



Gender Difference in Aggression Level of Secondary School Students

KEYWORDS

Gender, Aggression, Montessori and Traditional Method of Education

Muddanagouda Patil

B. H. Talawar

Research Scholar, Department of Psychology, Karnatak University Dharwad

Assistant Professor, department of Hindi, F.M.K.M.C. College Madakeri

ABSTRACT *The present study aimed to assess the gender difference in Aggression level of secondary school students in relation to their Montessori and Traditional method of education. It was hypothesized that male and female of Montessori students differ significantly in their Aggression level. Male and female of Traditional method of education students differ significantly in their Aggression level. In order to verify the above hypotheses a sample of 120 students were selected from secondary schools which offer education with Montessori (N=60) and Traditional methods (N=60). To measure Aggression, the Aggression scale developed by Pal and Naqvi (1986) was administered individually on the subjects. The data were subjected to 't' analyses and the major findings of the study revealed that the students of Montessori Method of education and Traditional Method of education did not differ significantly in their Aggression level. Further analysis revealed that the male students of Montessori and Traditional Method of education have significantly differed, and also there is significantly difference between in female students of Montessori and Traditional method of education in their Aggression level.*

Aggression:

Aggression may be defined operationally in terms of rude answering to elder, irritation, feeling of unfairness, carrying grudges, frequent quarrelling, broken engagement, and impulse to take revenge, and reactionary attitudes to traditions or beliefs (Chauhan & Tiwari, 1972). James Davies (1970) writes that aggressiveness implies a "predisposition, an attitude of mind, an underlying characteristic" whose likely product is a tendency for a violent action, injury, or damage. Leonard Berkowitz (1993) writes that Aggression is "any form of behavior that is intended to injure someone physically or psychologically". This term is widely accepted and used in the majority of books that deal with human Aggression.

Freud's most important theory of Aggression that came after his involvement with Einstein and under the influence of destructiveness of World War I is known as the "death instinct." The idea of Freud's death instinct is that, "the organism's wish to return to the state of nothingness when it emerged the stronger the death instinct in a person, the more necessary is it for that person to direct Aggression outward against objects and people" (Buss, 1961).

Gender and Aggression:

Another theory that intends to connect biology and human aggressiveness says that the males are biologically predisposed toward aggressive behavior when compared to females. In 1974 Maccoby and Jacklin published an article in which they gave reasons why biological sex differences appear to be involved in Aggression. One of the reasons was the fact that males are in most cases more aggressive than females in all human societies. Another reason was that "Aggression is related to levels of sex hormones and can be changed by experimental administration of these hormones." They asserted that cross-cultural evidence on sex differences in Aggression provided support for their notion that the sex difference and hostility are rooted in biological factors (Tieger, 1980).

The most commonly accepted view is that the gender differences toward violence and Aggression are influenced by

the environment in which people are brought up. Johnson (1972) writes that it is true that hormones influence behavior, but at the same time "masculine" and "feminine" behavior is also influenced by the outside environment and "the long socialization process through which students learn society's values".

Montessori Education:

Since Montessori method of education focuses on over all development of the children other than academic, the present study assumed that the personality development of the these children would be complete and holistic hence their aggression and frustration level should be lower compared to children of traditional method of education. The Montessori method of education is one of the important components is emotional, and social skills development to make the children better adjusted in their society.

In Montessori education, each child is a unique being. He is encouraged to develop social and emotional skills and body-mind coordination as well as cognitive preparations for future intellectual activities. A method of schooling that focuses on personal development rather than exams produces more mature, creative and socially adept students, scientists have found. Psychologists in the US found that across a range of abilities, students at Montessori schools out-performed those given a Traditional education. Some of the biggest differences were seen in social skills and behavior

Review of Literature:

Lagerspetz et al., (1988) studied gender differences in aggressiveness in 11 to 12 year old students through peer-rating techniques supported by self-ratings and interviews. The social structure of the peer groups was also studied. The principal finding was that female made greater use of indirect means of Aggression, whereas the male tended to employ direct means. Gender differences in verbal Aggression were less pronounced. The social structure of peer groups was found to be tighter among female, making it easier for them to exploit relationships and harm their vic-

tims by indirect manipulative Aggression. Because indirect Aggression has rarely been satisfactorily studied with tests of Aggression, this finding may help to explain 1) the generally lower correlation found between peer-rated and self-rated Aggression in female than among male and 2) the low stability of aggressiveness in female often found in developmental studies.

