

Students' Attitudes Towards Online Education: A Year into the COVID-19 Pandemic in Azerbaijan

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Biography

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Abstract

The unprecedented global lockdown during the COVID-19 pandemic led to “emergency remote teaching” (Pace et al. 2020; Hodges et al. 2020; Murshudova and Shahmarova et al, 2021) and the transition to online education. Azerbaijan initiated the compulsory change to online education, which brought various issues and challenges for students and teachers. The education system had to respond by relying on available resources. This research is based on similar research studies conducted in 2020, and 2021 of students’ attitudes towards online education, during the first online semester, and a year later after students had time to experience the process, observe the changes, and make final judgments about their preferences. In 2021, 77% of respondents from across 20 Azerbaijani Universities preferred the traditional learning model, while those who preferred online education had decreased by 13% from 2020. The importance of face-to-face communication in understanding subjects was the most popular argument for traditional learning. At the same time, the reduced cost of study was a top argument among those who expressed a willingness to continue learning online.

Keywords: pandemic, online education, transition, Azerbaijan

Introduction

The outbreak of the COVID-19 pandemic, a resultant recession, and a complex process of normalization in all areas of social and economic life on an international scale. Although this is not the first pandemic that humanity has faced, it marked an unprecedented moment in the history of education. With the technological advancements applied in education, the response to this situation was clear, meaning the prevailing number of countries in similar periods switched the mode of education from traditional (i.e., face-to-face) to online. With this mandatory shift, the government, management, and the teaching staff had to adapt, which was a challenging process for all stakeholders of online education and raised many questions about the effectiveness of online education vis-à-vis traditional education.

Simultaneously, the research community shifted to studying the impacts of COVID-19. According to Hook (2020), this narrow focus led to a “Covidisation of academic research” with many research grants given to coronavirus-based studies. Following this trend, a research team (M. Gasimova, G. Poladova, M. Valiyeva) led by Murshudova and Shahmarova investigated online education in Azerbaijan and the impact of COVID-19, April to June 2020 (Murshudova, Shahmarova et al. 2021), at the close of the first semester delivered online. The results indicated a need for further research on the topic, as there existed no baseline for comparison. A subsequent study was conducted by Shahmarova and Murshudova from May to October 2021, when students could be considered as experienced users of online education. While the first survey had 1,400 respondents (reduced after filtering to 1,286), the second had a sample of 1,750 students, which after filtering, was reduced to 1,718. This study aims to contribute to the limited research on online education in Azerbaijan during the pandemic and explore the change in students’ attitudes toward this mode of learning after one-and-a-half years of experience.

Many similar studies were conducted across the world, examining experiences and expectations of higher education students during the COVID-19 pandemic (Akram et al., 2021; Aristovnik et al., 2020; Lobos et al., 2021; Shankar et al., 2021; Masalimova et al., 2022). These analyzed various aspects including disciplinary areas, teacher training, technological tools and learning platforms, self-efficacy, and mental health (Zheng et al., 2021; Graham & Eloff, 2022). Few studies, however, examined longitudinal comparisons over time (e.g., Lobos et al., 2022). The results varied from negative experiences and expectations toward online learning at the beginning of the pandemic, to positive experiences in improved teaching instructions and

technological aspects (Lobos et al., 2022). Negative experiences related to social relationships and the lack of face-to-face interaction (Lobos et al., 2021; Lobos et al., 2022). Several studies indicated women were "...more optimistic, satisfied, and committed to the online learning experience" than men over the same period (Almomani et al., 2021; Lobos et al., 2022).

Studies also reviewed stress levels, anxiety, and mental health issues as factors influencing students' perceptions and experiences with online learning in several countries (Zhu et al., 2020; Jiang et al., 2022). According to Jiang et al. (2022), "Students experienced the highest levels of academic burnout and the lowest levels of study engagement and education satisfaction." Several studies showed that stress during the COVID-19 pandemic generated depression and anxiety among students and resulted in poor learning outcomes (Jiang, 2020; Jiang et al., 2022; Volman et al., 2022). For this current study, it was important to evaluate the stress level of respondents to understand whether their choice of a learning mode is based on students' experiences, or on habits that play a decisive role in stressful periods. In the second survey conducted among Azerbaijani higher education students, the stress level was considered to show the validity of any correlation between stress levels and preferences about education mode.

Despite the volume of articles globally over the past years on distinct aspects of online education under COVID-19, few articles have been published on students' experiences with online education in Azerbaijan (Doghonadze et al., 2020, Imanova, 2021; Murshudova and Shahmarova et al., 2021; Valehov & Gachayev, 2021). Several describe government efforts to transition to online education by offering classes using Microsoft Teams for school and university students (Imanova, 2021), and producing over 6,000 TV-based lessons for students in rural areas with no internet access (Valehov & Gachayev, 2021).

