

# Traditional versus Online Education under Special Circumstances: University Students' Preferences

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## ABSTRACT

Special circumstances such as COVID-19 pandemic may suggest distance or remote learning through online education instead of a traditional physical face-to-face learning environment. This research was carried out among 202 Bangladeshi undergraduate engineering students to comprehend their comparative preferences for traditional and e-learning during the COVID-19 pandemic outbreak in 2021. The online survey stressed their experiences of and satisfaction in e-learning, perception about online and traditional education, and preferences. Overall, it was observed that although respondents expressed their mixed responses on different problems, they encountered in online education that led them to prefer traditional learning, a significant percentage considered both traditional and online learning preferably in a blended form could be suitable for Bangladeshi students.

**Keywords:** Online education, traditional education, distance learning, preferences

## INTRODUCTION

While recent studies indicate that online learning can be just as effective as conventional classroom learning (Kemp & Grieve, 2014; Soffer & Nachmias, 2018), it is tough to pick a clear "better" option because the best choice really depends on

the individual. Each type of learning brings its own special perks and downsides. University students feel dissimilar inclinations regarding conventional versus online education, reflecting a complex landscape without a neat agreement. At present university students are blessed with several choices for their learning, as online and conventional learning modalities are both becoming prevalent. Some learners value the institutional and social involvement of conventional learning environments, while others appreciate the availability and convenience of e-learning, especially for students in remote places or encountering financial limitations. Many students prefer the flexibility of online learning, especially in adjusting their learning schedules, whereas others value the teamwork facilities and concentrated educational environment provided by traditional modality (Soffer & Nachmias, 2018; Najjar, Roupheal, Bitar & Walid, 2025). E-learning offers possible financial savings and adaptability, while traditional learning underscores an organized setting and in-person engagement. Eventually, the "best" choice and ideal educational setting depend on each student's unique requirements, priorities, learning styles, technical abilities, personal situations, and the specific subject at hand.

Earlier to the COVID-19 pandemic, e-learning primarily ranged within a niche market, catering to remote learners or

individuals pursuing additional skills. Although it was recognized for its versatility and ease of use, technological barriers and doubts impeded its further acceptance (Callaghan, Baxter & McAvoy, 2018). In order to ensure educational continuity, educational institutions globally shifted to online platforms, putting e-learning in the forefront as a result of alarming spread and fatal catastrophe of COVID-19 pandemic (Drachler, Jansen & Kirschner, 2021).

I conducted this research to assess Bangladeshi undergraduate engineering students' comparative inclinations for conventional and online education under unprecedented circumstances such as the COVID-19 pandemic outbreak in 2021. To conduct this research, I established four supplementary objectives that include evaluating students' experiences and satisfaction with e-learning, assessing their viewpoints of both conventional and online education, and determining their preferences between the two modalities. Furthermore, it was also intended to investigate the ways in which the shift to e-learning affected university students' perceptions of diverse teaching methods and their overall learning expectations. The findings of the study could ultimately provide a foundation for improving the standards of Bangladeshi education, making it more flexible to endorse a range of learning requirements of students to meet their needs.

My goal in conducting this study is to obtain important insights that will help shape post-pandemic educational strategies and policies. This study seeks to determine which elements of e-learning are effective and which necessitate improvement by understanding the particular obstacles encountered by students in this unprecedented period.

## **LITERATURE REVIEW**

### **Traditional Learning**

Traditional learning approach involves lectures, textbooks, and memorization in actual classroom environments under the guidance and control of a teacher. Although

it offers disciplined learning, a defined learning route, an emphasis on core subjects, an environment to develop punctuality, and social interaction, it can be time-consuming and inflexible involving costs associated with physical on-campus learning, multi-tasking and hasty note-taking, and one location centric education that exclude remote learning. Common practices including writing assignments, face-to-face classroom interaction, a teacher-centred paradigm and a set schedule are some important characteristics of traditional learning. Tsekhmister, Yakovenko, Miziuk, Sliuser, and Pochynkova (2022) in their study revealed that teachers engaged in online instruction exhibit lower overall working time efficiency in comparison to their counterparts in conventional education. Several studies endorse traditional classroom environment, asserting that e-learning sometimes lack feedback for both learners and instructors and e-learners may drop out more easily (Atchley, Wingenbach & Akers, 2013). Although traditional education has its merits, not all students may benefit from its demerits. However, it remains a preferable learning approach for many students, as it delivers practical learning experiences and promotes a deeper comprehension of the learning material at hand (Tlais, Hamdan, HajjHussein, Alkhatib & Hallal, 2025).

