

## IMPACT OF ONLINE STUDY ON STUDENT DURING COVID-19 PANDEMIC SELF-DESIGN QUESTIONNAIRE

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### Abstract

**Aim:** the purpose of the study is to identify the reliability of self-design questionnaire to find out the impact of online study on students during the COVID-19 pandemic

**Subjects And Methods:** A convenience sample of 101, was selected utilizing a convenient non-random selection method. This self-created English questionnaire consists of multiple-choice questions. Participation in the study was voluntary, over 70% of students were present, students from different colleges and institutions, and those without previous experiences of postural pain were all included. Part-time employment, not having been a self-studying student, depression, or anxiety, congenital or postural abnormalities, and any traumatic or pathological ailment that impairs physical health were among the exclusion criteria.

**Result:** The questions focus on problems related to the COVID-19 pandemic online learning approach. like tension, poor posture, difficulty learning, etc. It demonstrated how negatively online learning has affected students' performance and general well-being in a number of ways. Within its bounds and restrictions, online education has been adopted as a workable substitute.

**Conclusion-** The majority of the students encountered issues using it. It is stated that a rise in sitting times leads to health issues. In this process, additional immobility for extended periods and attending classes in anti-ergonomic positions could lead to issues for individuals related to the musculoskeletal system in students receiving distance education.

**Keywords:** Online classes, COVID19, Pandemic, Student

### INTRODUCTION

The global epidemic has greatly impeded the development of nations where new coronavirus infections are being reported. Various methods, including lockdowns, workplace non-attendance, school closures, suspension of transport facilities, etc, are being implemented by countries to restrict the number of individuals. To slow the disease's spread and flatten the trajectory, lockdowns, and stay-at-home tactics have been implemented. This nationwide closure affects more than 90% of the world's student population.(1)

The community was advised to exercise responsive care by nations worldwide. The use of face masks, physical separation, hand washing, and avoiding large gatherings and assemblies have all been used as public health measures. (2)

The effects are extensive, having impacted learning either during the present school year or in the days ahead. Numerous colleges, universities, and schools have stopped offering in-person instruction.

Alternative approaches to teaching and assessment must be developed and put into practice immediately. Our chance to introduce digital learning has been made possible by the COVID-19 epidemic. (3)

The lockdown has an impact on education. Students have to sit for a lot of time in the present educational system, and online classes increase the amount of time students must sit. Extended durations of sitting have been connected to the emergence of back pain and various musculoskeletal disorders. Participating in online or remote learning may also cause students to adopt alternative habitual postures and disturb their overall well being.

Impaired postures reflect the inadequate alignment of the body, which results in micro spasms, a reduction in the soft tissue's intrinsic elasticity, and modifications to the width and strength of the muscles that affect the relative involvement of the antagonists and synergists. One of the main risk factors for functional postural problems is likely the kind of prolonged or uncomfortable posture that students adopt during the day.

### **SUBJECT AND METHOD**

The main source for the data gathering method employed by the study is the primary information. 101 samples were chosen for the investigation using a straightforward random selection technique. Multiple-choice questions are included in this self-designed English questionnaire. It is a cross-sectional, and traditional random sampling is the sampling technique employed. The inclusion requirements were retained. Students from various universities or colleges, Students who have never experienced postural discomfort in the past, students who are willing to take part in the study, and those who have more than 70% attendance. The criteria for exclusion were students who worked a part-time job, and who wanted to study on their own. Students who struggle with anxiety and sadness, According to self-reports, have a pathological or traumatic state that affects one's physical health. The research's goal and methodology were described. Their consent was secured, and the sample had to be chosen. The purpose of the research Performa was to gather the necessary data from young, healthy individuals. In every subject, the data was collected and examined.

### **PROCEDURE**

This study used qualitative approaches to investigate students' perceptions of online instruction during the COVID-19 shutdown. The population under investigation consisted of all Santosh Physiotherapy College students.

