



A comparative study of different age groups on mindfulness during COVID-19 lockdown due to second wave

Ankit Kumar¹, Vikram Singh², Surender Singh³

¹ Instructor, Yoga and Naturopathy, Uttarakhand Ayurved University, Dehradun, Uttarakhand, India

² Sports Office, Jawaharlal Nehru University, New Delhi India

³ Assistant Professor, Keshav Mahavidyalaya (DU), Delhi, India

Abstract

The main objective of the present survey study was to compare the level of mindfulness amongst 4 different age groups (15 to 18 years, 18 to 21 years, 21 to 24 years and 24 to 27 years) from Indian cities, during lockdown period of COVID-19. 92 university and college level individuals, comprising females and males were administered Cognitive and Affective Mindfulness Scale (CAMS-Revised) but only a 73 responses of moderately active individuals were received, which were analysed for the purpose of this study. The CAMS-R scale was first developed in 2005 by Kumar, Feldman, and Hayes and subsequently reviewed and revised in 2007 by Feldman, Hayes, Kumar, Greenson, and Laurenceau into the Cognitive and Affective Scale of Mindfulness-Revised (CAMS-R).

Descriptive statistics like mean, standard deviation, and parametric test ANOVA were used with the help of SPSS 25.0 statistical package. The present findings revealed that there was no significant difference between the four age groups on mindfulness ($p > .05$).

Keywords: mindfulness, age-groups, COVID-19

Introduction

Mental disorders are becoming more prominent among school and college students. The prevalence of one or more than one disorders has also become these days (Lamers *et al.*, 2011) [9]. As per the 2014 survey study done by National College Health Assessment Survey (American College Health Assessment [ACHA], 2015) [1], 15.7 million American adults over the age of 18 had one major episode of depression. The prevalence of anxiety disorders for all adults in the country over the age of 18 was even higher at approximately four crores. In India, more than the school going children, those college students who are in the transition phase from school to college or college to post graduation studies have to cope with multiple stressors. Though there are positive sides of this transition as well but on the contrary this transition involves many new stressful experiences like personal grooming, acceptance with others, coping with emotions, including change in the support and attitude from parents, exposures to new cultures, making adjustments to different ways of thinking and life styles. They are also exposed to new risks such as late night partying, smoking, excessive drinking, using drugs, and the need to make decisions about these situations (Robb, 2011) [10]. Students might be under constant stress to be able to come up to such demands and may feel prone to over arousal, stress, and/or anxiety. Those who are more academically inclined might face more pressure as compared to those involved in active sports and other co-curricular activities. According to the emergent adulthood theory, the period from late teens to mid-20s is a time of life when many different options open up and there is a need to take decisions and introspect (Arnett, 2004) [2]. This period of life might be associated with a lot of uncertainty and doubts probably for the betterment of personality

development on the path to successful adulthood. Anti-depression drugs or other invasive methods may not always be successful as intervention techniques unless and until there is a dire need. There is a great need to explore other treatment interventions and adjunctive therapies for young students with or on the borderline of anxiety and/or depression. There is also a tendency not to seek mental health professionals help due to self-imposed demands and social pressures before it become very late in some instances.

Mindfulness yogic practices can help individuals calm their body and mind (Emerson & Hopper, 2011; Germer, 2009; Siegel, 2010) [4, 7, 11]. Recent researches have shown that the use of such practices is promising in helping adolescent and adults cope with stress, anxiety, and depression (Burns, Lee, & Brown, 2011) [3]. Such complementary alternative modalities are often used in addition to other conservative and symptomatic treatments for minor anxiety disorders have the potential to not only prevent but also decrease the use of psychotherapy and/or medications (Hofmann, Sawyer, Witt, & Oh, 2010) [8]. These techniques are not only non-invasive, non-pharmaceutical practices but have become more acceptable to students as a lifestyle change solely has many beneficial effects especially for those who may avoid obtaining help due to the social stigma associated with a diagnosis of a mental illness. Though sports and music have been shown to produce remarkable effects amongst those students who are raised with such culture around them but for not so lucky students, such methods have demonstrated effectiveness in as little as 8 weeks (Falsafi & Leopard, 2015) [5]. Unlike anti-anxiety, anti-depression drugs, these modalities are free from any side effects.