### **Online and Remote Learning**

In an online learning environment learners can communicate with teachers, collaborate with classmates, obtain educational resources, and complete tasks from anywhere of the globe with internet connectivity, instead of being obliged to be present at a designated location at a given time (Richardson & Swan, 2003; Hai & Geraets, 2023). In such flexibility students get required scope for mobility and, consequently, learning experience becomes more appealing. Crucial role of online education is seen in providing educational opportunities to individuals who are unable

to attend classes physically. During unprecedented situations or special cases such as COVID-19, this adaptability guarantees uninterrupted continuation of learning activity. Moreover, online education is effective in assisting students develop new skills that are required in the contemporary job market. In this setting, teachers provide clear clarifications of complex topics, create structured activities that improve understanding, and provide constructive feedback to aid student advancement. To promote deeper involvement and enrich the learning experience, they utilize various platforms, such as e-learning programs and virtual training sessions. The blend of interactive techniques and technology significantly enhances a more engaging learning environment, rendering it an invaluable resource for learners of every age.

Distance learning, often known as remote learning, is a form of learning style where instructors and learners and instructors temporally and physically separated and depend on technology to interact (Culduz, 2024). Rather than taking place in a conventional face-to-face learning environment, this interaction occurs through different online platforms such as live online classes, tutorial recordings and videos, and emails. As a result, this type of instruction enables learning to occur outside the boundaries of traditional classroom environments. The opportunity for self-paced study and inherent flexibility of online learning are two of its major benefits. This flexibility to learning at their one pace allows learners to balance their personal responsibilities. This learning approach can be a mixture of live interactions, permitting learners to communicate with their peers and instructors in real-time, alongside self-directed resources that enable a person to progress through a given course at their own speed. This mixture not only addresses numerous learning approaches but also upholds a greater sense of independence in the learning process.

Online education provides a learning atmosphere that is basically dissimilar from traditional physical classroom (Bazelais, Doleck & Lemay, 2018). A comparative study examining motivation in traditional and online courses identified that learners in online education expressed greater intrinsic motivation, especially among those studying at graduate level (Rovai, Ponton, Wighting & Baker, 2007). Numerous learners in general positively view e-learning to be advantageous, appreciating its accessibility and convenience; nevertheless, worries regarding the overall quality of the course offered to them and their technology skills very often validly stark their mind. As highlighted in a recent review, different challenges are linked to online learning encompass issues regarding the instructional methods, flexibility, cost, accessibility, opportunities for lifelong learning and educational policy (Pokhrel & Chhetri, 2021).

### **Learning in Special and Unprecedented Circumstances: COVID-19 Emphasized**

Learning in unique conditions refer to situations where uncontrolled, unprecedented crises or tragedies disrupt a learner's on-going flow and capacity to learn, requiring adjustments or support from the academic setting. Typical examples consist of financial hardship, a family member's death, personal or family illness, or natural calamities, which necessitate documentation and can result in fee waivers, modifications to financial support, or deadline extensions. To evaluate these situations and offer assistance according to the learner's application and accompanying documentation, institutions hold policies and resources such as the Exceptional Circumstances (EC) Service

The rise of unique coronavirus disease 2019, known as COVID-19 (Fauci, Lane, & Redfield, 2020), evidently disrupted and altered our personal and social life, work, and educational practices (Daniel, 2020; Haase, Cosco, Kervin, Riadi, & O'Connell, 2021). A sizeable number of human

activities transitioned to the digital platform since the onset of pandemic (Donthu & Gustafsson, 2020; Kramer & Kramer, 2020). Education sector noticeably encountered the effect of COVID-19 pandemic. Globally, schools and universities encountered shutdowns as a required measure to mitigate the spread of the stated pandemic, resulting to a substantial change in traditional educational techniques (Lemay & Doleck, 2020; Pokhrel & Chhetri, 2021). This unprecedented scenario led to a widespread transition to online education, which was swiftly adopted at numerous levels of learning. Stakeholders involved in teaching and learning process such as teachers, students, and guardians all embraced online platforms and novel technologies, promoting a fresh educational atmosphere that emphasized flexibility and virtual participation even from distant locations. The need for online classrooms highlighted the significance of digital competence and generated prospects for novel teaching strategies (Lemay & Doleck, 2020). Consequently, both learners and teachers are obliged to reconsider their learning methods, making the path for a potentially shift in the delivery and experience of education.

In many cases, several remote learning initiatives have found to be highly effective, as learners thrive when they get required assistance from teachers and institutions. Notwithstanding, the pandemic had exposed significant deprivations and disparities in social outcome, indicating that many learners were without adequate educational assistance (Flack, Walker, Bickerstaff, & Margetts, 2020). Consequently, many teachers are lamenting over the time wasted time during the outbreak of COVID19 and its adverse impacts on young people's social development, stressing the enduring effects this period may have on their academic and personal advancement (Allen, Mahamed, & Williams, 2020). This scenario calls for a reassessment of the structure and implementation of educational support

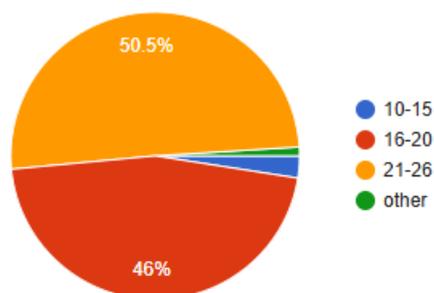
systems, particularly during times of widespread upheaval.

