IBN HALDUN UNIVERSITY
SCHOOL OF GRADUATE STUDIES
DEPARTMENT OF RADIO, TELEVISION, AND CINEMA

MASTER THESIS

THE EFFECTS OF ONLINE LEARNING ON THE ACADEMIC PERFORMANCES OF STUDENTS DURING THE COVID-19 PANDEMIC MEDIA DEPENDENCY, USES, AND GRATIFICATIONS PERSPECTIVE: A COMPARATIVE STUDY IN AFGHANISTAN AND TURKEY

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by

ROHULLAH MOHAMMAD

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APPROVAL PAGE

This is to certify that we have read this thesis and that in our opinion it is fully adequate, in scope and quality, as a thesis for the degree of Master of Arts in Radio, Television and Cinema Program.

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This is to confirm that this thesis complies with all the standards set by the School of Graduate Studies of Ibn Haldun University.

Date of Submission Seal/Signature

ACADEMIC HONESTY ATTESTATION

I hereby declare that all information in this document has been obtained and presented in accordance with academic rules and ethical conduct. I also declare that, as required by these rules and conduct, I have fully cited and referenced all material and results that are not original to this work.

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ÖZ

COVID-19 PANDEMİ DÖNEMİNDE UZAKTAN ÖĞREİMİN ÖĞRENCİLERİN AKADEMİK PERFORMANSLARI ÜZERİNDEKİ ETKİLERİ MEDYA BAĞIMLILIĞI, KULLANIMLAR VE DOYUMLAR PERSPEKTİFİ: AFGANİSTAN VE TÜRKİYE ARASINDA KARŞILAŞTIRMALI ÇALIŞMA

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İlk kez görülen Korona virüsünün neden olduğu küresel pandemi insandan insana virüsün yayılmasını sınırlamak için iş yerlerinin kapatılmasıyla sonuçlandı. Dünya genelinde tüm eğitim kurumları da öğrencilerin eğitim performanslarını düşürmemek için yüz yüze öğrenim modelinden ani bir şekilde uzaktan öğrenim modeline geçtiler. Buna rağmen öğrenim modelindeki geçiş, sayısız faydaların yanı sıra gelişmişlik düzeyi düşük olan, sosyoekonomik seviyesi az ve kitlesel iletişim araçlarına ulaşımın sınırlı olduğu ülkelerde zorlukları da beraberinde getirmiştir. Bu hususlara istinaden, bu tezin amacı KOVİD-19 pandemi süresi boyunca uzaktan öğrenim modelinin öğrencilerin akademik performansları üzerindeki etkilerini Afganistan ve Türkiye'yi karşılaştırarak değerlendirmektir. Türk ve Afgan öğrencilerini akademik performansları açısından karşılaştırmak amacıyla sayısal araştırma yöntemi öngörülerek 200 Türk ve 200 Afgan öğrenciye uygulanan kapalı uçlu araştırma anketi veri olarak kullanılıp istatistiksel analiz aracı olan SPSS yardımıyla değerlendirilmiştir.

Bu çalışma genel olarak Türk ve Afgan öğrenciler arasında KOVİD-19 pandemi süresi boyunca kitlesel iletişim araçlarına olan yaklaşım, algılanan etki ve memnuniyet açısından kayda değer farklılıkların olduğu sonucuna varmıştır.

Anahtar Kelimeler: Akademik performanslar, bilgi boşluğu teorisi, COVID-19 salgını, Çevrimiçi öğrenme, kullanımlar ve doyumlar teorisi, medya bağımlılığı teorisi.

ABSTRACT

THE EFFECTS OF ONLINE LEARNING ON THE ACADEMIC PERFORMANCES OF STUDENTS DURING THE COVID-19 PANDEMIC MEDIA DEPENDENCY, USES, AND GRATIFICATIONS PERSPECTIVE: A COMPARATIVE STUDY IN AFGHANISTAN AND TURKEY

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The global pandemic caused by the novel Coronavirus resulted in the closure of businesses to limit the spread through person-to-person contact. All educational institutions across the globe also closed the physical model of learning with an abrupt shift towards the online medium to sustain the educational performance of the students. However, this radical shift was equipped with a myriad of benefits as well as challenges specifically for underdeveloped countries with low socioeconomic strata and limited access to digital technologies. In this regard, this thesis is aimed to assess the effects of online learning on students' academic performance during the COVID-19 pandemic with a specific focus on Afghanistan and Turkey. To compare the perspectives of the academic performance of Afghan and Turkish students, a quantitative research method has been proposed where primary data was collected from 400 participants (200 Afghan and 200 Turkish students) through a close-ended survey questionnaire which was assessed through a statistical tool, namely SPSS. This study mainly found that there is a considerable difference in attitude, perceived impact, and satisfaction with online learning during the COVID-19 pandemic among Afghan and Turkish students.

Keywords: Academic performances, COVID-19 pandemic, knowledge gap, media dependency, Online learning, uses and gratifications.

DEDICATION

This dissertation work is dedicated to the memory of my Father. Although he is no longer of this world, his memories continue to regulate my life. I wish my father was alive and see my graduation.

I’d like to also dedicate this thesis to everyone in my family, specially to my mother and my brother, HabiburRahman Habib, who with love and effort have accompanied me in this process, without hesitating at any moment of seeing my dreams come true, which are also their dreams. I will always appreciate all they have done for me.

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I'd also like to thank my classmates and everyone who has been there for me emotionally and intellectually as I've worked on my coursework.

Finally, I would like to thank Allah, for letting me through all the difficulties. I have experienced your guidance day by day. You are the one who let me finish my degree. I will keep on trusting you for my future.

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LIST OF ACRONYMS & ABBREVIATIONS

ACT	American College Test
COVID-19	An infectious disease caused by the SARS-CoV-2 virus
DOS	Disk Operating System
GAD	Generalized Anxiety Disorder
GPA	Grade Point Average
HELMS	Higher Education Learning Management System
IT	Information Technology
KSRT	Kansas Silent Reading Test
MOHE	Ministry of Higher Education (Afghanistan)
PHQ	Patient Health Questionnaire
PSS	Perceived Stress Scale
SARS	Severe Acute Respiratory Syndrome
SAT	Scholastic Assessment Test
SPA	Scale of Physical Activity
SPSS	Statistical Package for Social Science
SWLS	Satisfaction with Life Scale
WHO	World Health Organization

CHAPTER I

INTRODUCTION

During the COVID-19 pandemic, governments of different countries implemented lockdowns to decrease the spread of the coronavirus. As a response to the outbreak, educational institutions shifted towards online learning to continue education. Like many other countries, Turkey and Afghanistan also adopted the online medium to ensure the delivery of education amidst the restrictions imposed by the outbreak of COVID-19, including physically distancing the closure of crowded spaces.

The main aim of this study is to find out how online learning affects the academic performance of students during the pandemic with a specific focus on Afghanistan and Turkey to understand the value and interest of students in online classes as well as compression between the two countries. The sample that has been chosen is 400 students, 200 are from Afghanistan and 200 are from Turkey. The data has been collected as primary data collection via email and online sources from students and after data collection, it has been analyzed with IBM- SPSS for the results.

The first chapter of this thesis has discussed COVID-19 and online learning, and how COVID-19 affected the world and contributed to many changes around it. The education system is one of the most important systems that cover all the future generations of a country, and it has been also affected by this pandemic that needs to be considered. In addition, this chapter talks about how the education system came from in-person classes and started online learning, and whether it was effective or not in most countries. Moreover, how did this system come to spread out between schools and universities, and did the students and teachers have any prior experiences with it or not?

The second chapter discusses the perceptions of online learning and teaching during COVID-19. It shows how the COVID-19 period has impacted the education system and also the student's perspective on online learning. In addition, it includes what

issues the students faced in these selected countries (Afghanistan and Turkey), and whether they can continue with this system in the future or not. Add on, this chapter covers the teacher's perspective about the system and what are their challenges with online learning.

The third chapter explains the research problem, the research questions, the hypothesis, the aims of the study, and the importance of online learning during the pandemic. In addition, this chapter includes some term definitions and explanations that have been used in the study. Furthermore, it includes the data collection sources, the methodology of the study, and data analysis. The last part discusses the questionnaires and how the questions have been designed and analyzed for more findings and results. Chapters four and five include the results and findings of the study. The results are shown with charts and tables, and a discussion of each finding. Overall, what is the level of satisfaction with this study and the method; it discusses the different results of two selected sample size countries.

Chapter six contains the conclusion and summarizes the main findings of this study which show how online learning impacted the academic performance of students during the pandemic. In addition, it covers the recommendations for further research, the governments, and educational institutions.

1.1. Online Learning and Covid-19

1.1.1. The Spread of Covid-19 in the World

COVID-19 was a lethal and serious global infectious disease that prevails on an international level and due to its viral characteristics, it was spread from individual to individual and soon it covered the entire world. The pandemic situation of COVID-19 impacts all around the world and according to the WHO data, approximately 550 million people got infected and almost 6.34 million people have died from the viral disease (Figure 1.1). The family of the virus was considered Coronavirus and it infected both animals and humans (Organization., 2020). The Coronavirus originated in China, the city of Wuhan that has more than 11 million residents in 2019. In the previous decade, Coronavirus was outbreak due to an infectious virus in 2003 called

Severe Acute Respiratory Syndrome (SARS) (Almarzouqi, Aburayya, & Salloum, 2022).

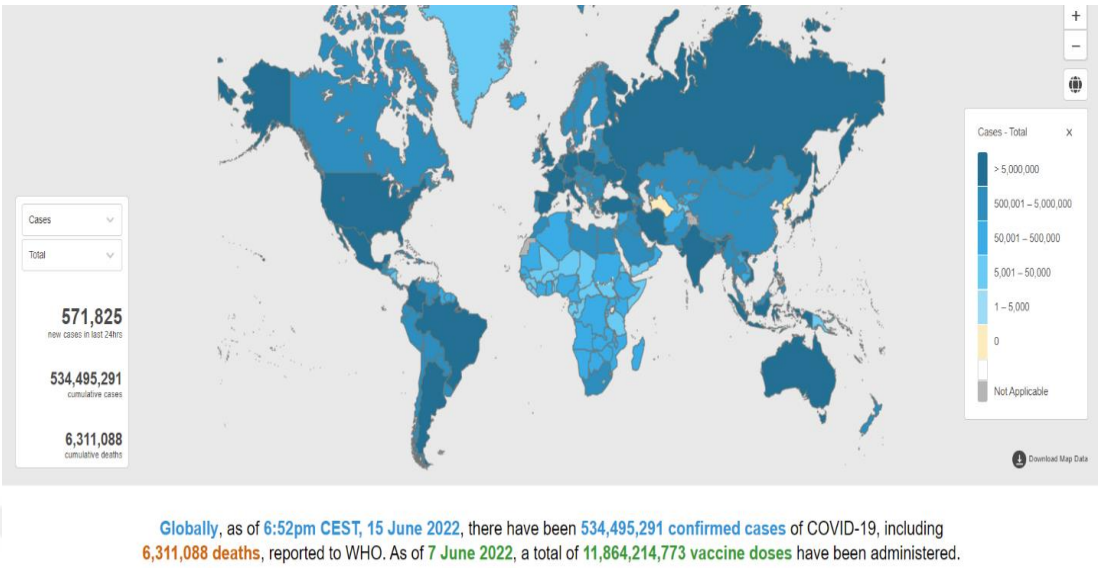

Figure 1.1. COVID-19 Worldwide Statistics

Source: World Health Organization, 2022

The symptoms of Coronavirus are similar to flu and fever with dry cough and the most common symptoms of Coronavirus are fatigue, faints, and nasal congestion. The pandemic situation of COVID-19 spread all around the world with common symptoms that people do not feel a sense of smell and they could not taste. According to the World Health Organization, it was investigated that different pieces of evidence are available that provide information about infection of new Coronavirus. The case is related to the disease of the respiratory system leading to pneumonia and it increases the risk among elderly people who have different medical issues such as heart problems and diabetes. According to the global report, approximately 14.8% of individuals are aged 40-49, and no children less than 9 years old were impacted (Burgess & Sievertsen., 2020). The evidence represented that older people have a weak immune system; therefore, infections develop among such people, and they required hospitalization to control the disease. The evidence also represented that the COVID-19 virus could last up to three days. Suppose the symptoms are continuously increasing for more than three days. In that case, the patient is advised to meet with the health practitioner and adopt the habit of washing hands frequently with soap, creating isolation from family and friends. WHO strictly emphasized wearing the mask,

specifically in public places and transport, and it was necessary to wear a mask if an individual has any sickness.

