

Aggression and Prosocial Behaviour in Middle School Boys – A Multimodal Approach



Psychology

KEYWORDS: Aggression, prosocial behaviour, middle school boys, intervention, Multimodal Approach

Dr. Preetha Menon

Assistant Professor, Dept. of Psychology, Avinashilingam University for Women Coimbatore- 641043.

Ms. Melina Mathew

M.Phil. Scholar, Dept. of Psychology, Avinashilingam University for Women, Coimbatore- 641043. Phone No.

ABSTRACT

The increasing incidents world wide of aggression amounting to crime towards women points at a very urgent need to combat the same. Research indicates that more than majority of the perpetrators of heinous crimes towards women are men who as young boys have had aggressive ways. The reported action research was an attempt to ascertain the effect of intervention based on Multimodal Approach on the aggression and prosocial behaviour of middle school boys (N= 75) in the age range of 12 - 14 years from a Higher Secondary School in Coimbatore, Tamil Nadu. Following the initial assessment of aggression and prosocial behaviour of the participants using Buss - Perry Aggression Questionnaire and Prosocial Personality Battery, intervention involving Multimodal Approach was administered for four weeks (5 days a week) with duration of 45 minutes per session. After four weeks, the participants were reassessed for aggression and prosocial behaviour. The difference in aggression and prosocial behaviour before and after intervention was statistically significant. The correlation between aggression, prosocial behaviour and the demographic variables were found to be statistically insignificant. Implications and recommendations for further research were suggested.

INTRODUCTION

Adolescence is the period from the beginning of sexual maturity (puberty) to the completion of physical growth (Hall, 1904). The exact ages spanned by adolescence vary from one person to the next. The psychological impact of the transition to adolescence may differ across individuals and perhaps even across cultures. Adolescence is partly an upheaval, a disruption of peaceful growth. Adolescence represented no period of stress or crisis, but was instead an orderly developing of a set of slowly maturing interests and activities (Mead, 1928).

Aggression is characteristic to adolescence. In some adolescents it takes a negative form and in some others it does not. Behaviour directed toward the goal of harming another living being who is motivated to avoid such treatment. Aggressive behaviours can be reactive or proactive. Reactive aggressive behaviours are unplanned and impulsive, and are usually a response to feelings of anger, fear, or a need to retaliate against someone. By comparison, proactive aggressive behaviours are calculated and planned actions that have some motive other than harming someone. Bullying is a form of proactive aggressive behaviour. Examples of aggressive behaviours include physical violence, verbal hostility, nonverbal intimidation and destruction of property. The causes of aggression can be biological, psychological and social. Management of aggression can be done effectively through relaxation and cognitive behavioural techniques.

Prosocial behaviour involves empathy – the capacity to be able to experience others emotional states, feeling sympathetic toward them and taking their perspective (Baron and Branscombe, 2008). Factors that influence prosocial behaviour are cultural difference, personality variables, gender differences, effects of religion and rural-urban difference. Situational factors and emotions too influence prosocial behaviour (Baron and Branscombe, 2008). Prosocial behaviour could be promoted through value education and social skills training.

METHOD

OBJECTIVES

- To assess the levels of aggression and prosocial behaviour in the sample who are the selected middle school boys.
- To find out the relationship between aggression and prosocial behaviour and the demographic variables of the sample.
- To find out the effect of Multimodal Approach on the aggression and prosocial behaviour of the sample.

PARTICIPANTS

From T. Ramalingam Chettiar Higher Secondary School, Coimbatore, 75 adolescent boys were randomly selected as the sample. They were in the age range of 12 - 14 years.

MEASURES

- **Case Study Schedule:** This was designed to collect the demographic details of the participants such as name, age, type of family and family background.
- **Buss-Perry Aggression Questionnaire:** The Buss-Perry Aggression Questionnaire was designed by Arnold Buss and Mark Perry (1992). It is a 29 item questionnaire where participants rank certain statements along a 5 point continuum from “extremely uncharacteristic of me” to “extremely characteristic of me.” The questionnaire scores for 4 dimensions of aggression- physical aggression, verbal aggression, anger and hostility.
- **Prosocial Personality Battery:** This battery was developed by Penner, Fritzsche, Craiger and Freifeld (1995). The measure is designed to capture dispositional tendency. The measure is made up of two factors: 1.) Other-Oriented Empathy – tendency to feel empathy and concern for others. 2.) Helpfulness – tendency (based on past experiences) to perform helpful acts. The scale is made up of 56 total items. It uses a Likert-type scale with 5 answer-choices.
- **Assent Form**
A formal letter indicating the permission to conduct the action research involving the students was obtained from the school authorities. The Assent Form was given to the student participants to obtain their willingness to participate in the research work.