The poll took the form of a questionnaire that asked questions regarding their ability to teach and learn, the challenges that youngsters had while working on "makeshift workplace adjustments," and the uncomfortable postures brought on by extended work hours on computers and other devices. There are sixteen items in total on the questionnaire. Students who are taking classes online are requested to complete the questionnaire with their permission. They answered inquiries about their teaching style, length of sitting, screen time, eye strain, back discomfort, work breaks, material, consequences of practical knowledge, the family-like environment in the classroom, and issues they faced.

150 students received the questionnaire; of these, 101 were chosen based on the greatest number of responses they provided. Adolescents with pre-existing medical difficulties and who aren't attending any online lessons. Survey results are not included in incomplete questionnaires.

Surveys are gathered and examined. The descriptive statistics and frequency of distribution were applied. The researchers used a non-randomized sampling strategy to choose the participants because they wanted to obtain comprehensive data regarding the research issues.

### **DATA ANALYSIS**

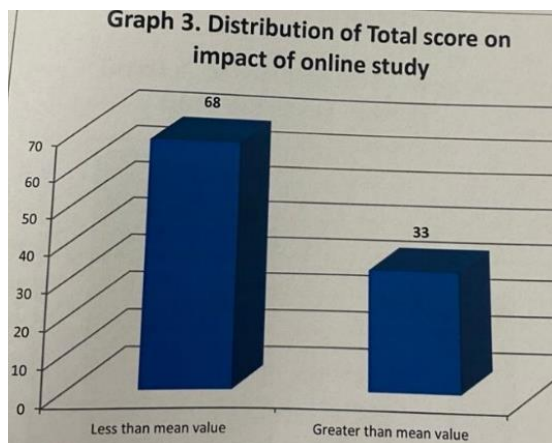
Respondents in this study were students of Santosh College of Physiotherapy Ghaziabad and actively participated to respond the questions in the questionnaire. The data were tabulated and analysed using descriptive and inferential statistics. The response to each questionnaire was noted separately. SPSS

software was used to assess all the parameters. The scores were statistically analysed using the paired test. The mean of each data was plotted on a Bar graph using the Ms-office unit.

**RESULT**

**Table 1:** Frequency and percentage of the total source of self-design questionnaire on the impact of online study (N = 101)

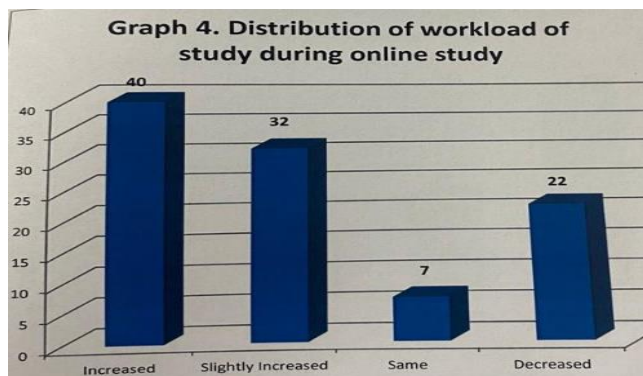
Total score	Frequency	Percentage	Mean ± SD
Less than mean value	68	67.3	30.70 ± 6.381
Greater than mean value	33	32.7	



**Graph 1:** Shows that the average score of students on the impact of the online study was 37 out of 64 scores and the majority of 68 students belonged less than the mean score and 33 students belonged greater than the mean score in this study

**Table 2:** Frequency and percentage of workload of studies during online classes of self-design questionnaire on impact of online study (N= 101)

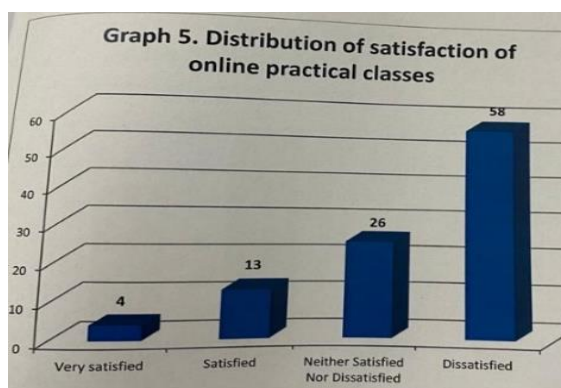
During online classes, the workload of studies has been	Frequency	Percent
Increased	40	39.6
Slightly Increased	32	31.7
Same	7	6.9
Decreased	22	21.8



**Graph 2:** Shows that the majority of 40 students had an increased workload of study during online classes and 32 students had a slightly increased workload of study. in students had decreased workload, and 7 students had the same workload of study during online classes in this study.

