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Effect Of Yogic And Aerobics Exercises On School Children's

Abstract:

Children at school undergo physical, psychological, social, and emotional transformations. The positive and negative experiences people have during this vulnerable time in their lives, as well as the influence of other people and events, have a lasting effect on them for the rest of their lives. The purpose of this study is to evaluate how twelve weeks of yoga and aerobic workouts affect the schoolchildren's quality of life. 60 pupils from senior secondary schools in the North 24 Parganas area (West Bengal), ages 14 to 16, are involved in the study. They were split up into three equal groups, each with twenty participants (n = 20). Group I practiced yoga, Group II engaged in cardiovascular exercises, and Group III served as the control. The testing period is restricted to 12 weeks, or around three months, three days a week, and 45 to 60 minutes each day with appropriate warm-up and cool-down routines. Standardized instruments were used to gather the primary data. Analysis of covariance (ANCOVA) will be used to determine if the pretest and posttest means of experimental groups I, II, and the control group are significant. For significance, the degree of confidence is set at 0.05. Additionally, if the F-ratio of the adjusted post-test means is significant, the LSD post-hoc test will be used to determine the paired mean difference, if any, between the groups for each variable independently. According to the study's findings, yoga and aerobic workouts significantly improved quality of life ($p<0.05$). Conclusions: Given the substantial impact that yoga and aerobics exercises have on schoolchildren's quality of life, policymakers should focus on implementing yoga and aerobics at the school level through standardized curricula and training instructors to encourage and inspire students to learn and practice these disciplines at a young age.

Key Words: Yoga practices, Aerobics exercises, Quality of life and school children.

Introduction:

Yoga is a well-liked physical exercise with a number of personal health advantages, such as enhanced mobility and balance and better cardio-metabolic health Sleep quality and life quality in the International Research Journal of Management Sociology & Humanity Additionally, increases in mood and mental health have been linked to yoga practice. These advantages are important since life satisfaction and general "wellbeing" are indicators of healthy aging in addition to longevity.

Aerobic exercise training improves performance on cognitive and psychological well-being tests, slows down the rate of cognitive decline, and improves the quality of sleep. Exercise and physical activity are known to improve several facets of health. In addition to the numerous advantages of exercise for physical health, studies have unmistakably shown a strong correlation between exercise and psychological health and wellbeing. One of the most significant factors influencing a person's general health is physical activity. Recreational exercise can greatly enhance psychological well-being and boost self-confidence and self-esteem in addition to improving physical health. Additionally, studies have confirmed that exercise improves psychological health and wellbeing across a variety of demographics.

School and society have an impact on how people develop socially, mentally, and in terms of their quality of life. Children's upbringing is greatly influenced by their families, particularly during childhood and adolescence. Mothers play an important role in the family and have a big impact on children's development. Adolescence is seen as a significant period in a person's mental and social growth. Identity and self-worth are aspects of this time that influence one another. Identity is a difference that a person thinks they have in relation to others and is based on their physical, social, and mental makeup. Adolescence brings with it a number of new psychological, emotional, biological, and social changes that underline the need of finding one's identity. Adolescents who find the right identity develop better self-esteem, which serves as the foundation for development and progress. On the other hand, those who form the wrong identity become frustrated and lack self-worth, which prevents them from interacting with others and results in a confused and ambiguous personality rather than self-awareness and a defined identity. Teenagers at boarding facilities struggle to build relationships with others, both within the facility and with their peers. Relationship maintenance and consistency are challenging due to frequent revocations in several facilities. Additionally, teenagers frequently claim that their peers stigmatize them for residing in these facilities. Due to a lack of long-term connections, a shattered feeling of belonging, and identity trepan confusion, adolescents in these facilities have low self-esteem.

Method

Sixty (N=60) schoolgirls were chosen at random to fulfill the study's objectives. According to school records, the individuals' ages varied from 14 to 16 years (15.3 ± 0.84). They were deemed physically and medically fit to take part in the training program after being checked by a licensed medical professional. They were therefore regarded as a homogeneous group because there were no differences in their regular daily patterns.