PROCEDURE

From T. Ramalingam Chettiar Higher Secondary School, Coimbatore, 75 boys from the middle school were given the Assent Form to obtain their willingness to take part in the action research. Since all the students expressed their willingness, they were given Case Study Schedule, Buss - Perry Questionnaire and Prosocial Personality Battery. Following this, the participants underwent sessions of intervention based on Multimodal Approach. The participants were divided into two batches of 38 and 37 in for intervention. Each session consisted of 45 minutes. After 4 weeks of intervention (5 days per week), the participants were reassessed for aggression and prosocial behaviour.

INTERVENTION

MULTIMODAL APPROACH

Multimodal Approach involved Psychoeducation, techniques like Rational Emotive Behaviour Therapy, active disputation of participant's beliefs, Rational Emotive Imagery, Cognitive Home Work, Emotive Techniques and Jacobson's Progressive Muscle Relaxation. Intervention was given to all the participants for 4 weeks (5 days per week) and each session consisted of 45 minutes.

EXPERIMENTAL DESIGN

The experimental design used in this action research was 'before- and- after without control design'.

RESULTS AND DISCUSSION

Table 1: Showing the Significance of Difference in Aggression before and after Intervention

	SS	Df	MS	F	P
Between	1,938.604	1	1,938.604	25.121	0.000**
Within	11,421.081	148	77.169		
Total	13,359.685	149			

** significant at 0.01 level

Table 1 throws light on the effect of the intervention on the aggression of the student participants. It could be noted that the difference in aggression before and after intervention is statistically significant at 0.01 level.

The following study supports the results of the present study. Stoltz, Londen, Dekovic, De Castro and Prinzie (2013) conducted study on Effectiveness of an Individual School-based Intervention for Children with Aggressive Behaviour: A Randomized Controlled Trial on elementary school-children with aggressive behaviour problems. The intervention was found to be effective in reducing reactive and proactive aggressive behaviour as reported by children, mothers, fathers or teachers.

Table 2: Showing the Significance of Difference in Prosocial Behaviour before and after Intervention

	SS	Df	MS	F	P
Between	226.935	1	226.935	4.037	0.046*
Within	8,320.056	148	56.217		
Total	8,546.991	149			

*Significant at 0.05 level

Prosocial behaviour is a voluntary behaviour intended to benefit another (Eisenberg, Fabes and Spinrad, 2007). Evidence suggests that prosociality is central to the well-being of social groups across a range of scales (Helliwell and Putnam, 2004). Empathy is a strong motive in eliciting prosocial behaviour, and has deep evolutionary roots (Decety, 2011). Prosocial behaviour fosters positive traits that are beneficial for children and society. It may be motivated both by altruism and by self-interest, for reasons of immediate benefit or future reciprocity. Encouraging prosocial behaviour may also require decreasing or eliminating undesirable social behaviours (Helliwell and Putnam, 2004).

Table 2 indicates an improvement in prosocial behaviour of the student participants after the intervention. It can be noted that the difference in prosocial behaviour before and after intervention is statistically significant at 0.05 level.

Research findings suggest that promoting prosocial behaviour may serve to counteract aggressive conduct and enhance academic achievement during adolescence (Caprara et al., 2014). Individuals can be compelled to act prosocially based on learning and socialization during childhood. Operant conditioning and social learning positively reinforces discrete instances of prosocial behaviours. Helping skills and a habitual motivation to help others is therefore socialized, and reinforced as children under-

stand why helping skills should be used to help others around them (Grusec, Goodnow and Kuczynski, 2000). An interventional study to enhance prosocial behaviour in school children was found to be beneficial in improving mood and mental health (Alden and Trew, 2013). People are generally much more likely to act pro-socially in a public setting rather than in a private setting. One explanation for this finding has to do with perceived status, being publicly recognized as a pro-social individual often enhance one's self-image and desirability to be considered for inclusion in social groups (Ariely, Bracha and Meier, 2009).

