totally lose their interest in studies, which leads to irregularity, non-cooperation and frustration. Moreover, within the science group the students cannot personally have option for biology, computer science hardware or software. The subjects are offered by the administration; relatively difficult subjects to more bright students and easy subjects to weak students, keeping in view the result and performance of their school in board examination, completely ignoring the needs and desires of their students. Students consider those unwanted subjects as an extra burden for them. But the high expectations of their teachers and parents force them to study. All science subjects whether easy or difficult are in English, and the students with weak base of English language and no aptitude for science subjects face double difficulty. All these factors along with strict discipline of the school; especially rules like punctuality, regularity and no permission to bring mobiles etc. and even punishment in some cases, results in lot of aggression in secondary school boys.

## **Student-student relationship**

When students from different backgrounds and personalities come together, obviously there can be difference of opinion. In teachers' opinion their students are very intolerant and short tempered, with an attitude that whatever they say is right. As soon as there is a conflict or difference of opinion within their class fellows or even friends, they lose their temper and start fighting with them. Moreover, due to strict rules and regulations, respect or fear of teachers and administration they cannot directly show their anger and frustration. So, that anger is also expressed in fights with their own fellows. In some cases, company of aggressive friends also influences students' behavior and they start imitating them.

#### **Society**

When compared to girls, boys have more freedom and are more opportunities for exposure to society and given priority as compare to girl students. They have many attractions for them outside that affect their overall personality and behaviors.

#### Class difference

Respondents were of the opinions that unequal distribution of resources in the society and existence of class and status difference play a very crucial part in the increase of aggressive behavior among secondary school boys. Parents' socio-economic problems, shortage of money and other facilities at home make the students frustrated. Moreover, when they compare their own living standards and the things they possess with those of their friends who are financially better than them they get jealous. This jealousy and frustration leads to manifestation of aggressive behavior in one form or the other.

#### Modern technology and changing values

The reasons that were explained by teachers of boys secondary schools were to some extent are the same as were described by teachers of girls secondary schools. Respondents of boys secondary schools explained that media, mobile phones and other information technology resources should be considered as major causes of aggression among boys. According to one of the respondents, the impact of media and modern technology especially mobile phones has become so strong and negative on youth that they nullify the positive effects of all the teacher's advices and moral teachings. Others also said that our society has lost its moral values, values have changed and the present students have no sense of morality, respect of parents, teachers and others.

## Students' own self

Majority of teachers believe that the age factor is an important cause of aggressive behavior among boys, as at this age secondary level, which is very critical age level in an individual's life, students suffer a lot of emotional and psychological problems due to certain biological changes. According to our respondents secondary school students are passing through a transitional period from childhood to adolescence which is characterized with many hormonal, physical, psychological and mental changes, and an increase in energy level. Therefore, teenagers are mostly very aggressive and intolerant. Some students who are emotionally disturbed or have any sort of complex behave abnormally. Some of them get personal satisfaction by disturbing others. Others, who do



not get proper attention, behave aggressively to seek attention of people around them.

#### Findings relating to causes of aggressiveness among students of secondary level

It is the common observation of teachers that both male and female students facing any kind of domestic problem are more aggressive than others. All the problems that they face in their personal life are depicted in their behavior at school in one form or the other. Family background, parents' behavior and parents-children relationship is a common cause of aggression in both boys and girls.

Teachers' behavior and teachers-students relationship also directly affects the behavior of both boys and girls. In case of girls, change of teacher also becomes a cause of negative behavior but in case of boys none of the respondents mentioned this factor. Furthermore, no gender difference was found in negative peer relationship which leads to aggression. In case of girls the respondents talked in detail about this issue, but in case of boys the discussion was limited. However, jealousy among class fellows and friends and intolerance were found common factors in both genders. Burden of Studies was found a cause of aggression in both. In girls it was usually limited to lengthy syllabus, homework burden and tough competition. But in case of boys, especially in public schools, the situation is alarming. They were forced to study science subjects without their interest, aptitude and abilities. Financial problems and class differences negatively affected both male and female students almost equally as revealed by the data. Modern technology and open media has changed the thinking and values of both boys and girls. They are now bold; want more freedom, with no moral values. According to teachers of both boys and girls the students' behavior has changed a lot in the last few years and are more aggressive than the ones 10 or 15 years ago. Both mentioned nature and personality, including physical and psychological problems as causes of aggression. Teachers of male students emphasized the importance of teenage and the changes associated with it as an important cause of aggressive behavior among boys. On the other hand, none of the girls' teachers mentioned this aspect.

