

A Study to Assess levels of Aggressive and Violent Behavior in High School Adolescents and Potential Roles of Occupational Therapy

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<http://dx.doi.org/10.13005/bbra/2713>

(Received: 13 November 2018; accepted: 19 December 2018)

Aggressive behaviour violating the social boundaries can lead to physical or emotional harm to others and violent behaviour can threaten and harm any individual or can destroy property. To assess the effectiveness of multi component cognitive behavioural therapy as a treatment model for aggressive and violent behaviour in high school adolescents. Experimental study was conducted among 13 to 16 years age group adolescents from public and private school in Chennai and Kancheepuram district through non probability sampling technique. Buss & Perry (Aggression Behaviour) baseline survey was used as screening tool as well as outcome measures. One hundred and ninety five (N=195) participants were recruited in the study and divided into control and experimental groups. It revealed that Physical aggression, Verbal aggression, hostility and anger scores were above normal in female and anger and hostility were above normal. Further it revealed that overall aggregate of aggression score was above normal for both male and female. However, intervention using multicomponent behavioural therapy with the selected samples in high school adolescents has found significant ($p = <0.001^*$) Hence, multicomponent behavioural therapy intervention is effective for the anger and violent behaviour among the adolescents in high school. Although some variation in demographics persists, engaging in physical and verbal aggression, anger and hostility in high school adolescent has greatly reduced with the use of multicomponent cognitive behavioural therapy. And overall rates of aggressive and violent behaviour in high school adolescent has reduced with significant ($p = <0.001^*$).

Keywords: Aggressive behaviour, violent behaviour, Cognitive behaviour.

When the Risk behaviors of adolescent violence has examined The youth involvement in physical harm of one another during rage and manifestation of aggressive behaviour during school and after school hour are have been traced to school age adolescents all over the world (Parrilla *et al.*, 1997. Kann *et al.*, 2000). Unceasing report of school age young boys and girls have repeatedly engaged in physical and verbal aggression to one another, like one-third of students have been reported to be fighting each other during and after

school hours, males two- third times more likely than females to engaged inschool fighting¹.

It s also important to find the root cause of bullying behaviours which often resulting to hostility for school children which are incapacitated to retaliate to go physically aggressive back to the opponent disturbing him which has made the prevalent to be more among school age children (Moore *et al.*, 1997Currie 1998)². A study was conducted in 27 countries of which the majority of the sample in the study were 13 year old school

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age adolescent (Currie 1998). Bullying behaviour among youth has track record of resulting into aggressive, physical fight and more serious forms of violence. (Loeber *et al.*, 1993). The male predominantly estimated to be involving in engagement in use of weaponry and other form of self defence to guard themselves or to cause pain to the others who arouse their anger³.

The weapon carrier has been found to be predominantly dangerous and this behaviour is tracked to male of high school age. Different countries have their contextual fact of carrying weapon based on the fact that the variation in weaponry has significant difference based on the country and the report has shown different countries adolescents carry their weapon differently. In Cape Town, South Africa evident has shown that male and female of school age have been reported carrying knife to school to harm others or to self defence. (Flisher *et al.*, 1993)⁴. Also in Scotland the result of the survey carried out has shown that by age 11 to 16 years 34.1% of males and 8.6% of females has confess that they had carried weapons before in their life time (Farrington *et al.*, 2001).

The subsequent study the weapon carriage among substance abuser has shown significantly more likely to carry weapon than non-substance abusers (McKeganey *et al.*, 2000). The economy factors in Netherlands have been so favourable to the extent that the secondary school pupils can afford to purchase a weapon to execute violent act study have shown that 21% of secondary-school pupils confessed that they possess a weapon and the students that carry weapon to school are 8% in the study (Mooij 2001).

The weapon carrier among school children in United States has shown that in grades 9–12 found that 17.3% of students during a national survey of students that carried weapon 8.9% has carried weapon to school premises and some had carried weapon in the last 30 days (Kann *et al.*, 2000).

