Post-Covid-19 Shifts: Analysing Changes in Bangladeshi Undergraduate Students' Attitudes Toward Face-to-Face Learning

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ARTICLE INFO	ABSTRACT
Keywords: *Post-COVID-19 Education,* *Blended Learning* *Preference,* *Student Attitudes,* *Learners' Behavioural* *Changes,* *Psychological Impact,* *Government Colleges*	This study explores shifts in undergraduate students' attitudes toward face-to-face classes after returning to in-person education following the COVID-19 pandemic. The pandemic necessitated a shift to online learning, requiring students to adapt to remote instruction. With the resumption of in-person classes, students faced new psychological and behavioral challenges, influencing their engagement and perceptions. Using a qualitative approach, the study examined 48 English department students at a government college in Bangladesh. Data were collected through open-ended questions via Google Forms and analyzed using inductive thematic analysis based on the Tripartite Model of Attitude. Findings reveal significant changes in students' feelings, beliefs, and behaviors regarding face-to-face instruction. While students valued in-person classes both before and after the pandemic, a growing number questioned their mandatory nature, highlighting the flexibility of online alternatives. Many continued to view face-to-face classes as effective but sought a balance between traditional and online modes of learning. Behaviorally, students increasingly prioritized social and teacher interactions over mere academic attendance. These findings emphasize the need for institutions to adopt flexible, hybrid learning models that address evolving student preferences. Educators should integrate active learning strategies and foster supportive environments to sustain engagement and capitalize on the strengths of both face-to-face and online instruction.

1. Introduction

1.1. Background of the Study

This study explores changes in learners' attitudes toward face-to-face classes in post-COVID-19 educational instruction. The study focuses on students' attitudes about in-person lectures after the COVID-19 lockdown of a Bangladesh government institution. During the COVID-19

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epidemic, educational institutions started flipping the traditional approaches (Husain & Uddin, 2024) and switched from in-person to online lessons (Chisadza et al., 2021). Students experienced a new way of learning through online platforms and became accustomed to online classes. Academic organizations have returned to face-to-face sessions after the peak outbreak of the coronavirus, vaccination programs, and extended lockdowns (Adarkwah & Agyemang, 2022). This change brings another transformation from online to face-to-face classes (Bezen & Demirkasimouglu, 2022). Learners responded to these teaching and learning transitions from face-to-face to online and online to in-person.

1.2. Academic Research Gap

Some empirical investigations concerning students' psychology and attitudes after the COVID-19 lockdown have been conducted (Houghton et al., 2022; Mansoor et al., 2022; McLure et al., 2022; Oducado et al., 2022; Wakui et al., 2021). These researchers have discovered that learners' psychological and attitudinal states have changed in the years following the COVID-19 lockdown. Despite this, changes in students' attitudes to face-to-face classes after the COVID-19 lockdown have yet to be researched. The study's problem statement will be discussed in the following sub-section.

1.3. Problem Statement

The changeover from face-to-face to online and online to face-to-face classes created students' psychological and behavioural problems in Bangladesh (Islam et al., 2022). These problems influenced students' attitudes toward face-to-face classes (Povero et al., 2022). Students' psychological and behavioural changes affected their attitudes toward face-to-face courses (Uddin & Bailey, 2024). It is a new problem in the post-COVID-19 era which needs to be studied. However, very little research exists on students' attitudes toward face-to-face classes after the COVID-19 lockdown. Therefore, the problem relating to students' changes in attitudes toward face-to-face courses must be addressed. This issue is prevalent among the students of government colleges in Bangladesh (Islam et al., 2022). This study was conducted on undergraduate learners of the English department in a Bangladeshi government college. The following sub-section talks about the rationale of the study.

1.4. Rationale

Learners' learning attitudes considerably impact their academic achievement (Uddin & McNeill, 2024). A significant relationship exists between pupils' attitudes and performance (Leal-Rodriguez & Albort-Morant, 2019). Therefore, it is essential to find learners' attitudes toward in-person lectures after the COVID-19 lockdown so that the institutions and guardians can respond according to pupils' attitudes. If students have changed their attitudes toward face-to-face classes, it will ultimately affect their educational achievement. As a result, poor academic performance will badly influence learners' and guardians' interest in educational activities and students' confidence and schooling. Furthermore, post-COVID-19 students' attitudes to in-person lessons might impose changes in teaching methods and institutional organization. It is necessary to look at learners' attitudes toward in-person lectures to maintain students' academic achievement and improve current teaching methods in the post-COVID-19 situation. Consequently, it is imperative to determine whether students have changed their attitudes toward face-to-face courses in the post-COVID-19 era. It should be noted that the current generation is technology-oriented and has a good command of educational technology, which has influenced their learning preferences. (Uddin & Bailey, 2024).

1.5. Research Objective

The study examined pupils' attitudes toward face-to-face courses after the COVID-19 lockdown. The students returned to in-person lessons after the COVID-19 lockdown. However, their attitudes to face-to-face classes were greatly influenced by the psychological changes experienced throughout the transition of teaching and learning from face-to-face to online and online to face-to-face courses. Therefore, the objective of the research is to examine students' pre and post-COVID-19 attitudes toward face-to-face classes. Accordingly, the study reveals any changes in attitudes.

1.6. Research Question

The study explores students' attitudes toward face-to-face lectures after the COVID-19 lockdown. Therefore, it addresses the following research question: "Have the students changed their attitudes to face-to-face classes after the COVID-19 lockdown?" This research question is divided into three sub-questions based on the Tripartite Model of Attitude by Spooncer (1989). The sub-questions are as follows.

1. Have the students changed their feelings about face-to-face lessons after the COVID-19 lockdown?
2. Have the students changed their beliefs about face-to-face classes after the COVID-19 lockdown?
3. Have the students changed their behaviours in face-to-face lessons after the COVID-19 lockdown?

1.7. Significance of the Study

This study will help to understand post-COVID-19 students' attitudes toward face-to-face classes in educational institutions. In the case of any change in learners' attitudes to in-person courses, the findings will help the teachers and the institutions take necessary steps according to the changes in the students' attitudes. Thus, this study can help to deal with the newly created students' attitudes to face-to-face classes. Educational organizations can change their syllabi, courses, and teaching methods to confront the changes in students' attitudes to in-person lessons. From this study, the guardians of the students will also be able to know the differences in post-COVID students' attitudes toward face-to-face courses. This knowledge will help them to take the required steps according to the changes. As a result, they can approach the students considering their changes in attitudes.

2. Literature Review

The following subsections provide an overview of the relevant literature regarding post-COVID-19 learners' psychological issues and attitudes to address the research questions, including the theory of attitude, the constituents of attitudes, the definition of attitude, and the changes post-COVID-19 students' attitudes. Moreover, this section examines the literature gap concerning changes in students' attitudes to in-person lectures after the COVID-19 lockdown. Therefore, the literature gap validates the research question to be answered in this study, while the succeeding sub-section discusses the theory of attitude.