Objective

The main objective of the present survey study was to compare the level of mindfulness amongst 4 different age groups (15 to 18 years, 18 to 21 years, 21 to 24 years and 24 to 27 years) from Indian cities, during May June 2021 lockdown period of COVID-19.

Procedure

This survey was conducted in India, in COVID-19 lockdown during second wave of corona virus in the month of May June 2021 that proved to be extremely stressful due to deaths and media reports of mismanagement flashed from time to time besides odd Indian weather conditions. 92 university and college level students, comprising females and males were administered Cognitive and Affective Mindfulness Scale (CAMS-Revised) but only a 73 responses of moderately active individuals were received, which were analysed for the purpose of this study. 4 different age groups (15 to 18 years, 18 to 21 years, 21 to 24 years and 24 to 27 years) from Indian cities, during May June 2021 lockdown period of COVID-19. The CAMS-R scale was first developed in 2005 by Kumar, Feldman, and Hayes and subsequently reviewed and revised in 2007 by Feldman, Hayes, Kumar, Greeson, and Laurenceau into the Cognitive and Affective Scale of Mindfulness-Revised

(CAMS-R).

Descriptive statistics like mean, standard deviation, and parametric test ANOVA were used with the help of SPSS 25.0 statistical package. Due to COVID-19 lockdown in 2020, the data was collected by sending the tool i.e. Cognitive and Affective Mindfulness Scale (CAMS-Revised) online through a Google form. The scale was first developed in 2005 by Kumar, Feldman, and Hayes. It was subsequently reviewed and revised in 2007 by Feldman, Hayes, Kumar, Greeson, and Laurenceau into the Cognitive and Affective Scale of Mindfulness-Revised (CAMS-R) where higher scores reflect higher levels of dispositional mindfulness.

The data thus collected was statistically treated by using Statistical Package for the Social Science (SPSS) version 25.0, thereby computing Mean, S.D., and ANOVA test to explore the differences between the four age groups on the total mindfulness scores.

Results and Discussion

Table-1 shows the case processing summary of our results with 12 subjects in the age group of 15 to 18 years, 28 in 18 to 21 years, 9 in the age group of 21 to 24 years and 24 subjects in the 24 to 27 years age group with no missing values. N=73

Table 1: Case Processing Summary

Dependant Variable	Age Groups	Cases					
		Valid		Missing		Total	
		N	Percent	N	Percent	N	Percent
Total mindfulness score	15 to 18 years	12	100.0%	0	0.0%	12	100.0%
	18 to 21 years	28	100.0%	0	0.0%	28	100.0%
	21 to 24 years	9	100.0%	0	0.0%	9	100.0%
	24 to 27 years	24	100.0%	0	0.0%	24	100.0%
Total (N)		73					

Table 2 shows the Mean and Standard Deviation (SD) scores of each group age wise. Mean score of total mindfulness for 15 to 18 years was 32.08 ± 5.08, for 18 to

21 years age group it was 30.55 ± 5.58, for 21 to 24 years age group it was 33.33 ± 5.74 and for 24 to 27 years age group it was 31.88 ± 4.89

Table 2: Descriptives of total mindfulness score amongst various age groups

Age group	Mean	Standard deviation	Minimum	Maximum
15 to 18 years	32.08	5.08	22	40
18 to 21 years	30.55	5.58	22	43
21 to 24 years	33.33	5.74	23	42
24 to 27 years	31.88	4.89	25	41

Table-3 shows the test of normality amongst the different age groups.

