

EFFECTS OF YOGIC INTERVENTION ON AGGRESSION OF SCHOOL GOING STUDENTS

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Abstract:

Background: An alarming number of school going students suffer from several emotional and behavioral problems. Aggression is one among them. Aggression in adolescence is a key point of focus for psychologists, educationists, parents, and teachers. On the other hand, interdisciplinary researches with special reference to yoga and psychology are growing rapidly in this era of applied science. **Aims:** The current study aimed at exploring the effect of Yogic Intervention on the aggression level of school going students. **Methods:** A sample consisting of 40 VIII grade students from Gayatri Vidyapeeth, Shantikunj, Haridwar, Uttarakhand was taken. The entire sample belonged to the age group of 14-16 years. Yogic intervention was given to each and every subject of the group for a period of 90 days regularly. In this research, pre-post single-group design has been applied. Participants were given a questionnaire named as "Aggression Scale" (A-scale) which was developed by Roma Pal and Tasneem Naqvi (1986) for measurement of aggression score. **Statistical Analysis Used:** Wilcoxon sign rank test, and reduction percentage have been used for comparing pre and post scores and computing the magnitude of the effect of intervention. **Results:** A Wilcoxon Signed-Rank Test revealed a statistically significant reduction in the level of aggression of the participants in the yogic interventional program, $z = -5.515, p < 0.001$ (sig.2-tailed). The median score on aggression decreased from 94 pre-intervention to 60 post-intervention. The pre test percentage was 64.15% and post test percentage was 41.5%, reduction percentage of aggression level was 22.65%, which indicates large effect of the intervention on aggression. **Conclusions:** The findings revealed that the Yogic Intervention is highly effective in reducing the aggression level in school going student participants, which was significant at 0.01 level of significance.

Keyword: *Yogic Intervention, Aggression and School Students.*

Introduction:- Among the deviant human behaviors, aggression appears to be the most prevalent and disturbing one, affecting one and all. Uncontrolled aggression/violent behavior could cause a significant toll, equally affecting both involved and the non-involved. This delinquent human behavior has been well addressed in Indian yogic scriptures. It provides a theoretical framework to understand the causes, ill-effects, need for peace, harmony, and ways to correct the aggression behavior. It is also claimed that yoga is a way for inner bliss and external coherence; and with this time-tested technique, it is possible to bring about a sense of inner peace and emotional stability, thus having potential to correct aggressive behaviors. An alarming number of school going students suffer from several emotional and behavioral problems. Aggression is one among them. Aggression in adolescence is a key point of focus for psychologists, educationists, parents, and teachers. While the adolescents are trying to adapt to changing life styles and emerging challenges, they are also becoming increasingly aggressive/violent. This is largely attributable to increased competition, stress, and anxiety, besides poor parenting methods. Expression or demonstration of one's angry behavior through verbal dialogue or physical assault or both may be termed as aggression. Aggression is one of the common psychological imbalances seen in children at the budding age. In psychology, it is assumed that aggression is generally associated with frustration, fear, and a sense of inferiority. They are the main causes of an extreme form of aggression in the human behavior. In adolescents, frustration is found due to many reasons like academic anxiety, maladjustment in schools or peer groups, sexual conflicts, academic stress etc. and ultimately frustration leads

to aggressive behavior. On the other hand, interdisciplinary researches with special reference to yoga and psychology are growing rapidly in this era of applied science. Despite rapidly growing scientific literature on yoga and its application, there has been no study conducted to determine whether Yogic Intervention affects the aggression level in school going students. Several studies seek to understand the causes for this delinquency and search for preventive interventions. Indian traditional texts claim that yoga is one of the important preventive interventions.

Ancient Indian texts identify non-violence, tranquility, compassion, gentleness, modesty, tolerance as divine traits; aggression, arrogance, wrath, rudeness, insensitiveness to others pain as demonic traits. Patanjali-Yogasutra (2.35) proclaims there is no enmity where a yogi resolutely commits to non-violence and yoga can bring about mental/emotional equipoise. In our contemporary world such equipoise is increasingly becoming hard to possess as the modern living is characterized by greed, speed, stiff-competition, restlessness, and struggle, causing stress on our personality, and manifesting as aggression/violence.