2.1. Theory of Attitudes

Spooncer's (1989) theory of attitude, also known as the Tripartite Model Attitude was adopted to describe an attitude in this study. Figure 1 presents the Tripartite Model of Attitude. This

model divided attitude into three parts: emotion (feelings), cognitive response (beliefs), and overt action (behaviour). According to this model, an individual reacts to external stimuli through emotion, cognitive response, and overt actions. These three elements altogether build an individual's attitude. While emotion is the verbal statement of feelings, the oral declaration of belief is the cognitive response. On the other hand, uttered expressions about intended behaviour are overt actions.
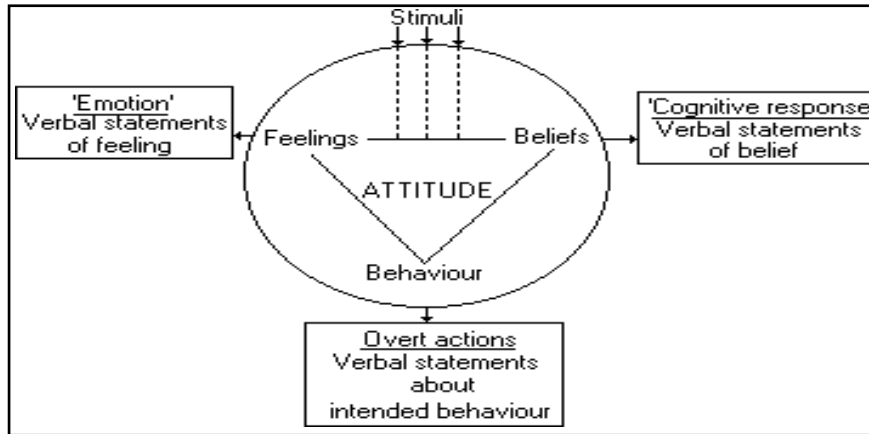

Figure 1. Tripartite Model of Attitude (Spooncer, 1989)

The researchers selected this model because it encompasses three key dimensions of attitudes: emotional, cognitive, and behavioural (overt actions). It is particularly relevant in educational contexts, as it enables a comprehensive understanding of students' feelings, beliefs, and behaviours. Additionally, the tripartite model offers a clear and systematic framework for designing surveys, making it a practical tool for research.

This model is highly adaptable and can be applied to various research contexts, such as examining students' attitudes toward face-to-face classes. Its flexibility and ability to account for cultural and contextual differences make it especially suitable for diverse student populations, including those in Bangladesh. Moreover, the model aligns with the objectives of the research by providing a means to assess students' attitudes toward face-to-face learning environments. By analysing beliefs, feelings, and behaviours, it offers a structured approach for interpreting data effectively.

The tripartite model also guided the development of open-ended questions for this study. Research instrument was constructed based on the three dimensions of attitudes, with two questions addressing each component—emotional, cognitive, and behavioural—resulting in a total of six questions for each section in the questionnaire. This approach ensured a thorough exploration of students' attitudes while maintaining alignment with the study's goals.

2.2. Components of Attitudes

The Tripartite Model of Attitude discloses that attitude consists of three components. These are emotion or feelings, cognitive response or belief, and overt actions or behaviour. The following subsections will discuss the components of attitude.

2.3. Emotion (Feelings)

The first component of attitude is an individual's emotion, represented by verbal statements of feelings. Emotions are about enjoying or hating something and a predisposition to react to doing something behaviourally (Eagly & Chaiken, 1993). In that sense, emotions describe an

individual's positive or negative feelings about an object. Therefore, students' emotions about in-person lessons depend on whether they feel it is essential or not. On the contrary, the mental image of the physiological modifications that underlie emotions is called a feeling (Damasio, 2001). So, students' cerebral portrayal of psychological changes regarding sentiment is feeling. To conclude, students' verbal feelings toward positive or negative consent in face-to-face classes are students' emotions about face-to-face courses. The next part will discuss the cognitive response.

2.4. Cognitive Response (Belief)

The second component of attitude is a person's cognitive reaction, expressed through vocal expressions of belief (Jain, 2014). Therefore, the cognitive response is the oral declaration of belief. Students' cognitive response to in-person lectures is one of the components of students' attitude to in-person lessons. Students' belief about the efficacy of face-to-face classes is their cognitive response to face-to-face courses. Furthermore, Eagly and Chaiken (1993) stated that cognitive perspective connects someone's understanding of a subject. In that sense, Learners' intellectual reaction to the effectiveness of in-person lectures is students' belief about face-to-face classes. The following part talks about the third element of attitude.

2.5. Overt Action (Behaviour)

The third component is an individual's overt action, represented by behavioural intention. Responses to environmental stimuli, internal or external stimuli-induced reactions (actions or inactions) of whole living things eliminating reactions more clearly known as overt action or behaviour (Levitis et al., 2009). In that sense, students' reactions to face-to-face classes are behavioural responses influenced by outside impulses. Likewise, Furr (2009) claimed that verbal statements or actions that could be observed by careful observers utilizing ordinary perceptual procedures are behaviours. So, an individual's reactions can be traced to the overt actions or behaviour of an individual.

On the other hand, behaviour is externally perceptible continuing decisions of an individual or emanations from an entity (Uher, 2016). In that sense, behaviour bears judgments of an individual that can be seen. In short, students respond that the reasons for attending and not attending face-to-face classes are the overt actions or behaviours of learners in face-to-face courses. Definition of attitudes is the subject of the following subsection.

2.6. Definition of Attitudes

Attitude is the psychological and behavioural aspects of the human being. According to Mensah et al. (2013), the concept of attitude focuses on a person's way of thinking, acting, and behaving. More to the point, an individual's ideas about a thing or system, their reaction against that particular thing or design, and how the same individual behaves to it comprise that individual's attitude to that thing or system. Similarly, Eagly and Chaiken (1993) stated that attitude has three components: cognitive, sensory, and behavioural. In that sense, attitude comprises opinion, perception, and human behavioural psychology. These three elements constitute an individual's attitude.

On the contrary, Gaiseanu (2020) claimed that attitude could be defined as a reactive informational output concerning a perceived or mentally proposed object/objective. So, a man's attitude is his way of behaviour and responses relating to a particular subject or matter of interest. To sum up, an attitude has three components in human psychology, which relate to emotion, cognitive response, and overt action of the human being. Furthermore, it is deeply

rooted in an individual's response to their choice of an object or idea. The following subsection will look at changes in attitudes.

2.7. Changes in Attitudes

Before we can declare that an attitude exists and changes, these three abovementioned factors must be present. In this regard, Moliner and Tafani (1997) stated that various components are involved, which results in a change in attitude. Therefore, we can anticipate a change when a factor of attitude toward an object of representation changes. In that sense, a specific attitude may include positive emotion, such as happiness in learning through face-to-face classes (emotion/feelings), a desire to attend face-to-face classes (behaviour), and the perception that face-to-face courses are simple to understand (cognition/belief). Similarly, Maio et al. (2018) claimed that when a persuading argument aligns with the components driving an attitude, it is more probable that it will change that attitude. So, changes in the constituents of attitudes are the changes in attitudes. In this regard, students can develop positive or negative attitudes toward face-to-face classes. They develop attitudes over time due to direct contact with an object. Students utilize attitudes to direct their behaviour when attending face-to-face classes, resulting in consistently positive or negative patterns of reactions to the face-to-face courses.