When the potential roles of occupational therapy were examined Occupational therapists are concerned with adolescents in school settings, OT play important roles in health and wellbeing of child transcending into adulthood, the roles of OT in term of prescription of activities that challenge the emotion of the child to the mature adult and problem solving and various coping skill will be

introduce during the course of intervention which promotes and gives important consideration for practice and research⁵.

In 2014 America Association of Occupational Therapy (AOTA) attested to the fact that cognitive behavioural therapy is within the profession s scope of practice given the non pharmacological and behavioural nature of this approach that promotes self regulation and stimulus control. By using research proven protocol and adapting activities that promote positive behaviour that is void of triggers of negative behaviour will be embedded in multicomponent cognitive behavioural therapy. Occupational therapy working in this emerging area of practice, OT can administer Multi component Cognitive⁶

Need for the study

According to Society for Adolescent Medicine (2004) multicomponent cognitive behavioural therapy protocol provides a comprehensive and integrative social cognitive framework for understanding aggression and violence which provide evaluation and treatment recommendations for aggressive behaviour, conduct problems, and antisocial behaviours which generate one third to one half of all child and adolescent psychiatric clinic referrals⁷. The multicomponent cognitive behavioural therapy has been used which combine the use of integration of two major theoretical approaches behavioural therapy and play therapy which has been used successfully to treat childhood anxiety and trauma (Springer *et al.*, 2012). According to American Academic Child Adolescent Psychiatry (2002) to further research to enhance our understanding of aggression and to inform effective interventions has been proven using multicomponent cognitive behavioural therapy (Burke *et al.*, 2002). To enhance knowledge of occupational Therapy in educational setting that should view the individual with a disability as lacking knowledge or skills to cope, therefore, our focus should be placed on how learning and making the behavioral changes needed to interact successfully in the environment. The study enhanced knowledge occupational therapy in child and adolescent psychiatry to be exposed to the relevant research about aggressive youth and to appreciate the practical limitations of our knowledge and possible areas of intervention⁸. The study proves the effectiveness

of multicomponent cognitive behavioural therapy protocol in occupational therapy for High School Adolescent with Aggressive and violent behaviour. To determine how much their anger and violent behaviour has reduced after the intervention.

Objectives

To assess level of aggression and violent behaviour score in both male and female adolescents in high school adolescents.

METHODOLOGY

Research design adapted in this is a quantitative experimental study design which explains the effects of multicomponent cognitive behavioral therapy in high school adolescent. Ethical clearance number: 1201/IEC/2017 obtained in SRM Ethical committee, The participants were recruited from JRK global school, St Joseph higher secondary school, and JRK Metric higher secondary school and Government Higher Secondary school Maraimalai Nagar Chennai. Through one hundred and ninety five students participated in the study, This research total sample populations were one hundred and ninety five (195) students and the convenience sampling technique was used.

Screening criteria

All the participants were selected following inclusion and exclusion criteria.

Inclusion criteria

Age group between 13-16 years.
Gender both Male and Female.

Aggressive adolescents with above average (>75) aggressive questionnaire scores.

Exclusion criteria

Visual impairment and hearing impairment
Developmental Disabilities.
Motor Disabilities.

Procedure

Aggressive Questionnaire (Buss & Perry, 1992) Was used to determine the objectives of the study. Each session make use of different educational method that is appropriate for the school environment and which is repeatable in other school environment. This includes:

Session One: Lecture delivery style

The session start by taking attendance of student followed by introduction of anger as a natural human physiology, the student expression

of their internal conflict and introducing ways to deal with the aggressive and violent behavior.

Session Two: Small group discussions method

The group was made flexible by starting with humor to make the group interesting, then the distribution of book anger management for dummies were used during the group intervention. Then the closure

Session Three

The multimedia power point presentation (e.g., video clips and images). The students assembled in a quiet hall void of distraction and the therapist project a kid stage video on anger management

Session Four: The hands on interactive session with role play and group tasks. The students were made to present the stage performance in replica to stage play on kid stage video on anger management (John, *et al.*, 2013)⁹.

Data analysis procedure

A statistical analysis was performed using the chi-square test and paired t test to detect percentage distribution of the scores by using IBM SPSS statistical software (version 22.0). The following statistical analysis was done.