Psychologists have shown that helping others can produce "feel-good" neurotransmitters such as oxytocin and that, similar to any other pleasurable activity, the act of volunteering; giving and behaving pro-socially can become addictive (Van der Linden, 2011; Keltner, Kogan, Piff and Saturn, 2014).

Table 3: Showing the correlation between Aggression and Prosocial Behaviour and Demographics of the Sample

Variable	Statistical Analysis	Birth Order	Type of Family	Aggression	Prosocial Behaviour
Birth Order	Pearson Correlation	1.000	-0.0535	-.0263	-.1454
	Sig. (2 - tailed)		.711	.904	.190
	N	75.000	75	75	75
Type of family	Pearson Correlation	-.0535	1.000	-.1396	-.0056
	Sig. (2 - tailed)	.711		.232	.962
	N	75	75.000	75	75
Aggression	Pearson Correlation	-.0263	-.1396	1.000	-.131
	Sig. (2 - tailed)	.904	.232		.264
	N	75	75	75.000	75
Prosocial Behaviour	Pearson Correlation	-.1454	-.0056	-.131	1.000
	Sig. (2 - tailed)	.190	.962	.264	
	N	75	75	75	75.000

Table 3 indicates that in the present study, the aggression scores do not correlate with the prosocial behaviour scores. In the student participants of the study, the factors leading to aggression and prosocial behaviour may be varied and may not follow a general pattern. A study done by Wang (2011) showed contradicting results. It was found that prosocial behaviour moderated aggression in relation with adolescents' friendships.

Contradicting the finding of the present study, numerous studies have shown that aggressive behaviour and prosocial behaviour are negatively correlated concurrently at different stages of development (Eivers et al., 2012; Krahe and Möller, 2011). In a longitudinal study of 800 participants at ages 8, 19 and 30, Eron and Huesmann (1984) found that prosocial behaviour was negatively related to aggressive behaviour consistently at each point in time.

Table 3 does not indicate statistically significant correlation between aggression, prosocial behaviour and demographic variables like birth order and type of family. Though the correlations are statistically insignificant, they are of negative nature; i.e., aggression and prosocial behaviour are negatively correlated with birth order and family type.

In a study, teachers rated boys and girls in mother-alone families as more aggressive relative to mother-father families. Among low-income families, the protective effects for mother-father families were not apparent, and mother-male partner families were associated with an increased risk for teacher-rated aggression for boys (Pearson, Lalongo, Hunter and Kellam, 1994).

In a research, after taking into account family income, urban area, and fourth-grade aggressive behaviour, boys in both mother—father and mother—male partner families were significantly less likely than boys in mother-alone families to be rated as aggressive by teachers. No significant relations between family structure and teacher- or parent-rated aggression were found for girls (Kearnan, Llango, Pearson and Kellam, 1995). Findings suggested that a positive family environment seems to be a stronger protective factor for girls in the development of problems of behaviour at school, whereas for boys this is the case for a positive classroom environment (Lopez, Perez, Oacha and Ruiz, 2008).

EMPIRICAL FINDINGS

- The difference in aggression before and after intervention based on Multimodal Approach is statistically significant at 0.01 level.
- The difference in prosocial behaviour before and after intervention based on Multimodal Approach is statistically significant at 0.05 level.
- The Pearson's Correlation score of 0.1318 between aggression and prosocial behaviour is statistically insignificant.
- The Pearson's Correlation scores between aggression, prosocial behaviour, birth order and family type are statistically insignificant.

LIMITATIONS OF THE STUDY

- The action research was restricted to one school involving 75 middle school boys.
- Inability to obtain permission from other school authorities for giving intervention as it was time consuming.
- Assessment of conduct problems in the participants could not be due to lack of time.
- Follow-up assessment could not be done as the participants were busy with their impending exams.

IMPLICATIONS

- Intervention involving Multimodal Approach evolved for the present action research have found to be effective in reducing aggression and enhancing prosocial behaviour in the participant middle school boys. Hence, Multimodal Approach could be adopted by schools.
- Tailor-made intervention programmes could be designed by the schools for girls, keeping Multimodal Approach as a framework.
- The present study throws light on understanding the importance of incorporating intervention programmes involving gender sensitization, anger management and social skills training.
- Findings of the current research might lead researchers to explore new dimensions of Aggression and Prosocial Behaviour.

RECOMMENDATIONS

- Psychologists can be appointed in all educational institutions to provide training and counselling to the needed students.
- Workshops on Anger Management involving Multimodal Intervention can be conducted in educational institutions for the benefit of adolescents.