To sum up, changes in attitudes mean changes in the components of attitudes. These components are feelings, beliefs, and behaviour. Learners' changes in these components are their changes in attitudes. The following part will discover the perspectives of post-COVID-19 learners.

2.8. Post COVID-19 Students' Attitudes

Some studies have examined students' psychology and attitudes after the COVID-19 lockdown. Students' perceptions of face-to-face class experiences were considerably more favourable in the post-COVID-19 times than before. McLure et al. (2022) studied the emotional atmosphere in the classroom and students' attitudes toward learning in universities that can be employed during lockdown online and post-lockdown face-to-face instruction. This study tried to find the distinctions between students' learning experiences at an Australian university during the COVID-19 lockdown (totally online) and after the lockdown was released (face-to-face and online). The researchers designed and validated a classroom emotional climate survey suitable for university learning in various settings (face-to-face, online, and blended). The study used a questionnaire and an attitude scale. The researchers wanted to evaluate the emotional atmosphere and attitudes in classes. The study revealed that after the lockdown and students resumed attending face-to-face classes, their opinions of experiences were noticeably more favourable (McLure et al., 2022). Therefore, the study presented variations in beliefs among students in face-to-face classes.

Moreover, COVID-19 has an impact on medical students' mental health and capacity to function consistently in a variety of settings. Mansoor et al. (2022) investigated the effect of COVID-19 on several aspects of medical students' lives and their psychological health. The survey carried out cross-sectional research. There were also inquiries about COVID-19 worries and effects. The DASS-21 (Anxiety, Stress Scale & Depression) was followed to examine the mental state. This survey revealed students' concerns about the impact of the pandemic on their academics and clinical rotations in clinical settings. Furthermore, it demonstrated how significantly Covid-19 affected medical students' mental health and ability to work regularly in various spheres.

Furthermore, in-person lectures were likely to be attended by students in post-COVID-19 schooling. Oducado et al. (2022) studied a theory of planned behaviour application for predicting nursing students' desire to attend face-to-face classes on post-COVID-19 school reopening. This cross-section research examined students' intentions to attend face-to-face classes after college reopened and their associations with the Theory of Planned Behaviour's fundamental constructs. Undergraduate nursing students completed an online questionnaire at one university in the Philippines. Multiple linear regression analysis was used to identify predictor factors. The findings revealed that nursing students were very likely to attend face-to-face lectures.

In addition, lecturers were concerned about contagion and teaching in the early days of reopening face-to-face classes. Wakui et al. (2021) tried to determine the elements that contributed to infection-associated worry and academic anxiety in instructors in Japan teaching in-person classrooms during the epidemic of COVID-19 after institutions resumed. They employed a questionnaire to examine the kind of institutions (middle school or primary), gender, ageing, and other factors influencing pandemic-related infection-associated worry and academic anxiety. Anxiety levels and relevant factors were rated following a 5-point Likert scale ranging from 1 (not at all) to 5 (very much so). In a data study, several instructors showed anxiety about infection and education.

Lastly, in post-COVID-19 face-to-face classes, substantial increases in depressive symptoms and a significant drop in good mental health were observed. Houghton et al. (2022) conducted a longitudinal study examining how school closures impact teenagers' mental health due to Covid-19. Pre and post-Covid-19 psychological health changes were examined using linear mixed models. Significant boosts in depressive symptoms were seen, as internalizing and externalizing signs, and a substantial decline in positive mental health with time compared to pre-covid-19 symptom levels.

Some other studies also studied post-COVID-19 students' attitudes. In this regard, Kedraka and Kaltsidis (2020) claimed that students felt in-person instructions were necessary. In that sense, the students prefer face-to-face classes after the COVID-19 lockdown. Similarly, Tarc (2020) stated that students thought they would be considerably more dedicated to attending in-person classes. So, in post-COVID-19 times, students felt they would participate attentively in face-to-face classes.

On the other hand, Radhamani et al. (2021) demonstrated that students showed behavioural intention to switch to technology-based education after COVID-19. So students' behavioural changes to online resources were evident in post-COVID-19 times. Therefore, students' feelings about in-person classes were positive, and they shifted their behaviour to online resources after the COVID-19 lockdown.

In conclusion, attitude comprises individuals' feelings, beliefs, and behaviours, whereas variations in these components are the changes in attitudes. Some studies around the world deal with post-COVID-19 students' attitudes and mental conditions. Most of them were cross-sectional research. These studies have discovered that learners' psychological and attitudinal states have changed following the COVID-19 lockdown. Despite this, changes in students' attitudes toward face-to-face classes after the COVID-19 lockdown have yet to be researched. The succeeding section will present the methodology used for this study.

3. Research Methodology

This section of the paper contains all the relevant information regarding how the researchers conducted this study. The following sub-section discusses the overview of the research

methodology. This part includes the research design, context and sampling, data collection method, validity and reliability of the research, research instruments, and data analysis method.

3.1. Research Design

This research adopted the qualitative method. Since the researchers wanted to examine changes in students' attitudes toward face-to-face classes after the COVID-19 lockdown, the researchers applied a qualitative approach. The study was qualitative in design and exploratory in nature. Learners' attitudes were very complex and needed to be explained and elaborated. Qualitative research was followed to understand students' attitudes and the components of attitudes, such as feelings, beliefs, and behaviour toward face-to-face lessons, as well as the reasons behind their attitudes. The researchers applied convenience sampling so that they could collect data from the students without having any trouble accessing them.

Moreover, the researchers used a qualitative design to understand the attitude and psychological explanation of students' attitudes in their responses to in-person lessons after the COVID-19 lockout. A set of questions was required before attempting to address the primary study issue. Therefore, open-ended questions were used to collect data. The researchers used Google Forms to create and distribute the questions and then sent the invitation to participate in the study through the Facebook page of the department of English at a government college in Bangladesh. The researchers used a framework of thematic analysis to analyse the collected data. Moreover, the researchers used Microsoft Excel to visualize the study's findings in bar graphs. Since the study was small-scale research and the time was short, the researchers could not conduct a pilot study. However, piloting the questions provided feedback to rectify the study's faults.

3.2. Research Context and Sampling

The research context was undergraduate students of the Department of English at a government college in Bangladesh. This undergraduate course was a four-year course. The population of the study was four years of students of this course. There were 240 students in this course. Therefore, the study population was 240 undergraduate students. The researchers followed convenience sampling to access the students through the English department's Facebook page and invited them according to their available time and space. The study sample was forty-eight undergraduate students. Table 1 represents the information of the respondents of this study. In the findings, the researchers presented the respondents as P1 to P48 to keep them anonymous. There were twelve students from each year of four years of the course. So, there were representatives of the course students from the first, second, third, and fourth years. Of these forty-eight students, twenty-seven were females, and twenty-one were males. There were thirty-five learners from rural areas and thirteen students from urban areas. Therefore, male and female students and rural and urban learners were representatives.