## **Solutions for Aggressive Behavior Proposed by Teachers**

The teachers were asked to propose some solutions to solve the problem of aggressive behavior among secondary school students. Following are the responses to this question:

#### Solutions for Aggressive Behavior Proposed by Teachers for Secondary School Girls

2. What are the possible solutions to minimize it according to the teachers' opinions?

The possible solutions proposed by teachers for preventing, dealing and minimizing aggressive behavior in secondary school girls and boys, emphasized the role of parents, teachers, parents-teacher interaction, moral and religious education, and positive role of media. The complete interpetation and answer to the question no. 2 is given below:

#### **Parents**

According to teachers, the personality development starts from the behavior and training of the parents. Parents need to keep friendly relation with their children, instead of scolding and beating them. Mother must train them how to love by showing love and affection for their daughter. The behavior of father must be balanced; neither too strict nor too lenient. Both must give proper time, attention, appreciation on good performance, and encouragement and motivation on bad performance as well. Parents must carefully observe their children's behavior and performance, and take immediate action if any unusual thing is observed. If a child is emotionally disturbed, parents need to give extra time for emotional satisfaction. Such child must not stay alone; there must be interaction with parents.

#### **Teachers**

The teachers' behavior must be friendly and equal to all. Immorality cannot be allowed but unnecessary strictness and restrictions must be avoided. They must understand the problems and requirements of their students apart from the syllabus etc. If the students are demotivated the teachers can motivate them by some light conversation. There must be a positive image of teachers among students. They must provide a comfortable environment in class so that the students can trust them and share their problems with them. If the students want to share their problems, the teachers must have patience to listen and guide them, and must keep it confidential. They must not hurt or attack the self-respect of students. They must appreciate the good performance of their students to motivate them. Teaching methodologies must be improved. Just like parents, teachers must also focus on character building and personality development of their students. They can design group activities to promote team work, peer interaction, sharing and cooperation, without a sense of negative competition and jealousy. They must arrange the class in such manner that groups are made irrespective of their performance, background or status, and bright and weak students get equal opportunities. Teachers must engage all the students in different interesting tasks and proper responsibilities assigned to each one of them.

## Parents-teacher interaction

Parents-teacher interaction can solve many problems of the students. According to some teachers, they alone



cannot do anything if there is no cooperation from parents' side. But if the parents frequently interact with the teachers many problems can be solved easily. Therefore, parents must go regularly to PTMs (Parent Teacher Meeting) and openly share their problems to find a better solution. Parents and teachers must keep an eye on the overall well-being of their children. The parents must make sure regular medical checkup of child. Any kind of physical or mental problems must be solved at first preference. The psychological needs of the individual must be understood by the adults. There must be proper counseling to solve any abnormal behavior.

#### Moral and religious education

Islamic teachings are very important in preventing aggressive behavior, especially in young students. Therefore, religious education and guidance must be a regular part of students' education. It must not be limited to Islamiat class. There must be regular sessions on Islamic teachings at home, class, school assembly and other places where possible to reinforce the Islamic values of peace and harmony. The students must be taught patience and tolerance, by guidance and becoming a role model for them. Moral lessons must not be given in form of boring lectures but practically using interesting activities and examples.

#### Role of Media

Media itself must play a more positive role. The channel owners must take some steps to avoid the propagation of violence, abuse, and aggression in the society. On the other hand, it is also the responsibility of parents and adults to ensure positive use of media. Day and night packages of mobile phones may be banned by the government through force of law. Parents can realize their responsibilities regarding use of media and other modern technologies. The government may ban such websites that are creating and developing aggressive attitudes among youth.