## **MATERIALS & METHODS**

This study was virtually conducted using Google Forms and it maintained a quantitative research approach. Google Forms is a helpful and handy tool with the ability to seamlessly connect to other Google services. Its user-friendly interface allows anyone to collect and analyse real-time data with ease and comfort. These features play a role in its extensive acceptance for various applications (Jaiswal, 2024).

I conducted the study in 2021 amid the COVID-19 outbreak, prompting the Government of Bangladesh to impose substantial limitations on public movement and assembly nationwide. Given these situations, employing Google Forms for conducting an online survey proved to be an effective and timely solution for gathering real-time data.

Undergraduate engineering students were the target group and respondents for this study, who had to participate in classes in digital platforms because of the limitations on in-person gatherings and mobility across Bangladesh amid the COVID-19 outbreak. A total of 202 undergraduate engineering students took part in this research on their volition, providing their thoughts and responses through the Google Forms platform. Over half of all respondents ranged in age from 21 to 26 years. A significant percentage of respondents (46%) belonged to age group of 16-20 years.



**Figure 1. Age distribution of the respondents.**

The data gathering process involved the creation of a structured questionnaire containing various questions to administer the research. As a result, respondents could only select from predefined options for each research question. It allowed them to identify the most appropriate options for expressing their choices. I crafted the main questions in alignment with research objectives under four principle facets: (i) students' experiences with online learning, assessing their experiences regarding the shift of this mode of learning; (ii) online learning and students' satisfaction, aiming to evaluate their happiness with this digital format of learning; (iii) perception about online and traditional education, promoting distinctions between these two learning methods; and (iv) preferences for online and traditional learning, intended to comprehend their preferred learning settings and strategies. Each question was targeted to draw out valuable insights that could impact in profound learning experiences and help shape future educational policies.

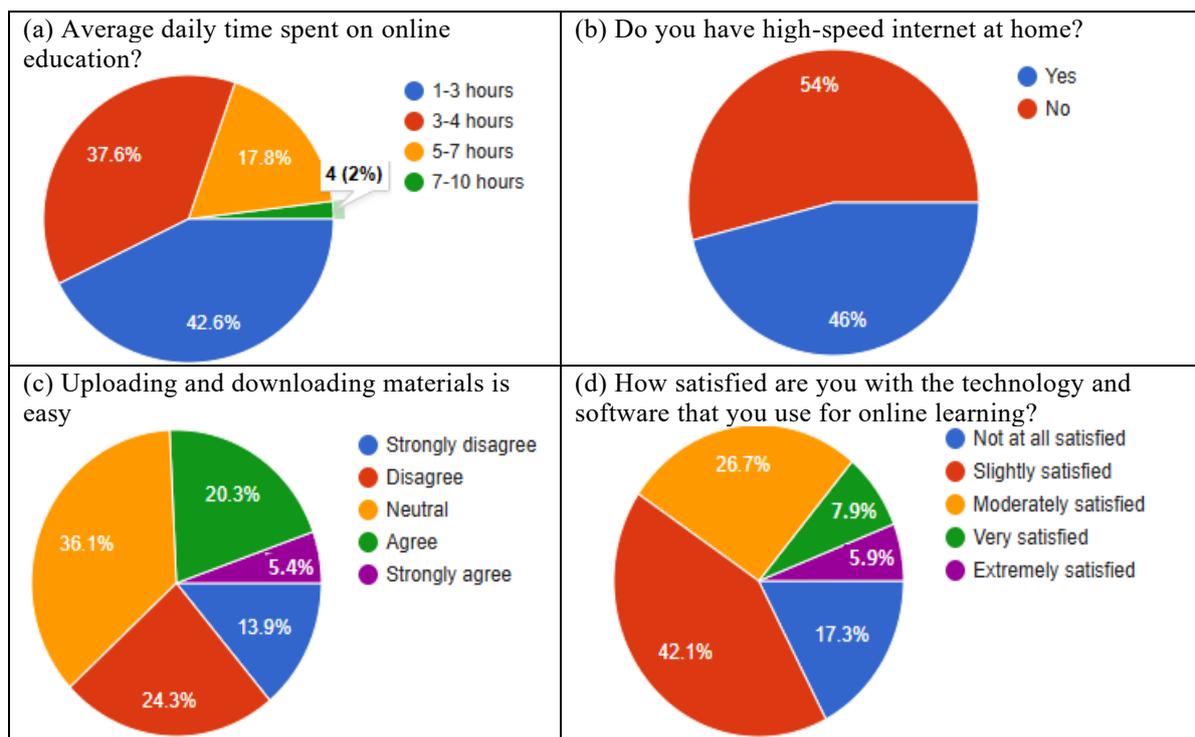
I subsequently extracted Google Forms assisted analysed responses to enhance the comprehension of obtained research data. I used different statistical graphics, including