Table 1.
Information of the respondents

Level of study	Years of the course	Number of Participants	Participants Pseudonym	Male	Female	Rural Residents	Urban Residents
Under gradua te	1st Year	12	P1-P12	5	7	8	4
	2nd Year	12	P13-P24	4	8	10	2
	3rd Year	12	P25-P36	3	9	9	3
	4th Year	12	P37-P48	9	3	8	4
Total		**48**	**P1-P48**	**21**	**27**	**35**	**13**

3.3. Method of Data Collection

The researchers used Google Forms to gather data from the respondents. Two sets of Open-ended questions, consisting of 6 questions for each, were created in Google Forms and sent to the Facebook page of the Department of English, inviting students to participate in the study. The researchers provided general information to the participants, and the respondents' consent was obtained through Google Forms. The participation was voluntary, and the researchers invited the students to participate. The students responded to the questions from the comfort of their homes and could answer them in time. Since the questions were open-ended, they needed time to think and write. Another advantage of collecting data online was the ability to reach all students. The students who were not present at college also could participate in the study. It took almost two weeks to collect data from the participants. Moreover, data collection by using Google Forms provided the opportunity to save data automatically in Google Forms and have the total data in a Microsoft Excel sheet. Therefore, data collected through Google Forms helped organize and protect students' responses.

3.4. Research Validity and Reliability

The researchers ensured the validity and reliability of this study. The findings presented in this study were objective and presented the respondents' views. In this regard, the researcher followed a thematic analysis framework to analyse the data. Because the data had to be entirely and objectively examined and corrected to ensure the findings were legitimate and trustworthy, Braun and Clarke's (2006) six-step technique was employed.

The questions were validated using a checklist, and the guidance and approval of an academic advisor were obtained to develop two sets of questions, comprising a total of 12 open-ended items. Additionally, the researchers piloted the questions before finalizing them. Ethical standards were strictly adhered to throughout the study. The researchers completed the required ethics form, ensured the confidentiality of respondents, and safeguarded the collected data.

An adequate number of students were taken as a sample to present the population so that many participants could speak for the entire population. The sample had representatives from every sphere of consideration, such as male or female, rural or urban residents. As a result, the sample represented the population, and the findings were acceptable and reliable. Therefore, the viewpoints of the participants were presented correctly.

3.5. Research Instruments

The research instrument was two sections of open-ended questions (Table 2). Drawing on the principles of Spooncer's Tripartite Model, the research instrument was designed with its three dimensions in mind. For each component—emotional, cognitive, and behavioral—two questions were developed, resulting in a total of six questions per section. The open-ended questions were created in Google Forms to examine pre- and post-COVID-19 students' attitudes toward face-to-face classes. The open-ended questions were written in English since the participants were pupils of the English department. Therefore, the participants could answer very quickly and effectively. Furthermore, the questions consisted of two sections. The first and second sections provided six open-ended questions about pre and post-COVID-19 students' attitudes to face-to-face courses, respectively.

Table 2.
Open Ended-Questions

Open Ended-Questions
Section A
Think of a pre-COVID-19 world and show your ideas before the coronavirus outbreak
1. How did you feel about the necessity of face-to-face classes?
2. Why did you feel so?
3. What was your belief about the efficacy of face-to-face classes?
4. Why did you believe so?
5. Why did you attend face-to-face classes?
6. If you could not attend face-to-face classes, what were the reasons?
Section B
Think of the post-COVID-19 world and show your present ideas.
1. How do you feel about the necessity of face-to-face classes?
2. Why do you feel so?
3. What is your belief about the efficacy of face-to-face classes?
4. Why do you believe so?
5. Why do you attend face-to-face classes?
6. If you cannot attend face-to-face classes, what are the reasons?

While creating the questions, the researchers followed Spooncer's (1989) model of attitude. This model provided three components of an attitude. These are feelings, beliefs, and behaviours. The questions were based on these topics. Two of the questions were related to each component of attitude. Therefore, six questions for each section related to three attitude elements. These questions helped to answer the research questions of this study. The questions were piloted following the piloting checklist, and the researchers made necessary changes accordingly.

3.6. Method of Data Analysis

The researchers employed inductive thematic analysis to examine the data in the study. To ensure the findings were comprehensive, unbiased, and trustworthy, they followed Braun and Clarke's (2006) six-step framework for data analysis. This six-step method is helpful to make valid report and make trustworthy (Uddin, 2024). The outlines the process (Figure 2) of navigating through the stages of understanding data to create a final report.
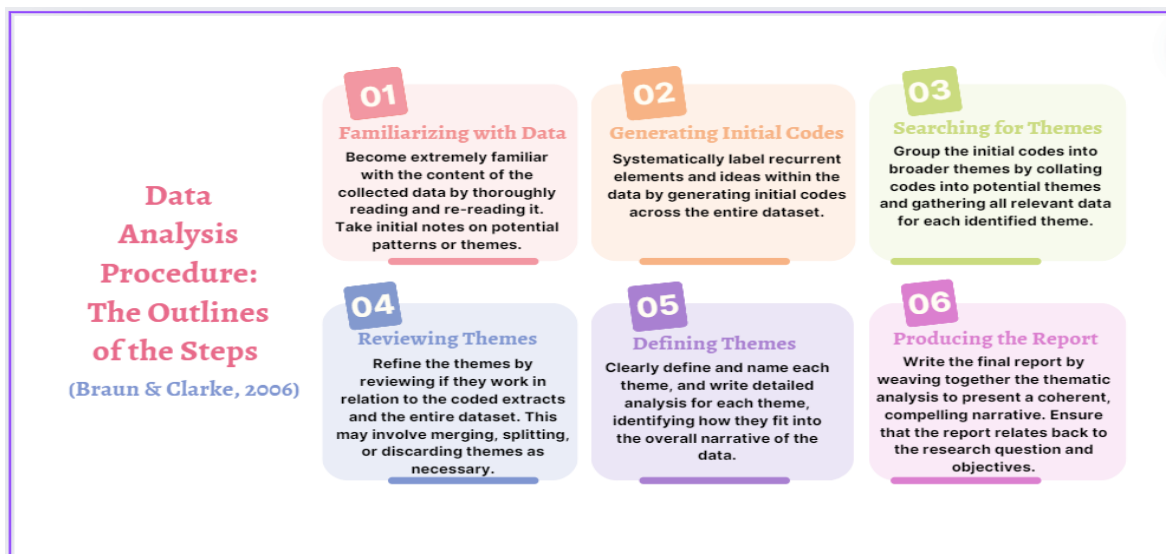

Figure 2. Thematic Analysis' Six Steps Framework, (Braun & Clarke, 2006)
Source: Uddin et al. (2024)

To analyse the data, the researchers began by thoroughly familiarizing himself with the data, repeatedly reading and re-reading it to gain a deep understanding. During this process, they transcribed the data and made initial notes on key concepts and emerging ideas. Following this, the researcher systematically organized the data by identifying and generating preliminary codes that captured significant patterns and features. These codes were then refined and grouped, with related data being collated under each specific code, allowing for a more structured and comprehensive interpretation of the data. Next, they searched for themes regarding the research question of the study. Then, the researchers reviewed the themes so that the researchers could relate themes to the entire set of data and generate a thematic map. The researchers then defined and named themes according to the research sub-questions. Finally, they produced the report in the findings section of the paper. In addition, the researchers used Microsoft Excel to visualize the data in bar charts. The researchers portrayed these charts to represent the constituents of attitudes and their differences.