**Table 3:** Frequency and Percentage of satisfaction with online practical classes of self-design questionnaire on impact of online study (N= 101)

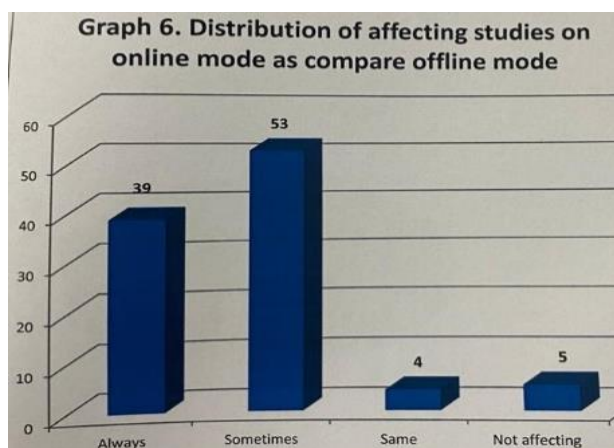
Are you satisfied with your Online practical classes	Frequency	Percent
Very satisfied	4	4
Satisfied	13	12.9
Neither Satisfied nor Dissatisfied	26	25.7
Dissatisfied	58	57.4



**Graph 5:** Shows that the majority of 58 students were dissatisfied with online practical classes and 26 students were neither satisfied nor dissatisfied with online practical classes satisfied with online practical classes in this study. classes: 13 students were satisfied with online practical classes, and 4 students were very satisfied with online practical classes in this study.

**Table 6:** Frequency and percentage of online mode of learning affecting self-design questionnaire on the impact of online study. (N=101)

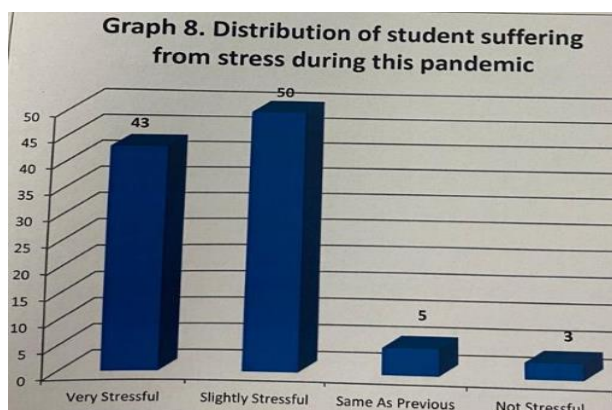
Where the online mode of learning is affecting your studies as compared to offline classes	Frequency	Percent
Always	39	38.6
Sometimes	53	52.4
Same	4	4
Not affecting	5	5



**Graph 6:** Shows that the majority of 53 students had some affecting studies through online mode as compared to offline classes and 39 students had always affecting studies; 5 students had not affected studies; and 4 students had same aft in the study through online mode as compare to offline classes in this study

**Table 8:** Frequency and percentage of students suffering from stress during this pandemic of self-design questionnaire on the impact of online study. (N=101)