The pandemic situation was not normal as COVID-19 created difficulty for the people as if no one has natural immunity to fight against the Coronavirus without using necessary measures. It was stated that the Coronavirus spread worldwide and WHO led the pandemic situation and implemented public health emergency of international concern. As just in one month, it spread in China and became the cause of thousands of deaths, COVID-19 was proved to become the cause of illness (Burgess & Sievertsen., 2020).

The countries and territories that were connected with China relatively got impacted and suddenly governments started to put restrictions on the transactions between the countries, but the virus was uncontrollable in February 2020, the Philippines also reported the first case of Coronavirus and in the next two days Japan and France also reported different cases of COVID-19. Most countries got impacted in February 2020 and on March 11, WHO declared COVID-19 as a pandemic virus because 4500 deaths were recorded across the world from 30 countries and states (Sivasankar, 2022). Two-thirds of total deaths were recorded from China and Italy also demonstrated with 300 daily deaths and it was reported that a large number of people died every day in the United States in the mid of April as well. At the start of June, the pandemic situation of COVID-19 shifted to America and started to decrease the number of deaths due to the implication of restrictions and lockdown (McKibbin & Fernando., 2020).

1.1.2. The Beginning of Online Learning During Covid-19

Education has always been an essential need for humans. In recent times, this need has become so comprehensive and urgent that it is not possible to satisfy the increasing demand for education with the present resources. That is where the role of developments in technology comes in. Innovative ways to educate have changed the learning landscape and introduced new disciplines in education like online learning, online education, and distance learning before the COVID-19 pandemic (El Said, 2021).

The outbreak of the Coronavirus not only resulted in the sudden shift of education from traditional to online models, but also forced educational institutions to improve their technological infrastructure for continuing the delivery of academic learning programs. The abrupt transformation, however, created several socio-economic challenges. Though distance learning is an effective solution to continue education during the COVID times, the impact on underdeveloped and developing countries is far more ferocious as opposed to the developed nations. The global outbreak caused by the novel Coronavirus (COVID-19) led to unprecedented public health concerns, compelling governments to impose strict lockdown measures to limit the social contact and spread of the virus. The education sector was no exception and encountered closures of the educational institutions causing challenges for the teachers, students, and parents (Clark et al., 2021; Eyles et al., 2020; Gopal et al., 2021). As a response to the outbreak, educational institutions shifted towards online mediums to continue education and teaching (Hashemi, 2021).

Figure 1.2. The Beginning of Online Learning During COVID-19

Source: Getty Images

The COVID-19 pandemic has changed the way people receive and perceive education. Due to the comfort of learning online, the rise of hybrid-style learning is inevitable. Now, education is less centralized and there are many more resources for students to

get their education. Initially, education institutes have made many faults regarding online education platforms. Some of the universities offered their platforms and some outsourced online education platforms. Due to the old ways of education in a physical class, teachers had problems getting used to the new ways. The effect of the COVID-19 pandemic on education seems that it will last. Despite the fact that the internet is a huge technological innovation that is revolutionizing society and institutions worldwide, the move to online education caused numerous challenges for both the teaching and learning communities (Volery and Lord, 2000).

According to research done in Nepal with 385 university students of different disciplines, the online learning environment remarkably varies from the typical classroom setting regarding learners' motivation, satisfaction, and interaction. The research questioned the students' perceptions of the online classes they had taken during the COVID-19 lockdown (Thiyaharajan, Aditya, Girish, & Aiswarya, 2020).

1.1.3. Online Learning Programs That Spread and Used During the Covid-19 Pandemic

During the pandemic situation of COVID-19 governments of different countries implemented lockdowns to restrict individuals from contracting with each other and controlling the spread of COVID-19 (Dhawan., 2020). Due to the implementation of lockdown, education activities were also restricted, and educational institutes prefer to shift learning programs with the help of an online system. Consequently, the education system was dramatically changed and there was an increase in the use of Online learning methods. Due to the sudden increase in the restriction and conversations in the education system regarding online learning programs, the educational institutes required to adopt the technology and investment in ed-tech that was reached approximately US$18.66 billion in 2019, and the overall market of online education was estimated to reach up to $350 billion by 2025 (Marinoni, Land, & Jensen., 2020).

The education institute responded to the significant demand of students with online learning programs and provided free access to different platforms such as Zoom, Google Classroom, Microsoft Teams, Google Meet, Cisco Webex, GoToMeeting,

Ding Talk, and BYJU's (Table 1.1). During the COVID-19 pandemic, Zoom was the main choice for many universities, organizations, and students. All technology companies started to increase their capabilities to provide one-step facilities to create a connection between teachers and students. For instance, a Singapore-based company developed an application to meet the exponential needs of teachers and students by providing unlimited videoconferences, auto-translation, capabilities, and editing of the project work that was highly admired by professional educators. BYJU'S[1] is a Bangalore-based educational technology that was used to provide free live class links with the help of the app and the number of pupils utilizing this application was predicted to have increased during this period. Alibaba's distance learning solution ding talk also provided services to more than 100,000 large-scale remote cloud servers in just one month (Schleicher., 2020).

Table 1.1. Popular Online Learning Platforms Used During the COVID-19

No	Platform Name	Logo	Link
1	Zoom	zoom	https://zoom.us
2	Google Classroom	Google Classroom	https://classroom.google.com
3	Microsoft Teams	Microsoft Teams	https://www.microsoft.com/microsoft-teams
4	Google Meet	Google Meet	https://meet.google.com
5	Cisco WebEx	webex training center	https://www.webex.com
6	GoToMeeting	GoToMeeting	https://www.goto.com
7	Ding Talk	DingTalk	https://www.dingtalk.com
8	BYJU'S	BYJU'S The Learning App	https://byjus.com

[1] BYJU'S is an Indian multinational educational technology company founded by Byju Raveendran in 2011 and currently has over 115 million registered students.

The implication of online learning was not without challenges, but educational institutes were required to adjust to these challenges as the pandemic situation was not a short period; therefore, it was necessary to manage effective online learning methods and access the technology and show the evidence of effective learning. The research demonstrated that the students up to 25 to 60% considered that learning online material is helpful and could be used as an alternative to the classroom. Approximately less than 40% of students considered that the traditional classroom setting is more appropriate as the student could learn in a good environment as compared to sitting in their rooms (McKibbin & Fernando., 2020).

It was reported that the pandemic situation completely disturbed the education system and several educational institutes have lost their assets because these educational institutes could not focus on the use of online learning methods and only depend on traditional academic skills losing a large market portion in the educational industry. It shows the significance of online learning programs that increase the use of online learning programs that are above-mentioned and shows that Online learning technology performs a great role to overcome the challenges of COVID-19 and saves the time of students (Agung, Surtikanti, & Quinones, 2020).

It is a well-known fact that the whole educational system was converted to an online platform and it demonstrated that online teaching and learning methods were adopted by educational institutes; also online examinations were conducted that are considered to reduce the efficiency of students, but one fact could not be ignored is that it also enhanced the use of Online learning methods and improved the skills of students' use of the online educational landscape that is helpful to increase the research skills of students.

1.1.4. Communication Process in Online Learning During Covid-19

Communication has become highly digitalized in the present times. Even before the pandemic, reliance on digital technologies for communication was an integral part of students' lives. With the surge of the pandemic, online learning became highly dependent on technology for communication. Every person involved in the process of learning essentially needs digital technology to communicate effectively. During the

process of communication, the media holds great importance. Media has acquired different shapes in the present times, however, the widely followed media in current times are digital media. Digital media shapes the lives of its users in different ways (Couldry and Hepp, 2018). This study is designed to discuss the communication process in online learning during COVID-19. The theoretical frameworks used for this study are the Uses and Gratification Theory and Media System Dependency Theory.

1.1.5. Media Dependency and Online Learning

The theory of Media Dependency is an approach developed by Sandra Ball-Rokeach and Melvin Defleur in 1976 to study the influences of mass media on audiences as well as the linkages between media, audiences, and social systems that take a rigorous and organized approach (Ball-Rokeach & DeFleur, 1976). Media dependency theory is a relationship in which one party's wants and ambitions are dependent on another party's resources. The link between media and audiences is a major emphasis of the idea. The theory places a significant focus on the connection that exists between viewers and various forms of media. People living in industrialized and information-based societies are more likely to turn to the media to satisfy a variety of needs. The link between media and audiences is a major emphasis of the idea (Fakhar Naveed, 2017).

According to media dependency theory, media shapes the lives of its users. The impact of media on people’s life is directly related to the needs of the users that are fulfilled by media. A person who relies on media more is influenced by it more as compared to others (Jung, 2017). In the current times, media shapes the lives of people instantly because they rely on media extensively. During COVID-19 dependency on media for learning purposes increased dramatically. This dependency impacted the nature of communication. People were not used to instant connectivity for learning purposes because before the pandemic they relied mostly on conventional media such as physical classrooms, printed books, and newspapers. The abrupt shift towards digital access to learning tools left a mark on learners (Kooli-Chaabane et al., 2022).

In times of the pandemic, communication is carried out through three mechanisms which are digital media, conventional media, and interpersonal communication.

Digital media emerged as the most active media for communication during the pandemic. For learning purposes, digital media helped people to advance remote learning and accelerate their research works. Several learners relied on digital media for gathering information (Salman, 2021). Media dependency has evolved over the course of time. Before the pandemic, dependency on media was less for the learners, however, during the pandemic learners had to rely entirely on digital media not only for their academic needs but also for entertainment and leisure. Spending more time on media led people to witness a more powerful impact of it on them (Munz, 2020).

Communication through digital media has resulted in a lack of social connectedness. Face-to-face interactions have become less frequent which has deteriorated the quality of it among students (Mahmud et al., 2018). The ability to communicate in real-time scenarios has decreased in students which will eventually shape their professional lives. Students have become shyer, and their speaking skills have reduced dynamically. These outcomes of online learning make students improve the quality of communication online, however, the social connectedness decreases which have its negative consequences. Accessing information online has become easier, however, articulating that information through speech has become difficult for students (Nguyen et al., 2021).

During COVID-19, online learning has changed the role of students in the social context quite dramatically. Students are no more confined to academic activities; instead, their role in extra-curricular activities has increased significantly. Governments are using carefully developed content to influence students for changing their political identities. Researchers have found that students desire to share the information that they believe is right with their friends and family (Hashim et al., 2020). This dependency on media is changing the way students choose their careers and excel in their academic lives.

1.1.6. Uses and Gratifications and Online Learning

The uses and gratifications theory, developed by Katz and Gurevitch in 1973 (Katz, Blumler, & Gurevitch, 1973), belongs to the communication studies literature that is applied largely in different types of media technology (Wang, Costa, Miller, Carr, &

Kohlbacher). In other words, it is a theoretical framework to find out the various reasons behind the usage of any given medium and the most important principle of this theory is that users are energetic, careful to select, and motivated to use a specific media (Kaur, Dhir, Chen, Malibari, & Almotairi, 2020). According to this theory, people use different media technologies that give the satisfaction of desire and gratification of knowledge, social interaction, entertainment, literature, etc., and play an important role in implementing technology in life. This theory clarifies the needs of smartphones, but it has a wider range or segment of human needs through different mediums of technology (Wang, Costa, Miller, Carr, & Kohlbacher).