Purpose of the Study

This exploratory and longitudinal research aims to compare student perceptions of online learning experiences at the beginning of the pandemic and after students became accustomed to three semesters of online learning. The study analyzes the conditions that determine the transformation of perception and provides recommendations for improvement based on students' opinions and expectations. In both surveys, the hypotheses aimed to decide whether the experience of students of online education could substantially and positively impact their preference toward online education. If it could not, the research inquired as to which factors might cause a tendency toward opting for traditional education.

The study is of paramount importance as it is the first study examining online learning in higher education institutions in Azerbaijan during the mandatory transition due to the pandemic.

Methodology

Both studies employed a Likert scale online survey as the primary data-collection method, with closed and open-ended questions. The survey was distributed through various networks among most higher education institutions in Azerbaijan. Participants responded to the surveys self-evaluating their stress level and mental health during online education and their preferences for traditional learning versus online learning. The open-ended questions allowed students to elaborate on their online and traditional education preferences. Open-ended answers helped to understand the students' choices and discover the most popular reasons, based on university representation and identify if top-performing students had a different attitude towards online education than the low-performing ones.

The survey questions were categorized into the following topics:

- Information on prior online education experience before the pandemic
- Reasons for preferring online education
- Motives for selecting traditional education
- Mental health-related evidence
- Evaluation of the teaching staff technical and online teaching skills, by students (added in the second survey)
- The possibility of getting higher grades (added in the second survey)
- Grade point average (GPA) distribution of respondents (added in the second survey)
- Open-ended questions for added options (added in the second survey)

The research team used a comparative analysis method to understand if students' attitudes toward online education have changed positively or negatively over the academic year of adapted online education.

Table 1
Survey Results in Percentages and Numbers

University	Percentage	Count
ADA University	23.08	393
Azerbaijan University of Languages	20.67	352
Azerbaijan State University of Economics (UNEC)	8.69	148
Azerbaijan State Pedagogical University	8.51	145
Mingechevir State University	9.69	165
French-Azerbaijani University (UFAZ)	7.69	131
Azerbaijan State Oil and Industry University	5.46	93
Baku Engineering University	4.46	76
Azerbaijan Medical University	3.64	62
Baku State University	2.70	46
Lenkaran State University	2.47	42

Results and Discussions

Since online education was not studied in Azerbaijan before the initial 2020 survey by the research team, there was no basis for comparison. Surveys showed that most of the prevalent trends during the pandemic have increased. Comparing the key findings of both surveys, researchers recorded that in the initial study, 63% of respondents expressed a preference to continue studying in the traditional mode, while 36.5% preferred the online method of learning. The impact of experience on the opinion of respondents was the main variable to test the theory. Students were asked to provide information about their preceding online learning experience. Only about 30% of all respondents reported that they had any experience of online learning in various forms, not necessarily only provided by universities.

A year later, students who had studied for three semesters online at their universities, answered the comparative questionnaire, again favoring the traditional learning. Online education experience increased from 30% to 100% in this period. Respondents (77%) demonstrated a 13.5% increase in their preference for returning to traditional education. Analyzing those respondents, the research team concluded that 59.8% of those respondents are top-performing students with GPA scores ranging between 80 to 100. Studies revealed that technical unpreparedness and a lack of related skills, were the primary sources of dissatisfaction among students of almost 20 Azerbaijani universities. ADA University, Azerbaijan University of Languages, Mingechevir State University, Azerbaijan State University of Economics (UNEC), and French-Azerbaijani University respondents topped the list of over 1,700 respondents. Most students at these universities with sufficient technical resources still preferred traditional education, even after a year of studying in online mode. With a 13.5% decline in comparison with the results of the first survey, the second survey showed 23% were still firm in their decision to be educated online. In addition, most students also admitted to experiencing stress due to the spread of COVID-19.

The major arguments selected by supporters of online education were the possibility of spending less, having more free time for studies, and the opportunity for self-time management. These were followed by feeling more relaxed during online studies; the least popular answer among others was the chance to earn higher grades more easily. A respondent preferring online education admitted, "...during online education, our program has become more compact, and time management has become much more convenient." Another respondent suggested that "Online exams are a little bit easier than offline ones."