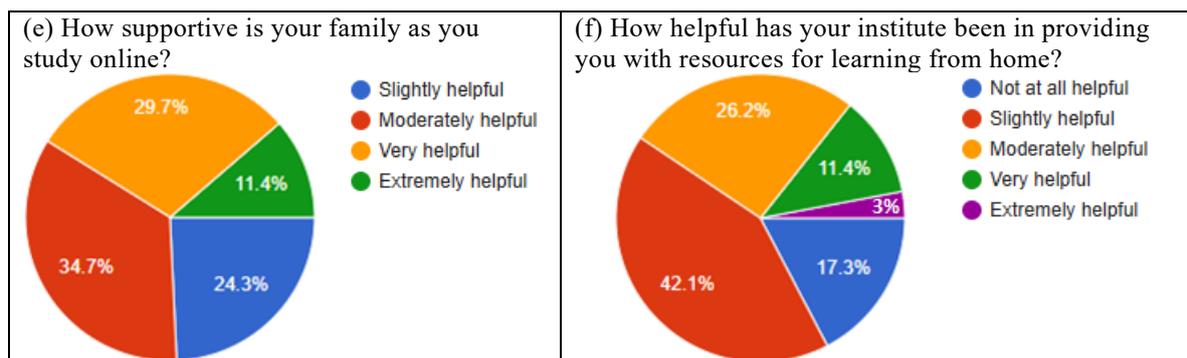
percentages, line graphs, and pie charts to clearly display the research results in a comprehensible manner. These visuals enhance clarity and enable a meaningful comparison of the research results. Employing various techniques for to data visualization aimed to guarantee that all stakeholders could readily grasp the worth of the research results, encouraging informed dialogues and conclusions derived from the data.

Safeguarding respondents' privacy was a major priority throughout the data gathering procedure. I clearly explained the purpose of this online study to ensure voluntary participation of the respondents. I took the initiative to acknowledge any support received from respondents and adequately cited all secondary sources used in this research. Participants willingly took part in the study. The objective of the online study was clarified. All secondary source references are included in this paper, and the contributions from respondents were duly recognized

## RESULTS AND DISCUSSION

### Students' Experiences with Online Education





**Figure 2. Students' experience of online learning regarding (a) average daily time spent on online education, (b) access to high speed internet at home, (c) ease of uploading and downloading materials, (d) satisfaction with technology and software used in online education (e) degree of family support in online education, and (f) level of institutional resources support.**

To understand students' experience with online education, eight questions were posed regarding average daily time spent on online learning, access to high-speed internet at home, ease of uploading and downloading materials, satisfaction with technology and software used in online education, degree of family support in online education, level of institutional resources support, obstacles encountered while studying at home, and degree of stress experienced in distance learning amidst the COVID-19.

Figure 2 (a) shows that regarding average daily time spent on online learning, the highest portion of respondents (42.6%) indicated spending 1-3 hours. A notable percentage of respondents (37.6%) reported spending 3-4 hours daily on online education.

In response to the availability of high-speed internet, 54% of respondents stated that they had no high-speed internet connection. The remaining respondents had access to a high-speed internet connection (Figure 2 (b)).

In reaction to the statement "Uploading and downloading materials is easy," most respondents were neutral (37.1%), while 24.3% disagreed. The mere 20.3% of respondents who answered "agree" suggests that for most of them, uploading

and downloading materials was not an easy-going task (Figure 2 (c)).

Figure 2 (d) shows that most respondents were satisfied with the technology and software used for online learning at various levels, with 42.1% being slightly satisfied, 26.7% moderately satisfied, 7.9% very satisfied, and 5.9% extremely satisfied. On the other hand, there was a response rate of 17.3% indicating total dissatisfaction. These results suggest that respondents faced various obstacles that decreased their desired satisfaction with the technology and software utilized for online learning.

Regarding family support in online education, 34.7% of respondents expressed that it was "moderately helpful." Responses included 29.7% very helpful, 24.3% extremely helpful and only 11.4% slightly helpful (Figure 2 (e)). This signifies the presence of a generally supportive family environment for students in their online learning.

In response to institutional resources aiding students' online education from home, most respondents (42.1%) viewed it as "slightly helpful" (Figure 2 (f)). There were 26.2% of respondents who found it moderately helpful, 17.3% who considered it not helpful at all, 11.4% who deemed it very helpful, and 3% who rated it as extremely helpful.

