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# **A comparative study of students' life on campus before and during the COVID-19 pandemic in Kerala**

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**Abstract**--With the unexpected outburst of the Covid-19 pandemic, the traditional education system of classroom learning shifted to a system of online classes. This study mainly aims to compare the effectiveness of campus life of students on campus before and during the pandemic period. Majority of the students preferred on campus classes and the students' satisfaction levels of campus life before the pandemic were comparatively much higher than during the online classes. It was also found out that the learning in a classroom was more effective for the students. The impact of covid-19 pandemic on certain factors affecting students such as extra-curricular activities, financial factors, physical health, social life, workload and mental health were analyzed and suggestive measures for overcoming the same are also provided in this study.

**Keywords**---COVID-19 pandemic, effective learning, extra-curricular activities, financial factors, mental health, online classes, physical health, social life.

## **Introduction**

Campus refers to a place where students learn and grow. In its literal sense, campus means the buildings and grounds of a school, college or a university. It is the place where a student's life gets moulded academically as well as psychologically. Every student would have experienced the life on campus for at least once in their lifetime. Campus life refers to the overall life experiences and knowledge that a student earns from his campus. It is a positive place where students study academic courses and gain life lessons as well. It not only helps

students to increase their knowledge but also helps to develop their character and inculcate values. The main asset of a campus are the teachers who help the students by providing the right guidance and support needed for them to pave their way towards success. Campus life also helps us to meet new people and create numerous memories within the campus. A good campus life will always have a cherished place in our life forever. Thus, Campus life is very essential in every student's life. But the recent scenario of the unexpected covid-19 pandemic has made great changes in the present idea of a campus life. The on-campus classes have been made fully online and this has highly impacted the life of students on campus. Based on this background, a comparative study on the campus life of students in different self-financing colleges of three different universities in Kerala pre and post covid-19 has been undertaken for this research.

### **Review of Literature**

(Chaturvedi, Vishwakarma, & Singh, 2021) This study identified the impact of Covid-19 based on different factors such as time spent on online classes and self-study, changes in their daily routine and its effects on weight, social life and mental health on the students of different age groups. The research examined students' engagement on social media platforms and found that students sought to help from their near ones in order to deal with stress and anxiety. (Tarkar, 2020) This study shows that the closure of schools and colleges has disrupted the education system. It has interrupted the learning of the students where the traditional system method has been replaced by online learning. This article is segmented into the impact of covid-19 on the educational system, schools, assessments, higher education and of online classes on parents. (J, 2020) This study mainly highlights on the major impacts of Covid-19 on Higher Education Institutions in India. The measures taken by the educational authorities and some of the new trends and ways of teaching and learning of higher education is highlighted. (Szopinski & bachnik, 2022) This study aims at analyzing and providing knowledge on what determines the evaluation of online studies, the frequency of student's participation in online courses, and the preferences regarding the mode of study (offline vs. online) in the future from the students studying in a business school in Warsaw. (Alger & Eyckmans, 2022) This case study examines the interpersonal interactions of the students during the online classes conducted at the initial stages of the pandemic. Despite excluding small negatives, the indicators generated immediate and positive relational effects such as enhancing the feeling of belongingness among students. (Chouksey & Agrawal, 2021) According to the survey, 61 percent of college students have suffered mild to severe anxiety as a result of the new coronavirus outbreak. Age, education, marital status, and gender did not have a significant impact on anxiety. The findings of the study can be used to better understand students' psychological health during such a difficult time as COVID-19, and to direct public health decision-makers' empirical attention to the severity of the situation in order to develop necessary measures to protect students and the general population from future mental health problems. To improve the educational system, it is critical to secure appropriate funding for educational institutions. The study proposes that the government and educational institutions work together to provide health infrastructure in order to offer a safer atmosphere for the teachers and students,