During the COVID-19 pandemic, everyone faced lockdown, and most importantly educational institutions were shut down so that no classes were held physically. These institutions conduct their classes online instead of in-person classes for students to complete their education. Students needed a device to attend their online classes, and based on the findings of this study, in developing countries such as Turkey students were having access to laptops and desktop computers, while in underdeveloped countries, like Afghanistan, the majority of students had only access to smartphones because smartphones are easily available at cheap prices for people and everyone uses a smartphone to fulfill many gratifications like knowledge, interaction, communication, etc.

Uses and Gratification Theory explains the needs, motives, and gratifications of media users. This theory is user-centric as it analyzes the impact of media in the context of the demands and aspirations of the users. This theory proves quite beneficial in understanding online learning during a pandemic by keeping a focus on communication. Through this theory, broader impacts of communication through different media on learning experiences can be located. The key postulates of this theory state that media serve four functions in society. These functions are surveillance, correlation, entertainment, and cultural transmission. This theory also holds that media users are not passive instead they are active. They shape media which subsequently influences the choices made by them (Kujur and Singh, 2020).

The learning process is considered hectic by students and the core reason behind the poor performance of students is a lack of interest and motivation in them. Researchers

have found that online learning increases motivation in students for learning. Their attitude towards studies changes and their engagement in learning activities increases. Enjoyment in the classes, convenience in the accessibility of courses, and socializing help trigger motivation in students (Khoa, 2020). In this context, online learning provides new avenues for students to learn and improve their academic standing. If any of the aforementioned factors is compromised, then the performance of students is affected negatively.

In the digitized world, the ability to communicate effectively on different media varies. People with good technological skills communicate better than those who lack these skills. These differences are sharp across racial and ethnic lines. Researchers are of the view that the quality of communication on a racial and ethnic basis differs sharply. Interacting with people from different cultures online is difficult. Lack of cross-cultural knowledge bars people from communicating effectively. These factors play a role in online learning as well. In online classes, interactions among class fellows have different outcomes for different people. The uncertainty of the nature of the relationship with peers places an additional burden on students during learning online (Brown and Keep, 2018).

Gratifications change for different courses online. Every course has specific attributes, and some factors influence the learning process of students more in those courses as compared to others. For example, in entrepreneurship of government, trust in government, motivation to learn, and prospects for gaining profit through these courses remain the most important factors that influence the learning process (Wu and Song, 2019). If these factors are present in an online learning course, the motivation for learners will be strong to take the course and participate actively in its activities.

1.1.7. Knowledge Gap in Online Learning

Society plays an important role in shaping the learning outcomes of people. Stability and peace in society enable learners to pay attention to their academics and fulfill their roles as students efficiently. Societies where peace does not exist such as war zones do not support healthy academic activities. Stability is related to the availability of infrastructure for the students. The areas where insurgencies or other forms of

instability prevail do not record higher levels of performance of students. The stability of society also allows efficient communication. With uninterrupted sending and receiving of information, tasks are completed easily and perfectly (Rubley et al., 2021).

Media also shapes the learning outcomes of students primarily by its accessibility. Access to different media learners helps them gather and integrate their academic activities. Banning or censorship of media bars learners from connecting with each other and gathering information. Interruption in connectivity is the primary factor that impacts online learning negatively. In the cases where an interruption in connectivity does not happen, the performance of students improves quite dramatically (Yra et al., 2020).

According to the Knowledge Gap theory, which was first proposed in 1970 by Philip J Tichenor (Tichenor, Donohue, & Olien, 1970), there is a greater benefit to those located in higher socioeconomic demographics than to those located in lower socioeconomic demographics. The Knowledge Gap theory suggests that there is an increasing disparity between those who are privileged and those who are not in terms of their knowledge and access to education, which consequently leads to the widening of the rich-poor gap. Thus, it is concluded that the greater advantage wealthy people have over disadvantaged ones will perpetuate unless something is done about it, leading to this gap getting wider and wider over time. In an educational setting, knowledge gap theory can play out in several ways. For example, students from higher socioeconomic backgrounds such as Turkey in this study may have parents who are better educated and can therefore help them with their homework more effectively. They may also have greater access to resources like tutors and private schools. As a result, these students are likely to perform better in their educational institutes, creating a vicious cycle that further entrenches the divide between rich and poor. At present, this trend is expected to continue as people from low socioeconomic backgrounds have lower levels of human capital investment than people from high socioeconomic backgrounds (Tichenor, et. al., 1970).

Lastly, the student-instructor relationship help is an important factor as well. In online learning, students are the audience, and the teacher is the presenter. The academic qualification, cultural background, and digital skills of the audience shape their

relationship with the instructor. For a good student-instructor relationship, all these factors are important. A good academic qualification allows students to grasp learning outcomes quickly. Likewise, cross-cultural awareness helps students to form good teams with the class fellows thus the learning process becomes efficient. In addition, digital skills are a paramount need for an efficient online learning experience. Students who lack these skills seldom perform well in academics (Yusuf and Ahmad, 2020).

The factors detailed above impact the life of a student in many ways. The most important effects, in this regard, are effects on the cognitive and behavioral attributes of the students. Students from peaceful and stable societies have the capacity to concentrate on learning more. Likewise, students who have strong accessibility to media show digital behavior as compared to those who have less frequent access to media. In short, the more a person uses the media the more influence it should have on that person. No person can remain immune from the impacts of media in the modern globalized world.

1.2. The Situation of Online Learning During Covid-19 in Afghanistan and Turkey

1.2.1. The Situation in Afghanistan

According to Almarzouqi and Salloum (2022), there are several types of challenges and opportunities that were enjoyed by the students and teachers in Afghanistan due to the implementation of lockdown in the pandemic situation of COVID-19 (Almarzouqi, Aburayya, & Salloum, 2022). The study analyzed the attitude and relationships of the students during the online learning programs and specifically explored what was the perspectives of students related to the online learning and distance learning programs during the pandemic situation. The results represent that there is no relationship with the attitudes of students toward distance learning end and quality qualitative findings represented that distance learning helped the students to overcome challenges and avail opportunities. On the other side, it is also a reality that the students lack access to online learning platforms during the pandemic situation of COVID-19 in Afghanistan (Himat, Takal, & Hakimi., 2021).

The real tragedy happened in Kabul when the students came across from poor families and they simply did not have the ability to pursue online education during the pandemic situation, and it was a genuine reason that they did not have the proper internet connection and access to technological devices to attend their online classes. In Afghanistan, the schools were shut down in March 2020 and over 10 million students were out of school, and approximately 300,000 students were from public and private universities that do not have Internet and electricity to take their online classes at home. According to the report, approximately 3.7 million students were not able to continue online learning and only 28.6% of students could access distance-learning programs, 13.8% of students used radio, and only 0.2% of students connected with the Internet (Mohammadi, Mohibbi, & Hedayati, 2021). Although the pandemic situation of COVID-19 is difficult for every country, you understand that poor countries like Afghanistan could not afford online learning programs which was a great difficulty for the students.

Tadesse and Muluye (2020) highlighted that the COVID-19 crisis led to a social divide where children from advantaged and economically stable parents were able to afford better digital infrastructure while young teachers with a better understanding of the digital technology skills were able to keep up with the distance learning. In underdeveloped nations like Afghanistan, with low socioeconomic strata, the adoption of online education is far more effective than the developed nations. Hence, there is a need to assess the impact of online education during the COVID-19 epidemic in underdeveloped and developing countries with a specific focus on Afghanistan and Turkey.

The government of Afghanistan dismissed the delivery of physical education to contain the spread of the COVID-19 virus. The Ministry of Higher Education (MOHE) of Afghanistan developed and administered an online teaching platform by the name of Higher Education Learning Management System (HELMS) to respond to the education crisis created by the pandemic (Hashemi, 2021). All universities nationwide experienced the online teaching scenario as a new platform without any prior preparation for such a crisis.

On the other hand, the online medium for education is not without challenges. A study based on the analysis of student satisfaction and academic performance in the Afghan context revealed that online education negatively affects the academic performance of students since the majority of the learners are not equipped with internet-based learning via smartphone or computer (Himat et al., 2021).

1.2.2. The Situation in Turkey

The research conducted by Umran Alan demonstrated that childhood educators are related to distance learning during the pandemic situation of COVID-19 and the study was conducted through an interview. A large number of international institutes are working in Turkey and during the crisis, students from different countries could not go from one institute to another as there were restrictions on physical learning (Aguilera-Hermida, Quiroga-Garza, Gómez-Mendoza, Villanueva, Alecchi, & Avci, 2021).

With the implication of online learning, Turkey has overcome the risk of closed educational activities by arranging to develop the online learning platform, and it was not difficult for the country because Turkey is a developing country where the majority of students have access to the internet, and they could join their online classes. In Turkey, even early childhood education was also continued during the pandemic situation. The pandemic situation affected several aspects of life and application is one of the most significant factors that completely changed all over the world.

The research team last rated that the government supported the families to continue the students' education and faced several difficulties to overcome the challenges in the way of education. Several school administrators revealed that the efforts and practices were made to support the education of the students as well as support them psychologically to avoid the trauma and helped the families to improve their technical competencies. The Turkish government took extra care of the public and enhanced the user-friendly distance education platform which was helpful to meet the requirements of high-quality education over distance. However, teachers were also required to have the training to use technological devices, therefore, the government also supported the

educational institutes to provide the required training for the teachers as well (Hwang & Chien., 2022).

The Council of Higher Education in Turkey accelerated its adoption of distance education methods to ensure the continual delivery of education among the public and private sectors. Similar to the measures adopted by Afghanistan, the government of Turkey designed and launched platforms at the school and university levels to support distance education in response to the COVID-19 outbreak (Elhadary et al., 2020). In response to the pandemic, the technological development in the education sector was accelerated to cater ~~to~~ the loss of education during the COVID-19-induced restrictions.

A plethora of research emphasized the effectiveness of online mediums while stating that online learning helps in yielding better academic results among students (Zheng et al., 2021). On the other hand, some studies have established a negative relationship between online learning and academic performance (Chen et al., 2020). Gunes (2020) discussed several benefits associated with online learning that positively affects the academic performance of individuals/students, such as–the shift towards online medium has resulted in the establishment of student-centered education delivery. In an online system, teachers play the role of facilitators instead of opting for a one-way teaching model approach (Sad et al., 2014). In an online scenario, the teacher asks the students to explore on their own while remaining in close contact with students to help them in the form of feedback and comments (Gunes, 2020).

Research conducted in Turkey revealed that students of web-based learning programs have a more positive association with lifelong learning opportunities than those attending face-to-face learning. Hence, online education improves the capability of students to share and access resources while also facilitating cooperation and socialization. Moreover, a survey based on Turkish students' perspectives regarding the preferred medium after the pandemic revealed that around 46 percent of the students prefer going back to face-to-face education as soon as the pandemic restrictions ease out due to a lack of adequate planning, design, and development of the online instructional programs (Sarac, 2021). Limited capability and availability of technologically advanced resources in underdeveloped countries create a hindrance

impacting the academic performance of students during the epidemic. Hence, there is a dire need to assess the impact of online learning on the academic performance of students during the pandemic with a specific focus on Afghanistan and Turkey.