Adolescent aggression is an important focus for educators and parents owing to its relative stability over time and consistent link to a variety of negative outcomes later in adolescence, including delinquency, substance abuse, conduct problems, poor adjustment, and academic difficulties (poor grades, suspension, expulsion, and dropping out of school). **Tripathy and Sharma (2017)** were aimed to determine the aggression of adolescents in relation to their academic achievement. The study revealed that (i) there is negative correlation between academic achievement and aggression of school students. (ii) Academic achievement of boys was found to have negative correlation with aggression. (iii) Academic achievement of girls was found to have negative correlation with aggression. (iv) the average and low aggressive secondary school students were found to be significant in their academic achievement. (v) the high and average aggressive secondary school students were found to be not significant in their academic achievement. (vi) the high and low aggressive secondary school students were found to be significant in their academic achievement. In addition, verbal and physical aggression often is the first signs, as well as later defining symptoms, of several childhood psychiatric disorders. These include Oppositional Defiant Disorder and Conduct Disorder, both of which have prevalence rates ranging from 6 to 10% in the general population and even higher among males, according to the American Psychiatric Association. Aggression is defined as “a sequence of behavior, the goal response of which is the injury to the person toward whom it is directed” (**Dollard et al., 1939**). Although the term aggression refers to a wide spectrum of behaviors, in the psychological literature, it is defined as any behavior intended to harm another individual who is motivated to avoid being harmed **Baron & Richardson, 1994**. **Krishna Rao (1995)** discusses the significance of yoga to the wellbeing of mankind. The core of yoga practice lies in concentration, yogic meditation and absorption. Reports showed that yogic practices are probably the most important and effective self-help tools available to humanity. Substantial reduction in depression, anxiety, psychosis, paranoid ideation, hostility, somatic, obsession and inter-sensitivity has been found on account of living a yogic lifestyle (**Bhushan, 1998**). We can see the odious behavior of aggression in all types of individuals; but today, it has become a significant clinical and social problem among adolescents. In psychology, the term aggression refers to a range of behaviors that can result in both physical and psychological harm to oneself, others, or objects in the environment. The expression of aggression can occur in a number of ways, including verbally, mentally, and physically (**Berkowitz, 1993**). Aggression could be physical, verbal, or covert. Physical aggression ends in physical injuries. Verbal aggression is use of abusive words, expressing animosity, intended at spoiling others self-concept, thus causing psychological injury. While physical/verbal aggressions are ‘overt’, instigating others without getting oneself personally engaged is ‘covert’. Males exhibit overt-aggression more frequently, and approve aggression; whereas, females frequently show covert aggression. **Tripathy (2017)** was monitoring aggression in adolescent: Chandra Namaskara as a panacea. For this research researcher used a sample consisting of 40 intermediate and undergraduate students. The entire sample belonged to the age group of 15-20 years. *Chandra Namaskara* practice was given to each and every subject of the

group for a period of 30 days regularly. There was a statistically significant decrease in the aggression score from pre-test ($M = 63.85$, $SD = 21.75$) to post-test ($M = 49.95$, $SD = 14.53$), $t(39) = 8.42$, $P < 0.01$ (two-tailed). The mean decrease in aggression score was 13.9 with a 99% confidence interval. The findings revealed that the practice of *Chandra Namaskara* is highly effective in reducing the aggression level in participants, which was significant at 0.01 level of significance. Chandra namaskara is an integral part of the yogic approach and it can be easily integrated into our daily life. The word Chandra means "moon". Just as the moon, having no light of its own reflects the light of sun, so the practice of Chandra namaskara reflects that of Surya namaskara. Sharma, A. (2012) investigated an Anova of the order of $2 \times 2 \times (2)$ with repeated measure was employed in the present research to gauge the effect of yogic exercises if any between the control group and the experimental group in the two genders from pre to post test on different types of aggression. This investigation used a complete package of multiple counseling techniques to normalize aggression. The study yielded significant F ratios thereby revealing the significant impact of interventions in monitoring the aggression. Gupta, R.K. et al (2015) Mindfulness meditation has proven effective in reducing psychological stress, negativity, anger and aggression; it is a tool for awakening and developing one's conscious and thereby modifying one's thoughts. This review examines the significance of guided mindfulness meditation in mediating aggression, both external and internal aggressive behavior and youth suicide. Sharma, V.K., Sahare, P. (2014) experimented on 40 intermediate and undergraduate students Kapalbhathi as intervention. The findings revealed that the practice of *Kapālabhāti* is highly effective in reducing the aggression level in participants, which was significant at 0.01 level of significance. There is a constant search for effective interventions to address adolescents' aggressive behavior. In one of the studies verbal aggression in normal healthy adults reduced significantly through yoga intervention in the form of asana, pranayama and meditation. Another study showed that the yoga intervention (in the form of asanas, pranayama and meditation) can reduce adolescents' anxiety and aggression levels where yoga intervention was twice a week for 12 weeks. In another study it was demonstrated that practice of asanas, pranayama, and meditation for eight weeks significantly reduces one's self-reported perceived stress, verbal aggression, and life satisfaction increases. Though yoga literature offers promising tools, there are no previous research studies on effect of yoga on school going students of VIII grade aggression level. Hence, this study was designed to address this gap.