allowing the academic activities to resume. Teachers have also suffered from mental stress and anxiety in adaption to new ways of teaching and with new technologies. Even the teachers also required psychological care in order to adapt to this unprecedented situation and happily perform their teaching role. (Camacho-Zuniga, 2021) Over 13,000 students from high school, college, and postgraduate levels across 36 campuses were interviewed over the course of eight weeks following the commencement of the COVID-19 pandemic. The findings revealed a widespread lack of energy and a predominance of negative feelings among students of all academic levels. During the lockdown, the most commonly stated symptoms were anxiety, tension, overwhelm, exhaustion and depression. 14 percent of them have stated that they are experiencing these sensations and that they require professional assistance in managing their emotions during the quarantine period. The report also proposes a number of techniques for dealing with the negative implications of the COVID-19 pandemic. (Fretheim, 2021) The relationship between COVID-19 risk, quality of life (subjective well-being), and teaching satisfaction is investigated in this article. According to the findings, the link between COVID-19 infection and teaching modality is extremely speculative. Shifting from classroom to online learning appears to have a detrimental effect on students' well-being in higher education. (Jennifer A. Phillips, 2016) The goal of this study is to measure faculty workload and perceptions while evaluating student perceptions and time spent on asynchronous online lectures in a blended learning environment (BLE). Students preferred online lectures because they were more flexible, allowed them to apply what they learned, and were more in accordance with their learning methods. Although faculty members noticed an increase in effort, the BLE enabled higher levels of learning during classroom sessions. (Jena, 2020) This research focuses on the positive and negative effects of the Covid-19 pandemic on schooling, as well as possible solutions. This paper discusses some of the steps taken by the Indian government to ensure that all citizens have access to quality education. To deal with the current COVID-19 dilemma, the Indian government and several education stakeholders have looked into the prospect of Open and Distance Learning (ODL) by implementing various digital technologies. It further notes that even if the COVID-19 problem lasts longer, there is a pressing need to maximize the use of online platforms so that students not only finish their degrees this academic year, but also prepare for a digitally oriented future.

(Steward Mudenda, Annie Zulu, & Maureen Nkandu Phiri, 2020) According to this study, the physical closure of schools, colleges, and universities has impacted students in various ways. According to reports, the students have been diagnosed with anxiety, despair, and mood swings. COVID-19 has disturbed student social interactions and has had an impact on their family lives. These effects on students are discovered to have an impact on their academic performance and growth. As a result, educational institutions should take steps to assist students in recovering from the effects of COVID-19. (ihm, Zhang, Vijfeijken, & Waugh, 2021) The study focuses on the physical and mental health consequences of the pandemic on the students during 2020, and the interdependencies of these impacts. The survey includes aspects like the challenges for infection control on campuses and for monitoring the disease dynamics in student communities. It also explores the psychological and mental health problems induced by the pandemic and evaluate the underlying factors that mostly affected the students.

### **Statement of the Problem**

The World Health Organization (WHO) declared Covid-19 as a pandemic on 11<sup>th</sup> March, 2020 and the Govt. of India declared a nationwide lockdown from 24<sup>th</sup> March 2020 for 21 days which further extended for more than a year in phased lockdowns. This introduced a fully online mode of learning which a new experience was entirely for the students. Once the vaccination was administered in the country, slowly the classes began for students of higher secondary and above in the campuses. After the second and third wave of covid, there aroused a form of blended learning which had a great impact on the overall campus life of students. Thus, an attempt has been made to know about the effect of covid-19 pandemic on the life of students on campus in different universities in Kerala.

### **Scope of the Study**

The study mainly covers the comparison of student life on campus in three different universities in Kerala before and after the covid-19 pandemic. The scope of the study is limited to students of selected self-financing arts and sciences colleges namely Amrita School of Arts and Sciences, Kochi of Amrita Vishwa Vidyapeetham University, Christ Nagar College, Maranalloor of Kerala University and MES College, Kunnukara of Mahatma Gandhi University.

### **Objectives of the Study**

1. The study is conducted to evaluate the impact of the changing campus life scenarios on the students due to covid-19 pandemic.
2. To analyze the various factors affecting the campus life of students during the pandemic period.

### **Limitations of the Study**

1. The study was limited by social distancing restrictions/norms and time constraints.
2. The sample is limited to 252 students and purposive sampling method is used for the study.

### **Research Methodology**

The study was conducted using a well-structured questionnaire distributed to the students directly. The sample size is 252 students and purposive sampling method is adopted for the study. Here, Descriptive cum Analytical method is used and the tools used for analysis includes Descriptive statistics, ANOVA and Regression.