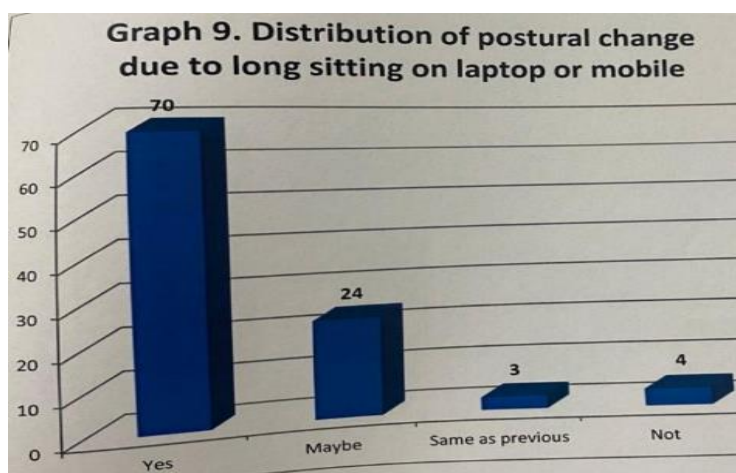
Do you agree that students suffering from stress during the pandemic	Frequency	Percentage
Very Stressful	43	42.6
Slightly Stressful	50	49.5
Same as Previous	5	5
Not stressful	3	3



**Graph 8:** Shows that the majority of so students had slight stress during the pandemic 43 students were very stressed during the pandemic, 5 students had the same previous stress during a pandemic, and 3 students were not stressed during the pandemic in this study.

**Table 9:** Frequency and Percentage of postural change due to long sitting on laptop or mobile of self-design questionnaire on impact of online study (N=101)

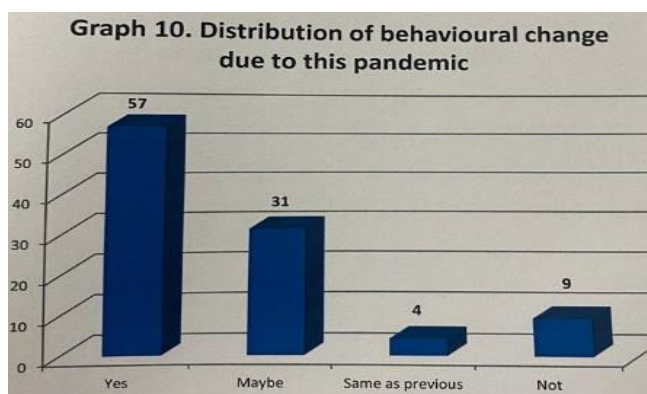
Do you observe the postural change in yourself due to long sitting on your Laptop or mobile?	Frequency	Percent
Yes	70	69.3
Maybe	24	23.8
Same as previous	3	3
Not	4	4



**Graph 9:** Shows that the majority of 70 students had postural change due to long sitting on a laptop or mobile and 24 students had maybe postural due to long sitting on a laptop or mobile; 4 students had no postural change due to long sitting on laptop or mobile in this study. mobile; and 3 students had the same previous postural change due to long sitting on a laptop or mobile in this study

**Table 10:** Frequency and Percentage of behavioural change due to this pandemic of self-design questionnaire on the impact of online study (N=101)

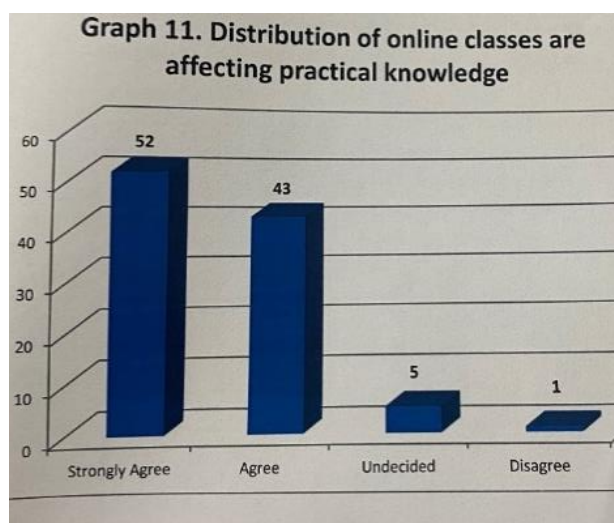
Do you observe any Behavioural change in yourself due to this pandemic	Frequency	Percent
Yes	57	56.4
Maybe	31	30.7
Same as previous	4	4
Not	9	8.9



**Graph 10:** Shows that the majority of 57 students had behavioral changes due to the pandemic 31 students had maybe behavioral changes due to the pandemic, students did no behavioural change due to this pandemic, and 4 students had same as previous behavioral changes due to this pandemic in this study.