Objective: - To analyze the efficacy of yogic intervention on the level of aggression of school going students.

Hypothesis :- There is no significant effect of yogic intervention on the level of aggression of school going students.

Research Design: - In order to study the effects of yogic intervention on level of aggression "Single group Pretest - Posttest Design" was applied.

Population: - In the present study the students of VIII grade studying in schools of Haridwar District constitute the population. The population of the study will constitute all the school-going students of age group 14-16 years.

Sample and Sampling: - For the sample of the present study boys and girls students of 14 to 16 years studying in VIII grade of Gayatri Vidyapeeth of Haridwar District were selected through purposive sampling. Total 40 students were selected as a sample whose aggression level is high and saturated.

Tools: - In this research work, the researcher used the aggression scale questionnaire for measuring the aggression level, which was developed by Pal and Naqvi (1986). The split-half reliability and test-retest reliability of the scale are 0.82 and 0.78, respectively. Content validity of the test is 0.78. This scale is applicable for the age group 14-24 years. It has 30 questions to which the participants responded. All the items of aggression scale are related to behaviors in everyday life. There is no complexity in items. Each item has

six alternative answers (multiple choice) graded on five point scale. A scoring pattern of 5, 4, 3, 2, 1, and 0 was followed and total score was obtained. The scores obtained from this scale vary between 0 and 150, and for interpretation of raw scores, the norms of this test are mentioned as follows- Range: - 0 to 150, the Saturated:-107 and above, the High:-90 to 106, the Average: – 61 to 89, Low Aggression: – 46 to 60, the Clean: - 45 and below.

Yogic Intervention:-

Asanas	Surya Namaskar (12 Steps)	3 Rounds	9 Mints
	Vrikshyasan	Final Posture will be for 1 Min	2 Mints
	Sasankasan	Final Posture will be for 1 Min	2 Mints
	Ustrasan	Final Posture will be for 1 Min	2 Mints
	Shavasana		5 Mints
Pranayama	Kapalbhati	40 to 60 strokes per round (3 rounds)	5 Mints
	Nadisuddhi	9 Rounds	5 Mints
	Bhramari	9 Rounds	5 Mints
Meditation	Om Meditation		10 Mints
Total Time Duration for Yoga Package			45 Mints

(Yoga package was given daily except (holiday) for forty five minutes in the morning for 3 months)

Statistical Analysis: - To analyze the collected data Wilcoxon Sign Rank Test, and Reduction percentage was applied. 10 Mints

Delimitation of the Study: - This study will be delimited to 14-16 years age groups of students studying in VIII grade of Gayatri Vidyapeeth, Haridwar City. Sample size is limited to 40.

Result and Discussion: -SPSS 20.0 was used for data analysis. Data was not normal [Kolmogorov (Sig) 0.002 and 0.001 for two subscales $p < .05$]. Hence, non-parametric test was done using Wilcoxon Signed-Rank Test.