## Data Analysis and Interpretation of the Study

### Gender wise Classification of the Respondents

Table 1.1 Gender wise Classification of Respondents

Gender	Counts	% of Total	Cumulative %
Female	210	83.3 %	83.3 %
Male	42	16.7 %	100.0 %
Total	252	100 .0%	100.0%

Source : Primary Data

Interpretation: The total population of the study was 252 students out of which the female students were 210 (83.3%) and the male students were 42 (16.7%). As the study was mainly concentrated in Arts and Sciences colleges, the percentages of male students were comparatively lesser to the female students.

### University wise Classification of the Respondents

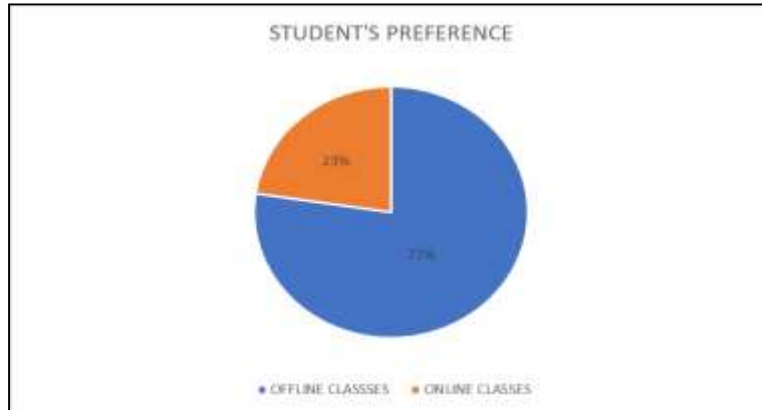
Table 1.2 Name of the University

Levels	Counts	% of Total	Cumulative %
Kerala University	78	31.0 %	31.0 %
Amrita Vishwa Vidyapeetham University	96	38.0 %	69.0 %
Mahatma Gandhi University	78	31.0 %	100.0 %
Total	252	100 .0%	100.0%

Source : Primary Data

Interpretation: The sample population of the study consisted of three different universities in Kerala, namely, Amrita Vishwa Vidyapeetham University, Mahatma Gandhi University and Kerala University. The respondents of the study included 78 students of Kerala University (31%), 96 students of Amrita Vishwa Vidyapeetham University (38%) and 78 students of Mahatma Gandhi University (31%) respectively.

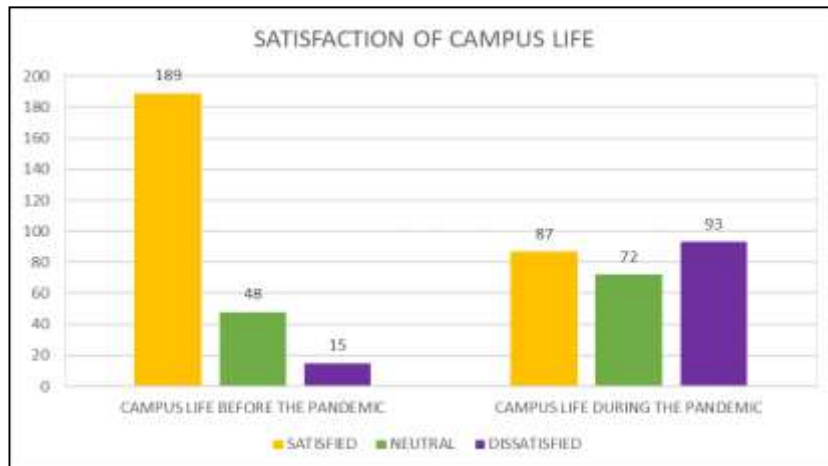
### Preference of Students



Source : Primary Data

Interpretation: Out of the 252 samples collected, 77% of the total students preferred offline classes and only 23% of them preferred online classes. This shows that majority of the students preferred on campus learning.