Kuppens et al., (2008) studied individual and classroom variables associated with relational Aggression in elementary-school aged students. Relational Aggression was studied within classroom environments by examining individual and classroom correlates among 2731 students (3rd–5th graders) during two successive measurement years. Multilevel analyses yielded small gender differences for relational Aggression, indicating that such aggressive behavior was more associated with female as compared to male. Findings further demonstrated that relational Aggression was positively associated with perceived popularity and peer rejection.

Henry et al., (2011) studied influence of school-level variables on Aggression and associated attitudes of middle school students. This study sought to understand school-level influences on aggressive behavior and related social cognitive variables. Participants were 5106 middle school students participating in a violence prevention project. Predictors were school-level norms opposing Aggression and favoring nonviolence, interpersonal climate (positive student–teacher relationships and positive student–student relationships), and school responsiveness to violence (awareness and reporting of violence and school safety problems). Outcomes were individual-level physical Aggression, beliefs supporting Aggression, and self-efficacy for nonviolent responses. School norms and both interpersonal climate variables had effects on all three outcomes in theorized directions. Only one of the responsiveness measures, awareness and reporting of violence, had theoretically consistent effects on all outcomes. The other, school safety problems, affected self-efficacy later in middle school. Evidence of gender moderation was generally consistent with greater influence of school-level factors on female adolescents.

Munroe et al. (2000) conducted a cross-cultural research in which behavioral aggression was observed among 192 students (96 males and 96 females, aged 3, 5, 7, and 9 years) in naturalistic setting in Belize, Kenya, Nepal and American Samoa. Results indicated that Male exhibited aggression in approximately 10% of their social behaviour, female in 6% and in all 4 cultures the aggression of male was more frequent than of female at a marginally significant level or better.

Cummings et al. (2004) described an eight-session psycho educational group for aggressive adolescent female. The content of the group sessions is based on research that has identified gender-specific issues related to aggression in adolescent female, such as gender-role socialization, childhood abuse, relational aggression, horizontal violence and girl culture. Non-aggressive coping strategies were also discussed. Initial evaluation showed that female did change some of their attitudes about their aggressive behavior.

Research methodology

Objective:

- To find out the gender difference in aggression level of

secondary school students in relation to their Montessori and Traditional method of education.

Hypotheses:

- Male students of Montessori education have significantly higher level of Aggression than female students of Montessori education.
- Male students of Traditional education have significantly higher level of Aggression than female students of Traditional education.
- Male students of traditional school have significantly higher level of aggression than male students of Montessori school.
- Female students of traditional school have significantly higher level of aggression than female students of Montessori school.

Sample of the study:

The study was conducted on 120 samples with two main group of Montessori and Traditional secondary schools students who studying in 8th and 9th standard. Each group has 30 male and 30 female students. Schools located at Montessori education of Chandan high school Sirasi and Karnataka University Public School Dharwad, Karnataka state, India.

Tools of study:

1. **Aggression Scale** - developed and standardized by Pal and Naqvi (1986) has 30 items with six responses and scoring pattern of the scale is 5, 4, 3, 2, 1 & 0. The test-retest reliability of the scale was found to be .78 and the validity co-efficient was found to be .74.

Statistical Techniques:

Obtained samples raw scores were converted into standard scores using 16.0 versions of SPSS, subsequently the mean and SD was calculated. The data was subjected to independent sample 't' analysis to find the significant difference between the male and female students of Montessori and Traditional education.

Results and Discussion:

Table no 1: Means, standard deviations and 't' value of the male and female of Montessori students on aggression.

Sample Group (N=60)			
Aggression	Male Students of Montessori School (N=30)	female Students of Montessori School (N=30)	t-value
Mean	47.35	43.76	1.56 _{NS}
SD	8.00	9.67	

NS: Not significant.

The table no 1 shows means, standard deviations and 't' value of male and female of Montessori students on aggression. On the aggression variable there is no significant difference between the male and female students of Montessori. The obtained mean scores are 47.35 and 43.76 respectively. The obtained standard deviation scores are 8.00 and 9.67 respectively. the 't' value obtained for the mean difference is 1.56, which is not significant at 0.05 level.

Table no 2: Means, standard deviations and 't' value of the male and female students of Traditional education on aggression.

Aggression	Sample Group (N=60)		't' value
	Male Students of Traditional School (N=30)	Female Students of Traditional School (N=30)	
Mean	56.51	52.38	1.81 _{NS}
SD	8.19	9.38	

NS: Not significant.