## Solutions for Aggressive Behavior Proposed by Teachers for Secondary School Boys

The possible solutions proposed by teachers for preventing, dealing and minimizing aggressive behavior in secondary school boys, emphasized the role of parents, teachers, parents-teacher interaction, school administration and moral and religious education.

#### **Parents**

Students start learning discipline at home. Therefore, parents must avoid disputes and fights in front of children. Parents can develop a friendly relationship with their children, especially teenagers. They can show love and care, avoid extra strictness and harsh punishments. If unavoidable, the punishments must be lesson seeking to change their bad behavior. It is better to avoid punishments but the parents must be firm, and closely monitor their children's actions and behaviors to deal with any misbehavior. If noted, they may give extra attention and have sittings to solve at early stage. They may not discuss financial issues with or in front of their children to prevent aggression. They may choose proper educational institution to avoid future financial problems.

#### **Teachers**

Teachers can try to use innovative teaching methods to make their classes more interesting and effective. Teachers may behave friendly with students, especially teenagers. They must talk politely and decently. With their positive attitude towards students they can easily gain the confidence of their students and inquire about their personal problems. They can try their best to release their tensions, worries, academic as well as personal problems, and persuade them to inculcate positive attitude towards life. The students can be diverted and engaged in different productive tasks so that they don't have time to think negatively.

## **Parents-teacher interaction**

There must be good coordination between teachers and parents to deal the child positively. Students, teachers and parents together as a triangle can solve many problems, which if remain unsolved lead to aggressive behavior. Individual needs and problems must be understood. Any unusual behavior in students must be properly investigated, and there must be proper counseling; in and off school by parents and teachers.

#### **School administration**

The school administration must be student friendly; according to the psychological needs of students. The administration of those schools where there is no option of arts or humanities must take necessary steps to introduce those subjects in their schools. Students must be given the liberty by both parents and school administration to select the subjects according to their own desires and aptitudes. Steps must be taken for the promotion of arts subjects so that the parents do not force their children to study science unwillingly. Teaching of English language can be improved so that the students do not face difficulties at secondary level regarding foreign language. Unnecessary work load must be avoided to provide them a stress free environment. Especial workshops can be arranged to guide teachers about problems of adolescent age and how to deal with students' aggressive behavior at secondary level effectively.

## Moral and religious education

Scientific education must be related with moral and Islamic education to get better results. Proper attention and guidance must be provided at home, mosque and school.



## Findings relating to solution of students' aggressive problems

Teachers of both male and female students emphasized the importance of good domestic environment and parents-children relationship. Both said that teachers' good behavior and positive attitude towards students can solve many problems at initial level.

They also mentioned the importance of parents-teacher interaction in order to deal the students with aggressive behavior. Both believe that moral and religious education must be a regular part of every student's upbringing; all stake holders must take this responsibility.

In case of girls, teachers said that media must change its policies and parents must keep an eye on their children that what they are watching. But teachers of boys did not mention the role of media in solutions. On the other hand, teachers of male students focused on the positive role of school administration for many of the students' problems that ultimately lead to aggression, but none of the teachers of female students showed their concern about school administration.

#### Discussion

Starting from small animals and later on specializing in humans, a lot of work has been done internationally on aggression and aggressive behavior. The scientists and researchers are continuously contributing new knowledge to this field. Findings of the present study are consistent with results of previous researches like Bandura, Ross, and Ross 1963; Roden 1971 as cited in James (2010); Shores, Jack, Gunter, Ellis, DeBriere, & Wehby (1993); Van Acker, Grant, and Henry (1996); Moeller, 2001; Poggenpoel & Myburgh (2002); Spaulding, A. (2005); Rose & Gallup, (2005); Nelson (2006); Marsh, L., 2006) and Zirpoli, 2012). Apart from the contextual differences, the major findings of this study coincide with the previous researchers conducted in different parts of the world. The percentage of aggression in secondary school girls is not very less. However, boys were found comparatively more aggressive than the girls. Aggression among both girls and boys is an existing phenomenon. Physical fight and aggression is exhibited more commonly by boys are similar to the findings of many studies mentioned by Moeller (2001).