Descriptive statistical analyses to find out the demographic characteristics (like the students age, ethnical background, parents marital status, parents educational status, parents employment status, parent aggression status, parents age, students academic performance, students hobby, favorite and role model, parents opinion of anger and type of family)¹⁰.

Family Type and Family education were considered for association using Pearson Chi square analysis. It was found that both family type and family education was found to be not significant at 5 % level of significance (P value = 0.343 and 0.410 respectively). Hence, irrespective of the family type and family education, the aggressive behavior does not change.

Pearson Chi square analysis was performed to find the association between gender and aggressive behavior. 5% level of significance was used. Null Hypothesis: there is no association between gender and aggressive behavior. Alternate Hypothesis: there is association between gender and aggressive behavior.

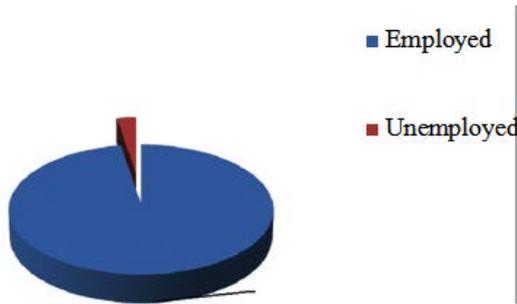
Independent, t test was used to find the difference aggressive behavior between males and

females. Null: There is no difference in aggressive behavior between males and females. Alternate: There is difference in aggressive behavior between males and females. There are 5% level of significance was considered. However, since

the p value of 0.009 is less than 0.05, the alternate hypothesis is accepted. Hence, there is difference in aggressive behavior between males and females.

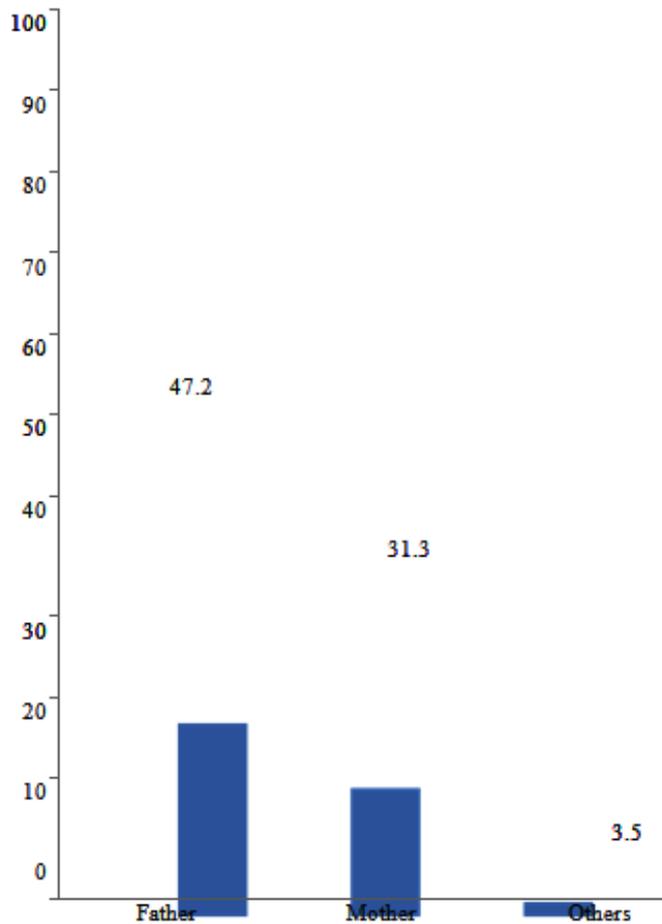
Analysis of variance was used to find the difference aggressive behavior between different schools. Null: There is no difference in aggressive behavior between different schools. Alternate: There is difference in aggressive behavior between different schools. There were 5% level of significance was considered. Therefore, since the p value<0.001 is less than 0.05, the alternate hypothesis is accepted. Hence, there is difference in aggressive behavior between different schools.