Table 3: Tests of Normality

	Age Groups	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Total mindfulness score	15 to 18 years	.238	12	.059	.939	12	.480
	18 to 21 years	.162	28	.056	.960	28	.356
	21 to 24 years	.183	9	.200*	.966	9	.854
	24 to 27 years	.118	24	.200*	.931	24	.105

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

The above table presents the results from tests of normality, namely the Kolmogorov-Smirnov Test and the Shapiro-Wilk Test. The Shapiro-Wilk Test has been used as our numerical means of assessing normality for interpretation in the present study. We can see from the table-3, that for the

"15-18 years", "18 to 21 years", "21 to 24 years", "24 to 27 years", all four age groups the dependent variable, "Total mindfulness score", was normally distributed. (p>0.05), showing that the data is normal and that the data does not significantly deviate from a normal distribution.

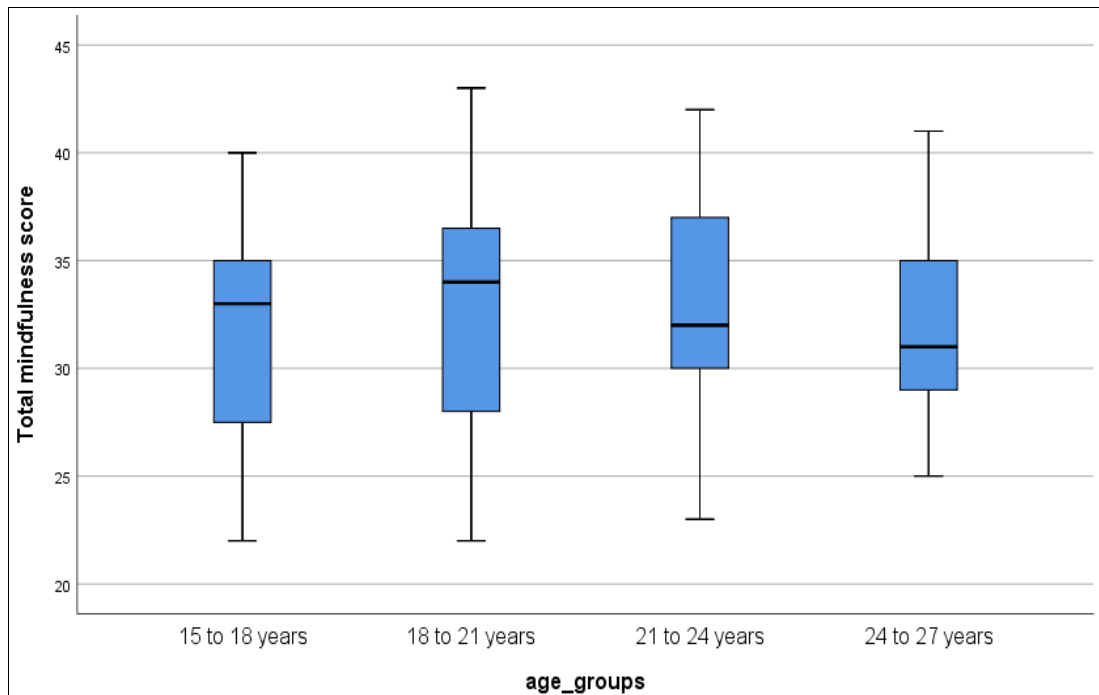


Fig 1: Box plot showing data normality

Figure-1 shows the box plot is being derived from table-3 above, showing that the data is normal for applying a suitable parametric test.

Table 4: Tests of Between-Subjects Effects

Dependent Variable: Total mindfulness score					
Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	18.415 ^a	3	6.138	.218	.883
Intercept	62177.956	1	62177.956	2210.053	.000
ageGroups	18.415	3	6.138	.218	.883
Error	1941.256	69	28.134		
Total	78644.000	73			
Corrected Total	1959.671	72			

R Squared = .009 (Adjusted R Squared = -.034) $p > .05$) was seen, so post-hoc tests were not applied. Since no significant difference between the groups ($F = .218$,