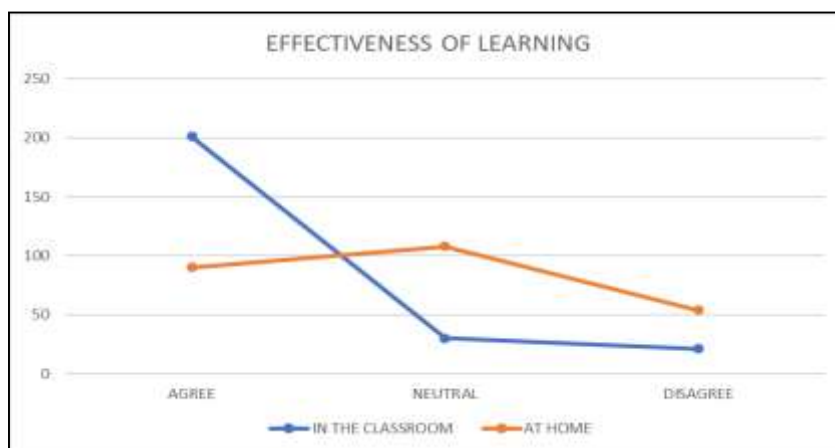
### Satisfaction of campus life before and during the pandemic



Source : Primary Data

Interpretation: From the data collected regarding the campus life of students before the pandemic, 189 students (75%) are satisfied, 15 students (6%) are dissatisfied and 48 students (19%) are neither satisfied nor dissatisfied. Where as from the data collected regarding the campus life of students during the pandemic, 87 students (34.5%) are satisfied, 93 students (37%) are dissatisfied and 72 students (28.5%) are neither satisfied and nor dissatisfied. It is very evident that the satisfaction levels about the campus life of students are comparatively high before the pandemic.

### Which is more effective for the students : Learning in the classroom or at home?



Source : Primary Data

Interpretation : Out of the 252 respondents, 201 students agrees that classroom learning is more effective while 27 student disagrees. When it comes to effective learning at home, 90 students agrees and 54 students disagree. All the remaining neither agrees nor disagrees. This clearly indicates that classroom learning is much more effective than online classes for the students.

### Relative Importance Index Analysis of Negative Impact on Campus Life of Students during the Covid-19 Pandemic Period

Table 1.3 Relative Importance Index Analysis of Negative Impact on Campus Life of Students during the Covid-19 Pandemic Period

Factors	Mean	S.D	RII	Rank
Financial factors	3.262	0.890	0.652	5
Social Life	3.512	0.881	0.702	3
Workload	3.893	0.928	0.779	1
Mental Health	3.060	1.030	0.612	6
Extra-Curricular Activities	3.892	0.952	0.778	2
Physical Health	3.429	0.931	0.686	4
Overall Negative Impact on Students College Life During the Covid-19 Pandemic Period.	3.607	0.558		

(Source: Computed from Primary Data)

Based on Relative Importance Index (RII), work load (RII – 0.779) is the most important factor on the negative impact on campus life of students during the Covid-19 Pandemic period, followed by extracurricular activities (RII - 0.778), social life (RII – 0.702), physical health (RII – 0.686), financial factors (RII – 0.652) and mental health (RII – 0.612). The overall Mean score revealed that Covid-19

Pandemic has adversely affected the Campus life of students during the pandemic period (Mean – 3.607 with S.D 0.558).

This means that the most negatively impacted factor on the students' campus life was the increase in the workload, followed by extra-curricular activities such as celebrations and cultural events conducted in the campus, major impact on the social life of students, physical health, financial factors and finally the impact on the mental health of students. The pandemic has severely affected the overall campus life of the students as there has been a significant increase in the amount of workload given during online classes, all the extra-curricular activities has reduced due to lack of celebrations and cultural events conducted in the campus, the social life of students has come down to a level where the students does not even know all the students in their own class, the continuous online classes for longer hours in front of the screens have taken a toll on the physical health of the students in the form of headaches, back pain etc., there has been a significant impact on the financial factors as there was additional costs involved in the transition from the offline to online classes for buying new gadgets like mobile phones, laptops, etc. and in taking up new internet connections and there has been a sudden rise in the mental health issues faced by students after the pandemic has led to online classes.

### **Multiple Linear Regression for explaining Negative Impact on Campus Life of Students during the Covid-19 Pandemic Period**

The information about results obtained from the fitted Multiple Linear Regression taking, Negative Impact on Campus Life of students during the Covid-19 pandemic period as the dependent variable and Physical Health, Extra-Curricular Activities, Social Life, Financial factors, Mental Health, Workload as the independent variables (predictors).

#### **Coefficient of Determination (R-square)**

#### **The coefficient of determination with standard error of estimates**

Model Summary<sup>b</sup>

Model	R	R Square	Adjusted R Square	Standard Error of the Estimate
1	0.855a	0.731	0.724	0.293024

a. Predictors: (Constant), Physical Health, Extra-Curricular Activities, Social Life, Financial factors, Mental Health, Workload.

b. Dependent Variable: Negative Impact on the Campus Life of Students during the Covid-19 Pandemic period.