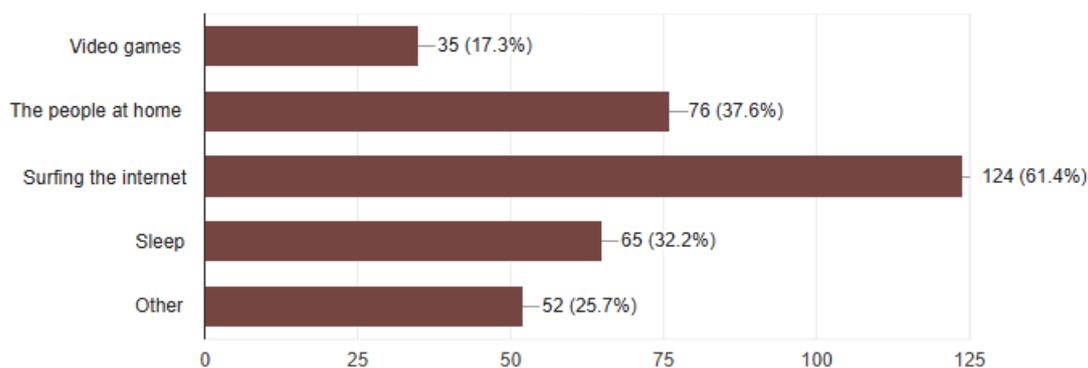


Figure 3. Obstacles encountered by respondents while studying in online at home.

Students' experience of online learning during COVID-19 pandemic would remain incomplete if the obstacles they encountered and the stress, they experienced went unaddressed. Respondents could choose several options to indicate the obstacles they faced during online learning. Surfing the internet remained the most pressing concern (61.4%). Other obstacles were the people at the home (37.6%), sleep (32.2%), and video games (17.3%) (Figure 3).

During COVID-19 pandemic, 36.6% respondents viewed distance learning slightly stressful for them (Figure 4). There were also 22.3% very stressful, 22.3% moderately stressful, and 6.9% extremely stressful responses. On the other hand, only 11.9% of respondents considered that online learning or distance learning was not at all stressful for them during the COVID19 outbreak.

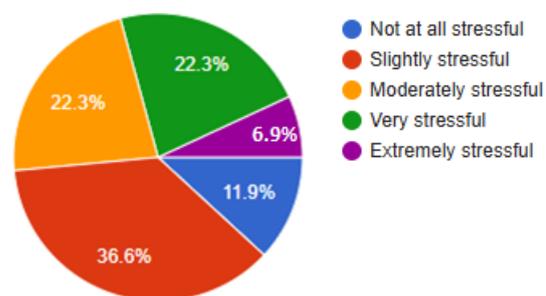


Figure 4. Level of stress felt by respondents in distance learning during COVID19 outbreak.

### Online Learning and Students' Satisfaction

While conducting the study, four questions were posed to determine students' satisfaction in online learning in terms of enjoyment in online education, effectiveness of online education, online learning ratings, and level of satisfaction.

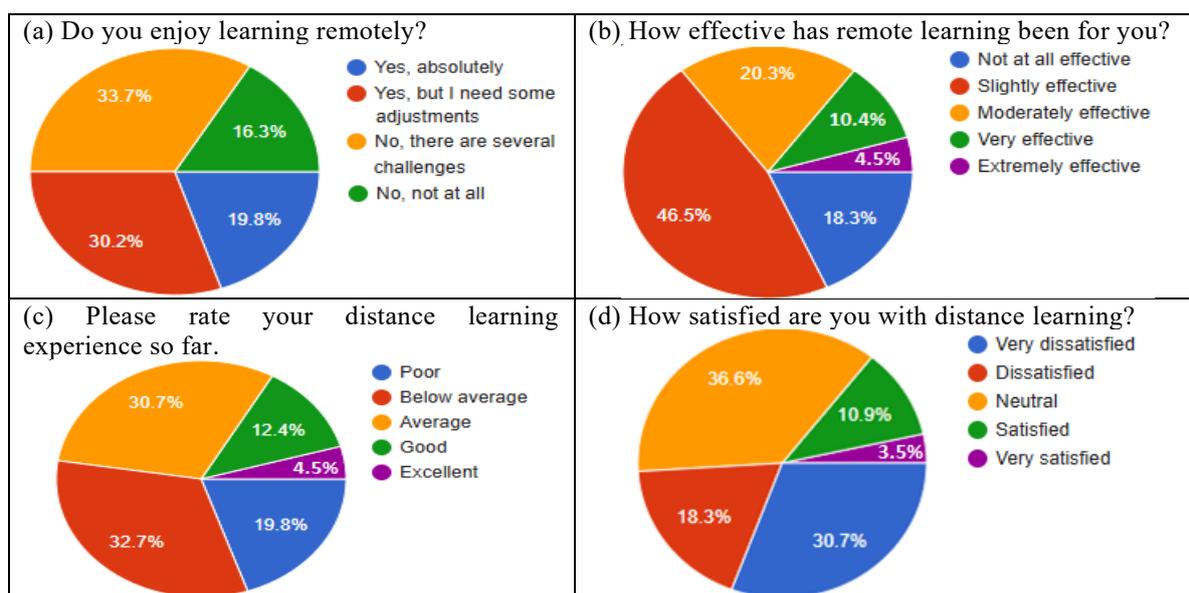


Figure 5. Students' satisfaction in online learning in terms of (a) enjoyment in online education, (b) effectiveness of online education, (c) online learning ratings, and (d) level of satisfaction.