CHAPTER II

ONLINE LEARNING AND TEACHING DURING COVID-19

2.1. Perception of Online Learning and Teaching During Covid-19

The COVID outbreak has influenced all sectors of life with a predominant impact on the teaching methodologies adopted by educational institutes. During the COVID-19 pandemic, a considerable majority of countries adopted the approach of online learning (Bokayev et al., 2021). The government of developing and least developed countries took measures to avoid the spread of COVID-19 and assured continuity of educational processes within the region via online learning (Al-Rahmi et al., 2020). The COVID-19 pandemic generated significant changes in the process of teaching and learning, and educational institutes were constrained for carrying out educational activities exclusively online (Sobaih et al., 2020; Alsoud & Harasis, 2021).

Before the pandemic, internet-based learning was considered an alternative to the traditional learning approaches in some of the developed countries of the world (Abou El-Seoud et al., 2014); however, the pandemic situation influenced the educational institutes of the developing population to entirely shift toward online learning.

Orfan and Elmyar (2020) proclaimed that similar to other countries of the world, the government of Afghanistan dealt with the pandemic situation by dismissing the educational institute. The Ministry of higher education (MOHE) in Afghanistan compensated for teaching and learning by adopting an online teaching system. The Higher Education Learning Management System (HELMS) was designed and implemented by MOHE to provide a rapid response to the COVID-19 crisis within educational institutes. In addition to Afghanistan, the Higher Education Council in Turkey also adopted the method of distance education to avoid interruptions in teaching and sustain learning at all levels of education among the public and private sector institutes.

Elhadary et al. (2020) also proclaimed that online platforms were launched by the government of Turkey for supporting schools as well as university-level education in response to the COVID-19 outbreak. Within the critical situation of the pandemic, the students, as well as teachers, experienced the challenges of adopting and successfully using the learning management systems. In most countries, shifting toward online learning was the first attempt for teachers. At the same time, shifting entirely towards online learning was challenging for the students and influenced their learning and academic performance.

The perception regarding online learning is not the same in Turkey and Afghanistan. Concerning Afghanistan, the study of Sarwari et al. (2021) highlighted that since Afghanistan is a war-torn country that has a serious infrastructure problem, the online education system in response to the COVID-19 pandemic is not much appreciated. This is reflected in the attitudes of the students who are increasingly unable to have a stable internet connection and attend classes without any interruption. The same conclusions were drawn in the study of Noori (2021) who signified that the student community in Afghanistan was abruptly impacted, and since most of the cities in Afghanistan do not have a stable internet connection, they were finding it hard to connect in the classrooms. The general perception was not very comforting, and this forced the Ministry of Education in the country to revise the policy and come up with training programs that can address the current challenges confronted by the education community.

On the contrary, perceptions were very different in Turkey as compared to Afghanistan. The study of Siregar (2021) outlined the teachers' perspective on online education. The researchers found out that even though the country did not have as many connectivity issues as Afghanistan, training the teachers and students has been very challenging. This is because most of the teachers were two or three generations before the advent of the internet, and they did not know how to use multimedia or visual simulations in virtual classrooms. This made the teaching sub-optimal, and as a result, the teaching was not carried out in the same spirit.

A case study of online education in Turkey during COVID-19 has been conducted by Süğümlü (2021) who concluded an overall negative experience for the teachers

because their digital skills were not well-defined. Some of the teachers never had the opportunity to use virtual classrooms, and they had to be first trained on top of their regular teaching training sessions. As a result, the teachers found it hard to balance their personal and professional lives, as well as the effectiveness of teaching was negatively impacted.

2.2. The Impacts of Covid-19 on Teaching-Learning Process on Academic Performance: Perceptions of Students

Several researchers have examined the impacts of online learning on the level of satisfaction and academic performance of students (Hebebci et al., 2020; Sad et al., 2014). It was found that online learning during the pandemic ensured continuity of education despite the closure of educational institutes, assured lifelong learning experiences for the students, and reduced commuting costs (Hebebci et al., 2020). The analysis of the levels of satisfaction and understanding of the students after being shifted to online education revealed that students habitual of learning by using textbooks and study materials experienced accessibility to the available online information for the very first time. At the same time, Turkish students also reported that the online educational environment allowed students to spend more time studying and revising their concepts, which positively influenced their academic performances.

Another research conducted by Sad et al. (2014) revealed that online learning improved the students' competence and enabled them to adjust their learning pace on their own. The analysis of the impacts of online learning on the academic performances of the Turkish students revealed that the online learning platforms provided individualized learning experiences to the students, and as it corresponded with several learning styles, the online learning-teaching approach was reported to be equally beneficial for the students having different styles of learning (Sad et al., 2014). Thus, online learning provides students with the opportunity to learn from multiple sources, revise their concepts, and develop better levels of understanding.

On the contrary, Hebebci et al. (2020) examined the perceptions and experiences of the students and teachers regarding the online education system implemented within Turkey during the pandemic and found that students experienced challenges while

performing group tasks during online learning because of a lack of opportunity to socialize. The study found that a considerable majority of Turkish students reported that online education had negatively influenced their overall academic performance because they could not develop their levels of understanding similar to the onsite classes. Other students reported that during online learning, they tried to cover the course contents from the online lectures, as well as from the textbook.

Similarly, Sad et al. (2014) also reported that students experienced difficulty accessing the online available study material due to copyright limitations. The analysis of the perspectives of Turkish students regarding online education during the pandemic revealed that around 46 percent of the students preferred physical education after the pandemic situation (Sarac, 2021). Thus, due to the constraints experienced by the students from learning via online means, the students preferred physical education despite the benefits of online education.

The research conducted by Mohammadi et al. (2021) found that the Afghan students reported that with limited knowledge and expertise in using the online learning management systems, they experienced challenges in understanding the terminologies and functions. Hashemi (2021) analyzed the perceptions and levels of satisfaction of the Afghan students regarding the online education system and found that the Afghan students were highly not satisfied with online education and reported low levels of understanding from the webinars and the lectures delivered via the online mode. The respondents demonstrated that due to limited or no training and experience in online teaching, the quality of teaching was highly compromised (Hashemi, 2021). The low levels of motivation of teachers negatively influenced the interaction between the teachers and students, and due to low levels of understanding, the students were also not willing to repeatedly ask questions from the teachers and clear their concepts.

Another research conducted by Himat et al. (2021) analyzed the levels of satisfaction of Afghan students regarding online education and found that a considerable majority of students in Afghanistan lacked access to laptop and desktop computers as well as other technological devices. The abrupt decision for online education by the Afghan Government contributed to a social division among the students, such as the students from disadvantaged and economically unstable families were not able to attend the

classes (Tadesse & Muluye, 2020). The inaccessibility of electronic devices and technology further reduced the motivation levels of Afghan students (Himat et al., 2021). Moreover, the lack of technical support, the lack of policies of the educational institutions regarding online teaching, the absence of assessment criteria provided by the institutional management, and the unavailability of appropriate professional training to the instructors regarding online teaching were significant barriers, which reduced the levels of satisfaction of the students (Hashemi, 2021; Himat, Takal, & Hakimi, 2021).

Thus, in the context of Afghanistan, the levels of satisfaction of the students from online learning were significantly dependent on the accessibility of the students to electronic devices and technology. In this regard, the students in Afghanistan could not acquire maximum benefit from online learning and had minimal positive impacts on their academic performance.

Another very interesting study was conducted by Himat et al. (2021) who highlighted that one of the best universities in Afghanistan, Kandahar University reported a large number of dissatisfactory students who prioritized offline classrooms as compared to online rooms. This was mostly because many students did not have a stable internet as well as the teaching method imparted to them in online classrooms was not very pedagogical. Rahim and Chandran (2021) further built on these lessons and stated that many students did not enjoy the multimedia interactivity in the online classrooms, which was lacking in the traditional problem. However, due to infrastructure and technological challenges, online learning was not able to be a permanent replacement for traditional classrooms (Nova & Sukyadi, 2017). This was mostly the case in higher education, where there were deeper concepts, and it was always better for the students to be placed in a physical environment where teachers or instructors can see their facial expressions and deduce if the teaching concepts have been understood.

The study of Oziski (2021) introduced another dimension to the research theme. As per their findings, online education did prove useful to the students as they did not have to be present in physical classrooms, and hence, online learning became very comfortable. This had a positive impact on the oral communication and interaction of the students. However, the lack of preparedness and abrupt decision to shift the offline

classrooms to online learning caught students unprepared. This then resulted in the already discussed problems like lack of internet connectivity and technology (Ali, 2020). However, if a proper amount of time is dedicated to organizing online learning, it can permanently replace traditional classrooms, which will be very beneficial for the students.

2.3. Issues Faced by Students During Online Classes Which Impacted Their Academic Performance

According to the study by Aristovnik et al. (2020), online learning mainly needs greater motivation and self-discipline to go through the lesson. In the specific context of developing nations, students need to learn the use of an innovative system that may influence their motivation and attitude due to the rise in the obligations to understand the technical complexities. Conversely, teachers who are not familiar with the delivery's new mode can increase the students' workload with assignments as well as study materials. For example, one of the research works conducted by Owusu-Fordjour et al. (2020) studied the impact of COVID-19 on the online learning of Afghan students, specifically in terms of their workload. The results revealed that around thirty percent of students declared that the workload of their study had declined significantly, whereas more than 25 percent stated that the workload had increased due to the complexity of understanding how to use online tools for learning as opposed to face-to-face learning. In addition, a large number of students, i.e., more than forty-two percent, reported a significant increase in their study workload due to the pandemic and online learning. Moreover, Aslan et al. (2020) explored the perceived anxiety and stress among Turkish students while taking online classes during the pandemic "COVID-19". It was discovered that the students in Turkey were extremely vulnerable towards the issues of mental health, and it was represented that a huge upsurge in perceived stress as well as problems of mental health was recorded during the pandemic.

To find the results, the researchers conducted a cross-sectional study and used various measurements, such as PHQ-8 (Patient Health Questionnaire), GAD-7 (Generalized Anxiety Disorder), PSS-10 (Perceived Stress Scale), SWLS (Satisfaction with Life Scale), a sociodemographic survey, and SPA (Scale of Physical Activity). The findings

discovered that low life satisfaction, high apparent stress, and slight generalized anxiety were reported by the students while taking online classes. This represented a high-risk level associated with the mental health of Turkish students during COVID-19.

Furthermore, Jamieson (2020) discussed various challenges that were associated with online learning, such as affordability, educational policy, flexibility, life-long learning, accessibility, and learning pedagogy, which were faced by the students and impacted their overall academic performance. Several nations, including Afghanistan, are experiencing substantial problems with access to innovative technologies and a reliable connection to the internet. Not only this but also economically backward students are not capable of affording devices for online learning, which creates an exposure risk towards increased learner's screen time (Pokhrel & Chhetri, 2021). Hence, the students must get themselves involved in self-exploratory learning along with offline activities.

Additionally, Sintema (2020) revealed that in most schools, the student's academic performance dropped for the internal and year-end examinations because of online learning. This has resulted in inadequate consultation of students with their instructors in times when difficulties are faced by them in understanding as well as learning any concept and reduced contact time. Likewise, the study of Putri et al. (2020) also evaluated the problems faced by Indonesian students while taking online classes during the times of the pandemic COVID-19. Their research utilized fifteen respondents, which consisted of students as well as parents. The results revealed several obstacles along with challenges that the students and parents experienced in online learning, including students' challenges associated with the needs of special education, more prolonged screen hours, and insufficient communication regarding socialization between students.

2.4. The Impacts of Covid-19 on Teaching-Learning Process on Academic Performance: Perceptions of Teachers

Hebebci et al. (2020) reported that it was equally a challenge for teachers to shift towards online teaching during the pandemic. The analysis of the perceptions of the

teachers regarding the impacts of online education revealed that the Turkish teachers reported that adhering to online education was challenging for them; however, it was the best possible decision for facilitating the students in continuing education during the pandemic situation. The teacher demonstrated that online classes were interactive; however, still acquiring feedback from the students was a real effort.