The table no 2 shows Means, standard deviations and 't' value of the male and female students of Traditional education on aggression. On the aggression there is no significant difference between the male and female students of traditional school. The obtained mean scores are 56.51 and 52.38 respectively. The obtained standard deviation scores are 8.19 and 9.38 respectively. The 't' value is 1.81, which is not significant.

Table no 3: Means, standard deviations and 't' value of the male students of Montessori school and traditional school on aggression.

Aggression	Sample Group (N=60)		't' value
	Male Students of Montessori School (N=30)	Male Students of Traditional School (N=30)	
Mean	47.35	56.51	4.37**
SD	8.00	8.19	

** = Significant at 0.01 level.

The table no 3 depicts means, standard deviations and 't' value of the male students of Montessori school and traditional school on aggression. The mean and standard deviation scores of the male students of Montessori school are 47.35 and 8.00 respectively. Whereas the mean and standard deviation scores of the male students of traditional school are 56.51 and 8.19 respectively. The 't' value obtained for the mean difference is 4.37, which is highly significant at 0.01 level. This clearly implicates that the male students of traditional school have significantly higher level of aggression than students of Montessori school.

Table no 4: Means, standard deviations and 't' value of the female students of Montessori school and traditional school on aggression.

Aggression	Sample Group (N=60)		't' value
	Female Students of Montessori School (N=30)	Female Students of Traditional School (N=30)	
Mean	43.76	52.38	3.50**
SD	09.67	09.38	

** = Significant at 0.01 level.

The table no 4 depicts means, standard deviations and 't' value of the female students of Montessori school and traditional school on aggression. The mean and standard deviation scores of the female students of Montessori school are 43.76 and 9.67 respectively. Whereas the mean and standard deviation scores of the female students of traditional school are 52.38 and 9.38 respectively. The 't' value obtained for the mean difference is 3.50, which is highly significant at 0.01 level. This clearly implicates that the female students of traditional school have significantly higher

level of aggression than the female students of Montessori school.

Conclusions:

1. There is no significantly difference between Male and female of Montessori secondary schools students.
2. There is no significantly difference between Male and female of Traditional secondary schools students.
3. There is a significantly difference between Montessori and Traditional secondary schools male students.
4. There is a significantly difference between Montessori and Traditional secondary schools female students.

References:

1. Buss, A. (1961). *The Psychology of Aggression*. New York. John Wiley & Sons, Inc.
2. Berkowitz, L. 1973. 'Simple Views of Aggression' In Montagu, A. (ed.) *Man and Aggression*. Second Edition. Oxford University Press. Pp. 39-52.
3. Berkowitz, L. 1993. *Aggression – Its Causes, Consequences, and Control*. New York.
4. Davies. J. C. 1970. Violence and Aggression: Innate or Not? *The Western Political Quarterly*. Vol. 23, No. 3. p. 611-623.
5. Feshbach, S. 1994. 'Nationalism, Patriotism, and Aggression.' *Aggressive Behavior – Current Perspectives*. New York. Plenum Press. Pp. 275-291.
6. Freud, S. 1973 'Why War?' In Maple, T. and Matheson, D. W. (ed.) *Aggression, Hostility, and Violence – Nature or Nurture?* New York. Holt, Rinehart, and Winston, Inc. Pp. 16-27.
7. Henry, D. B., Farrell, A.D., Schoeny, Tolan, and Dymnick. (2011). Influence of school level variable on aggression and associated attitudes of middle school students, 48 (5), 481-503
8. Kuppens, S., Grietens, H., Onghena, P., and Subramainian. S. V. (2008). Individual and classroom variables associated with relation aggression in elementary school aged students. *Human development and health*, 46(6), 639-660.
9. Lagerspetz, J., Bjorkqvist, K., Berts, M., and King, E. (1993). Group Aggression among school students in their school. *Scandinavia Journal of Psychology*, 23(1), 45-52.
10. Pal R and Naqvi T. (1986). *Manual for Aggression scale*. Agra: Agra Psychological Research Cell.
11. Shapka, J. D. (1994). Sex difference in physical, verbal and indirect aggression. *A Review of Research*. 30. 3-4.
12. Tieger, T. 1980. On the Biological Basis of Sex Differences in Aggression. *Child Development*. Vol. 51, No. 4. p. 943-963.
13. Young, E. L., Boye, A., & Nelson, D. 2006. Relational aggression: Understanding, identifying, and responding in schools. *Psychology in the Schools*, 43, 297-312.