Figure 5 (a) indicates that in terms of enjoyment felt by students in remote learning the highest percentage of respondents (33.7%) responded negatively due to several challenges they had to encounter. There was also 16.3% “no, not at all” response. On the other hand, 30.2% “yes, but I need some adjustments” and 19.8% “yes, absolutely” affirmative responses were observed. The findings indicate that remote learning was not a good experience for most of the respondents.

In terms of the effectiveness of online education 46.5% slightly effective, 20.3% moderately effective, 10.4% very effective and 4.5% extremely effective responses were found (Figure 5 (b)). On the other hand, a 10.4% “not at all effective” negative response was observed.

In rating their experience of online learning so far, 32.7% of respondents chose a “below average” response. There

were also 30.7% average, 12.4% good, 4.5% excellent and 19.8% poor responses (Figure 5 (c)).

As shown in Figure 5 (d), there were 30.7% of participants expressed being very dissatisfied and 18.3% that were dissatisfied with distance learning. A significant proportion (36.6%) stayed neutral. On the other hand, there were 10.9% of respondents being satisfied and 3.5% that were extremely satisfied. The results, therefore, show that participants were generally dissatisfied with their distance learning experience.

### Perception about online and traditional learning

During the study, four inquiries were made to evaluate students' reactions to the benefits and drawbacks of e-learning compared to traditional learning. In each question, some statements were given, allowing respondents to select multiple options.

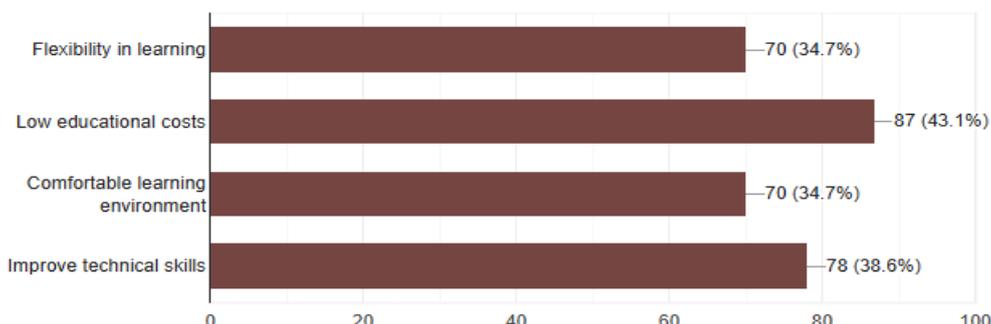


Figure 6. Advantages of e-learning as indicated by respondents.

Figure 6 shows that 43.1%, the largest share, of respondents identified “low educational costs” as a key advantage of e-learning. Respondents also mentioned other advantages such as flexibility in

learning (34.7%), comfortable learning environment (34.7%), and improve technical skills (38.6%) as the advantages of e-learning.

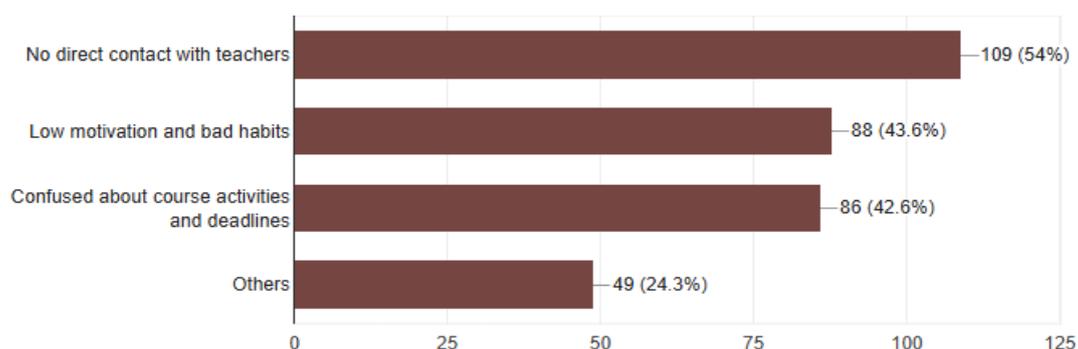


Figure 7. Disadvantages of e-learning as reported by respondents.

