

Physical Activity And Financial Well-Being Among College Teachers In Kerala In The Aftermath Of Covid 19 Pandemic

Dr. Diana Ann Issac^{1*}, Prof (Dr) Binu George Varghese²

¹Assistant Professor, Department of Commerce, Mar Athanasius College (Autonomous), Kothamangalam, Kerala, India, dianaann@macollege.in, Mob: 8547104170

²Professor & Director, SPESS, Mahatma Gandhi University, Kottayam, Kerala, India, binugv1234@gmail.com, Mob: 9447006946

*Corresponding Author:- Dr. Diana Ann Issac

*Assistant Professor, Department of Commerce, Mar Athanasius College (Autonomous), Kothamangalam, Kerala, India, dianaann@macollege.in, Mob: 8547104170
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Abstract

Covid 19 has forced everyone to curtail their outdoor physical activity and restrict themselves to indoors. With the commencement of online classes, college teachers found themselves isolated, stressed out and confined to homes. Teachers were initially worried about their ability to cope up with the new norms in education which was online teaching as well as concerned about their financial security. In order to deal with stress, many of the teachers turned to one or other healthy behaviors like joining for online Yoga, Zumba, Dance and other aerobic exercises. The study assessed the connection among physical activity patterns and financial well-being of college teachers in Kerala. The study focused on college teachers working in Autonomous, Government, University Departments, and Self Financing and Government- Aided Colleges in Kerala. A sample of 250 college teachers was surveyed. The samples had a total service experience ranging from 1 to 30 years. The survey was conducted using IPAQ Questionnaire, abbreviation of which is International Physical Activity Questionnaire, that consists of 7 questions, and Financial Wellbeing Scale, which consists of 10 questions. According to the results, 31.20 per cent of participants (N=78) were inactive with a MET score below 600, while 20 per cent (N=50) were 'minimally active' with a score ranging between 600 and 1499. The majority of teachers with MET scores above 1500 were in the "HEPA (Health enhancing physical activity)" category (N=122). Financial well-being was found to be low among 1.20 per cent of teachers, average among 94 per cent of teachers, and high among 4.80 per cent of teachers. In addition, no significant correlation was found between MET total and financial well-being (-0.0148) among male college teachers, female college teachers (-0.049) and the total population of college teachers in Kerala (-0.098).

Keywords:- Physical activity patterns, IPAQ, Financial Well-being, Covid 19 pandemic

INTRODUCTION

Fitness refers to the ability to perform physical activities without feeling fatigue. It is imperative that everyone maintains a healthy level of physical fitness. According to several studies, physical activity is beneficial to health, including an increase in functional capacity, a decrease in disease risks, an improvement in body composition, and a weight reduction (Fox, K.R., 1999; Maher, J.P.;Pincus,A.L.;Ram, N.;Conroy, D.E., 2015). Further, study has proven that physical activity could positively impact a person's psychological well-being, such as improving their mood, reducing depression, and reducing anxiety levels.

Financial well-being refers to the state of a person's financial health, which is becoming increasingly important for individuals and families. Stress about a person's financial security can have serious impacts on his mental and general health. Financial well-being, as the name implies, is a concept that encompasses financial satisfaction, objective financial positions, as well as financial attitudes and behaviors, all of which cannot be measured systematically through a single tool (Sohyun Joo, 2008). Financial well-being refers to a feel of confidence and control of one's finances, both in the present and the future. Therefore, people who have an excellent financial situation have less stress about money as a result. Aside from that, it also has a positive effect on their mental and physical health, as well as on their relationships as well.

The present study aimed to analyse the link among physical activity and financial wellness amongst college teachers in Kerala while controlling for demographic variables:

1. Researchers tested the MET Scores of physical activities among Male and Female College Teachers.
2. Researchers tested the economic well being between Female and Male College Teachers
3. Researchers tested for the association between financial well-being among college teachers with different levels of physical Activity.

4. Researchers tested whether the MET Scores of physical activities could significantly foresee fiscal well being amongst male and female college teachers.
5. Researchers further investigated the relationship between Gender and financial wellness, as well as physical activity levels.

METHODOLOGY

A total of 250 teachers from various government, aided, self-financed, and autonomous colleges in Kerala participated in the study. Of which 136 men and 114 women teachers were randomly selected from 14 districts of Kerala State. In the survey, 54.4 per cent of the respondents were male, and 45.6 per cent were female. Researchers collected data by administering the IPAQ Questionnaire ,abbreviation of which is International Physical Activity Questionnaire and the Financial Well-Being Survey (FWBS, 2015) through Google Forms. It has been found that a large number of researches are now focused on physical activity surveys using the IPAQ questionnaire which comprises of seven questions. The IPAQ is mostly used for the investigation of adult populations. For classifying population, there are three levels of physical activity. Below mentioned are the latest suggested categories, that consider the concept of whole physical activity across whole areas.