SUGGESTIONS FOR FURTHER RESEARCH

- The research might be expanded to the diversified and cross cultural samples from different cities and provinces in India as well as internationally for comparison purposes.

- Longitudinal research can be conducted on larger sample of students applying Multimodal Intervention
- Further studies can concentrate on other variables among adolescents. It can include follow-up to bring about a sustained change in behaviour.

REFERENCE

- Alden, L. E. & Trew, J. L. (2013). If it makes you happy: Engaging in kind acts increases positive affect in socially anxious individuals. *Emotion*, 13, 64 – 75. Retrieved 10/1/2015 from <http://dx.doi.org/10.1037/a0027761>. | Ariely, D., Bracha, A. & Meier, S. (2009). "Doing Good or Doing Well? Image Motivation and Monetary Incentives in Behaving Prosocially". *The American Economic Review*, 99 (1), 544–555 | Baron, A.R., Branscombe, R.N. & Byrne, R.D. (2008). Social Psychology (12thEdn).393 – 405, 437 | Bowers, F.E. et al. (2000). Using positive peer reporting to improve the social interactions and acceptance of socially isolated adolescents in residential care: a systematic replication. *Journal of Applied Behavior Analysis*, 33(2), 239–242. Retrieved 23/11/2014 from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1284242/> | Buss, A. H. & Perry, M. P. (1992). The Aggression Questionnaire. *Journal of Personality Social Psychology*, 63, 452 – 459. Retrieved 2/2/2015 from <http://psychology-tools.com/buss-perry-aggression-questionnaire/> | Caprara, G.V. et al. (2014). Positive effects of promoting prosocial behavior in early adolescence-Evidence from a school-based intervention. *International Journal of Behavioral Development*. Retrieved 02/8/2015 from <http://jbd.sagepub.com/content/early/2014/04/17/0165025414531464.full> | Crick, N.R. (2008).The role of overt aggression, relational aggression, and prosocial behavior in the prediction of children's future social adjustment. *Child Development*, 67(5), 2317–2327. Retrieved 25/11/2014 from <http://onlinelibrary.wiley.com/doi/10.1111/j.1467-8624.1996.tb01859.x/abstract>. | Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R.D. & Schellinger, K.B. (2011). The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions. *Child Development*, 82(1):405–432. Retrieved 9/12/2014 from <http://www.ncbi.nlm.nih.gov/pubmed/21291449>. | Dymnicki, A.B. et al. (2011). Understanding how programs work to prevent overt aggressive behaviours: A meta-analysis of mediators of elementary school-based programs. *Journal of School Violence*, 10 (4), 315-337. Retrieved 9/12/2014 from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4440499/> | Eisenberg, N. et al. (2001). Behavioral and sociocognitive correlates of ratings of prosocial behavior and sociometric status. *The Journal of Genetic Psychology*, 149(1),5–15. Retrieved 10/12/2014 from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4106187/> | Eisenberg, N., Fabes, R.A. & Spinrad, T.L. (2007). *Handbook of Child Psychology*. John Wiley and Sons, Inc. Retrieved 20/7/2015 from <http://onlinelibrary.wiley.com/doi/10.1002/9780470147658.chpsy031/figures> | Eivers, A.R. et al. (2012). Concurrent and longitudinal links between children's and their friends' antisocial and prosocial behaviour in preschool. *Early Childhood Research Quarterly*, 27(1), 137–146. | Eron, L.D. & Huesmann, L.R. (1984). The relation of prosocial behaviour to the development of aggression and psychopathology. *Aggressive Behaviour*, 10,201–211. | Grusec, J. E., Goodnow, J. J. & Kuczynski, L. (2000). New directions in analyses of parenting contributions to children's acquisition of values. *Child Development*, 71 (1), 205–211. Retrieved 1/1/2015 from <http://www.ncbi.nlm.nih.gov/pubmed/10836575>. | Hall, G.S. (1904). In Morgan, T.C. (1993). *Introduction to Psychology*, 7th edition, 464 – 478. | Helliwell, J. F. & Putnam, R. D. (2004). "The social context of well-being". *Philosophical Transactions of the Royal Society B: Biological Sciences*, 359 (1449), 1435–1446. Retrieved 1/1/2015 from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1693420/> | International Center for Research on Women (2011). *International Men and Gender Equality*. *J.Exp.Child Psychol*, 93(4):322-36. Retrieved 2/8/2015 from <http://www.ncbi.nlm.nih.gov/pubmed/16325845>. | Kearnan, N.V., Llango, N.S., Pearson, J. & Kellam, S.