The table shows that the adjusted R square value of 0.724. It indicates that the independent variables (predictors) such as Physical Health, Extra-Curricular Activities, Social Life, Mental Health, Workload and Financial factors used in this

model explained about 72.4 per cent of the total variation in dependent variable negative impact on students' campus life during the period of Covid-19 under study and remaining 27.6 per cent is explained by other factors which are not considered in this study. It means that 72.4 per cent of the total variation of the dependent variable on the negative impact on campus life of students during Covid-19 pandemic period can be explained by the regression model including independent variables like Physical Health, Extra-Curricular Activities, Social Life, Mental Health, Workload and Financial factors. The Adjusted R square is more than the benchmark of 0.5 which is sufficiently explainable enough for the regression model (Hair, Joseph, JW, BJ, & ER, 2010).

### Analysis of Variance (ANOVA)

		ANOVA <sup>b</sup>				
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	57.071	6	9.512	110.778	<.001***
	Residual	21.036	245	.086		
	Total	78.107	251			

a. Predictors: (Constant), Physical Health, Extra-Curricular Activities, Social Life, Financial factors, Mental Health, Workload.

b. Dependent Variable: Negative Impact on the Campus Life of Students during the Covid-19 Pandemic period.

ANOVA (Analysis of Variance) has been used to assess the statistical significance of the result. From the table, we can understand that since the p-value is less than the 5% significant level, there are significant differences in between the factors having negative impact on the campus life of students during the Covid-19 pandemic period. Thus, the table observed that the Analysis of Variance (ANOVA) provides the statistic test for overall model fit regarding F statistics (Hair, Joseph, JW, BJ, & ER, 2010). As it can be seen in the table, the value of F statistic 110.778 is highly significant with 5% level of significance, which means that there is a linear relationship between the dependent variable (Negative Impact on the Campus Life of Students during the Covid-19 Pandemic period) and the independent variables such as Physical Health, Extra-Curricular Activities, Social Life, Financial factors, Mental Health, and Workload. In other words, any given change in one of the independent variables will always produce a corresponding change in the dependent variable (negative impact), thus all independent variables were confirmed by the analysis to have strong impact on the dependent variable.

### Regression Model

As it can be seen from table, the R square was statistically significant, with F= 110.778 and p values is less than the 5% level of significant level. Using the values of the coefficient (Beta) from the regression coefficient Table 1.6, the estimated multiple Linear Regression Equation is as follows:

Table 1.6 Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	p-value.
		$\beta$	Std. Error	$\beta$		
1	(Constant)	-0.184	0.156		-1.180	.239
	Financial factors	0.150	0.022	0.239	6.959	<0.001**
	Social Life	0.173	0.021	0.274	8.126	<0.001**
	Workload	0.198	0.022	0.329	9.038	<0.001**
	Mental Health	0.212	0.019	0.392	11.150	<0.001**
	Extra-Curricular Activities	0.182	0.021	0.311	8.597	<0.001**
	Physical Health	0.165	0.022	0.276	7.514	<0.001**

a. Dependent Variable: Negative Impact on Students College Life during the time period of Covid-19 pandemic

$$\hat{Y} = -0.184 + 0.150X_1 + 0.173X_2 + 0.198X_3 + 0.212X_4 + 0.182X_5 + 0.165X_6 \dots \dots$$

... (i)

For this model let Y represents the negative impact on Students College life during Covid-19 pandemic period. Physical Health (X1), Extra-Curricular Activities(X1), Social Life(X1), Financial(X1), Mental Health(X1), and Workload(X1) represents the impact factors for campus life of students during the Covid-19 pandemic period.