The students with aggressive behavior (score>75) were given the intervention and post test scores were obtained from them. Paired t test was used to analyze 139 samples to the effect of multi component cognitive behavioral therapy protocol;



Graph 1. Demographic variables of parents employment status in high schooladolescen

Table 1. Demographic variables of parent aggression status in high schooladolesce



MCBT has effect in reducing aggressive and in high school adolescents. The significant p value (<0.001) shows that the intervention is effective in reducing the aggressive behavior.

RESULTS

This chapter would outline the result of this research after the data was subjected to statistical analysis. Data obtained were statistically analyzed with the chi-square test, analysis of variance test and paired, t test to detect percentage distribution of the scores by using IBM SPSS statistical software (version 22.0)

The above represents the parent aggression status of the high school adolescents sample (n=195). It is the evident that the majority of the high schools adolescent parents are aggressive. They were Father (47.2%), mother (31.3%) and other guardians (3.5%) to find congruence with (Boston *et al.*, 1979) that the parent who naturally aggressive gives harsh discipline which has been link with violence and aggressive behavior adolescent.

The above represents the parent employment status of the high school adolescents sample (n=195). It is the evident that the majority of the high schools adolescent parents are employed (97.4%) and unemployed parents are very low (2.6%) to find congruence with (Elliott *et al.* 1989) that low income has been link with violence and aggressive behavior adolescent.

DISCUSSION

The results of this study assess the aggressive and violent behavior in high school adolescent using aggression questionnaire. The past research has found out that the school based program is an effective approach and is a universal targeted program for selected/indicated children (Sandra *et al.*, 2007). This research shows the percentage of distribution of the student s aggressive and violent behaviors, the mean age of parent and child, ethnical background, parent s marital status, parent s educational status, parents employment status, parent aggression status, students academic performance, students hobby, favorites and role model, parents opinion of anger

and type of family. It is the evident that the majority of the high schools adolescent parents are matured adult (43years old), mother age (38years old) and children mean age (14) which find alignment with (Nagin *et al.*, 1997) that a teenager has no strong foundation to bring up her upspring. It is the evident that the majority of the high schools adolescent are Tamilian (91.3%) followed by Telugu (8.2%) and Kanatika (0.5%) to find congruence with (Smith *et al.*, 1996)

That ethnic segregation breeds violent in adolescent. It is the evident that the majority of the high schools adolescent parents are married (99.5%) and divorced parent is very low (0.5%) to find congruence with (Henry *et al.*, 1996) the child has tendency to develop violent and aggressive behaviour when they grow up with single parent . It is the evident that the majority of the high schools adolescent parents are educated (88.2% and uneducated parents are very low (11.8%) to find congruence with (Perales *et al.*, 1995) that low educational levels of the parents are both associated with violence and aggressive behaviour adolescent. This research work shows that the employment status of the parents of high school adolescents, based on the sample size (n=195). It is the evident that the majority of the high schools adolescent parents are employed (97.4%) and unemployed parents are very low (2.6%) to find congruence with (Elliott *et al.*, 1989) that low income has been link with violence and aggressive behaviour adolescent¹¹. This research work shows that the gender of the high school adolescents, based on the sample size (n=195). It is the evident that the minority of the high schools adolescent are male (46.2%) and majority were females (53.8%) who participated (Orebro *et al.*, 1993). Implications of the study in Occupational Therapy Practice include The study makes students with aggressive and violent behavior to focus on the development of the proper thinking attitudes, knowledge, and skills about a variety of activities, developing positive thought about self and others, and utilizing various strategies learned in multicomponents cognitive behavioral therapy (MCBT) which may be essential component of promoting individual with aggressive and violent behavior.

The method use in the study teaches participation in meaningful activities and social

activities is related to and significantly influences a person's well-being, life satisfaction, quality of life, or health¹².

School based MCBT provides a fertile context in which individuals can learn to direct attention and effort toward creating more challenging and interesting experiences¹³. This research work shows that the aggression status of the respondents' parents and other guardian which had influenced their aggressive behavior. It is evident that the majority of the high schools' adolescent parents are aggressive. They were father (47.2%), mother (31.3%) and other guardians (3.5%) to find congruence with (Boston *et al.*, 1979) the parents

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