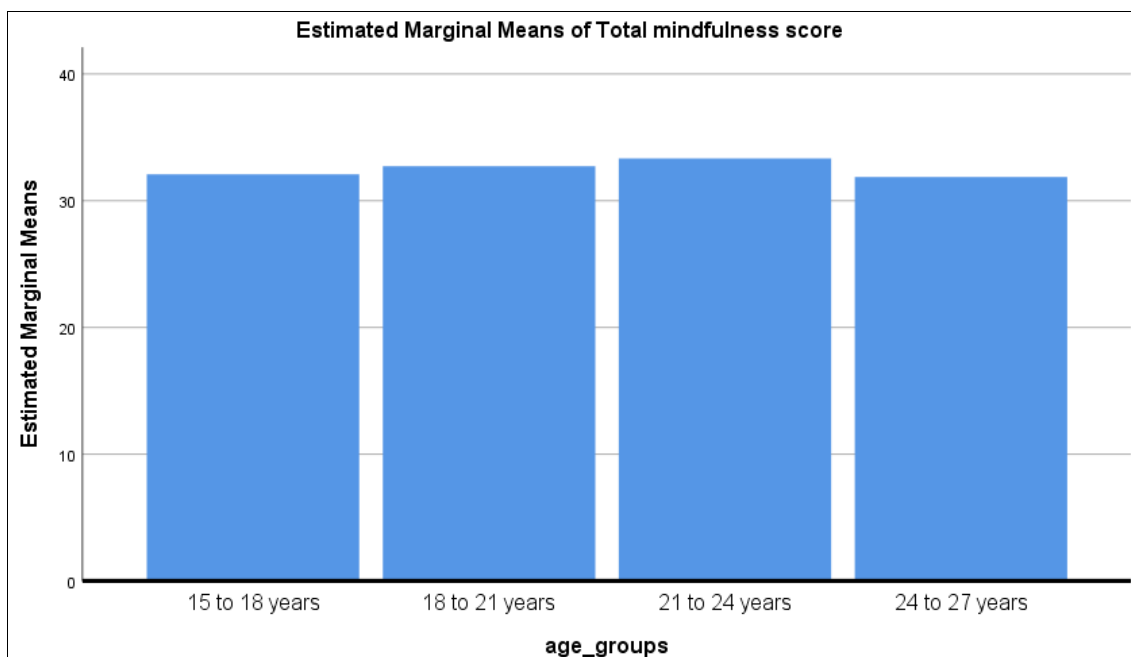


Fig 2: Estimated marginal means of Total mindfulness score of 4 age groups

Graphical representation -2, showing no significant difference between the groups so no need for any post-hoc tests.

Table 5: Pearson Correlations amongst the age and total mindfulness score

		Total mindfulness score	Age (in years)
Total mindfulness score	Pearson Correlation	1	-.013
	Sig. (2-tailed)		.914
	N	73	73
Age (in years)	Pearson Correlation	-.013	1
	Sig. (2-tailed)	.914	
	N	73	73

Table- 5 shows the relationship between age and total mindfulness scores of different age groups of subjects using Pearson correlation coefficient. Results of the Pearson correlation indicated that there was no significant association between age groups and total mindfulness, ($r(73) = -.013, p = .914$).

Conclusion

Though this study has limited implications for a cost-effective treatment for various mental disorders, but the findings from this study can provide useful information to university the professional working with young population as counsellors while comparing their results in different age groups. It has also come to the fore that irrespective of their age groups, the youth had almost similar experiences with regard to mindfulness. As per the CMS-R scale norms, higher scores would represent better mindfulness, it can be said that all the age groups fell in the low to moderate state of mindfulness. It is further suggested that if these vulnerable age groups practice mindfulness exercises like yoga asana and meditation then they can improve upon their scores on CAMS-R. Some individuals might find mindfulness practices easier than yoga asana practices because there are very less limitations in when and where it can be practiced. Mindfulness practices can alleviate the symptoms that affect the body, and practicing yoga can be beneficial to those individuals (Van Der Kolk, 2014; Woolery, Myers, Sternlieb, & Zeltzer, 2004) ^[12, 13]. Individuals who practice such modalities on a regular basis tend to respond to situations rather than react to them (Falsafi & Leopard, 2015) ^[5]. No relationship between the age and mindfulness indicates that mindfulness doesn't depend upon our age and irrespective of our age we can start and learn these powerful techniques at any age.

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