

Effect of Mindfulness and Yoga on Quality of Life: A Study of Elementary School Students

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ABSTRACT

Background: The current research is conducted to assess the impact of mindfulness and yoga in an elementary school on student for measuring their quality of life.

Materials & Methods: This is a randomized controlled trial was utilized to assess the impact of yoga and mindfulness on third to fifth-grade students who screened positive for symptoms of anxiety.

50 Students were selected at a random that was exposed to yoga/mindfulness activities for 18 weeks between October 2018 and February 2019. The Baseline student scores before and after the mindfulness and yoga were gathered with the help of their teachers. The same were analyzed by using paired sample t test with SPSS software.

Results: Our study showed that the group trained at least 45 minutes daily have significantly improved their quality of life (p -value <0.05). The results suggested that a yoga/mindfulness intervention improves symptoms of anxiety among students.

Conclusion: It facilitates stress management among elementary school students and may be added as a complement to social and emotional learning activities.

Keywords: Yoga, Quality of Life, Mindfulness.

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INTRODUCTION

The yoga and mindfulness practices are used from decades for improving individual mental health and well-being¹, particularly for stress.² Multiple evidence suggested that yoga is effective at reducing anxiety and enhancing mood and well-being in adults.^{3,4} The literature shown the efficacy of yoga interventions on stress management in adults and revealed found positive results in relation to management of stress, but it also cited limitations including nonrandomized designs, small sample sizes, and non-standardized yoga interventions.^{3,5}

Further inspiring outcomes were also reported for yoga as a means of addressing anxiety and anxiety disorders in adults^{4,6}, but these identified similar limitations and the additional limitation of heterogeneous outcomes within individual studies.⁴ Yoga-based interventions were also found to have a suggestive positive effect on depressive disorders, although these results were subject to similar limitations as those for anxiety and stress in addition to the potential lack of feasibility of yoga interventions for adults with limited or impaired mobility.⁶ Further Mindfulness is defined as an experiential practice of focussing one's attention with intention and without judgement.⁷ While this definition of mindfulness is

generally accepted, there is ongoing debate in the literature regarding the measuring and operationalization of mindfulness.^{8,9} Interventions include manualised mindfulness-based programs such as Mindfulness-Based Stress Reduction (MBSR) and Mindfulness-Based Cognitive Therapy (MBCT), mindfulness-informed interventions such as Dialectical Behavior Therapy (DBT) and Acceptance and Commitment Therapy (ACT), modified mindfulness interventions and yoga.⁷ To improve the well-being of students, and teachers by associating an elementary school to incorporate dual yoga and mindfulness programming into the school's existing curriculum with a specific focus on students who may be experiencing stress. Mindfulness and yoga were added to the school's existing course to provide additional targeted intervention for students identified as being in need of supplementary support. This study also pursued to provide tools for teachers to use for all students in their classrooms on an ongoing basis. This study aimed to assess whether mindfulness and yoga instruction improved quality of life more than the usual care the school provided among students identified as having symptoms of anxiety.

MATERIALS & METHODS

A two-tiered study that included a controlled test of elementary school students receiving small-group yoga/mindfulness sessions and two post-test only examinations of health-related quality of life, after each of two professional development sessions, took place between October 2018 and April, 2019 at one publicly funded elementary school of Udaipur-Rajasthan-India. Yoga and mindfulness sessions were taken by us as experience children’s yoga instructor for students.

Study Population

Data were collected from school students throughout the period on daily basis. At beginning a survey has taken place to students prior to randomization. Another survey was given following the completion of the intervention by all participants randomized to the intervention group.

Teachers/Staff

Data collected from teachers included items from the health-related quality of life. Questions assessed the number of days in the prior month that the students would be rated for their mental health and physical health, and the number of days on which their mental or physical health prevented them from completing their normal daily activities.

Respondents Profile: The study includes 50 students of third to fifth class on which yoga was conducted. The children selected were of age between 0-15 years. In present research, the participants were selected using convenience sampling. The sample of the present study, represented the population with respect to demographic dimensions i.e. gender and age. Care was taken to make the sample representative of the actual population.

Data Collection: For achieving the objective of this study and to conduct the investigation, data was collected from both primary and secondary sources. Primary data was collected from participants of the experiment. This study involves primary data collection through questionnaire filled by teachers of student for Mindfulness and yoga during the experiment. And secondary data was collected through Books, Periodicals, Journals, Research papers, and case–study, Websites, Articles, and Newspapers.