Due to teachers' lack of experience in online learning, the teachers had to adapt to new conditions while teaching online (Coman et al., 2020). The management of educational institutes experienced challenges regarding the conversion of entire course content into online delivered lectures and assuring that students were able to understand the course content without any practical exposure. Many teachers experienced challenges in keeping equilibrium between the courses and designing the activities for students, which facilitated critical thinking (Coman et al., 2020).

Hebebci et al. (2020) also found that the technical and infrastructure problems created challenging situations for them. Thus, the Turkish teachers reported that after the pandemic, they would prioritize teaching the students in the interactive environment of school over online learning.

Analyzing underdeveloped countries like Afghanistan, due to inaccessibility to consistent internet connection and electricity, the teachers had low levels of satisfaction with online education (Mohammadi et al., 2021). Despite a lack of cooperation from the university management, the teachers in Afghanistan transforming their lessons online during the pandemic situation were required to keep into account that some of the students had no accessibility to the internet. For this reason, it was a challenge for them to keep the entire class of students on the same page. Moreover, due to a lack of training and expertise, the teachers experienced difficulties understanding the functions and terminologies; however, they could not acquire assistance from educational institutes due to a lack of technically trained employees (Mohammadi et al., 2021). Thus, due to low levels of satisfaction of teachers in Afghanistan from online education and the lack of accessibility of the faculty members and the students towards online education, the student’s academic performance in Afghanistan was relatively low compared to the developed regions of

the world. In this regard, the teachers preferred onsite education after the pandemic situation.

Attention was also one of the reasons quoted in the study of Himat et al. (2021). This factor was identified as a big challenge for the teachers as they were finding it increasingly hard to ensure that students were attentive and listening to the lecturer. Most of the students did not turn on their cameras which made it very difficult for teachers to maintain face-to-face contact with the students. The study of Sundarwati and Pahlevi (2021) also highlighted the importance of physical contact among the learners and teachers, which can play a vital role in the understanding of the concepts. The optimal learning output in this scenario of online learning depended on the supportive digital devices and resources, along with a better understanding of the digital literacy of the teachers as well as the students. However, Taopan and Drajati (2020) reported that the lack of an engaging environment in online education created hurdles for the students as well as the teachers which hindered maximizing the educational benefits. The barriers due to limited teachers' digital literacy along with pedagogical skills needed for online teaching restricted the potential gains intended from the online educational context. Lack of technical difficulties and inaccessibility to digital devices in developing nations exacerbated the challenges. Thus, lack of adequate digital literacy skills, limited access to digital resources, and minimum engagement during classes restricted the effectiveness of online education for the teachers as well as the students.

The teachers in Afghanistan were confronted with the same challenges. Khlaif et al. (2020) illustrated the need to understand the socio-cultural context of Afghanistan, where the majority of the teachers do not possess adequate digital skills and have never used online classrooms in their lives. Because of this, the teachers first had to educate themselves and then engage in online learning sessions. Furthermore, the study of Izhar et al. (2021) mentioned eight different themes that impacted the teachers. These themes were technological access, environment, time, technological skills, interest, knowledge, course design, and communication self-efficacy. Among them, the factor of time and technological access were the most challenging because both of these factors were limited and restricted, respectively, and hence, it was unfair on behalf of teachers to expect them to impart the teaching in an online setting as they had done in

an offline environment. Thus, restriction of physical contact added a hindrance to the effectiveness of online learning and teaching both for the students and teachers.

2.5. Issues Faced by Teachers During Online Classes Which Impacted the Academic Performance of Students

Zhang et al. (2020) conducted a study to identify the influence of COVID-19 on online learning and the teaching way of instructors. Their study represented disagreement as well as ambiguity relating to the students' and teachers' workload, the teaching environment, how to teach, and what to teach. Further, it was discussed that there is a need for good coordination among teachers within online learning, such as offering timely and routine mechanisms of communication. Along with that, mutual respect can result in greater satisfaction with the job of teachers. Similarly, Fauzi and Khusuma (2020) evaluated the impact of online learning on teachers' capability of giving quality knowledge to their students within Afghani schools in times of COVID-19. It was explored by their study that while teaching students, there were various challenges that the instructors experienced, involving lack of opportunities, learning evaluation along with implementation, communication with parents of the students, and use of the internet and network. Moreover, it was discovered by Mailizar et al. (2020) that curriculum, as well as time management, were the two major constraints faced by Turkish secondary school teachers during the pandemic when online education was offered by them. In addition to that, Rasmitadila et al. (2020) discussed that participation of student within education and their experiences of online classes, conditioning of the learners, and technical barriers were the important issues experienced by the teachers in COVID-19 during online classes, which affected their quality of teaching and students' academic performance.

The study of Seema and Nangia (2020) also explored the problems experienced by school teachers in COVID-19 while providing online teaching. In their research work, they conducted an online survey with more than 3000 teachers to identify several challenges faced by them during online learning. By using a questionnaire, the data was gathered and used for further analysis. The data findings disclosed that around eighty-two percent of the instructors were conducting e-classes for the first time. The significant problems experienced by the teachers during online classes were

inadequate in-service training, difficulty in following up on the students' learning, insufficient resources along with materials, and no proper cooperation from the students as well as parents, inadequate facilities on the internet to the learners, technical issues, and improper management of curriculum. Moreover, it was revealed that the attitude of the teachers towards online learning was favorable and extremely positive; however, the lack of training and efficacy within online teaching mode made them realize that they could provide better education within the traditional way of teaching.

CHAPTER III

THE EFFECTS OF ONLINE LEARNING ON THE ACADEMIC PERFORMANCES OF STUDENTS IN AFGHANISTAN AND TURKEY DURING THE COVID-19 PANDEMIC

3.1. Research Problem

The COVID-19 pandemic disturbed the entire landscape of education across the globe. The traditional method of in-class physical classes was replaced by online classroom setups. These setups were previously unknown to students from developing and underdeveloped countries. Even in developed countries, not every student has access to online tuition facilities. This alienation from technology costs students a lot in terms of their academic performance. Researchers have shown that the countries where students were habitual in using technology for research purposes performed better in online education during the pandemic (Clark et al., 2021). The performance of students in exams was not the same even for these students as the choice of accessing the educational portal through either laptop or smartphone also affected the process.

The academic performance of students learning online is impacted by several factors. These factors include quality of instructors, course design, internet connection, access to technological devices, feedback from the instructors, and satisfaction of the students (Gopal et al., 2021). During the pandemic students of every region had their satisfaction criteria and that is why their level of satisfaction varied across different countries. This research work aims to analyze the academic performance of students from Turkey and Afghanistan in online education during the pandemic. These two countries have been chosen because Turkey and Afghanistan have different levels of technological development. When compared with the technological muscle of Turkey, Afghanistan is a less developed and economically weak country. The technological

aids available to Turkish students are certainly better and more sophisticated than those available to Afghan students.

The performance of students in online learning is influenced greatly by the nature of communication between instructors and students. Frequent disruptions in communication affect the performance of students. For students to perform better, the glitches in communication must be resolved (Alawamleh et al., 2020). Not only this but also the expertise of the instructor determines the outcome for students. This research work analyzes socio-economic and educational barriers that are faced by Turkish and Afghan students while studying online during the COVID-19 pandemic. By analyzing the academic performance of students from both countries before the pandemic and after the pandemic this paper shall look into the factors that impact the academic performance of students while studying online.

Online learning has become extensively dependent on the media. The strong impact of media on the academic performance of students is due to the extensive reliance of students on media. In modern times, the media is fulfilling all needs of humans. The more a student depends on media, the stronger its impact on the student's performance. In the learning process, the media is controlling the efficiency and effectiveness of teaching tools and techniques. Learners are dependent on media for communication, accessing classrooms, submission of their homework, and interaction with the instructors and administration. This reliance on media shows how important media has become in the life of humans. The most important outcome of this dependency is that students' behavior and attributes have changed. They have developed an orientation toward digitalization and the relevance of conventional means of learning has decreased significantly (Adnan and Anwar, 2020).

Online learning employs different assessment techniques to test the learning of students. The Uses and Gratification Theory can be used to record outcomes of assessments used for different online courses. Researchers have found that students' perceived value of an assignment plays an important role in the successful completion of that assignment. Those class activities and course projects which instill motivation in the students shape the positive attitude of learners (Florenthal, 2016). The interactive

nature of online courses should be designed in a way that ensures the engagement of students.

Lastly, in online learning, a learner uses multiple media at the same time. The dexterity of the person to use these media determines the outcomes of one's performance. For this purpose, learning digital skills before joining online learning sessions has become the need of the hour. Students who possess strong digital skills perform better in online learning. The Digital skills of a student are shaped by the technology that a person has access to. Not only this but also, the availability of infrastructure and accessibility of different technological gadgets allow the students to develop a good digital skill set (Reddy et al., 2020).

This research work explores the difference in academic performance of Afghan and Turkish students keeping in view the nature of technology available to them, their basic language and arithmetic skills, the effectiveness of communication between them and their instructors, and technological support for online education for both types of students. The purpose of this research work is to assist teachers in knowing the factors that lead to lower performance of students learning online. This shall also help administrations of educational institutions to design online courses as per the need of the students. The last stakeholder that shall benefit from this research work is the students' parents. They will get to know the barriers that their children face while studying online. By analyzing the issues from technological and educational perspectives, this research paper will contribute significantly to the available literature on the subject.

3.2. Hypothesis

Based on the research problem, the hypothesis is formulated as follows:

1. H_1: The students perceive a positive impact of the COVID-19 learning process on their academic performance.
2. H_0: The students perceive a negative impact of the COVID-19 learning process on their academic performance.

3.3. Research Questions

The core research question is: Does online learning have positive or negative effects on the academic performance of students during the COVID-19 pandemic?

Based on the main research question, the following sub-questions were designed to explore in-depth the research objectives set for the study:

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1. What is the perception of online learning and teaching during the pandemic among Afghan and Turkish students?
2. What is the impact of online learning on the academic performance of Afghan and Turkish students during the pandemic?
3. What is the impact of COVID-19 on the teaching-learning process during online learning?
4. What are the differences between Afghan and Turkish students in regard to the impact of online learning on their academic performance during the pandemic?
5. What device did students use for online learning during COVID-19?
6. How has media dependency affected students' performance during the pandemic?
7. How knowledge gap during online learning impacts students' academic performance?

3.4. Research Aims

Based on the literature review and previous research, it can be stated that an in-depth evaluation of online medium for education purposes is required to understand how the medium affects the academic performance of students and the feasibility of the medium in terms of accessibility and its subsequent impact on the learning capabilities of students in Turkey and Afghanistan. The research aims are as follows:

1. To assess the effects of online learning on the academic performances of students during the COVID-19 pandemic with a specific focus on Afghanistan and Turkey.

2. To analyze the role of COVID-19 on a radical shift in the educational sector towards online mediums.
3. To assess the perception of online learning and teaching among Afghan and Turkish students.
4. To determine the impact of online learning on the academic performance of Afghan and Turkish students during the pandemic.
5. To evaluate the impact of COVID-19 on the learning process during online learning.
6. To compare the impact of online learning on students' academic performance in Afghanistan and Turkey during the pandemic.
7. To understand uses and gratifications during the online learning process.
8. To show the dependency of students on media during the pandemic.
9. To understand and analyze how knowledge gaps affect students' academic performance.

3.5. Importance of the Study

The study has been done to show the importance and differences of online learning among developing and underdeveloped countries. Many studies have been done on online classes during COVID-19 and the effects on students in many different countries. However, there is no study shown that compared the students' level, and the facilities' importance in these two countries and found other challenges that students and teachers are facing.

Thus, this research will raise the awareness of instructors, students, and their parents about the effects of online learning on the academic performance of students during the COVID-19 pandemic and the obstacles which the students faced. Moreover, this research will be a good academic source for researchers who are researching the perspective of students towards online learning, especially in Afghanistan and Turkey.