**Table 11:** Frequency and Percentage of Online classes affecting Practical Knowledge of self-design questionnaire on impact on online Study (N =101)

Do you agree that online classes are affecting your practical knowledge	Frequency	Percent
Strongly agree	52	51.5
Agree	43	42.6
Undecided	5	5
Disagree	1	1

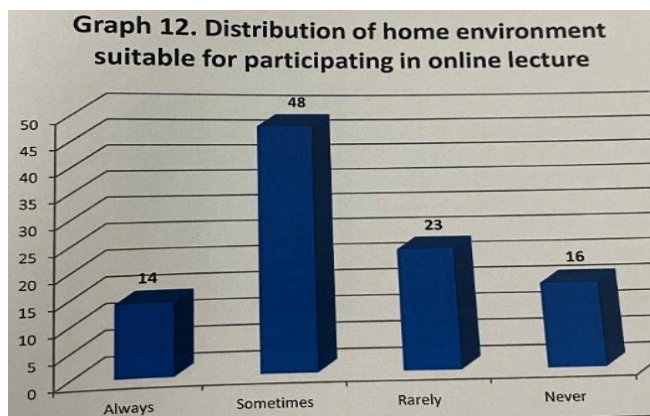


**Graph 11:** Shows that the majority of 52 students strongly agree that online classes affect practical knowledge 43 students agreed that online classes affect practical knowledge, 5 students were undecided about online classes affecting practical knowledge, and 1 student disagreed that online classes affect practical knowledge in this study



**Table 12:** Frequency and Percentage of home environment suitable for participating in online classes of self-design questionnaire on impact of online study (N =101)

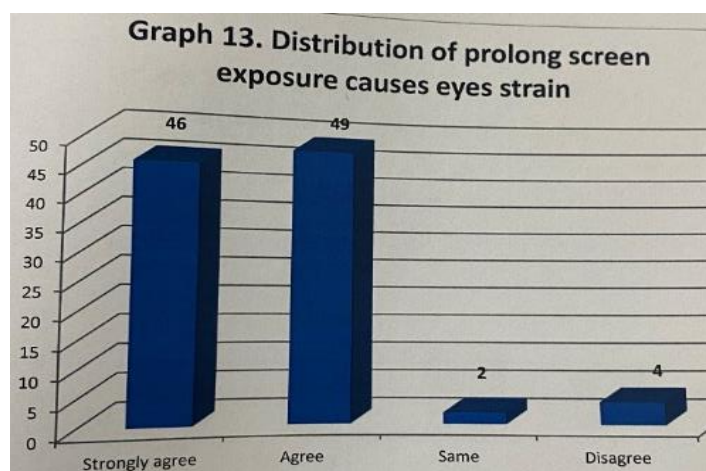
Is the Home Environment suitable for participating in online lecture	Frequency	Percent
Always	14	13.9
Sometimes	48	47.5
Rarely	23	22.8
Never	16	15.8



**Graph 12:** Shows that the majority of 48 students had suitable home environments suitable for participating in the online lectures 23 students had a home environment suitable for participating in online lectures; 16 students had never had home environments suitable for participating in online lectures; and 14 students had always had home environments suitable for participating in an online lecture in this study

**Table 13:** Frequency and Percentage of prolonged screen exposure causes eye strain of self-design questionnaire. (N=101)

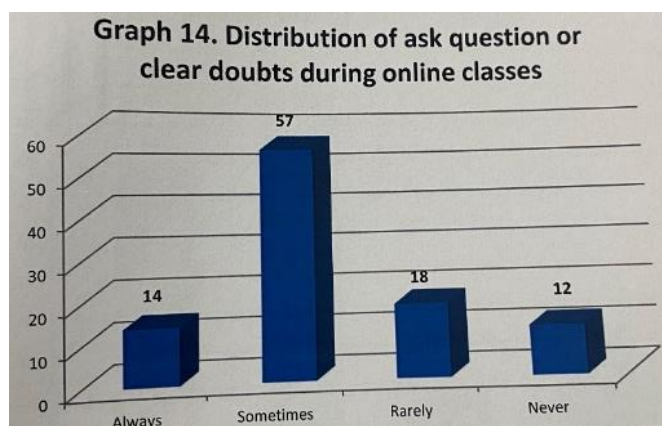
Do you agree prolonged screen exposure causes eye strain	Frequency	Percent
Strongly agree	46	45.5
Agree	49	48.5
Same	2	2
Disagree	4	4