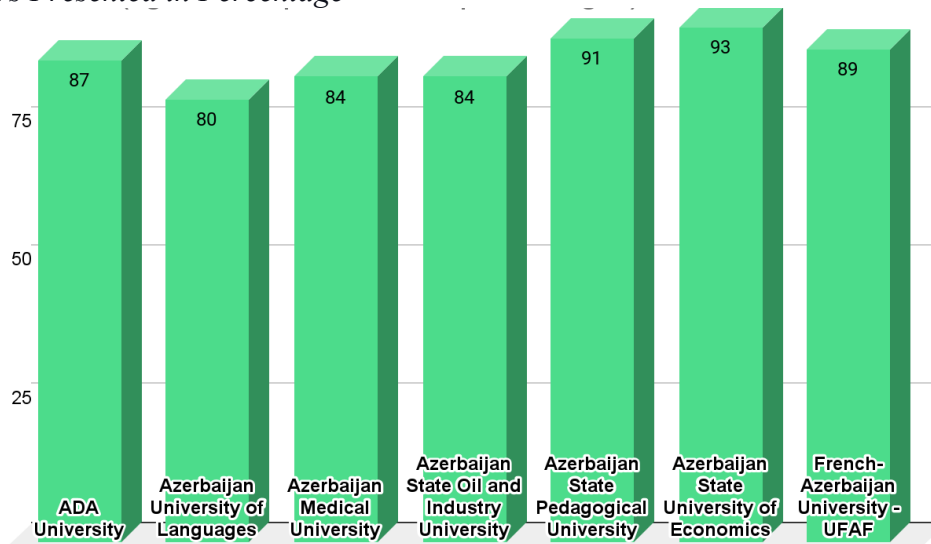
In the first survey, the online learning experience before COVID-19 was emphasized. The hypothesis was based on the notion that online learning was new to most Azerbaijani university students. The stress caused by the pandemic contributed to a negative attitude toward online education, as many students struggled with technical issues, a lack of social interaction, and difficulties with self-discipline that affected students' choices, and led to feelings of frustration and discontent. Despite that, as the research group identified a decline in favoring online learning, we compared the reported 30% of previous online learning experiences in the first survey with 100% in the second. The hypothesis was not confirmed, since the presence of online learning and its duration over three semesters due to the obligatory shift, did not have a positive effect on students' beliefs.

Consequently, the conclusion outlined traditional learning as more appealing to students. At this point, it was crucial to show whether the experience that impacted on the final choice was positive or negative. For the analyses, the research group observed the reasons leading the majority to select traditional learning. The results were confirmed in correlation with variables such as students' GPA, stress levels, perception of teachers' online teaching skills, and reasons for opting for online, or face-to-face education.

The GPA variable was one of the instruments used to compare the choices of high and low-performing students. A cross-sectional analysis ascertained a tendency among students representing all GPA score categories, leaning toward traditional learning, regarding face-to-face interaction as crucial to comprehension of a subject, and to socialization with peers. One of the respondents suggested, "...feedback timing is important; you can get concrete and well-constructed feedback during traditional education". Others highlighted the importance of socializing in grasping the syllabus in a foreign language, "...when it comes to higher education in a foreign language, it is crucial to make interactions with peers and friends, to acquire the language effortlessly and joyously". A substantial portion of underachievers (with GPA less than 50) reported that traditional studying allowed for greater maintenance of responsibility for

their education (90.5%). An “...all subjects can be taught in the classroom” argument for using traditional teaching was slightly less popular among supporters of traditional education. The arguments for the traditional learning method were explored in correlation with universities represented by many respondents. The importance of in-class interaction for a better grasp of the subject was the most popular choice among the following universities (see Table 2).

Table 2
Numbers Presented in Percentage



In both surveys, female respondents predominated, though female and male respondents shared virtually identical attitudes, underlining the importance of face-to-face classes and the role of communication in their educational lives. Male respondents opined that traditional classrooms help to maintain a level of responsibility.

One reason for students choosing online education was reduced expenditures, such as lower tuition fees, food, and transportation costs. Similarly, underachievers who preferred traditional education, displayed a deviation from the overarching trend by emphasizing having more free time and better time management; these students considered that online learning allowed them to score higher in tests. The reduction in the cost of online learning, coupled with the arguments for having more free time and feeling more relaxed, displayed the tendency of both women and men to respond in a virtually identical manner, as the numbers were marginally different.

Respondents with average, and higher academic performance were less likely to elaborate on their choice, with the perception of reduced difficulties in achieving better grades. Students with a 30-50 GPA rarely thought they could manage their time and felt more relaxed. The availability of time and the ability for personal time management were not as popular of choices for online learning supporters, as decreased costs of studying, signifying that the most appealing feature of online learning is the possibility of saving on education costs.

ADA University students (393 out of 1,718 or 22.9%) who opted for the online learning mode responded that being able to review classes helped them prepare for exams – “...because the Blackboard system allows us to review our lectures, which is more convenient when we need to study for exams”. Students from UFAZ (27%), Azerbaijan State University of Oil and Industry (20%), and ADA (26%) thought it less likely to get better grades by studying online, in contrast to those from Azerbaijan Medical University (40%), Azerbaijan State Pedagogical University (35%) and Azerbaijan State University of Economics (44%).