PHYSICAL ACTIVITY PATTERN		
INACTIVE (CATEGORY 1)	MINIMALLY ACTIVE (CATEGORY 2)	HEPA ACTIVE (CATEGORY 3)
LEAST LEVEL OF PHYSICAL ACTIVITY	a) Three or more days of vigorous activity of at least 20 minutes per day	a. Vigourous- intensity activity on atleast 3 daysachievinga minimum of atleast 1500 MET minutes/week
	b) five or more days of moderate-intensity activity or walking of at least 30 minutes per day	
	c) 5 or more days of any combination of walking, moderate-intensity activities or vigorous intensity activities achieving a minimum of 600 MET-min/week.	b.7 or more days of any combination of walking,moderate- intensity or vigorous intensity activities achieving a minimum of atleast 3000 MET-minutes/week

Metabolic equivalent (MET) values and Formula for computation of Met-minutes

Metabolic equivalent values are measures of the volume of a physical activity, calculated by giving weights to every type of physical activity with its energy requisite.

Formula for computation of Met-minutes	
Level (MET-Minutes/Week)	Calculation Formulas
Low intensity	3.3 x walking minutes x walking days
Moderate intensity	4.0 x moderate-intensity activity minutes x moderate days
High intensity	8.0 * vigorous-intensity activity minutes x vigorous-intensity

The Financial Well-Being Scale was developed by the Consumer Financial Protection Bureau, with inputs from experts and consumers. The scale lets the investigators to precisely and steadily compute, what the respondents previously have, which is an idea about the degree to which the fiscal condition and the fiscal capabilities offer them safety and liberty of choice. A financial wellbeing score provides a common metric to allow comparison of financial wellbeing among the samples selected. It consists of ten questions. The Financial Well-Being Scale score is a standardized number between 0 and 100 that can be used to determine the respondents' level of financial wellbeing based on the underlying fiscal condition. The higher the score of financial well-being, the greater the level of financial wellbeing. However, there is no specific cutoff for what constitutes a "good" or "bad" score of financial well-being. The financial well-being scores are comparable across individuals and changes in the same individuals over time.

RESULTS OF THE STUDY

As per the data collected from the questionnaire survey completed by the respondents, the data obtained was carefully classified and tabulated for statistical analysis. The data collected from the subjects were categorized based on their gender, and level of physical activity. The results were analyzed using descriptive statistics, and ANOVA to test the hypothesis based on our data collection. To find out the distribution of the subjects' responses for each dependent variable, frequency and percentile analysis were carried out. A Pearson correlation analysis was also conducted to determine whether there is a relationship between gender and different levels of activity for Financial Well Being and Physical Activity. SPSS V25 was used to analyze the data in the present study.

Table No. 1 Analysis of MET Total among College Teachers

Category	Group	Frequency	Per cent	Valid Percent	Cumulative Percent
Inactive (MET below 600)	Female	38	33.3	33.3	33.3
Minimally Active (MET Above 600 and below 1499)		43	37.7	37.7	71.1
HEPA (MET above 1499)		33	28.9	28.9	100.0
Inactive (MET below 600)	Male	42	30.9	30.9	30.9
Minimally Active (MET Above 600 and below 1499)		45	33.1	33.1	64.0
HEPA (MET above 1499)		49	36.0	36.0	100.0
Inactive (MET below 600)	Total	78	31.20	31.20	31.20
Minimally Active (MET Above 600 and below 1499)		50	20.00	20.00	51.20
HEPA (MET above 1499)		122	48.80	48.80	100

Table No. 1 shows the MET Scores of College Teachers (Male and Female). The outcomes indicate that 33.3 (N=38) per cent of female college teachers and 30.9 (N=42) per cent of male college teachers had an inactive level of Physical Activity. Interestingly, 28.9 per cent of female college teachers (N=33) and 36.0 per cent of male college teachers (N=49) follow a healthy lifestyle. The majority of the female college teachers, i.e., 37.7 per cent of them (N=43) and 33.1 per cent of them (N=45), engaged in moderate-intensity activities of at least five days per week which include climbing stairs, standing in labs, walking a lot, mostly between institutions, engaging in recreational activities, and walking at least 30 minutes per day. However, it was found that they spend a minimal amount of time doing sports or exercising compared to population figures, and most of them do not participate in rigorous activities like aerobics, jogging, swimming, cycling and so on.