**Graph 13:** Shows that the majority of 49 students agreed that prolonged screen exposure causes eye strain and 46 students strongly agreed that prolonged screen exposure causes eye strain; 4 students disagreed that prolonged screen exposure causes eye strain in this study and 2 students had the same prolonged screen exposure caused eye strain

**Table 14:** Frequency and Percentage of ability to ask questions or clear doubts during online classes of self-design questionnaire on impact of online study (N=101)

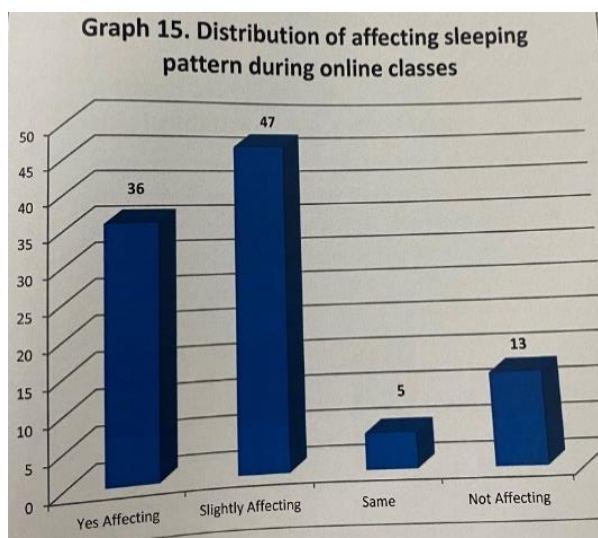
Are you able to ask questions or clear doubts during online classes	Frequency	Percent
Always	14	13.9
Sometimes	57	56.4
Rarely	18	17.8
Never	12	11.9



**Graph 14:** shows that the majority of students were sometimes able to ask questions or clear doubts during online classes and 18 students were rarely able to ask questions. Clear doubts during online classes; 14 students had been always able to ask questions clear doubts during online classes, and 12 students had never been able to ask questions with clear doubts during online classes in this study

**Table 15:** Frequency and percentage of online classes affect sleeping pattern of self-design questionnaire on impact of online study (N=101)

Does online class affect your sleeping pattern	Frequency	Percent
Yes affecting	36	35.6
Slightly affecting	47	46.5
Same	5	5
Not affecting	13	12.9

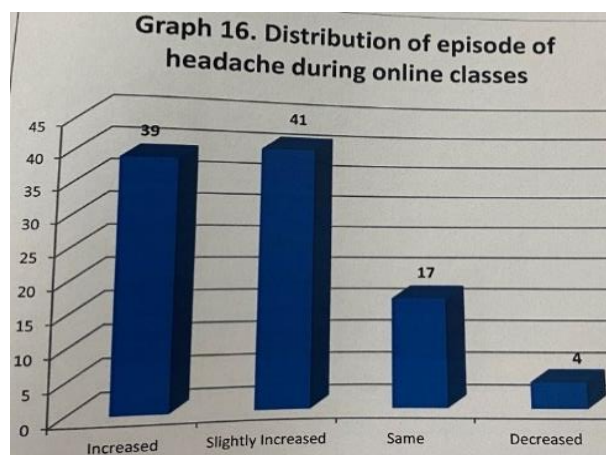


**Graph 15:** Shows that the majority of 47 students had slightly affected sleeping patterns during online classes 36 students had affected sleeping patterns during online classes; 13 students had not affected sleeping patterns during online classes and 3 students had the same sleeping pattern during online classes in this study



**Table 16:** Frequency and Percentage of increased episodes of headache during online classes of self-design questionnaire on impact of online study (N =101)