The causes of aggressive behavior among the students revealed by this study are also similar to the ones already investigated by other researchers. In this study, the causes have been divided into four main categories: home, teacher's behavior and teacher- student interaction, society and individual. The findings of this study also match with a list described by Poggenpoel & Myburgh (2002), investigated by different researchers from time to time as possible causes of human aggression. However, this similarity does not mean that these are the only causes of aggression, nor does it show that these factors are universal. It may be noted that within these similar findings, there still exist various differences. These differences mainly depend on the context in which an individual lives. For example, if we consider home as an important factor, the home environment, domestic problems, family system, and other aspects are not identical throughout the world. Similarly, there may be contextual variety in the teacher's behavior and nature of teacher- student interaction, the school environment, administration policies, etc. can vary according to the education system. Same is the case with the factor relating to society like language, culture, values, ethics, media, class system, economics and politics etc. are different from place to place. All these, in addition to the biological and genetic factors contribute directly or indirectly to the formation of an individual's personality, which may cause aggression. Therefore, there is always a need of understanding all these aspects in detail. The present study was an effort in this regard to contribute the existing knowledge by providing some solutions of aggressive behavior of secondary level as it was explored by our respected respondents. The fact mentioned by Stoff & Cairns (1996), that aggressive behavior cannot be studied alone but requires an interdisciplinary understanding of various scientific and social disciplines, is also applicable in case of the solutions as well. The solutions proposed by the teachers of secondary school students also indicate the same i.e. the problem of aggression among youth cannot be solved in isolation. There is a need of collective efforts by parents, teachers, school, individual, media and society to solve this problem at initial stages.

#### Conclusion

The results show that boys are comparatively more aggressive than girls. The teachers teaching both boys and girls said that girls were usually normal when compared to boys. Both boys and girls have low level of tolerance regarding criticism on their personality or on their performance. As soon as something happens against their will they become aggressive. The major difference observed between the manifestation of aggression in girls and boys is the use of abusive language and physical fight in case of boys which is hardly observed in girls. According to teachers of both boys and girls the students' behavior has changed a lot in the last few years and are more aggressive than the ones 10 or 15 years ago. There is need to investigate what are other societal and developmental factors that are increasing aggressiveness among youth.



#### Causes

It was the common observation of teachers that both male and female students facing any kind of domestic problem are more aggressive than others. Common causes of aggression in both boys and girls are negative family background, indifference and negligence of parents, weak parents-children relationship, teachers' behavior, teacher-student relationship, peer relationship, financial problems, class differences, modern technology, open media, nature, personality and individual problems. Burden of studies is also a cause of aggression in both genders. In girls it is usually limited to lengthy syllabus, homework burden and tough competition. Boys are forced to study science subjects without their interest, aptitude and abilities. Teachers of male students emphasized the importance of teenage and the physical changes associated with it as an important cause of aggressive behavior among boys. On the other hand, none of the teachers mentioned this aspect for girls.

#### **Solutions**

Teachers of both male and female students emphasized the importance of good domestic environment, trust based parents-children relationship, teachers' good behavior and positive attitude towards students, parents-teacher interaction, and regular moral and religious education to prevent and treat aggressive behavior in secondary school students. In case of media, teachers said that media can change its policies and parents may keep an eye on their children about what they are watching. Anyhow, teachers of boys did not mention the role of media in solutions. On the other hand, teachers of male students focused on the positive role of school administration for many of the students' problems that ultimately lead to aggression, but none of the teachers of female students showed their concern about school administration.

#### Recommendations

It was a small study with financial and time constraints. A large comparative study may be planned by including some major countries of the south Asia to explore the causes of aggressive behavior of youth in South Asia if it is funded by any national or international agency.

The result of such large scale research can help in bringing peace in the region. Based on findings of the present study it is recommended the same procedure can be followed to do further research for an in-depth understanding of the topic by collecting from other regions of the country. It is further suggested that secondary school teachers can be provided specific in- service professional development training about handling with and providing counseling to aggressive students. The school administration can redesign their policies to facilitate students by giving them freedom in selection of subjects of their choices. Teachers may guide, inform, and advice students' parents about the benefits of providing students autonomy for selection of subjects of their own choice.