On the basis of beta coefficients (regression coefficients) from Table 1.6, where constant (intercept)  $\beta_0 = -0.184$  represents that when the value of the independent variable is zero, the negative impact on students' campus life during the covid pandemic period would take the value -0.184. Similarly,  $\beta_1 = 0.150$  indicates that one unit increase in the financial factors results in 0.161 units increase in the negative impact on the student's campus life and t value = 6.959 (with P-value = 0.00 < 0.05) is also significant. So, alternative hypothesis is accepted which states that there is positive relationship between finance and negative impact on students' college life. The model shows that  $\beta_2 = 0.173$  where one unit increase in the social life results in 0.173 units increase in the negative impact on students' college life during the covid pandemic period and since, t value = 8.126 (with P-value = 0.000 > 0.05) is significant which states that there is a significant relationship between Social life and negative impact on the college life of students during the Covid-19 pandemic period. Likewise, coefficient  $\beta_3 = 0.198$  states that where one unit increase in relationship with Workload results in 0.198 units increase in the negative impact on students' college life during the Covid-19 pandemic period and t value = 9.038 (with P-value = 0.000 > 0.05) is also significant which states that there is a significant relationship between workload and negative impact on students' college life during the Covid-19 pandemic period. For Mental Health,  $\beta_4 = 0.212$ ; where one unit increase in the Mental Health results in 0.212 units increase in the negative impact on students' college life during the time period of Covid-19 pandemic. In other words, if the mental

health is one times better than before, then the level of negative impact on students' college life during the Covid-19 pandemic period is increased by 0.212 (21.2%) and t value = 11.150 (with P-value = 0.000 < 0.05) is significant which means that there is positive relationship between mental health and negative impact on students' college life during the Covid-19 pandemic period. Similarly, the regression coefficient  $\beta_5 = 0.182$  states that when one unit increase in the extracurricular activities results in 0.182 units increase in the negative impact on students' college life during the Covid-19 pandemic period and t value = 8.597 (with P-value = 0.000 < 0.05) is significant which means that there is positive relationship between the extracurricular activities and negative impact on students' college life during the Covid-19 pandemic period. For Physical Health,  $\beta_6 = 0.165$ ; where one unit increase in Physical health results in 0.165 units increase in the negative impact on students' college life during the Covid-19 pandemic period and t value = 7.514 (with P-value = 0.000 < 0.05) is significant. The null hypothesis is rejected which states that there is significant relationship between physical health and negative impact on students' college life during the time period of Covid-19 pandemic (Suryasa et al., 2021; Suryasa et al., 2022).

From the above table 1.6, it can be seen that the variables Physical Health, Extra-Curricular Activities, Social Life, Financial factors, Mental Health, Workload factors have significant impact on Negative Impact on Students' College life during the time period of Covid-19 pandemic at 5% level of significance. The p-values for calculated t-statistics for each of the model coefficients are seen to be less than 0.05 which indicate that all of the model coefficients are significant at 5% level of significance.

### **Findings of the Study**

1. From the total population of 252 respondents, 195 students (77%) preferred offline classes while only 57 students (23%) preferred online classes.
2. While comparing the satisfaction levels of campus life of students before and during the pandemic period, it is very evident from the data collected that more students were satisfied with their campus life before the Covid-19 pandemic.
3. Majority of the students have stated that the classroom learning was much more effective when compared to the online learning at home.
4. The fitted multiple linear regression model has shown that the variables Physical Health, Extra-Curricular Activities, Social Life, Financial factors, Mental Health and Workload have significant negative impact on students' campus life during the time period of Covid-19 pandemic under the study. The findings of the study shows that all the significant variables have negative impact on the campus life of students during the Covid-19 period while compared to the pre pandemic period, although the academic and productivity aspect is positively impacted.

### **Suggestions of the Study**

1. Institutions can provide yoga, meditation and counselling programs to improve the physical and mental health of students.

2. The fees can be reduced to a nominal amount during online classes so that additional financial burden does not arise. Similarly, entrepreneurship development programs can be initiated to increase financial stability during unexpected pandemic scenarios.
3. Workload can be given to the students in a considerate manner.

## Conclusion

The study was undertaken among students who have attended both on-campus and off campus classes and it has been proved that students preferred offline classes more than online classes. Majority of the students felt that classroom learning was comparatively more effective than attending online classes at home. It was found that students missed hanging out with their friends during the Covid-19 pandemic and were highly satisfied with the campus life they had before the pandemic. The factors such as workload, physical and mental health, financial factors, social life, extra-curricular activities, etc. were all negatively impacted upon the students due to the Covid-19 pandemic. Thus, the study concludes that the life on campus had much more positive impacts on the students when compared to the campus life they had during the Covid-19 pandemic in Kerala.

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