Rank Table

Particulars	N	Mean Rank	Sum of Ranks
AGGRESSIONPOST - AGGRESSIONPRE			
Negative Ranks	40 ^a	20.50	820.00
Positive Ranks	0 ^b	0.00	0.00
Ties	0 ^c		
Total	40		

a. aggressionpost < aggressionpre b. aggressionpost > aggressionpre c. aggressionpost = aggressionpre

Wilcoxon Sign Rank Table

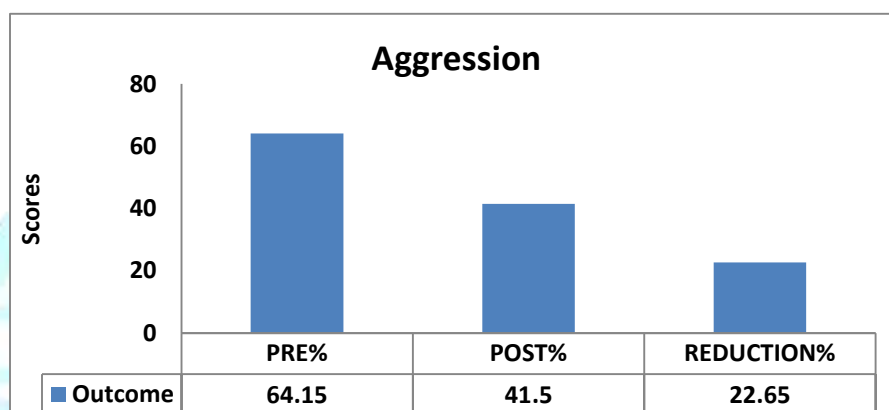
Outcome	N	Mdn	z	Sig. (2 tailed)
Pre test	40	94	-5.515	.000
Post test	40	60		

A Wilcoxon Signed-Rank Test revealed a statistically significant reduction in the level of aggression of the participants in the yogic interventional program, $z = -5.515$, $p < 0.001$ (sig.2-tailed). The median score on aggression decreased from 94 pre-intervention to 60 post-intervention. The wilcoxon sign rank test indicated that, $z \geq 5.5$ or

$z \leq -5.5$, $p < 0.001$, which is less than 0.05 and 0.01 at 0.05 and 0.01 level of significance. Hence we reject the H_0 that there is no significant effect of yogic intervention on the level of aggression of school going students at both .05 and .01 level of significance. It is observed from the results that yogic intervention has reduced the aggression level in students. Therefore, null hypothesis of the present research that “There is no significant effect of yogic intervention on the level of aggression of school going students” is rejected.

Table of Average Reduction% level of Aggression

AGGRESSION	PRE%	POST%	REDUCTION%
	64.15	41.5	22.65



It is evident from the above table and graph that average pre test aggression level of students is 64.15% and post test showed 41.5%. Hence there is 22.65% reduction level.

Educational Implications of the Study: - The findings of this research study have implications for teachers and professionals in addressing the aggression of the students at secondary level. Therefore, various measures must be applied by the teachers to manage aggression among students. The students with higher aggression must be identified and treated.

Conclusion: - Study suggests that during childhood/adolescence if parents could invest in strategic preventive-interventions like yoga, delinquency may reduce. Thus the study encourages policy makers to initiate yoga as a preventive intervention at school levels through standardized yoga curricula, besides providing a good support for psychiatrists/therapists to apply yoga as a rehabilitative adjunct therapy to address adolescent aggression. Though we cannot fully protect our children from being witness to aggression, we can surely equip them with suitable dexterities by exposure to preventive interventions. It is evident from various research studies that yoga intervention on subjects of varied age, ethnicity, and nationality have shown remarkably similar results and findings are quite encouraging to deal with the problem of aggression through yoga. Researches on aggression and violence have progressed to a stage where a unifying construction is needed in the sense that different kinds of interventions (yoga, Transformative life skills, counseling, addressing predictors of aggression and violent behavior) can be blended to be more effective in addressing this delinquent human behavior. Further, there is a need for standardizing the yogic intervention module and period of intervention, so that this delinquent human behavior is addressed effectively and the results could be more evident. It also helps to scientifically establish the basis for transformation claimed by Indian yoga scriptures. This could be one of the valuable, cost effective, alternative (or complementary)

methods that involve no drugs and no invasive treatments to correct this delinquent human behavior. Excepting the theory of hormones and chromosomes, most of the aggression theories deal only with the mind as the root instrumental cause for aggression and violent behavior. Yoga deals comprehensively with this subject. Hence there is a need for the researchers to look at this ancient, time tested method advocated by Indian yogic scriptures.

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