Teachers may try to create a respectful learning environment where everyone is treated equally without any sort of discrimination and where no one is allowed to ridicule any one. For this purpose teachers formulate rules and principles for class interaction with consultation of their students and students themselves may be assigned responsibility to observe that the proposed principles and rules by them, are being fully implemented.

Following areas are suggested for future studies:

- ✓ Comparing causes of aggressive behavior in public and private sector secondary schools
- ✓ Causes of aggressive behavior and its impact on their academic achievement may be investigated.
- ✓ Relationship between emotional competencies and aggressive behavior of students of various level of education can be measured through explanatory and experimental research.
- ✓ Teachers' opinions about their training need regarding handling of aggressive behavior secondary school level students in classroom may be explored.

#### References

- Ellis, D. N., DeBriere, T. J., & Wehby, J. H. (1993). Classroom interactions of children with behavior disorders. *Journal of Emotional and Behavioral Disorders*, 1, 27-39.
- Malik Allah Bakhsh, Sufiana Khatoon and Fauzia Khurshid (2011). Perceived Learning Environment and Emotional Intelligence among Prospective Teachers. *British Journal of Humanities and Social Sciences* 1 November 2011, Vol. 2 (2) p-2
- Marsh, L. (2006). Physical aggression among high school students in New Zealand (Thesis, Doctor of Philosophy). University of Otago. Retrieved from http://hdl.handle.net/10523/542 on August 31, 2013.
- Minton, Stephen James(2010) 'Students' experiences of aggressive behavior and bully/victim problems in Irish schools', *Irish Educational Studies*, 29: 2, 131 152
- Moeller, T. G. (2001). Youth aggression and violence: A psychological approach. Mahwah, NJ. Lawrence Erlbaum Associates. Retrieved from http://www.questia.com/read/106225815/youth-aggression-and-violence-a-psychological-approach



- Nelson, R. J. (2006). Biology of aggression. New York. Oxford University Press. Retrieved from http://www.questia.com/read/119479615/biology-of-aggression
- Poggenpoel, M. & Myburgh, C. (2002). The lived experience of aggression in secondary schools in South Africa. *Education, Vol. 123, No. 1*. Retrieved from http://www.questia.com/library/1G1-94265116/the-lived-experience-of-aggression-in-secondary-schools
- Roland and Idsoe (2001) Aggression and bullying. Aggressive Behaviour 27, no. 6: 446\_61.
- Rose & Gallup, (2005). The 37th annual Phi Delta Kappa/Gallup poll of the public's attitudes toward the public schools. *Phi Delta Kappan*, 87(1), 41-57.
- Shores, R.E., Jack, S.L., Gunter, P.L., Ellis, D.N., DeBriere, T.J., & Wehby, J.H. (1993).
- Classroom interactions of children with behavior disorders. Journal of Emotional and Behavioral Disorders, 1, 27–39
- Sufiana. K. Malik (2012). Parents' Involvement in Female Secondary Schools. *International Journal of Social Sciences and Education* Volume: 2 Issue: 1 January 2012. P 455
- Spaulding, A. (2005, August 02). The Impact of High School Teacher Behaviors on Student Aggression. *Current Issues in Education* [On-line], 8 (17). Available: http://cie.ed.asu.edu/volume8/number17/
- Stoff , D. M. & Cairns, R. B. (1996). Aggression and violence: Genetic, neurobiological, and biosocial perspectives. Mahwah, NJ. Lawrence Erlbaum Associates. Retrieved from http://www.questia.com/library/4729466/aggression-and-violence-genetic-neurobiological
- Van Acker, R., Grant, S.H., & Henry, D. (1996). Teacher and student behavior as a function of risk for aggression. *Education and Treatment of Children*, 19, 316.
- Zirpoli, T.J. (2012). Aggressive behavior. Pearson Allyn Bacon Prentice Hall. Retrieved from http://www.education.com/reference/article/aggressive-behavior/

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