3.6. Concepts of the Study

3.6.1. Effect

According to the Merriam-Webster dictionary, effect means something that inevitably follows an antecedent (Merriam-Webster 2022). One of the basic approaches in history is the study of cause and effect, which requires a firm grasp of historical chronology. In physics, there is an underlying principle that for every action there is an equal and equivalent reaction. History suggests that every event is the result of a cause and that every event is itself caused by a subsequent event. These subsequent events are therefore their effects (Cause and Effect, 2022).

For example, COVID-19 had effects on life as we know. This has created a chain reaction, vaccines, economic collapse, wars, remote work, and education. An effect can lead to positive and negative outcomes, only in time the outcomes of an effect can be understood.

3.6.2. Online Learning

Online learning is training in a virtual classroom with online tools in a digital environment. According to an article from Adamas University, the first university which offered the first completely online courses was the University of Toronto and it was back in 1984. A network was created for DOS and Commodore 64 computers in 1986 known as the Electronic University Network. In 1990, the University of Phoenix established the world's first fully online educational institution, providing both bachelor's and master's degrees. In these early days, little was known about the potential of this new way of education, but people would soon discover that it would make learning accessible to them in ways they could never have imagined (Adamas University, 2020).

3.6.3. Academic Performances

Student achievement is measured across multiple academic subjects by academic performance. Education officials and teachers typically use classroom performance,

graduation rates, and standardized tests to measure achievement (Ballotpedia, 2022).

In the United States, evaluating academic performance dates back to the 1830s. In Boston, Horace Mann and Samuel Gridley Howe evaluated student progress by using a standardized test. The Kansas Silent Reading Test (KSRT), created by Kansas school administrator Frederick J. Kelly in 1914, paved the way for standardized testing. This multiple-choice test was used to standardize student evaluations and decrease grading time. The Scholastic Assessment Test (SAT) was developed by Harvard University professor Henry Chauncey in 1934 to assess scholarship candidates, and the American College Test (ACT) was developed in 1959 by University of Iowa professor E.F. Lindquist to evaluate college students (Ballotpedia, 2022).

The grade point average (GPA), graduation rate, standardized tests that students take annually, and college entrance exams are used to measure student performance. In the classroom, students' GPAs are usually measured on a scale from zero to four, with higher GPAs representing better grades. (Ballotpedia, 2022)

3.6.4. The Covid-19 Pandemic

COVID-19 (coronavirus disease-2019), which is caused by the new SARS-CoV-2 coronavirus, has affected millions of people across the globe with unprecedented health consequences. Despite the ongoing pandemic, with new incidents being reported every day, global society's resilience continues to be tested. The SARS-CoV-2 coronavirus has spread panic among people and insecurity at all levels of society, affecting everyday life, global economics, travel, and trade worldwide. Due to the extreme restrictions taken to prevent the rapid spread of COVID-19, the disease has also been linked with depression in many individuals (Zoumpourlis, V et al. 2020).

3.6.5. Afghanistan

Afghanistan is a country located in the heart of south-central Asia; Afghanistan is a landlocked nation with a multiethnic population. Since Afghanistan sits along important trade routes connecting southern and eastern Asia with Europe and the Middle East, for millennia the empire builders have sought to subdue it, leaving traces

of their efforts in the form of great monuments that are in ruins today. Many of the country's imperial ambitions have been laid to rest by its barren landscape and fiercely independent population, which has never united into a nation but instead has endured as a patchwork of competing ethnic factions and ever-changing alliances. (Dupree, L. et al. 2022).

Figure 3.1. Map of Afghanistan

Source: Getty Images

3.6.6. Turkey

Located at the crossroads of Asia and Europe, Turkey occupies a unique geographical position. It has served as a bridge and a barrier between the two continents throughout its history (Dewdney, J. C., and Yapp., Malcolm Edward (2022)).

The Turkish Republic is located at the intersection of the Balkans, Caucasus, Middle East, and the eastern Mediterranean. The country is one of the largest in terms of territory and population in the region, and its land area is larger than any European country. It consists almost entirely of Asia Minor, also known as Anatolia (Anadolu), and is a mountainous region in the east. Thrace (Trakya) in Turkey lies in the extreme southeast of Europe, a remnant of an empire once encompassing the Balkans. Ankara is the capital, and Istanbul is the largest city (Dewdney, J. C., and Yapp, Malcolm Edward (2022)).

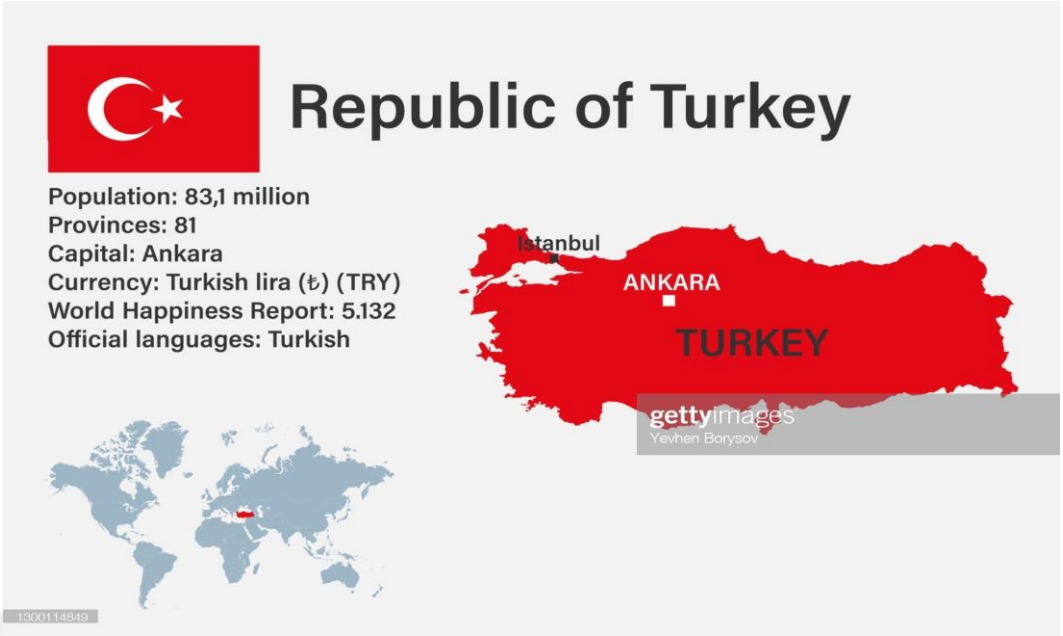

Figure 3.2. Map of Turkey

Source: Getty Images

3.7. Data Collection Sources

Data collection sources are divided into primary and secondary data collection. The primary data is also known as the first-hand collection of information directly from the targeted population, whereas the secondary data is retrieved from existing literature (articles, publications, textbooks, journals, newspapers, Internet, and other writings) published by relevant researchers in a similar domain (Saunders et al., 2019). For this purpose, a close-ended survey questionnaire was used as a tool to collect relevant information from students in both countries. The rationale for choosing a close-ended questionnaire was to obtain quantitative insights and enable statistical analysis (Hyman, & Sierra, 2016).

3.8. Quantitative Method

The research intends to keep an exploratory research design. As the name implies, exploratory research explores the research question. Exploratory research does not offer conclusive evidence. Rather it aims to gain a better understanding of the problem in depth (Dudovskiy, 2016; Saunders et al., 2019). Similarly, the research topic at hand does not intend to provide any conclusive evidence but rather focuses on understanding

the impact of online learning and how the shift towards the new medium due to COVID-19 impacts the academic performance of students, their perception of the feasibility, and success of the mediums along with the perception of teachers regarding the effectiveness of online learning in an existing and post-pandemic world.

Thus, by keeping an exploratory research design, the researcher can investigate the key facts and opinions of students and teachers regarding the role of online learning on academic performance (Saunders et al., 2019). Moreover, the design will facilitate the comparison of opinion analysis in Turkey and Afghanistan context while facilitating in providing the study with a new angle by laying the foundation for future research.

The research aims to keep a quantitative research approach. The rationale for using a quantitative research approach is that it facilitates the determination of the relationship between variables within a population (Creswell, 2013; Saunders et al., 2019). Moreover, the quantitative research approach is feasible in explaining a particular phenomenon by emphasizing objective measurements (Saunders et al., 2021). Thus, to gain an in-depth understanding of the online education phenomenon in Turkey and Afghanistan, a quantitative research approach is deemed appropriate. To facilitate the quantitative research approach, a survey method is used. A survey approach involves asking questions to a group of people to gain in-depth knowledge regarding the research topic. For the present study, the targeted population was the students of Turkey and Afghanistan using online mediums for education due to the COVID-19 outbreak.

3.8.1. Questionnaire

The questionnaire has been used as primary data collection for being more accurate, simply understanding, and to add more quality to the research study either directly from the selected sample or from all members of the study community, by asking a set of specific questions prepared in advance, relying on voluntary responses and snowball probability sampling methods. Furthermore, the questionnaire included closed questions based on the Likert scale. For collecting primary data, two countries' students have been selected as a sample size to show the differences between students

in two different countries. The sample size from each population was selected using a non-probability sampling technique that included 400 students in total with each country indicating 200 students; this technique was used by researchers to select respondents based on accessibility and reach (Saunders et al., 2019).

The questionnaire has included both male and female participation in both countries, and it has been distributed via email/Google forms and the link shared on my Facebook page (www.facebook.com/Rohullah.Mohammad) and also WhatsApp groups of students. Moreover, the questionnaires have been published on students' groups such as Kabul University Students and İstanbul Türkiye Burslusu Öğrenci Grubu on Facebook as well.

The following issues were covered in the questionnaire:

1- The first axis contains the respondents' demographic data.
2- The second axis contains the attitude of students toward online learning during the COVID-19 pandemic, and it contains (7) items.
3- The third axis contains the impact of online learning on the academic performance of students during the COVID-19 pandemic, and it contains (8) items.
4- The fourth and last axis contains the satisfaction of students with online learning during the COVID-19 pandemic, and it contains (8) items.

3.8.2. Ethical Considerations

During conducting this thesis, some ethical issues came up. The researcher took several steps to minimize these issues. Some of the ethical considerations for the present research include respondents' consent and anonymity, data privacy and security, and the well-being of society. To ensure transparency, full disclosure of research aims, and purpose was provided to the respondents. Moreover, the respondents had complete autonomy to leave the research process at any stage they wanted by simply informing the researcher.

The data retrieved from the participants is kept under a password-protected file, and the information is only accessible to the researcher and the supervisor. The works of other authors are acknowledged through proper referencing. In addition, other university standards and guidelines for conducting research have been followed at all costs.

3.8.3. Questionnaire Validity

The validity of the questionnaire content shows to what extent the scale measures are prepared to measure in a certain context through the logical analysis of the scale content. The questionnaire is enclosed in the appendix. Three academicians[2] who have experience in the field of media have observed, checked, and judged its questions before they got distributed. All observations were taken, and the questionnaire was edited based on these observations until the questionnaire reached the final form.

3.8.4. Questionnaire Reliability

The questionnaires were also distributed once before in a 10% pilot study to test and check the validity of the questionnaires as it was proved to be well. Moreover, the questionnaires were presented to three academicians to verify the validity of their paragraphs. The researcher benefited from the specialist's observations by adopting the agreed-upon observations, whether by deletion, addition, or amendment until the study tool appeared in its final form, divided into two variables and each variable contains four dimensions. The researcher considered the opinions of the specialists and their adjustments as an indication of the truthfulness of the content of the study tool, and the relevance and diversity of its paragraphs. After making the required adjustments, the balance between the contents of the study instrument in its paragraphs is achieved, thus the validity of the scale has been verified.

