



## Assessment of COVID-19 lock-down activities of physical education students

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### Abstract

The purpose of this study was to examine the physical activity of physical education students in Kerala and to determine the relationship between physical fitness, level of satisfaction with online classes, and social media use by male and female subjects. Purposively, 418 students (292 males and 127 females) were recruited from various physical education institutions in Kerala. A well-structured questionnaire was used to collect data on college students' backgrounds, exercise habits, social media usage, and satisfaction with online classes. The mean and standard deviation of the subjects' ages were found to be 22.42.77. The majority of subjects (291) were male, and the majority lived in rural areas (311 subjects). The majority of students were enrolled in physical education bachelor's programmes (155 subjects) During the lockdown, the majority of male and female subjects reported feeling physically fit. There was a significant correlation between male and female subjects' fitness levels. There was a statistically significant relationship between male and female subjects' use of social media. They used social media to increase the circumference of the lockdown. The majority of male and female subjects expressed dissatisfaction with the institution's online course. There was no statistically significant difference in the level of satisfaction with online classes between male and female students, even though they took the same classes.

**Keywords:** COVID 19, physical education, lock-down

### Introduction

Disease caused by SARS-CoV-2 (COVID-19) was discovered in Wuhan, China, in December of 2019. A total of nearly 600,000 people have died as a result of this pandemic, which has spread to nearly 210 countries. On this scale, there hasn't been a pandemic like this since 1918; it has already had a significant impact on the economies of countries around the world (Effrey A, 2020) [2].

Positive-stranded non-segmented RNA viruses such as coronaviruses are among the largest in size (27–34 kilobases). The nucleic acid-protein complex that encases them has a diameter of 120 nm and is named after them (similar to a solar corona). Direct respiratory system injury, immune system compromise, exacerbation of pre-existing medical conditions, and systemic failure and death are the primary effects of the virus on human health. Many thousands of patients are squeezed into tiny spaces. Thousands of millions of people have been hospitalised, immobilised, quarantined, and restricted from physical activity as a result of the COVID-19 attack, which could lead to a second-wave attack on the health and well-being of both the infected and the general population (Pillai, 2021) [4].

A healthy lifestyle necessitates regular physical activity. Changes in the internal environment of our bodies are constantly detected and responded to by our bodies. Workout-induced changes in organ function are indicative of a serious threat to the body's ability to maintain equilibrium. Structural muscle's metabolic rate can rise to 100 times its resting rate when activated. 50 During physical activity and exercise, our bodies go through temporary acute responses in order to meet the energy demands of our working muscles. The organism adapts to its metabolic needs as a result of the accumulation of exercise sessions. As a result of regular physical activity and training, our bodies undergo adaptations that last over time. These

adaptations include hypertrophy of the heart and resting bradycardia. The musculoskeletal system, one of the body's most critical tissues, is the primary focus of exercise training (Aleksandra M, 2020) [1].

### 1. Objectives of the study

1. To evaluate the physical education students' excises activities during the covid pandemic.
2. To determine the level of satisfaction with online classes during the covid pandemic.
3. To examine the relationship between male and female subjects' use of social media, satisfaction with online classes, and physical fitness.

### Materials and Methods

#### 1. Sample Selection

Total of 418 Physical education students were collected from various part of Kerala. A convenience sampling technique was used to select the subjects.

#### 2. Construction of Questionnaire

Set of self-made questions were made for collecting the information regarding physical fitness of subjects. Piolet study was conducted by using 50 participants. Data were analysed by SPSS. And the questionnaire was finalised with the help of experts.

#### 3. Collection of Data

A Google form with a well-structured questionnaire was created. The Google form was distributed to students via online mode. The following data was collected from physical education students using a questionnaire: Background information, physical activity duration, mental health status, and time spent on activities during the COVID period.

**4. Statistical Techniques**

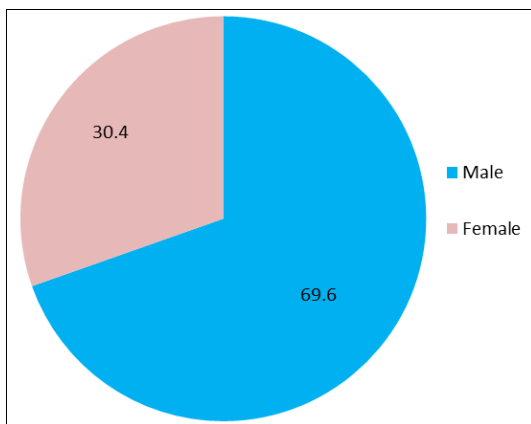
The statistical analysis was performed using the software SPSS version 3.0. The chi-square test was used to determine the relationship between two groups. Statistically significant P-values less than 0.05 were considered statistically significant. Frequency and percentage were used to represent the data. The Chi-square statistic was used to investigate the relationships between physical activity, fitness, satisfaction with online classes, and gender.