While responding to the disadvantages of e-learning the largest portion, of respondents indicated “no direct contact with teachers” as the key point (Figure 7). Respondents also mentioned low motivation and bad habits (43.6%), confused about the course activities and deadlines (43.6%), and others (24.3%).

In addressing the drawbacks of e-learning, the majority of respondents identified “lack of direct interaction with teachers” as the main issue (Figure 7). Participants additionally cited low motivation and poor habits (43.6%), confusion regarding course activities and deadlines (43.6%), and other factors (24.3%).

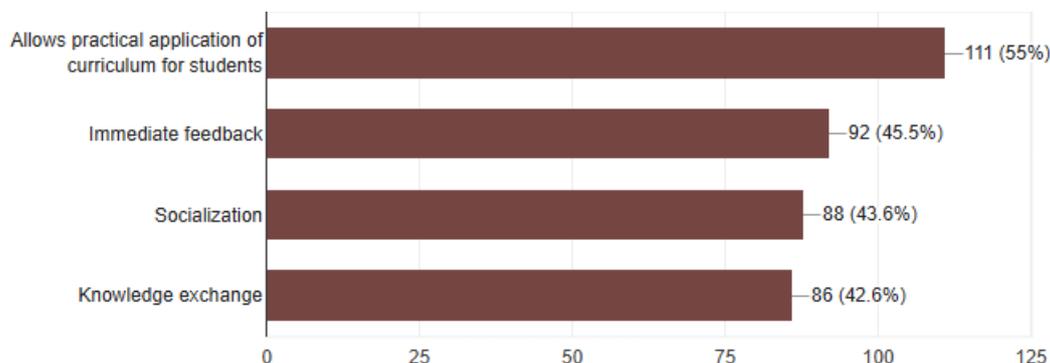


Figure 8. Advantages of traditional learning as indicated by respondents.

In addressing the advantages of traditional learning, the largest portion, of respondents considered “allows practical application of curriculum for students” as the key factor (Figure 8). Respondents also indicated immediate feedback (45.5%), socialization (43.6%), and knowledge exchange (42.6%) as the advantages of traditional face-to-face learning.

In response to the disadvantages of traditional learning, the majority of respondents noted “time and location constraints” as a major concern. Respondents also noted student-teacher ratio (45%), classroom size (23.8%) and instructor-centred issues (26.7%) (Figure 9).

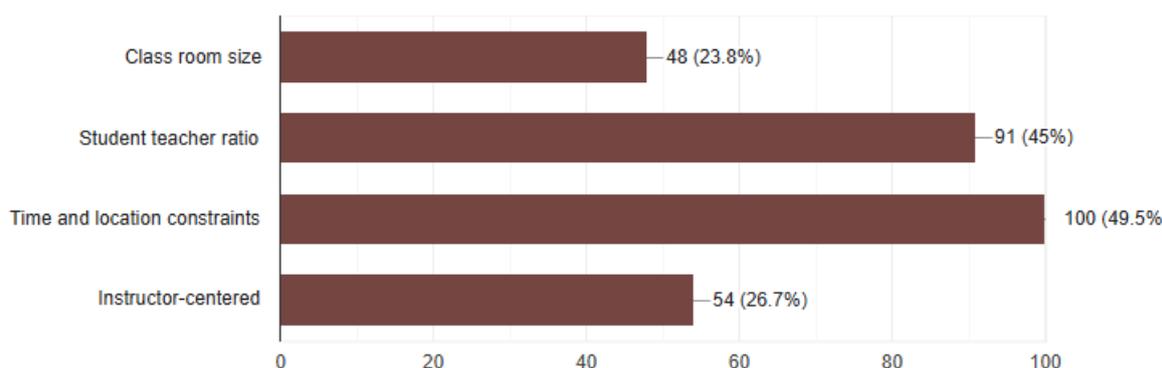


Figure 9. Disadvantages of traditional learning according to respondents.

### Preferences between Online and Traditional Learning

To understand students' preferences between online and traditional learning three questions were asked on the extent of effort dedicated to online learning compared traditional learning, feeling about online learning compared to