Statistical Analysis: To test the difference in quality of life by mindfulness and yoga course given parameters, Paired sample ‘t’ test (also called dependent ‘t’ test) is applied. Paired sample t-test is a statistical technique that is used to compare two population means in the case of two samples that are correlated.

Table-1: Demographic Profile of Respondents

		Frequency	Percent
Gender	Male	37	74.0
	Female	13	26.0
	Total	50	100.0
Age	5-8	17	34.0
	9-12	18	36.0
	Above 12	15	30.0
	Total	50	100.0
Class	3	6	12.0
	4	17	34.0
	5	27	54.0
	Total	50	100.0

Table-2: Paired Samples T Test for impact of Suryanamaskar on FAT

Paired Samples Statistics									
		Mean	N	SD	SEM				
Pair 1	Score before	4.3200	50	.84370	.11932				
	Score after	3.8400	50	1.01740	.14388				
Paired Samples Correlations									
Pair 1	Score before & Score after		N	Correlation	Sig.				
			50	-.034	.813				
Paired Samples Test									
		Mean	SD	SEM	95% CI of the Difference	t	df	Sig. (2-tailed)	
					Lower	Upper			
Pair 1	Score before – Score after	.48000	1.34377	.19004	.09811	.86189	2.526	49	.015

SD: Std. Deviation; SEM: Std. Error Mean; CI: Confidence Interval

RESULTS & DISCUSSION

The result showed a positive gap difference in the level of quality of life the students respondents before and after the use of the mindfulness and yoga course. Alternate hypothesis is accepted and we can say that the anxieties is significantly decreased ($p < .05$) as $\mu_B (4.3200) > \mu_A (3.8400)$. It can also be revealed that a positive gap difference between the anxiety incidents of the respondents before and after the use of the mindfulness and yoga course. Alternate hypothesis is accepted. One of the best things about mindfulness and yoga program is that any age child can be taught mindfulness and yoga levels. It can help to restore balance (both physical and emotional) as well as provide a calming sense of security. Incorporating Yoga into a child's schedule can be a building block in which to add other healthy lifestyle changes. Qualitative research has also identified perceived benefits to mindfulness and yoga programming including increased self-regulation, self-esteem, physical conditioning, academic performance, and stress reduction (Wang & Hagins, 2016).¹⁰

In generalized estimating equation models adjusted for time, the yoga-based intervention was associated with a 14.17 unit increase in student emotional PedsQL (p -value 0.001) and a 7.43 unit increase in psychosocial PedsQL (p -value 0.01). Results were not attenuated by adjustment. Teachers and staff reported using yoga more frequently in the classroom following the second of two professional development sessions (p -value < 0.05). Perceived barriers to introducing yoga to the classroom were similar at two data collection time points, while perceived benefits remained high (Bazzano et al., 2018).¹¹

The study authors reported the effects of a 10-week classroom-based intervention. Students in the second grade, but not third grade, exhibited a decrease in cortisol level from before and after the intervention, while both groups of students showed significant decreases in cortisol level from before to after performance of a cognitive task. Additionally, teachers perceived some improvements in student behavior. (Butzer et al., 2015)¹²

Ewais et al., (2019)¹³ found that mindfulness interventions showed a statistically significant effect on stress in both the short (SMD = -0.48; 95%CI: -0.97, 0.00; $P = .05$), and long term (SMD = -0.55; 95%CI: -0.78, -0.32; $P < .00001$), significant long term effects on depression (SMD = -0.36; 95%CI: -0.66, -0.07; $P = .02$) and quality of life (SMD = 0.38; 95%CI: 0.08, 0.68; $P = .01$), and small but not statistically significant improvements in anxiety (SMD = -0.27; 95%CI: -0.65, 0.11; $P = .16$). Effects on physical outcomes were equivocal and not statistically significant.

CONCLUSION

As the differences in the various reading as an mindfulness and yoga on quality of life is found significant, to measure the mindfulness and yoga on quality of life is separately measured to know the better results on the health of respondents that came as an improvement in quality of life. For this purpose first the impact of mindfulness and yoga on quality of life are separately measured. In the study, we tried to measure the effect of mindfulness and yoga on quality of life of small school going children's during school days with their physical activity during the evenings and weekends. The results revealed that there are various positive impact on children's in respect of their quality of life on the basis of our training on mindfulness and yoga.

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