After conducting an internal validity analysis, the questionnaires were further analyzed for the reliability of scales using Cronbach's alpha (Table 3.1). For this analysis, all

[2] The academicians: Assist. Prof. Yasmin Aldamen, Assist. Prof. Hakki Öcal from, Ibn Haldun University, and Prof. Dr. Ahmad Shabir Abdul Saleem, Bakhtar University.

items that were not valid in either the Persian version or the Turkish version of the questionnaires were excluded from the measures. All items with which Cronbach's alpha score is less than 0.60 were excluded. Results from Table 3.1 show that after deleting the non-valid items from the scale, all scales had a Cronbach's alpha higher than 0.60, deemed to be considered reliable in both the Persian and Turkish versions of the questionnaires.

Table 3.1. Reliability Analysis

	No of Items	Afghanistan Cronbach's Alpha	Turkey Cronbach's Alpha
Attitude Towards Online Learning	7	0.686	0.673
Impact of Online Learning on Academic Performance	8	0.800	0.753
Satisfaction with Online Learning	8	0.922	0.841

Table 3.2. Pearson Collection Coefficient Test

Attitude Toward Online Learning			**Impact of Online Learning on Academic Performance**			**Satisfaction with Online Learning**		
	Afghanistan	Turkey		Afghanistan	Turkey		Afghanistan	Turkey
Sr. #	*Pearson Correlation*	*Pearson Correlation*	*Sr. #*	*Pearson Correlation*	*Pearson Correlation*	*Sr. #*	*Pearson Correlation*	*Pearson Correlation*
1	0.627**	0.735**	1	-0.064	0.241**	1	0.781**	0.649**
2	0.701**	0.676**	2	0.427**	0.587**	2	0.848**	0.727**
3	0.699**	0.647**	3	0.703**	0.729**	3	0.846**	0.714**
4	0.672**	0.419**	4	0.705**	0.567**	4	0.832**	0.671**
5	0.464**	0.633**	5	0.675**	0.395**	5	0.800**	0.713**
6	0.620**	0.445**	6	0.705**	0.704**	6	0.801**	0.648**
7	0.269**	0.391**	7	0.783**	0.652**	7	0.815**	0.665**
8	0.461**	0.210**	8	0.658**	0.562**	8	0.716**	0.725**
			9	0.425**	0.575**			

* $p < 0.05$, **$p < 0.01$

Pearson Collection Coefficient test was used to determine the internal validity for each statement and the relationship with its dimension for both the Persian and Turkish versions of the questionnaire separately (Table 3.2). Items that are not significantly correlated with its dimensions at a 5% significant level and that have a Pearson Correlation score less than 0.25 in either one of the questionnaires were excluded and deleted. Results from Table 3.2 showed that item 8 of 'attitude toward online learning, and item 1 of 'impact of online learning on academic performance' had a Pearson Correlation of less than 0.25 and were not statistically significant at 5% in one or both versions of questions, and hence were excluded from the study.

3.8.5. Statistical Processing

After completing the collection data, the data was transferred from the MS Excel program, and then the results were processed and analyzed using the Statistical Package for Social Sciences (SPSS) software and the conclusions were drawn. Simple frequencies and percentages were used in the analysis of the study data to obtain the necessary statistical results, answer the study questions, and test the hypotheses.

The reason for choosing descriptive statistical analysis is that it allows answering who, what, when, and to what extent questions, which is the main focus of the study (Loeb et al., 2017). To perform statistical analysis, Statistical Package for Social Science (SPSS) software will be used to analyze our collected data, and the results will be represented using graphs, charts, and text summaries. All of the collected data will be stored in a safe place, and the information will be only accessible to the researcher and the supervisor.

CHAPTER IV

RESULTS AND ANALYSIS

4.1. Quantitative Results

From the descriptive statistics, it can be observed that most of the respondents were male in Afghanistan, (73.5%), while men and women were almost equally proportioned in Turkey (Male – 51.5%; Female – 48.5%). A large number of respondents had ages between 22 years and 25 years in both countries (Afghanistan – 54.5%; Turkey – 57.5%). There were a large proportion of respondents enrolled in bachelor's degrees in Afghanistan (66.5%). The number of respondents was even higher in Turkey where almost 80% of respondents were enrolled in bachelor's degrees (78.5%). Most of the Afghan respondents were currently studying in their final year (41.5%); however, most of the Turkish respondents were currently studying in their second year (50.5%). Most of the Afghans had either a moderate level of IT skills (45%) or a high level of IT skills (48%), while Turkish respondents had a mostly moderate level of IT skills (57.0%).

Turkish respondents were almost equally proportioned as online learning participants before the COVID-19 pandemic (Yes – 47.5%, No – 52.5%), whereas almost two-thirds of Afghan respondents participated in online learning before the COVID-19 pandemic (64.0%). Interestingly, almost all respondents were taking physical classes before the COVID-19 pandemic in both Afghanistan (88.0%) and Turkey (91.0%). Most of the Afghan respondents studied either one (40.5%) or two (37.5%) semesters of their degree via online learning, while Turkish respondents studied either two (39.5%) or more (48.5%) semesters through online learning. Afghan respondents were not currently studying online (76.0%), while half of the Turkish respondents were still studying online (58.0%). Most of the respondents had access to devices for online learning in both countries (Afghanistan – 90.0%; Turkey – 94.5%). Out of respondents who had access to devices for online learning, the majority of Afghan respondents had

access to smartphones (61.4%), while most of the Turkish respondents had either Laptop (39.0%) or a smartphone (37.4%) with them for online learning.

4.2. The Demographic Data of the Participants

Table 4.1. Demographic Data

	Afghanistan		**Turkey**	
	Frequency	Percentage	Frequency	Percentage
Gender				
Male	147	73.5%	103	51.5%
Female	53	26.5%	97	48.5%
Age				
18 to 21 years	26	13.0%	47	23.5%
22 to 25 years	109	54.5%	115	57.5%
26 to 29 years	42	21.0%	28	14.0%
Above 30 years	23	11.5%	10	5.0%
Educational Degree				
Bachelor	133	66.5%	157	78.5%
Master's	50	25.0%	30	15.0%
Ph.D.	4	2.0%	6	3.0%
Others	13	6.5%	7	3.5%
Semester				
1 – 2	48	24.0%	37	18.5%
3 – 4	45	22.5%	101	50.5%
5 – 6	24	12.0%	38	19.0%
7 – 8	83	41.5%	24	12.0%
IT Skills				
Low	14	7.0%	16	8.0%
Moderate	90	45.0%	114	57.0%
High	96	48.0%	70	35.0%
Participated in Online learning Before the Pandemic				
Yes	72	36.0%	95	47.5%
No	128	64.0%	105	52.5%

Table 4.1. (cont.)

Online Classes During COVID-19 Pandemic				
Yes	162	81.0%	195	97.5%
No	38	19.0%	5	2.5%
Access to Device for Learning Online				
Yes	180	90.0%	189	94.5%
No	20	10.0%	11	5.5%
Devices used for Online Learning				
Desktop	6	2.1%	49	13.2%
Laptop	87	31.1%	145	39.0%
Tablets	8	2.9%	34	9.1%
Smartphone	172	61.4%	139	37.4%
Other	7	2.5%	5	1.3%
Physical Class Before COVID-19 Pandemic				
Yes	176	88.0%	182	91.0%
No	24	12.0%	18	9.0%
No. of Semesters Studied Online				
1	81	40.5%	24	12.0%
2	75	37.5%	79	39.5%
3+	44	22.0%	97	48.5%
Currently Studying Online				
Yes	48	24.0%	116	58.0%
No	152	76.0%	84	42.0%

4.3. The Attitude of Students Toward Online Learning

Table 4.2. Online Learning is More Interesting than in-Person Classrooms

		Afghanistan		Turkey	
		Frequency	Percentage	Frequency	Percentage
1	Strongly Disagree	76	38%	50	25%
2	Disagree	83	41.5%	54	27%
3	Undecided	17	8.5%	38	19%
4	Agree	21	10.5%	36	18%
5	Strongly Agree	3	1.5%	22	11%
	Total	***200***	***100%***	***200***	***100%***

Table 4.2 indicates that, in Afghanistan, the majority of students (41.5%) disagree that taking courses online is more fascinating than going to regular classrooms; 38% strongly disagree; 8.5% are unsure; 10.5% agree, and only 1.5% strongly agree. In contrast to Turkey, where the majority of respondents (27%) disagree that online learning is more interesting than attending traditional physical classrooms, 25% strongly disagree, 19% are unsure, 18% agree, and only 11% strongly agree. According to the data, the majority of students in both countries stated that online learning is not interesting compared to in-person classes. However, if we compare both countries, the percentage of respondents who stated that online classes are more interesting than in-person classes is higher in Turkey than in Afghanistan.

Table 4.3. I Was More Active and Participative in My Online Courses

		Afghanistan		Turkey	
		Frequency	Percentage	Frequency	Percentage
1	Strongly Disagree	44	22%	54	27%
2	Disagree	70	35%	45	23%
3	Undecided	21	10.5%	33	17%
4	Agree	51	25.5%	45	23%
5	Strongly Agree	14	7%	23	12%
	Total	***200***	***100%***	***200***	***100%***

Table 4.3 illustrates that most respondents (35%) dispute that students were more engaged and active in online courses during the COVID-19 pandemic, while 22% strongly disagreed, 10.5% are undecided, and 25.5% agreed, and just 7% highly agreed. On the other hand, in Turkey, the majority of respondents, 27%, strongly disagree, 17 percent are undecided, 23 percent agree, and only 12% strongly agree, and (23%) of students disagreed that they were more active and participated in online courses during the COVID-19 pandemic. Now, if we compare Afghanistan and Turkey, the majority of students in both countries were not active and participative in their online courses. However, the percentage of students who stated that they were not active and participative during their online classes is higher in Afghanistan than students in Turkey.

Table 4.4. I Learn Better with Online Instructors than with Normal Face-to-Face Instructors

		Afghanistan		Turkey	
		Frequency	Percentage	Frequency	Percentage
1	Strongly Disagree	64	32%	50	25%
2	Disagree	93	46.5%	50	25%
3	Undecided	21	10.5%	38	19%
4	Agree	18	9%	42	21%
5	Strongly Agree	4	2%	20	10%
	Total	*200*	*100%*	*200*	*100%*

According to table 4.4, the majority of respondents (46.5%) disagree that students learn better from online professors than from regular in-person instructors; 32% strongly disagree; 10.5% are unsure; 9% agree, and 2% strongly agree. Comparatively, in Turkey, where the majority of respondents (25%) strongly disagree that learning is improved by online instructors over traditional in-person instructors, also the same percent (25%) disagree, 19 percent are undecided, 21 percent agree, and only 10 percent strongly agree. If we compare respondents in these countries, those who disagree that learning is improved by online instructors over traditional face-to-face instructors are more numerous in Afghanistan, those who strongly disagree are also more numerous in Afghanistan than in Turkey, and those who are unsure are less numerous in Afghanistan than in Turkey. The percentage of agreeing to respondents

is also lower in Afghanistan, and the percentage of strongly agreeing respondents is less in Afghanistan than in Turkey.