There is an example on how the researchers analysed the data based on the Thematic Analysis' Six Steps Framework. To analyse the data collected from the first question in Section A of the open-ended questions, the Thematic Analysis Six Steps Framework was applied. The process began with repeatedly reviewing the participants' responses to understand their feelings of the necessity of face-to-face classes during the pre-COVID-19 period. This initial review revealed a range of opinions, from those viewing face-to-face classes as essential to others who did not see them as mandatory. Some participants also highlighted feelings of comfort associated with traditional classroom settings.

The next step involved generating primary codes from the responses by identifying key ideas. For example, the codes included: "Good," "Enjoyable," "Softly", "It is necessary to learn," "Very helpful for understanding", "Mandatory for learning," "Necessary for acquiring knowledge", "I feel comfortable in traditional classroom situations", "Face-to-face class was more enjoyable", and "Face-to-face classes are necessary for proper education" etc.

After identifying the codes, the researchers grouped similar ones into broader themes. For instance, the theme Not Important included responses like "good," "softly," and "enjoyable," which suggested that face-to-face classes were not essential for learning. The theme Important reflected the view that face-to-face classes were helpful or useful for understanding but not absolutely critical. The codes are like "It is necessary to learn". Very Important captured responses that explicitly emphasized the necessity of face-to-face classes, particularly for acquiring knowledge. The codes are like "Very helpful for understanding". The theme Comfortable included responses indicating emotional comfort and preference for traditional classroom setups. Not Mandatory reflected that while face-to-face classes enhanced learning, they were not strictly required. Finally, Mandatory highlighted that participants viewed face-to-face classes as crucial for effective learning. The codes are like "Mandatory for learning".

The researchers then reviewed the themes to ensure they aligned with the dataset and to eliminate overlaps. For example, the code "enjoyable," initially categorized under Not Important, was examined to confirm it did not overlap with Comfortable. Similarly, the distinction between Mandatory and Not Mandatory was carefully reassessed to ensure clarity in participant intent.

In the fifth step, the researchers refined and clearly defined each theme. Not Important described face-to-face classes as non-essential for learning. Important indicated that while face-to-face classes were useful, they were not indispensable. Very Important underscored their critical role in acquiring knowledge. Comfortable focused on emotional preferences for traditional classroom environments. Not Mandatory reflected that face-to-face classes

enhanced learning but were not strictly necessary, and Mandatory emphasized the essential role of face-to-face classes in proper education.

Finally, a report was written to illustrate the findings, supported by vivid examples from participant responses. For Not Important, examples included statements like, "I felt softly" and "Face-to-face classes were enjoyable." For Important, participants said, "Face-to-face classes are helpful for understanding topics." For Very Important, responses like "Face-to-face classes are necessary for acquiring knowledge" were highlighted. Comfortable included examples like, "I feel more comfortable in traditional classroom situations." For Not Mandatory, responses such as "Face-to-face classes enhance learning but are not absolutely necessary" were used, while Mandatory was supported by statements like "Face-to-face classes are mandatory for proper education and acquiring certificates." This structured approach ensured that each theme was firmly grounded in the data and accurately reflected the participants' perspectives.

3.7. Validity

To enhance the reliability and validity of the identified themes, the researchers implemented a systematic process of cross-checking. This involved researchers independently reviewing and verifying the themes to minimize subjectivity and ensure consistency in interpretation. Furthermore, ethical considerations were meticulously upheld throughout the analysis. This included safeguarding the anonymity of participants by removing identifiable information from the data and employing unbiased coding procedures to prevent personal biases from influencing the findings. Additionally, the thematic analysis process was designed to reinforce the credibility and robustness of the research outcomes. Systematic coding ensured that the themes were firmly grounded in the raw data, while collaborative validation, such as discussions among researchers or peer reviews, helped to refine and confirm the accuracy of the themes. These measures collectively ensured that the analysis was both transparent and reliable, providing a solid foundation for the study's conclusions.

4. Findings

The findings below are interpreted through the lens of the Tripartite Model of Attitudes, focusing on the components of attitudes. Moreover, each element of attitudes is also demonstrated based on students' pre-COVID-19 and post-COVID-19 attitudes. This subsection includes all the findings from the study's data analysis. The researchers categorized the results following the three elements of attitudes and these are feelings, beliefs and behaviours described by Tripartite Model of Attitude. Therefore, the findings were presented in three parts based on the students' changes in feelings, beliefs, and behaviours toward face-to-face lessons. In this way, the research questions could be answered and the coherence in the findings could be maintained. The following part presents findings of the first component of attitudes.

4.1. Changes in Students' Feelings

The first element of attitudes is feelings. Figure 3 below shows students' pre and post Covid-19 feelings about face-to-face classes. This figure illustrates students' perceptions of in-person classes, comparing their feelings both before and after the COVID-19 pandemic. It provides insights into how the outbreak may have influenced their attitudes, preferences, and overall experiences with face-to-face learning environments.
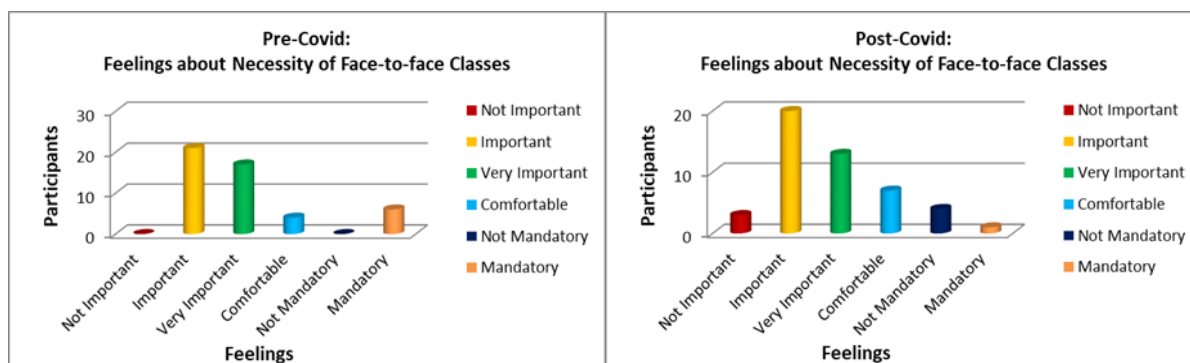
Figure 3. Changes in Learners' Feelings about Face-to-face Classes

Figure 3 presents the changes in students' feelings throughout pre and post covid-19 times. After analysing primary data, it was found that most students showed positive attitudes towards the importance of face-to-face classes. Both pre and post covid-19 responses stated that most students felt that face-to-face classes were vital (McLure et al., 2022). Therefore, there was no change in feelings regarding this variable.

On the other hand, some students felt that face-to-face classes were mandatory before COVID-19. However, half of them changed their feelings toward mandatory face-to-face classes after COVID-19. One of the participants, P3, commented on this regard: "It is necessary for learning but not the only way."