Experimental design

This study used a pretest and posttest random group design with sixty participants. The 60 chosen participants were split equally and at random into three groups. Experimental Group I (n = 20) practiced yoga, Experimental Group II (n = 20) engaged in aerobic activities, and Group III (n = 20) served as the Control Group. For a duration of twelve weeks, the two experimental groups received their respective training three days a week, three times a week, with each training session lasting sixty minutes. Instead of their regular duties, the control group was not given a specific aim (treatment program).

For a total of 36 sessions spread over 12 weeks (3 days a week), the subjects participated in yogic practices in the morning between 7 and 8 am as part of a curriculum class on yoga. This included yogic asanas for 30 minutes, pranayama for 15 minutes, omkar chanting for 10 minutes, and a final 5 minutes of Shavasana/relaxation. Every lesson began with three OM chants.

The following were specifics of the yoga practice:

I. Yoga Prayer
II. Suryanamaskara (12 count 5 min)
III. Yogasanas: (25 min) [Asanas included sitting, standing, prone and supine postures with relaxation after each posture. The asanas were: Vakrasana, Ardhamatsyendrasana, Pawanamuktasana, Paschimottasana, Nauka Asana, Paschimottasana, Uttanpadasana, Bhujangasana, Shalabasana, Dhanurasana]
IV. D. Pranayama (15 min) [Anulome vilome, Ujjayi, Bhramari and Kapal bharti].
V. Onkar chaning (10 min)
VI. Conclusion: (5 min) Shavasana

The aerobics group's intervention lasted for 12 weeks, or roughly three months, with three sessions per week lasting 60 minutes each (warming up, aerobics, and cooling down). Warming up and cooling down took ten minutes each, while aerobic exercise (slow, medium, and fast movement) lasted forty minutes. A gentle rhythm of music was played as stretching exercises were performed to warm up the body. Stretching exercises with a leisurely cadence were part of the cooling down. Music was chosen to use between 60% and 80% of the individuals' reserved rate. Wrist pulses were used to monitor the subjects' heart rates during activity, and the Karvonen formula was used to determine the subjects' reserved heart rate (HRR).

Subjects were randomly assigned to case (exercise) and control groups in this experimental, quantitative investigation. In order to evaluate the impact of the independent variables of yoga practices and aerobic exercise on the dependent variables of life satisfaction and self-esteem in teenage girls, this study included two phases of pretesting as well as the first and second posttests. After a twelve-week training program, all three subject groups took a post-test, and the researcher closely examined the results. Climate, food, and individual differences are all outside the researcher's control, so these factors are taken into account as study limitations. With the aid of SPSS, analysis of covariance (ANCOVA) has been utilized to determine the significant differences both within and between the groups. In every instance, the alpha 0.05 level of confidence was set.

Table – I
Analysis of covariance for the results before and after the intervention on Dependent variables among the Groups

Variables	Test	*YPG*	*AEG*	*CG*	SOV	*Sum of the Square*	*df*	*Mean Square*	*F–ratio*	*Sig.*
Life Satisfaction	PT	51.94	51.80	51.39	Bw	3.232	2	1.617	0.895	0.414
					Wn	102.950	57	1.806		
	POT	52.13	51.94	51.29	Bw	7.900	2	3.950	3.055	0.055
					Wn	73.700	57	1.293		
	ADPOT	51.95	51.87	51.55	Bw	1.777	2	0.889	8.443	0.001
					Wn	5.894	56	0.105		
Self Esteem	PT	71.90	71.80	71.40	Bw	2.800	2	1.400	0.784	0.461
					Wn	101.800	57	1.786		
	POT	72.20	72.10	70.98	Bw	9.733	2	4.867	4.255	0.019
					Wn	65.200	57	1.144		
	ADPOT	72.06	72.03	71.52	Bw	3.655	2	1.827	7.464	0.001
					Wn	13.709	56	0.245		

Table 1: The analysis of covariance between the dependent variables (life satisfaction and self-esteem) in the groups (YPG, AEG, and CG) was compiled in Table I. According to the table, there were no statistically significant differences in the groups' Life Satisfaction pre-test scores (PT – F: 0.89), post-test scores, or adjusted post-test scores. Similar to how the self-esteem pre-test revealed an insignificant difference (PT-F: 0.78), the post-test adjusted post-test also revealed a significant difference. The 12-week (about three-month) intervention program had some effect on the chosen dependent variables, while the control group did not exhibit any improvement. The researcher employed the Least Significant Difference post-hoc test to elucidate the mean difference between the groups.