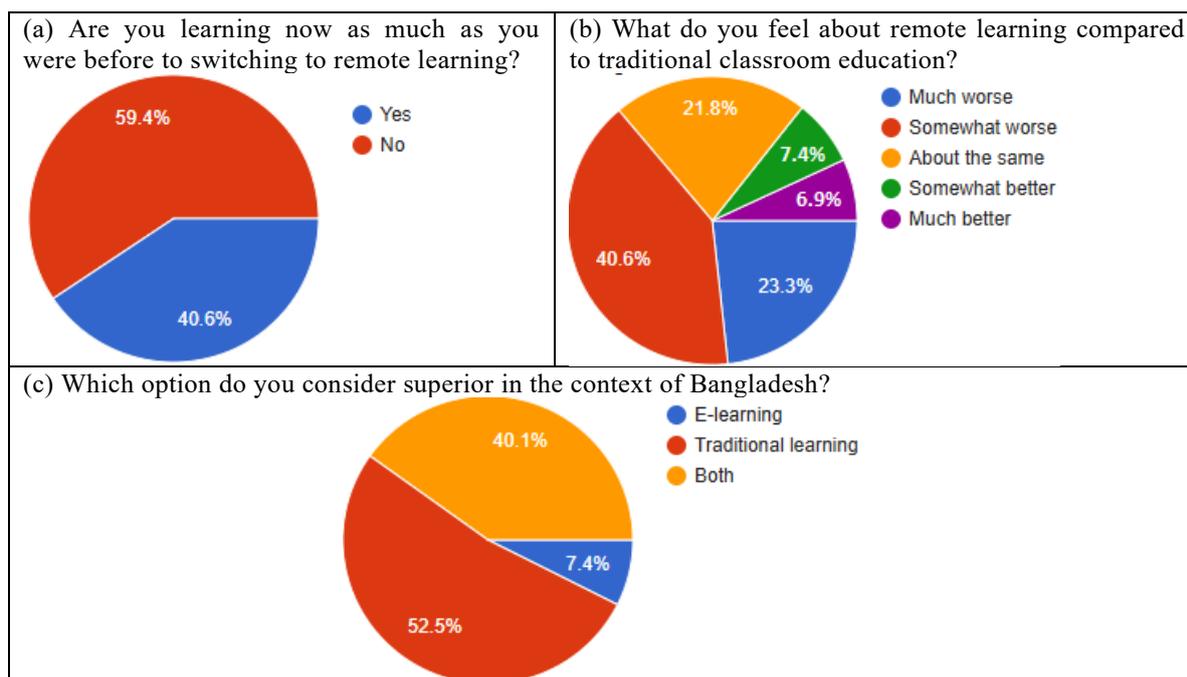
traditional learning, and their opinion about superior option between online and traditional learning in the context of Bangladesh. In each question, some options were given, allowing respondents to select one.

Figure 10 (a) shows that 59.4%, the highest portion, of respondents opined that their

habitual dedication in traditional learning was not found in online learning. It means that their learning endeavour was decreased while encountering remote online based learning. Conversely, 40.67% of respondents argued that they were learning as much as they did before switch to remote learning.

While reporting their feeling about online learning compared to traditional learning,

40.6% of respondents, the largest portion, expressed “somewhat worse” experience (Figure 10 (b)). There were 23.3% of respondents who considered the feeling was much worse. Respondents also expressed about the same (21.8%), somewhat better (7.4%), and much better (6.9%) feelings.



**Figure 10. Students' preferences between online and traditional learning in terms of (a) enjoyment in online education, (b) effectiveness of online education, (c) online learning ratings, and (d) level of satisfaction.**

As seen in Figure 10 (c), 52.5%, the largest share, of respondents expressed that traditional learning to be the superior between online and traditional learning in the context of Bangladesh. While only 7.4% considered e-learning, 40.1% argued that a combination of both traditional and e-learning would be suitable in the context of Bangladesh.

## CONCLUSION

In conclusion, the findings reveal that students' experiences with online education during the COVID-19 pandemic were largely characterized by discontent, profound challenges, and a preference for traditional learning methods. The results

indicate a considerable discontent among learners concerning their experience with online education during the period of COVID-19 pandemic outbreak. Students' dissatisfaction mainly arises from slow and insufficient internet connectivity that prohibits many from fully engage with their course materials and participation in online classroom. Students also noticed an absence of interaction with and support from the course instructors in physical classroom situation. Additionally, students felt frustrated and disconnected due to the complications raised from the technological challenges they encountered—spanning from insufficient devices to inadequate digital skills. Although the advantages of

online learning are conspicuous such as its inherent flexibility and cost effectiveness, these benefits are overshadowed by the considerable encounters that numerous learners face in a completely online setting. Students' overwhelming preference for traditional learning methods underscores a conspicuous disparity in the current educational landscape and an urgent need for schools to check their learning and instructional approaches, indicating that a one-size-fits-all method to education might prove useless.

This study indicates that a more balanced and blended learning structure, which integrates the benefits of both traditional and online methods, could undoubtedly enrich the overall learning experiences. Educators can establish a more effective and inclusive learning environment by merging the convenience and ease of online education with the personal interaction and structured face-to-face teaching.

Finally, the research results highlight the urgency for integrating administrators and policy makers with educators to collaboratively innovate, refine and adapt educational methods by prioritizing the needs, expectations and preferences of learners. This initiative would allow us to pave the way for a future where learning is more accessible and enriching, ensuring that learners have the chance to excel in a rapidly changing digital landscape. This research indicates that the insights gained from COVID-19 outbreak should act as a catalyst for enhancement and innovation in education, guaranteeing that all learners can succeed, irrespective of their place and modalities of study.

#### **Declaration by Authors**

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