Furthermore, after analysing pre and post-COVID-19 students' feelings, it was found that none of them felt that face-to-face classes were 'not mandatory' before COVID-19. However, some respondents felt in-person lectures were 'not mandatory' after the COVID-19 lockdown. Similarly, none of the students responded that face-to-face classes were 'not important' before COVID-19. On the contrary, some respondents thought face-to-face classes were unimportant after the COVID-19 lockdown. Another participant of the study, P17, responded to this. "It is bad for COVID-19 sessions and not to attend face-to-face classes"

Therefore, the findings indicated changes in feelings (Moliner & Tafani, 1997; Maio et al., 2018) among learners regarding the mandatory and importance of in-person lessons after the COVID-19 lockdown.

4.2. Changes in Students' Beliefs

Figure 4 represents learners' beliefs in face-to-face classes after the Covid-19 lockdown. This figure showcases students' beliefs and attitudes toward in-person classes, offering a comparative perspective on their beliefs before and after the COVID-19 pandemic. It highlights shifts in their perceptions, shedding light on how the pandemic may have impacted their outlook on traditional classroom-based learning.
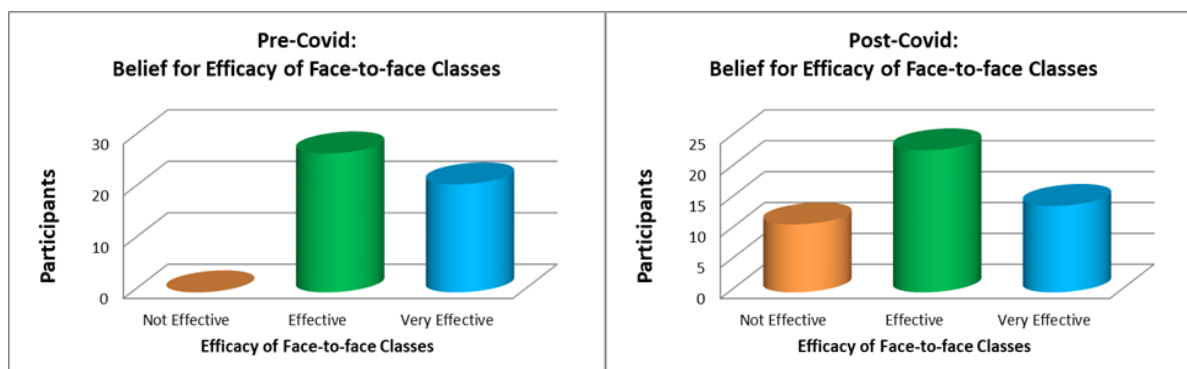
Figure 4. Changes in pupils' Beliefs in Face-to-face Classes

Figure 4 shows us the differences in learners' beliefs toward in-person courses. By considering respondents' beliefs about face-to-face classes, it was found that most of the students believed that face-to-face classes were effective before and after the COVID-19 pandemic (Tarc, 2020). As a result, there is no change in beliefs regarding the effectiveness of face-to-face classes. On the contrary, the number of students who believed in-person lessons were 'effective' decreased in the post-COVID-19 responses. However, the significant change in the findings was that none of the respondents thought face-to-face classes were 'not effective' before the COVID-19 outbreak, although some believed it was 'not effective' in the post-COVID-19 era. In this regard, one of the participants, P34, answered, "It is not always effective, such as in the time of pandemic." Another respondent, P41, commented, "I believe that face-to-face classes still require self-discipline as students are still required to go to class and participate."

Therefore, the findings showed that after the COVID-19 lockdown, respondents' beliefs (Moliner & Tafani, 1997; Maio et al., 2018) regarding the effectiveness of in-person courses changed. Though all the respondents believed in-person lessons were effective before the COVID-19 epidemic, their beliefs changed in the following COVID-19 lockdown. Changes in learners' behaviours will be discussed in the next part of the paper.

4.3. Changes in Students' Behaviours

Figures 5 and 6 below represents the pre and post-COVID-19 pupils' behaviour toward face-to-face lessons. This figure highlights students' behaviours and interactions in in-person classes, providing a comparative analysis of their actions and engagement both before and after the COVID-19 pandemic. It offers valuable insights into how the outbreak may have influenced their classroom dynamics, participation levels, and overall approach to face-to-face learning.
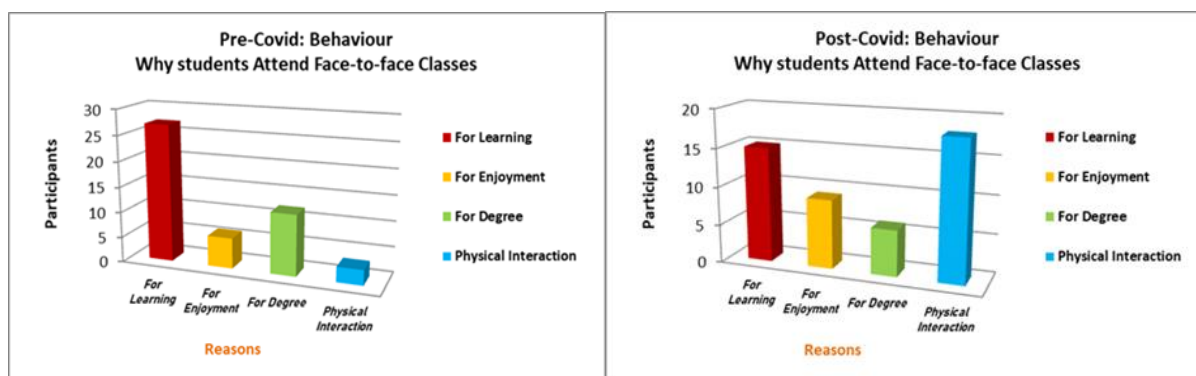

Figure 5. Changes in Learners' Behaviour to Face-to-face courses

Figure 5 presents evidence of pupils' change of behaviour toward in-person lessons. Regarding pupils' behaviour, it was found that before COVID-19, most students joined in-person classes

for learning, while this number decreased in the post-COVID-19 behaviour of students. On the other hand, after the COVID-19 lockdown, most students participated in face-to-face lessons for physical interaction with teachers and classmates. Participant P6 responded, "I attend face-to-face classes because the interaction between students and teacher is clear and accurate."

Another respondent, P48, commented, "Online-based educational videos confuse me as there are so many opinions, but my teachers can give me the right one in face-to-face classes."