In the light of the current evidence, it can be assertively stated that positive outcomes have been demonstrated. According to the Procedures for Data Analysis and Processing of IPAQ, it can be concluded that approximately 68.80 per cent of the selected College Teachers perform greater than the basic level of physical activity referred to in present public health recommendations for adults. In contrast, only 31.20 per cent of them are not doing enough to meet the total amount of physical activity recommended by the public health recommendations. The results of this study also follow the survey conducted by Elzbieta Biernat et al. (2008), in which average score of physical activities was 1386 and 320 MET minutes/week in the SC and DI groups, respectively. The previous score is comparable with those reported for fifteen European Union countries, which ranged from 693 (Northern Ireland) & 1119 (Sweden) to 2060 (Germany) and 2336 (Netherlands) MET minutes/week.

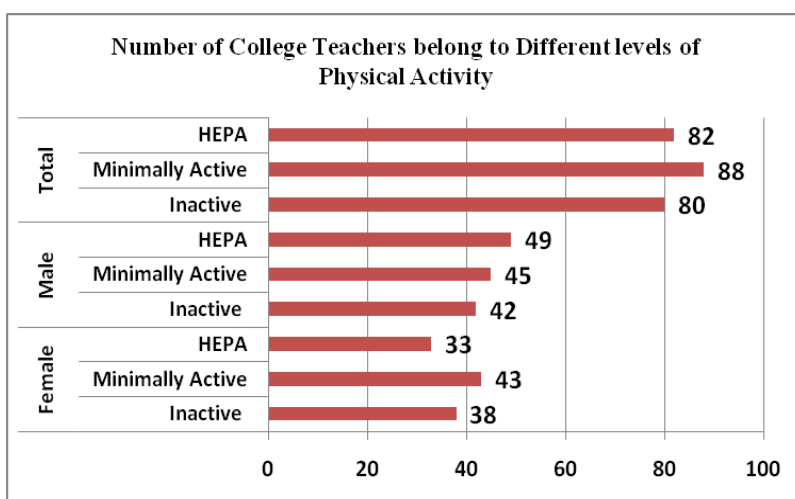
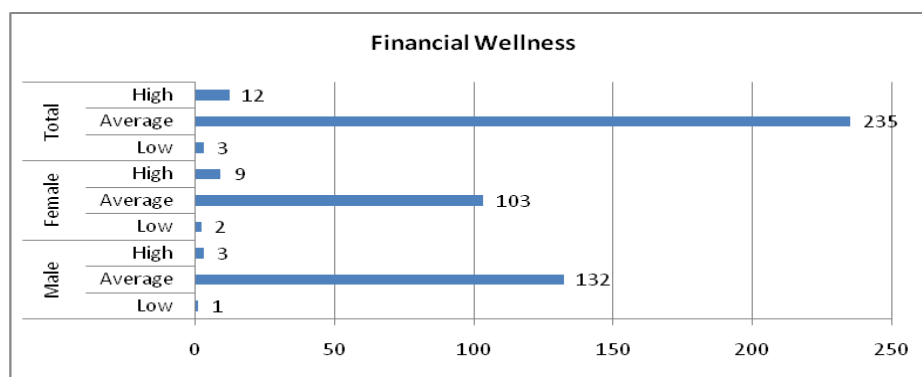


Figure 1. Level of Physical Activity among College Teachers

Table 2 Analysis of Financial Well -being among College Teachers

Category	Group	Frequency	Per cent	Valid Percent	Cumulative Percent
Low	Male	1	0.74	0.74	0.74
Average		132	97.06	97.06	97.80
High		3	2.20	2.20	100
Low	Female	2	1.76	1.76	1.76
Average		103	90.34	90.34	92.10
High		9	7.90	7.90	100
Low	Total	3	1.20	1.20	1.20
Average		235	94.00	94.00	95.20
High		12	4.80	4.80	100

Table No.2 reflects the financial well-being of college teachers as a whole. It has been determined that 0.74 per cent (N=1) of male college teachers have the lowest level of financial well-being and 1.76 per cent (N=2) of female college teachers have the highest level of financial well- being. On the other hand, only 2.20 per cent (N=3) of male teachers and 1.20 per cent (N3) of female teachers stated that they had a secure financial situation. It was found that the vast majority of male and female college teachers (N=132) and 90.34 per cent (N=103) of those surveyed reported that they were in a relatively good financial situation. It has been concluded that only 1.20 per cent of teachers have low level of financial wellbeing in the overall results. In comparison, 98.80 per cent of teachers have consumer-perceived financial well-being, which is the capacity to meet all recent and continuing monetary obligations. They sense confident in the future of one's finances, and create options that can make one's life enjoyable. This gives a clear indication that worries about personal finances are not a major cause of stress for the majority of college teachers in Kerala.