Table- II
Least Significant Difference Post hoc Test for the depended variables on means values

Variables	(I)Groups	(J)Groups	Mean Difference(I-J)	Sig.
Life Satisfaction	YPG	AEG	.078	.449
		Control	**.404***	.000
	AEG	YPG	-.078	.449
		Control	**.325***	.003
	Control	YPG	**-.404***	.000
		AES	**-.325***	.003
Self Esteem	YPG	AEG	.029	.854
		Control	**.544***	.001
	AEG	YPG	-.029	.854
		Control	**.516***	.002
	Control	YPG	**-.544***	.001
		AEG	**-.516***	.002

Table 2: The corrected post-test mean difference in life satisfaction between the three groups is displayed in Table II. The two training groups (aerobic and yogic) differ from the others, with a paid mean difference of 0.40* between the yogic practices group and the control group and 0.33* between the aerobic and control groups. When compared to the aerobic group, the yoga practice group's improvement in life satisfaction is just somewhat greater (0.07%). The yoga practice group's findings were found to be marginally higher than those of the aerobic exercise group. Two training groups (yogic and aerobic) differ from the others, and the adjusted post-test means difference in self-esteem between the three groups is 0.54*. The paid mean difference between the yogic practices group and the control group is 0.52*. When compared to the aerobic group, the yogic practice group exhibits slightly more gain in flexibility (0.02%), suggesting that the yogic practices group outperforms the aerobic group.

Discussion

The findings show that the mean Life Satisfaction and Self-Esteem scores prior to intervention did not significantly differ among the three groups. After the intervention, there was a notable difference between the three groups. Life satisfaction and self-esteem have significantly improved as a result of the yogic and aerobic training menu intervention. According to the current study results, life satisfaction has improved by 0.02% in the yogic practices group (three sessions per week) and 0.15% in the aerobic exercises group (three sessions per week). Although both trainings show improvement, the aerobic exercises group has improved more than the yogic practices group and control group. The study's calculated results also show that self-esteem is improved by 0.22% in the yogic practices group (three sessions per week) and 0.32% in the aerobic exercises group (three sessions per week). While both trainings show improvement, the aerobic exercises group outperforms the yogic practices group and control group. This is because of the subjects' customized instruction, the length of the training program, and the nature of the subjects' bodies.

The mental and emotional well-being of an individual can also be significantly impacted by aerobic exercise. Additionally, strength training exercises help lessen sadness, increase self-esteem and confidence, and enhance overall wellbeing According to the literature exaggerates the advantages of exercising self-esteem. They verified that engaging in fitness regimens does result in notable improvements in self-esteem,

however the gains were not statistically significant. They determined that the kind of program and improvements in fitness are two important factors that affect self-esteem. Their study's findings indicated that while skill-training activities had no influence on self-esteem, exercise and lifestyle programs led to modest to moderate gains in self-esteem. Additionally, they discovered a strong correlation between improvements in self-esteem and changes in physical fitness.

Teenagers who practice yoga may learn more about their bodies and identify their strengths and weaknesses. Teens may envision, unwind, and join a noncompetitive setting with yoga. A self-evaluation process that compares one's self-description to one's actual self is necessary for self-esteem. Yoga techniques produce a general sense of well-being by reducing worry through relaxation. Deep, slow breathing is linked to a peaceful frame of mind and is believed to raise parasympathetic tone. By enhancing self-awareness, self-control, and self-esteem, yoga attempts to address the fundamental limits of the mind.

Conclusion

The findings of this study clarified the impact of various yoga practice modalities and aerobic exercise regimens on life satisfaction and self-esteem, as well as the nature of the best activity for raising schoolchildren's self-esteem and life satisfaction. The study's findings suggest that engaging in regular yoga and aerobic activities enhances one's subjective quality of life. Students' psychological well-being can be improved by including such yoga techniques and aerobic activity. The students' increased wellbeing would encourage them to stick with these routines.

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