Moreover, an increasing trend among students was the enjoyment of face-to-face courses. Post-COVID-19, more learners came to college for pleasure than before. Another bar chart, Figure 6, of the findings, responded to the student's behaviour.
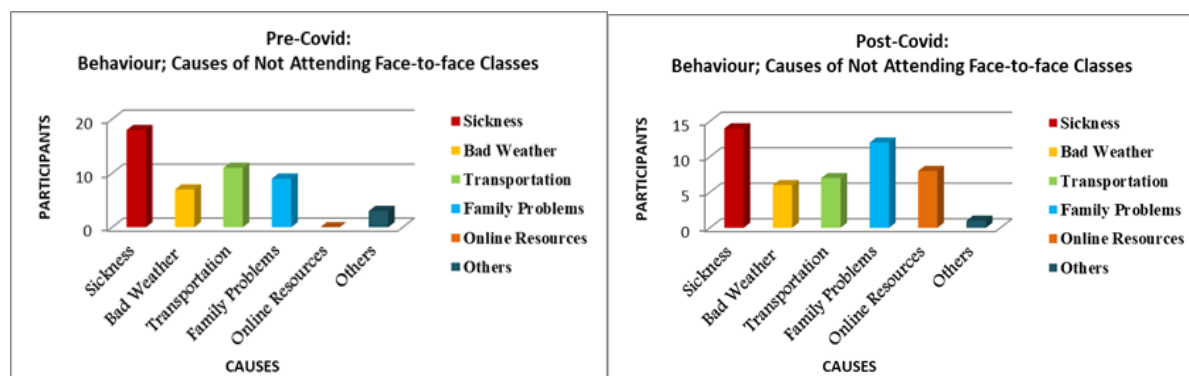

Figure 6. Changes in Students' Behaviour to Face-to-face Classes

Another study finding was the students' behaviour in "not attending" classes. Both pre and post-COVID-19 responses of the students showed that sickness was a significant reason. In contrast, there was an essential change in the case of online resources. None of the participants mentioned that online resources were their reason for not joining in-person lessons before the COVID-19 lockdown. However, a reasonable number of respondents believed that online resources were their reason for not attending face-to-face courses after the COVID-19 lockdown (Radhamani et al., 2021). Participant P17 responded, "Online resources give the opportunity to ignore classes (face-to-face)." Another participant, P14, responded, "Because there are online platforms and resources available."

Another increasing trend among students after the COVID-19 lockdown was family problems. After the COVID-19 lockdown, students behaved like they had more family problems than before. In this regard, P26 responded, Because of my family crisis, I cannot attend the class (in person) some days." Therefore, the respondents showed changes in behaviour (Moliner & Tafani, 1997; Maio et al., 2018) following the COVID-19 lockdown. After the COVID-19 pandemic and lockdown, the learners participated in in-person classes because of the physical interaction with teachers and classmates. However, before the COVID-19 outbreak, most learners attended schools for learning.

To sum up, the findings revealed changes in learners' feelings, beliefs, and behaviours toward face-to-face lessons in post-COVID-19 class reopening. The respondents displayed changes in feelings regarding the mandatory and importance of in-person instruction. Moreover, the participants showed changes in beliefs relating to the effectiveness of face-to-face lectures in the post-COVID-19 times. Furthermore, behaviours regarding the goal of attending in-person lessons after the COVID-19 lockdown also vary. Consequently, the findings explored the differences in students' attitudes to face-to-face classes after covid-19 lockdown.

5. Discussion

The findings of this study revealed significant shifts in students' attitudes toward face-to-face classes after the COVID-19 pandemic based on the components of attitudes described in Tripartite model of Attitudes. These shifts encompass changes in feelings, beliefs, and behaviours, offering critical insights into how the pandemic has reshaped educational preferences and practices. The learners' attitudes to in-person lectures have changed all three components of attitudes (Spooncer, 1989; Mensah et al., 2013; Eagly & Chaiken, 1993). Regarding the learners' feelings, negative feelings towards face-to-face classes were found among the respondents. Not important and not mandatory, these themes were only found in the post-COVID-19 students' feelings about in-person courses. In this discussion, the researchers explore the pragmatic decisions for educators and institutions and suggest directions for future research.

5.1. Changes in Students' Feelings toward Face-to-Face Classes

The analysis of students' feelings before and after the COVID-19 lockdown demonstrates both consistency and divergence in attitudes toward face-to-face classes. Prior to the pandemic, the majority of students viewed face-to-face classes as essential. This sentiment largely persisted post-pandemic, with many students continuing to emphasize the importance of in-person instruction. However, a notable shift occurred among students who previously felt that face-to-face classes were mandatory; many of them reconsidered this stance after the pandemic, recognizing that in-person classes were beneficial but not the sole means of effective learning. This shift in perspective reflects a broader reevaluation of traditional educational models in light of the pandemic's disruption, highlighting a growing recognition of alternative learning modalities. This finding suggests that educational institutions may need to adopt more flexible instructional approaches, accommodating students who prefer a blend of in-person and remote learning options. This finding suggests that large-scale implementation of online education in Bangladesh could be a transformative step, aligning with global practices to address the evolving needs of students in the post-COVID era. By embracing online platforms, the education system can enhance accessibility, flexibility, and inclusivity, ensuring that learners are better equipped to thrive in a rapidly changing digital landscape. This approach would not only modernize traditional learning methods but also bridge educational gaps and foster a more adaptable and resilient academic framework.

5.2. Changes in Students' Beliefs about the Effectiveness of Face-to-Face Classes

Beliefs regarding the effectiveness of face-to-face classes also evolved post-pandemic. While most students believed in the efficacy of in-person instruction both before and after the pandemic, there was a noticeable decrease in the number of students who held this belief after the pandemic. Additionally, the emergence of the view that face-to-face classes were not effective during the post-pandemic period underscores a critical shift in perception. This change likely stems from students' increased exposure to online learning during the pandemic. The forced transition to online learning may have led some students to question the effectiveness of traditional in-person methods, particularly when faced with health risks and social distancing. For educators, this finding suggests the need for a more nuanced approach to teaching effectiveness. Institutions should consider integrating best practices from both in-person and online learning environments to create hybrid models that maximize student engagement and learning outcomes. Moreover, the emphasis on self-discipline in in-person classes, as highlighted by some respondents, points to the need for developing strategies that support students' autonomy and responsibility, regardless of the learning format. The findings indicate that students believe blended learning is the most effective approach for educational institutions in Bangladesh. By combining traditional classroom methods with online learning,

this approach has the potential to maximize learning outcomes for students. Blended learning not only leverages the strengths of face-to-face instruction, such as direct interaction and personalized guidance but also incorporates the flexibility and accessibility of online platforms. This integration could create a dynamic and inclusive learning environment, addressing diverse student needs and fostering skills essential for success in the modern, technology-driven world.

5.3. Changes in Students' Behaviours Toward Face-to-Face Classes

Behavioural changes were perhaps the most pronounced among the three components of attitudes. Before the pandemic, students primarily attended face-to-face classes for learning purposes. However, after the COVID-19 lockdown, the motivations for attending in-person classes shifted. Many students began to prioritize physical interaction with teachers and classmates, valuing the social and relational aspects of in-person education more than before. This shift indicates a renewed appreciation for the interpersonal dynamics that are often missing in online learning environments. Additionally, the study found an increase in the number of students who did not attend face-to-face classes due to the availability of online resources. This change highlights the growing role of digital tools in education, even in traditional settings. The pandemic has accelerated the adoption of online platforms, and students have become more accustomed to accessing educational materials virtually. As a result, the availability of online resources has become a significant factor in students' decisions about attending in-person classes. For educational institutions, these behavioural changes present both challenges and opportunities. On the one hand, there is a need to enhance the appeal of face-to-face classes by emphasizing the unique benefits of physical interaction that cannot be replicated online. On the other hand, institutions must acknowledge the growing importance of online resources and consider how to integrate them into the overall learning experience effectively. Thus, a significant shift in students' attitudes toward face-to-face and online learning has been observed. In Bangladesh, students exhibit distinct preferences and behaviours toward these two modes of education. This presents an excellent opportunity for educational institutions to address students' diverse needs by offering a combination of in-person and online learning, allowing them to benefit from the strengths of both approaches.