**Results and Discussion**

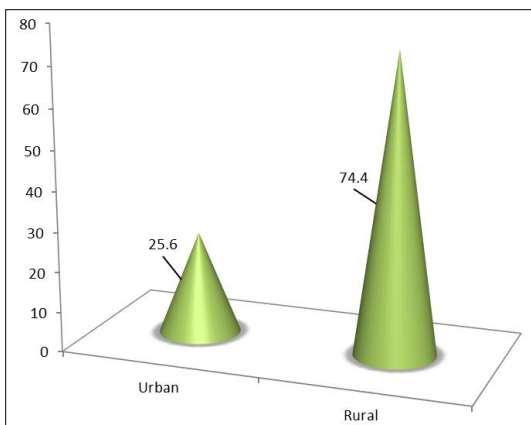
**Table 1:** Demographic variable of subjects

Variables	Participants
Age Mean ±Std deviation	22.4±2.77
Male (N &%)	291 (69.6%)
Female (N &%)	127 (30.4%)
Residential area N (%)	
Urban	107 (25.6)
Rural	311 (74.4)
Course of study N (%)	
Integrated BPED	150 (35.9)
BPED	155 (37.1)
MPED	90 (21.5)
Others	23 (5.5)

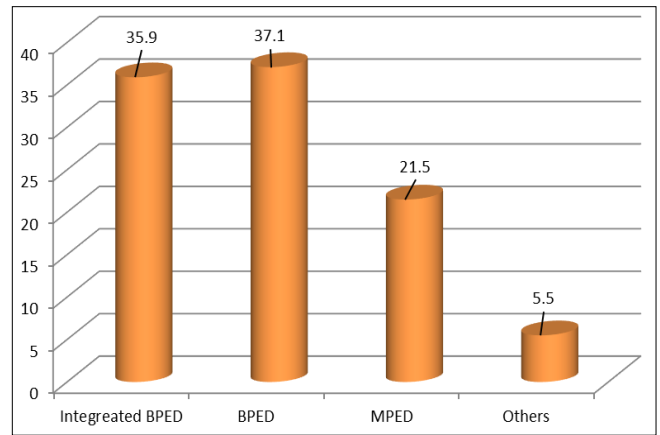
According to the study, the mean and standard deviation of the subjects' ages were 22.4±2.77. The majority of the subjects were males (291), and most of them lived in rural areas (311 subjects). The majority of students were enrolled in bachelor's programmes in physical education (155 subjects).



**Fig 1:** Distribution of Gender



**Fig 2:** Distribution of Residential Area



**Fig 3:** Distribution of Course of the study

**Table 2**

Do you Exercise Regularly				
Response	Male		Female	
	Frequency	%	Frequency	%
Yes	185	63.6	62	48.8
No	15	5.2	10	7.9
Sometimes	91	31.2	53	41.7
No opinion	0	0	2	1.6
Type of exercise involved during covid				
Jogging	75	25.8	15	11.8
Walking	24	8.2	27	21.3
Aerobic	77	26.5	28	22.0
Others	112	38.5	40	31.5
What kind of social media used				
Face book	17	5.8	14	11.0
WhatsApp	135	46.4	76	59.8
Instagram	78	26.8	8	6.3
Online games	45	15.5	15	11.8
Others	16	5.5	14	11.1
Institution conducted online class during lock down period				
No	176	60.5	75	59.1
Yes	84	28.9	37	29.1
No opinion	31	10.6	15	11.8
Time for online class				
1 hour	6	4.7	31	10.7
30 minutes	39	13.4	21	16.5
More than 1 hour	22	7.6	14	11.0
Nil	199	68.4	86	67.7

The majority of male (185 subjects) and female (62 subjects) subjects exercised on a regular basis during the covid pandemic. The majority of subjects prefer other exercises such as aerobic, anaerobic etc., while 75 males and 15 female subjects prefer jogging exercise. Among both male and female subjects, WhatsApp was the most popular social media platform. The majority of male and female subject colleges did not hold any online classes during the lockdown. The vast majority of both male and female subjects have no opinion about online classes. 199 male subjects and 86 female subjects never attended the online classes.