(1995). Household family structure and children's aggressive behavior: A longitudinal study of urban elementary school children. *Journal of Abnormal Child Psychology*, 23(5), 553-568 | Keltner, D., Kogan, A., Piff, P.K. & Saturn, S.R. (2014). The Sociocultural Appraisals, Values, and Emotions (SAVE) Framework of Prosociality: Core Processes from Gene to Meme. *Annual Review of Psychology*, 65,425–60. Retrieved 20/1/2015 from <http://www.ncbi.nlm.nih.gov/pubmed/24405363>. | Krahé, B. & Möller, I. (2011). Links between self-reported media violence exposure and teacher ratings of aggression and prosocial behaviour among German adolescents. *Journal of Adolescence*, 34, 279–87. Retrieved 22/12/2015 from <http://www.ncbi.nlm.nih.gov/pubmed/20627370>. | lawjrank.org (2014). Retrieved 31/7/2015 from <http://lawjrank.org/pages/1250/Gender-Crime-Differences-between-male-female-offending-patterns.html> | Lopez, E.E., Perez,S.M., Oacha,G.M. & Ruiz, D.M.(2008). Adolescent aggression: Effects of gender and family and school environments. *Journal of Adolescence*, 31, 433-450. Retrieved 2/2/2015 from <http://www.ncbi.nlm.nih.gov/pubmed/18023860>. | Mead (1928). In Morgan, T.C. (1993). *Introduction to Psychology*, 7th edition, 464 – 478. | National Crime Records Bureau, GOI (2013). *Crimes against Women*. Retrieved 31/7/2015 from <http://ncrb.gov.in/CD-CII2012/cii-2012/Chapter%205.pdf> | Obsuth, I., Eisner, M.P., Malti, T. & Ribeaud, D., (2015). The developmental relation between aggressive behaviour and prosocial behaviour: A 5-year longitudinal study. *BMC Psychol*, 3(1), 16. Retrieved 20/11/2014 from <http://www.biomedcentral.com/2050-7283/3/16> | Pearson, J.L., Lalongo,N.S., Hunter,A.G. & Kellam, S.G. (1994). Family structure and aggressive behavior in a population of urban elementary school children. *J Am Acad Child Adolesc Psychiatry*,33(4), 540-548. Retrieved 20/7/0215 from <http://www.ncbi.nlm.nih.gov/pubmed/8005907> | Penner, L. A., Fritzsche, B. A., Craiger, J.P. & Freifeld, T. S. (1995). Measuring the prosocial personality. In Butcher, J.N. and Spielberger (Eds) *Advances in personality assessment*, 12. Hillsdale, N. J. : Erlbaum. Retrieved 20/2/2015 from <https://www.med.wayne.edu/fam/faculty/pdfs/measuringprosocialpersonality.pdf> | Sheridan, B.A. et al. (2011). Evaluation of a social skills program based on social learning theory, implemented in a school setting. *Psychological Reports*,108(2),420–436. Retrieved 20/7/2015 from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4440499/> | Stoltz, S.,Londen, M.V., Dekovi , M., de Castro, B.O., Prinzie, P. & Lochman J. E. (2013). Effectiveness of an individual school-based intervention for children with aggressive behaviour: a randomized controlled trial.*Behav Cogn Psychother*, 41(5):525-48. Retrieved 5/2/2015 from <http://www.ncbi.nlm.nih.gov/pubmed/22784703> | Tremblay, R.E. et al. (2004). Physical aggression during early childhood: trajectories and predictors. *Pediatrics*, 114(1), 43-50. Retrieved 22/12/2015 from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2538721/> | Van der Linden, S. (2011).The helper's high: Why it feels so good to give. *Ode Magazine*,8 (6), 25–26. Retrieved 25/7/2015 from <http://icppss.net/wp-content/uploads/2014/09/proceedings-book.pdf> | Wang, J.M. (2011). Prosocial Behavior Moderates the Effects of Aggression on Young Adolescents' Friendships. *International Journal of Developmental Science*, 5, 127–137. Retrieved 20/12/2015 from http://www.academia.edu/1979573/Prosocial_Behavior_Moderates_the_Effects_of_Aggression_on_Young