**Figure 2.** Level of Financial Well-being among college teachers**Table 3** Descriptive Statistics on MET Total and Financial Well being

Variable	Group	Mean	Std. Deviation	N
MET Total	Male	2704.23	2866.80	136
Financial well being		52.86	7.714	136
MET Total	Female	2067.44	2625.76	114
Financial well being		52.85	9.61	114
MET Total	Total	2413.86	2772.31	250
Financial well being		52.86	8.612	250

Table 3 shows descriptive statistics on MET and financial well-being among college teachers (male and female). The study determines that the mean level of the total MET of male college teachers is 2704.23 with a standard deviation of 2866.80. In contrast, the mean level of the total MET of female college teachers is 2067.44, with a standard deviation of 2625.76. The total mean score of the sample for the total MET is 2413.86 (SD= 2772.31) concerning financial well-being, the mean score of male college teachers is 52.86 (SD = 7.714), and that of female college teachers was 52.85 (SD (9.61). It has been found that the median financial wellbeing score for the total population of respondents is 52.86 (SD=8.511). It may be observed from the mean score of the total MET that the male college teachers have a higher level of physical activity than their female counterparts. However, there is hardly any difference between male and female college teachers regarding their financial well-being.

Table 4 Descriptive Statistics on Financial Well-being among college teachers belonging to different levels of Physical Activity

Variable	Group	Mean	Variance	N
Financial well being	Inactive	52.29	59.83	80
	Minimally Active	54.02	80.64	88
	HEPA	52.16	80.75	82

Table 4 reflects the descriptive statistics on Financial Well-being for college teachers according to their level of physical activities. It was found that the mean score of financial well-being of inactive college teachers is 52.29 (N=80), that of minimally active college teachers is 54.02 (N = 88), and that of health-enhancing physically active college teachers is 52.16 (N = 82). Financial Well-being means how much of an impact various aspects of the teacher's life have on their financial circumstances. Based on the mean score of Financial Well-being, it can be seen that minimally physically active college teachers have better financial well-being. In contrast, health-enhancing, physically active college teachers have poorer financial well-being.

Table 5 ANOVA on Financial Well-being among college teachers belong to different levels of Physical Activity

Source of Variation	SS	Df	MS	F	p-value
Between Group	185.535	2	92.7675	1.25325	0.28738
Within Group	18283.3	247	74.0214		
Total	18468.8	249			

Significant 0.5 level

Table 5 shows the ANOVA result, which reveals that F value for the independent variables of financial well-being and Physical Activity levels was 1.25325 and p = 0.28737, respectively. It is important to note that the p-value is 0.28738, which means we accept the null hypothesis. It means that, that we don't have enough evidence to suggest a statistically significant difference between the mean value of the 2 groups.

Table 6 Correlation between MET Total and Financial Well-being among College Teachers

MET Levels	Description	Value
MET Total and Financial Well-being (Among Male College Teachers)	Pearson Correlation	-0.148
	Sig. (2 tailed)	0.086
	N	136
MET Total and Financial Well-being (Among Female College Teachers)	Pearson Correlation	-0.049
	Sig. (2 tailed)	0.604
	N	114
MET Total and Financial Well-being (Among Total College Teachers)	Pearson Correlation	-0.098
	Sig. (2 tailed)	0.123
	N	250

Correlation is significant at the 0.01 level (2 tailed)

Table 6 shows that the Pearson's Product Moment correlations is used to analyse the relationship between the variables. This study reveals that there is no significant correlation between the MET total and the financial well-being of male college teachers (-0.0148), female college teachers (-0.049), and the total number of college teachers in Kerala (-0.098).

FINDINGS OF THE STUDY

1. The study found that 68.80 per cent of the College Teachers performed more physical activity than the minimum level recommended for adults. Only 31.20 per cent fell into the category of being inactive due to not doing enough physical activity recommended for adults. It means that the majority of College Teachers in Kerala have a healthy physical activity.
2. A significant majority of female college teachers (66.60 per cent) and a significant majority of male college teachers (69.10 per cent) were above the minimally active category of physical activity. In comparison, 33.3 per cent of female college teachers and 30.9 per cent of male college teachers were inactive. They did not perform sufficient physical activity as part of their daily routines.
3. 94 per cent of all college teachers were found to have an average level of financial well-being. In comparison, 4.80 per cent and 1.20 per cent of college teachers, respectively, were classified as individuals with high and low levels of financial well-being.
4. According to the results of this study, it can be concluded that there is no significant difference in the level of financial wellbeing between college teachers with varying levels of physical activity.
5. There was no evidence to suggest that level of physical activity and financial well-being were significantly correlated among males, females, and college teachers in Kerala as a whole.

CONCLUSION

The study is a pioneering effort to assess the relationship between levels of physical activity and financial wellbeing amongst the college teachers in Kerala. The results of the study are relevant for the policy makers and society at large. It is heartening to identify that the level of physical activity amongst college teachers in Kerala is quite encouraging. There is also a high level of financial wellbeing among the college teachers across genders.

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