**Table 3**

Gender	Satisfaction level of Online Class		6.84 X <sup>2</sup>	P
	Frequency (%)	Frequency (%)		
	Yes	No		
Male	72 (24.7%)	219 (75.3%)	6.84 X <sup>2</sup>	0.81
Female	27 (21.3%)	100 (78.7%)		

According to the table, the majority of the male (219) and female (100) subjects were dissatisfied with the online class offered by the institution. There was no statistically

significant association in the level of satisfaction with online classes between male and female subjects ( $X^2 = 6.84, p = .81, p > 0.05$ ).

**Table 4**

Gender	Usage of Social Media During Lock Down			X <sup>2</sup>	p
	Frequency (%)	Frequency (%)	Frequency (%)		
	Less than 1 Hour	1 to 2 Hour	More than 2 Hour		
Male	24 (8.2%)	49 (16.8%)	218 (75%)	50.13*	.00
Female	19 (15%)	13 (16.8%)	102 (74.8%)		

The table shows that the majority of male and female subjects spent more than 2 hours on social media during the covid pandemic. There was a statistically significant association in usage of social media between male and female subjects ( $X^2 = 50.138, P=.00, p < 0.05$ )

**Table 5**

Gender	Feeling Fit During Lock Down				X <sup>2</sup>	p
	Frequency (%)		Frequency (%)			
	Yes	No	Yes	No		
Male	214	73.5%	79	62.3%	6.80*	.03
Female	77	26.5%	48	37.7%		

The majority of the male and female subjects felt physically fit during the lockdown. There was a statistically significant association in fitness during between male and female subjects. ( $X^2= 6.80, p = 0.03, p < 0.05$ ).

**Discussions**

The purpose of this study was to assess the physical activity of physical education students in Kerala and to discover the relationship between physical fitness, level of satisfaction with online classes, and social media use by males and females. 481 Kerala college students were chosen using the convenience sample technique. A well-structured questionnaire was used to collect information from college students about their background, exercise habits, social media use, and satisfaction with online classes.

During the covid pandemic, the majority of male (185 subjects) and female (62 subjects) subjects exercised regularly. This was in lined with another study carried out by Constandt *et al.* (2020) reported a general increase in exercise, during the CoViD-19 lockdown.

Walking was the most common type of physical activity that was restricted during the lockdown. This is explained by the limitations on outdoor movements. During the lockdown, the only activities permitted were grocery shopping and pet walking. In contrast to the findings, reported an increase in leisure-related walking activity.

During the lockdown, the majority of the male and female subjects felt physically fit. The reason could be that students in physical education are always trying to stay fit. And there was a significant relationship between fitness and gender among subjects, with males being more likely to maintain fitness than females.

The majority of male and female participants spent more than two hours on social media during the covid pandemic. The findings of the study by Cauberghe, 2021, during the lockdown, the majority of the adolescents reported an increase in social media use. The most common, however, was that participants used social media to cope with the current situation.

Governments have ordered all colleges and universities to go online because of the global pandemic. Due to the lack of certainty surrounding the duration of this pandemic, an online format has been adopted as the primary means of instruction. However, even though some of the teachers weren't tech-savvy, they kept up with the times in order to handle unexpected situations (Pillai *et al.*, 2021) [4]. By learning more about how students feel and perform in online classes, educators can better support them. As a result of this research, educators can better understand how to implement online teaching in their own classrooms. During India's lockdown, a study was conducted to see if students were happy about their online education experience. Most males (219) and females (100) participants in the current study were dissatisfied with the institution's online class. Students' attitudes toward online learning, as well as their physical location, may all play a role in how happy they are with their experience there.

**Conclusions**

Even though students in physical education make an effort to stay fit, quarantine, especially for men in Kerala, causes significant drops in total weekly physical activity energy expenditures. The majority of students have become social media slaves in response to the pandemic situation. Exercise has a profound effect on psychological health, increasing self-esteem and resilience to stress, while lowering depression and anxiety. Staying at home is critical for the containment of the pandemic, given the rapid spread of COVID-19. If you are forced to stay indoors due to a coronavirus outbreak, it's important to keep up your regular exercise routine to prevent physical and mental health issues such as depression. In order to get better, "continue your journey to recovery."

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