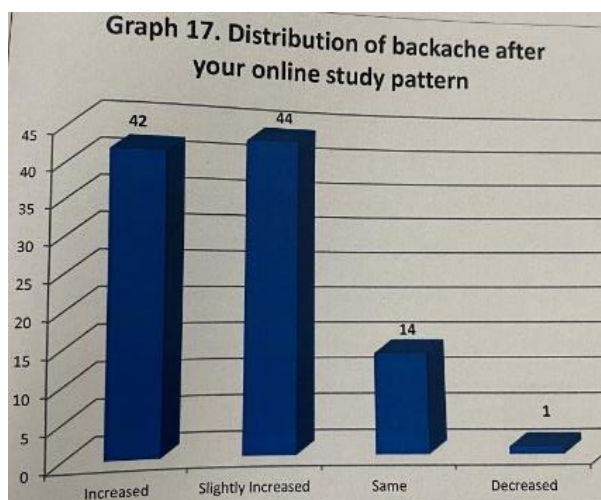
Did you feel increased episodes of headache during online classes	Frequency	Percent
Increased	39	38.6
Slightly Increased	41	40.6
Same	17	16.8
Decreased	4	4



**Graph 16:** Shows that the majority of 41 students had slightly increased episodes of headache during online classes 39 students had increased episodes of headache during online classes 17 students had same episode of headaches during online classes and 4 students had decreased episodes of headache during online classes in this study

**Table 17:** frequency and percentage of feel increased backache after your online study pattern of self-design questionnaire on impact of online study (N=101)

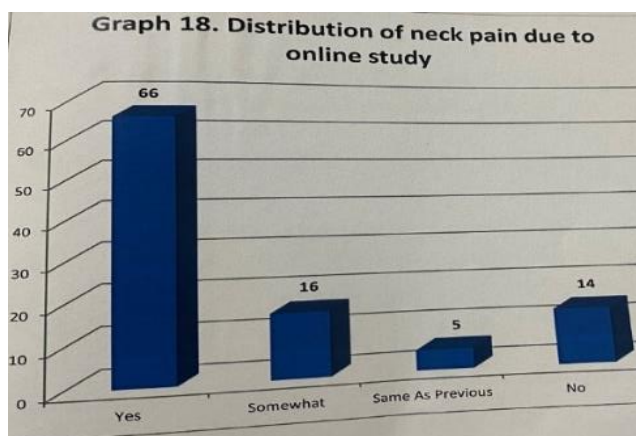
Did you feel increased backache after your online study pattern	Frequency	Percent
Increased	42	41.6
Slightly Increased	44	43.6
Same	14	13.9
Decreased	1	1



**Graph 17:** Shows that the majority of 44 students had slightly increased backache after the online study pattern 42 students had increased package after the online study pattern 14 students had backache after the online study pattern and 1 student had decreased backache after studying online class in this study

**Table 18:** Frequency and percentage of any neck pain due to online study of self-design questionnaire on impact of online study (N=101)

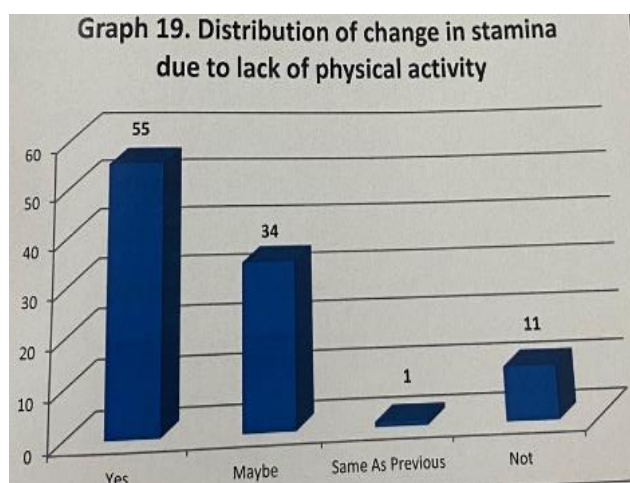
Did you feel any neck pain due to online study	Frequency	Percent
Yes	66	65.3
Somewhat	16	15.8
Same as previous	5	5
No	14	13.9