5.4. Decisions Based on Findings

The shifts in students' feelings, beliefs, and behaviours suggest several pragmatic decisions that educators and institutions can implement to address the evolving landscape of education:

Adopt Hybrid Learning Models: Given the mixed feelings about the necessity of face-to-face classes, institutions should offer hybrid learning options that combine in-person and online instruction. This approach can cater to students who value both the flexibility of online learning and the interpersonal benefits of face-to-face interaction.

Enhance Online Learning Resources: As online resources play an increasingly critical role in students' decisions to attend face-to-face classes, institutions should invest in improving the quality and accessibility of these resources. This includes providing comprehensive digital libraries, interactive online tools, and well-structured virtual classrooms.

Promote Active Learning and Engagement in Face-to-Face Classes: To counteract the perception that face-to-face classes are not always effective, educators should focus on active learning strategies that engage students in the learning process. This includes incorporating group work, discussions, and hands-on activities that capitalize on the benefits of in-person interaction.

Support Student Well-being: The pandemic has brought to light the impact of family problems and other personal challenges on students' ability to attend classes. Institutions should provide support services, such as counselling and academic advising, to help students navigate these challenges and stay engaged in their education.

Encourage Flexibility in Attendance Policies: Recognizing that students may face legitimate barriers to attending in-person classes, such as health concerns or family issues, institutions should adopt more flexible attendance policies. This could include allowing students to attend classes virtually when necessary or providing recorded lectures for later viewing.

6. Conclusion and Recommendations

The COVID-19 pandemic has fundamentally altered students' attitudes toward face-to-face classes, with significant changes observed in their feelings, beliefs, and behaviours. These findings underscore the need for educational institutions to adapt to the evolving needs and preferences of students in a post-pandemic world. By embracing flexibility, enhancing online resources, and promoting active learning, educators can create a more resilient and effective educational system that meets the demands of the future. The transition of Bangladeshi learners from in-person to online and virtual to in-person classes led to behavioural and cognitive issues among the pupils (Islam et al., 2022). These issues affected the students' attitudes about in-person classes (Povero et al., 2022). After the Covid-19 lockout, the study looked into how students' attitudes to in-person instruction had changed. The study proved how students' attitudes to face-to-face classes changed after the COVID-19 lockdown. The learners responded with changes in all the components of attitudes, namely feelings, beliefs, and behaviour. In the case of emotions, the respondents expressed changes in negative feelings toward face-to-face classes. Analysing the students' pre- and post-COVID-19 responses, it was evident that several learners felt that face-to-face courses were no longer mandatory. Concerning beliefs, there was a significant change. After the COVID-19 lockdown, many students believed that face-to-face classes were ineffective, while none thought so before the COVID-19 lockdown. In addition, students changed their behaviour toward face-to-face classes post-COVID-19. Most students behaved in in-person class as physical interaction with classmates and teachers. In contrast, a few people showed that behaviour before COVID-19 lockdown. To conclude, the students showed changes in the three elements of attitudes toward face-to-face classes. Therefore, the study's research question was whether the learners had changed their attitudes toward face-to-face classes after the COVID-19 lockdown or not answered. The study highlights a significant change in students' perceptions of face-to-face and online classes in the post-COVID-19 period. In-person classes are recognized for fostering direct physical interaction, which promotes engagement and collaborative learning. Meanwhile, online classes are appreciated for their convenience and the ease with which students can access a wide range of digital resources. This shift suggests that students now value a balanced approach that leverages the unique advantages of both modes, emphasizing the importance of adopting hybrid learning models to cater to diverse learning preferences and maximize educational outcomes.

6.1. Implications for Practice

Teachers must stay current by exploring innovative methods to improve teaching practices and enhance student learning (Akter & Uddin, 2024). This study underscores the need to adapt to

evolving student attitudes toward face-to-face learning post-COVID-19, highlighting shifts in feelings, beliefs, and behaviors. These findings hold critical implications for educators, institutions, and policymakers in rethinking traditional educational approaches that include:

Firstly, the persistence of positive attitudes toward the importance of face-to-face classes highlights the continued value of in-person education. However, the growing acceptance of alternative learning modalities suggests that rigid, one-size-fits-all approaches may no longer be effective. Institutions must, therefore, consider adopting more flexible, hybrid learning models that cater to diverse student needs and preferences.

Secondly, the study's findings emphasize the need for a rethinking of teaching effectiveness. With some students questioning the efficacy of traditional in-person instruction, educators should focus on incorporating active learning strategies and leveraging the strengths of both face-to-face and online environments. This shift can help maintain engagement and learning outcomes, even as students' preferences evolve.

Moreover, the study underscores the importance of addressing the broader social dynamics within education. As students increasingly value physical interaction with peers and instructors, institutions should prioritize creating supportive, interactive learning environments that foster collaboration and relationship-building.

Finally, the implications of this study call for increased attention to equity and access in education. The pandemic has exacerbated disparities, and institutions must work to ensure that all students have equal access to high-quality educational resources, whether in-person or online. By addressing these implications, educational stakeholders can better respond to the changing landscape and support student success in the post-pandemic era.

6.2. Limitations of the Study

The primary limitation of this study lies in its scope and sample size, as it was conducted exclusively within the English department of a single government college in Bangladesh. This narrow focus limits the generalizability of the findings to a broader population, as the attitudes and experiences of students in other departments or institutions may differ. Additionally, the study's small-scale nature restricted the exploration of diverse perspectives, which could have been enriched by including participants from multiple departments or colleges. The research, while insightful, provides a snapshot of attitudes at a specific point in time, which may not fully capture the dynamic and evolving nature of students' attitudes toward face-to-face classes post-pandemic. Moreover, the study did not account for variations in socioeconomic backgrounds, access to technology, or other factors that might influence students' attitudes and behaviours. Future research should aim to address these limitations by expanding the sample size, including multiple institutions, and incorporating longitudinal approaches to better understand the lasting impacts of the COVID-19 pandemic on educational preferences and practice

6.3. Recommendations for Future Research

Based on the limitations and findings of this study, several recommendations for future research can be proposed to deepen the understanding of the evolving educational landscape post-COVID-19. Future studies should include a broader range of participants across multiple departments, colleges, and universities to increase the generalizability of the findings to provide a more comprehensive understanding of the shifts in educational attitudes. Besides, longitudinal research is essential to track changes in students' attitudes, beliefs, and behaviours over time and to determine whether the shifts observed in this study are temporary or indicative

of a lasting change in educational preferences due to the pandemic's impact. Furthermore, comparative studies between hybrid, fully online, and traditional in-person learning environments can offer valuable insights into the effectiveness of these models and guide future instructional designs. In addition, the pandemic has highlighted disparities in access to education, particularly in online environments. Future research should focus on identifying and addressing the barriers that prevent equitable access to education, ensuring that all students, regardless of their socio-economic background, have the opportunity to succeed. Then, future research should consider mixed methods approaches that combine qualitative and quantitative data to provide a more nuanced understanding of students' attitudes and behaviours. Last but not the least, future studies should investigate the influence of external factors, such as socio-economic status, access to technology, and mental health, on students' attitudes and behaviours toward different learning modalities.

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