Students were asked to rate teachers' level of preparedness; 60.4% of respondents stated that not all teachers were ready to teach online. Only half of the respondents admitted that they were satisfied with the teachers' online lessons. When evaluating student opinions about online learning over three semesters, it should be noted that only 45% of students believed that professors' teaching or technical skills had improved during the period. Teachers who did not have much online teaching experience before the pandemic but managed to improve their performance over three semesters of online learning, were utilized as the baseline for comparison.

Respondents were asked to select their reasons for not opting for online learning and provide their reasons. The most popular option was still the technical question (85.3%), similar to the initial poll. Self-discipline and time management were considered problematic by 64% of respondents; 33.4% of students admitted that their university needed more time to be ready to provide high-quality online classes. Some students expressed concerns about online learning, such as, "One of the main reasons is the quality of sound. Even if I hear and understand what teachers say, it sounds boring and I get exhausted very fast... I can't digest the information and after many... lessons, I stopped understanding what was going on... I just looked at the screen, trying to understand but rarely being able to... it turns... the whole learning process into just reading PDFs."

The hybrid mode of education applied by some universities also raised objections among respondents, "...if we're going to have online learning next semester, either the teachers need to step up in terms of teaching methods, or... don't arrange offline exams, because the results will be bad... you will have 1-2 graduates out of 150". Some also commented, "...online learning with offline exams seems stressful because of the lack... of discipline and seriousness; finals week tends to be stressful." It is evident that students felt they need more face-to-face classes in a hybrid mode of education.

While analyzing the impact of mental health and stress on decisions, it is essential to highlight that 1,093 (63.6%) out of 1,718 respondents indicated that they were experiencing stress, "Traditional studying provides me with better mental health." Another respondent shared their view that, "Traditional learning and physically attending lectures, did not negatively impact my mental health and satisfaction with my life. Indeed, it had many beneficial effects. On the other hand, online classes were detrimental because a lack of human interactions and an insufficient social life took a toll on my mental health." Notably, 956 (87.5%) out of the 1,093 students who felt stressed, preferred the traditional mode over online learning. Students (304) who admitted not being affected by stress shared the stressed respondents' support for conventional education (154 students - 50.7%), while 52 (17.1%) were neutral, the rest (32.2%) preferring online education over traditional.

The research team looked for arguments where the respondents were hesitant or couldn't decide whether they agreed or disagreed with the survey. One peculiar fact arose in the question entitled, "I have managed to get higher grades during online education." This had the most (411) neutral responses in the second survey.

By summarizing the data of three mandatory online semesters in Azerbaijani universities, the survey revealed that 1,058 (61.6%) students out of 1,718 were less interested in online higher education studies. Once again, the dominant part of those respondents (965 of 1,058 or 91.2%) preferred returning to traditional classes. The survey data substantiated the theory that the nature of experience, whether positive or negative, affects the perception of

students about online education more than the length of that experience dictated by the pandemic and the mandatory shift to remote learning.

Conclusion

The first research (2020) on measuring attitudes toward online education in Azerbaijani universities was validated by subsequent investigation (2021), and revealed that respondents predominantly expressed a firm desire to study in traditional mode. Online education support decreased by 13% following a year of compulsory online education, meaning that the duration of experiencing online education did not result in positive attitudes overall. The sole argument in favor of online education was the reduced cost of studies; this was a common response from both male and female, low, and high-achieving students. This trend has also been analyzed from a mental health perspective, as the shift to online education occurred during an unprecedented pandemic. Several studies suggest that the decision-making process tends to be influenced by people's mental health. However, the figures indicated the prevalence of supporters of traditional education in both categories: among those who admitted going through stress, and those who felt less stress. Most of the respondents admitted being stressed during online education "...because online exams are stressful". The lack of social interaction with teachers and peers not only negatively affected the students' grades, it also pointed to a negative impact on stress levels among Azerbaijani students, "...because of some cases of cheating, there are some rules that make my grade decrease (a decrease time range or an increase the number of questions was imposed). So, I couldn't get the grades I got during traditional learning." Student assessments also showed that not all teachers were prepared to teach online, but more than half saw improvements in teachers' teaching and technical skills.

Due to the pandemic and the transition to online learning, this form of education has secured its place in higher education institutions worldwide. Considering the needs and expectations of students will lead to effective reform and increase the approval of Azerbaijani universities among students. The additional answers provided by respondents revealed that students have much to say about online learning and their opinions should be considered, while offering solutions to make this more attractive to students.

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