**Graph 18:** shows that the majority of 66 students had neck pain due to online study 16 student had some neck pain due to online study 14 students had no neck pain due to online study and 5 students had seen previous neck pain due to online study in the study

**Table 19:** frequency and percentage of change in your stamina due to lack of physical activity of self design questionnaire on impact of online study (N=101)

Is there any change in your stamina due to a lack of physical activity	Frequency	Percent
Yes	55	54.5
Maybe	34	33.7
Same as previous	1	1
Not	11	10.9



**Graph 19:** shows that the majority of 55 students had a change in stamina due to lack of physical activity 34 students had a change in stamina due to lack of physical activity 11 students had no change in their stamina due to lack of physical activity and one student had as same as previous change in stamina due to lack of physical activity

## DISCUSSION

The challenges pertaining to the COVID-19 pandemic online learning approach are the main topic of the questions. Online training has been employed as a viable replacement under specific circumstances, but with considerable limitations, such as stress, postural deformity, learning difficulties, etc. It is important to know if it will be effective in the future. Right now, it makes sense to put the educational system back in place. When asked how they felt about online instruction during COVID-19, students responded that although it offered a different way to finish the syllabus and kept them from gathering in class, it also made it easier for them to keep up with their lessons outside of the classroom. Nonetheless, a lot of students had trouble with it. It is stated that an increase in sitting times leads to health problems. In this process, additional immobility for extended periods of time and listening to classes in anti-ergonomic positions may cause problems in individuals related to the musculoskeletal system in students receiving distance education. Numerous studies shown that the majority of college students spend too much time on screen-based activities and do not engage in enough physical activity.

According to the findings, students whose stress levels fall into the most severe categories point to a number of reasons, including an unpleasant environment, unsuitable technology, and trouble asking questions when they're unsure about something of lengthy screen exposure, a restricted data allotment, erratic internet access, a lot of lecture assignments due quickly, and offline practical classes. This is because to participate in online learning every student must have supporting facilities/devices. In addition, in terms of lecture materials, especially in vocational higher education that has more composition of practical courses, during this time when facing obstacles during practicum, it can directly ask the lecturers. However, this cannot be done through online learning. Moreover, students may find it difficult to express the difficulties they encounter when conducting virtual practical courses. Students who have high standards for themselves and become frustrated when reality does not live up to those standards are under stress. Moreover, students may find it difficult to express the difficulties they encounter when conducting virtual practical courses. Students who have high standards for themselves and become frustrated when reality does not live up to those standards are under stress. The explanation of this is that students are under pressure to work excessively hard due to the demands of an excessive number of lectures. Depending on the learner's personality type and developmental stage, the body's response might change; the more mature in development, This survey states that stress affects more than 50% of students, with the result that their mental and physical health deteriorate. The lockdown has an impact on them, disrupting their studies. In addition, students are uncomfortable with the online format and are under pressure to learn.

According to Sahu's (2020) research, the university should provide appropriate counseling services to protect students' mental health during this pandemic. This is in line with our findings, which show that counseling services are essential for students' sound mental health and well-being and are therefore provided by Mizoram University to assist students in managing stress. Following the conclusion of in-person training, students experienced a variety of challenges, such as socioemotional imbalance, personal adjustment to daily activities at home, and financial hardship.

Sir John Daniel (2020) Pedagogy and the COVID-19 pandemic Educational institutions are seriously threatened by the COVID-19 pandemic. This viewpoint gives educators, administrators, and other officials guidance on how to approach the situation. A crucial element of the institutional approach involves providing comfort to parents and children. Educators should utilise asynchronous learning, which works best in digital media, to expand their ability to provide teaching remotely. Teachers should provide a range of assignments and projects that situate COVID-19 in a historical and global perspective, in addition to the required curriculum. If teachers create student assessments first, they will be better able to concentrate on developing curricula.

The results of this study demonstrate the critical need for developing interventions and preventative measures to address college students' mental health.

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