Table 4.5. My Instructors Were Always On-time and Accessible

		Afghanistan		Turkey	
		Frequency	Percentage	Frequency	Percentage
1	Strongly Disagree	50	25%	24	12%
2	Disagree	60	30%	29	14.5%
3	Undecided	31	15.5%	42	21%
4	Agree	51	25.5%	63	31.5%
5	Strongly Agree	8	4%	42	21%
	Total	***200***	***100%***	***200***	***100%***

Most of the respondents (30%) in Afghanistan differ in that teachers were dependable on time with online courses; 25% firmly deviate; 15.5% are unsure; 25.5% concur, and just 4% emphatically concur. Rather than Turkey, where the respondents (14.5%) differ that, teachers were consistently on time with online courses, 12% unequivocally deviate, 21% are unsure, the larger part of the respondents 31.5% concur, and 21% emphatically concur. Assuming we look at Afghanistan and Turkey, the level of respondents who differ that educators were dependable on time with online courses is higher in Afghanistan, the level of the people who firmly differ is additionally higher in Afghanistan than in Turkey, and the level of the uncertain people is lower in Afghanistan than in Turkey. The level of concurring respondents is lower in Afghanistan than in Turkey, and the level of firmly concurring respondents is less in Afghanistan than in Turkey.

Table 4.6. I Prefer to Meet My Project Group Members Online

		Afghanistan		Turkey	
		Frequency	Percentage	Frequency	Percentage
1	Strongly Disagree	26	13%	35	17.5%
2	Disagree	51	25.5%	34	17%
3	Undecided	16	8%	42	21%
4	Agree	89	44.5%	55	27.5%
5	Strongly Agree	18	9%	34	17%
	Total	***200***	***100%***	***200***	***100%***

According to table 4.6, the majority of students in Afghanistan agree that they like to meet their project group members online to examine and finish their course project; 44.5% agree; 9% strongly agree; 8% are unsure; while 25.5% disagree and 13% strongly disagree. On the other hand, in Turkey, the majority of students also agree that they like to meet a group of individuals online to talk about and complete our course project; 27.5% agree; 17% strongly agree; 21% are undecided, while 17% disagree and 17.5% strongly disagree. Assuming we think about Afghanistan and Turkey, the level of respondents who agree that they like to meet a group of individuals online to examine and follow through with our course project is higher in both countries. The level of respondents who agree is higher in Afghanistan compared to Turkey as well as the percentage of respondents who disagree is also higher in Afghanistan compared to Turkey.

Table 4.7. It Was Easy for Me to Use the Platform Developed by My University

		Afghanistan		Turkey	
		Frequency	Percentage	Frequency	Percentage
1	Strongly Disagree	36	18%	26	13%
2	Disagree	54	27%	28	14%
3	Undecided	34	17%	24	12%
4	Agree	57	28.5%	79	39.5%
5	Strongly Agree	19	9.5%	43	21.5%
	Total	***200***	***100%***	***200***	***100%***

In Afghanistan, we examined that the majority of respondents (28.5%) agree that it was simple for them to use the platform created by their university for web-based learning; 18% strongly disagree; 17% are unsure, while 27% disagree and just 9.5% strongly agree. On the other hand, in Turkey, the majority of students also stated that it was easy for them to use the platform created by their university for online learning, 39.5% agree; 21.5 strongly agree and 12% are undecided, while 14% disagree and only 13% strongly disagree. Assuming we look at Afghanistan and Turkey, the level of respondents who agree that it was easy for them to use the platform developed by their university for online courses is higher in Turkey than in Afghanistan. The percentage of respondents who agree are extremely higher in Turkey compared to Afghanistan while the percentage of respondents who disagree are extremely higher in Afghanistan

than in Turkey. The level of unsure individuals is additionally higher in Afghanistan than in Turkey.

Table 4.8. I Faced Technical Issues with My University's Online Learning Platform

		Afghanistan		Turkey	
		Frequency	Percentage	Frequency	Percentage
1	Strongly Disagree	37	19%	36	18%
2	Disagree	97	49%	63	32%
3	Undecided	21	11%	26	13%
4	Agree	27	14%	43	22%
5	Strongly Agree	18	9%	32	16%
	Total	***200***	***100%***	***200***	***100%***

In table 4.8, we examined that in Afghanistan, the majority of respondents disagree that they faced technical problems with their universities' online learning platforms during the pandemic. 49% of respondents disagree, 19% strongly disagree, 11% are undecided, 14% agree, and only 9% strongly agree that their university's online learning platform experienced technical difficulties during the COVID-19 epidemic. On the other hand, similar to Afghanistan, the majority of respondents in Turkey also disagree that they faced technical problems with their universities' online learning platforms during the pandemic. 32% of respondents disagree, 18% strongly disagree, 13% are undecided, 22% agree, and only 16% strongly agree that their university's online learning platform experienced technical difficulties during the COVID-19 epidemic. While comparing these two countries, we can see that the majority of students in both countries disagree that they faced technical issues with their universities' platforms for online learning. However, the percentage of respondents who selected 'disagree' is higher in Afghanistan compared to respondents in Turkey. The percentage of respondents who agree and strongly agree is higher in Turkey compared to Afghanistan.

4.4. The Impact of Online Learning on the Academic Performance of Students

Table 4.9. How Did the COVID-19 Pandemic Affect Your Education?

		Afghanistan		Turkey	
		Frequency	Percentage	Frequency	Percentage
1	Greatly affected	94	47%	79	40%
2	Considerably affected	36	18%	62	31%
3	Moderately affected	46	23%	31	16%
4	Slightly affected	17	8.5%	16	8%
5	Not affected	7	3.5%	12	6%
	Total	***200***	***100%***	***200***	***100%***

As specified in table 4.9, the majority of students 47% in Afghanistan indicated that the COVID-19 pandemic greatly affected their study; 18% were considerably affected in Afghanistan; 23% are moderately affected; 8.5% are slightly affected, and only 3.5% were not affected. In contrast to Turkey, where the majority of respondents (33%) are greatly affected, 32% are considerably affected, 24% are moderately affected, 3% are slightly affected, and only 8% are not affected. If we compare Afghanistan and Turkey, the majority of students in both countries indicated that the COVID-19 pandemic greatly affected their studies. The percentage of those who are moderately affected is lower in Afghanistan than in Turkey. The percentage of slightly affected respondents is lower in Turkey than in Afghanistan, and the percentage of not affected respondents is less in Afghanistan.

Table 4.10. The COVID-19 Pandemic Had A Negative Impact on My Study

		Afghanistan		Turkey	
		Frequency	Percentage	Frequency	Percentage
1	Strongly Disagree	11	5.5%	51	25.5%
2	Disagree	28	14%	28	14%
3	Undecided	17	8.5%	24	12%
4	Agree	86	43%	52	26%
5	Strongly Agree	58	29%	45	22.5%
	Total	***200***	***100%***	***200***	***100%***

According to table 4.10, of the students who responded in Afghanistan, most of them agree that the COVID-19 pandemic adversely affected their studies. 43% agree; 29% strongly agree; 8.5% are undecided, while 14% of them disagree and only 5.5% of the respondents strongly disagree. On the contrary, almost the same percentage of students agree, and the same percentage disagree that the COVID-19 pandemic adversely affected their studies. 26% agree; 22.5% strongly agree; 12% are undecided, while 14% of them disagree and only 25.5% of the respondents strongly disagree. Assuming we look at the percentage of respondents in Afghanistan and Turkey, most of the respondents in both countries agree that the COVID-19 pandemic negatively affected their studies. The percentage of respondents who agree is higher in Afghanistan compared to Turkey and the percentage of respondents who strongly agree is also higher in Afghanistan than in Turkey.

Table 4.11. Online Classes Have Significantly Contributed to My Academic Performance

		Afghanistan		**Turkey**	
		Frequency	Percentage	Frequency	Percentage
1	Strongly Disagree	47	23.5%	39	19.5%
2	Disagree	65	32.5%	52	26%
3	Undecided	37	18.5%	32	16%
4	Agree	42	21%	52	26%
5	Strongly Agree	9	4.5%	25	12.5%
	Total	***200***	***100%***	***200***	***100%***

Based on the data in table 4.11, people who respond in Afghanistan, (23.5%) disagree that online courses have significantly improved their academic performance; nonetheless, the majority of respondents (32.5%) strongly disagree; 18.5%) are unsure; 21%) agree, and only 4.5%) strongly agree. In contrast to Turkey, where 26% of respondents disagree that online courses have essentially improved my scholarly presentation and more interestingly the same percent (26%) agree, 19.5% strongly disagree, 16% are unsure, and only 12.5% strongly agree. If we compare Afghanistan and Turkey, the proportion of respondents who disagree that online courses have significantly improved my scholarly exhibition is larger in Afghanistan, as are the proportions of those who vehemently disagree and those who are doubtful is also higher in Afghanistan than in Turkey. However, the level of agreeing respondents is

higher in Turkey and lower in Afghanistan, and the level of strongly agreeing is also higher in Turkey and lower in Afghanistan.

Table 4.12. My Online Courses Helped Me to Achieve Better Grades

		Afghanistan		Turkey	
		Frequency	Percentage	Frequency	Percentage
1	Strongly Disagree	48	24%	36	18%
2	Disagree	90	45%	38	19%
3	Undecided	18	9%	30	15%
4	Agree	36	18%	63	31.5%
5	Strongly Agree	8	4%	33	16.5%
	Total	***200***	***100%***	***200***	***100%***

According to table 4.12, the majority of students in Afghanistan, (45%) disagree that my online classes during the pandemic helped me to achieve better grades; 24% of the respondents strongly disagree; 9% are undecided; 18% agree, and only 4% strongly agree. On the other hand, in Turkey, the majority of students 31.5% agree that online courses during the COVID-19 pandemic helped them to achieve better grades, 16.5% strongly agree, 15% are undecided, 19% disagree, and about 18% strongly agree. If we compare Afghanistan and Turkey, the percentage of respondents who disagree that online courses during the COVID-19 pandemic helped them to achieve better grades is higher in Afghanistan and lower in Turkey, the percentage of those who strongly disagree is also higher in Afghanistan than in Turkey, and the percentage of those who are undecided is lower in Afghanistan than in Turkey. Howbeit, the percentage of agreeing to respondents as well as strongly agreeing is widely higher in Turkey than in Afghanistan.

Table 4.13. I Have Completed All My Online Course-Related Assignments On-Time

		Afghanistan		Turkey	
		Frequency	Percentage	Frequency	Percentage
1	Strongly Disagree	27	13.5%	32	16%
2	Disagree	62	31%	24	12%
3	Undecided	27	13.5%	30	15%
4	Agree	66	9%	71	35.5%
5	Strongly Agree	18	13.5%	43	21.5%
	Total	***200***	***100%***	***200***	***100%***

According to table 4.13, the majority of students in Afghanistan, (31%) don't think they completed all of their online course-related homework and projects on time even though the COVID-19 pandemic was ongoing. Only 13.5% of students strongly agree, compared to 9% who agree, 13.5% who are undecided, and 13.5% who strongly disagree. In contrast to Turkey, where the majority of respondents (35.5%) agree, only 12% of respondents disagree, compared to 16% who strongly disagree and 15% who are undecided, and 21.5% who strongly agree. If we compare Afghanistan and Turkey, the percentage of respondents who disagree is higher in Afghanistan and extremely lower in Turkey, the percentage of those who strongly disagree is also lower in Afghanistan compared to Turkey, and the percentage of those who are undecided is almost the same in both countries. However, the percentage of respondents who agree is extremely higher in Turkey compared to Afghanistan, and additionally, the percentage of respondents who strongly agree is also higher in Turkey than in Afghanistan.

Table 4.14. My Communication Skills Have Improved Due to Online Classes

		Afghanistan		**Turkey**	
		Frequency	Percentage	Frequency	Percentage
1	Strongly Disagree	26	13%	46	23%
2	Disagree	73	36.5%	46	23%
3	Undecided	29	14.5%	31	15.5%
4	Agree	58	29%	43	21.5%
5	Strongly Agree	14	7%	34	17%
	Total	***200***	***100%***	***200***	***100%***

Table 4.14. shows that the majority of respondents (36.5%) disagree that they believe their communication skills have improved due to online classes; 13% strongly disagree; 14.5% are undecided; 29% agree, and only 7% strongly agree. As opposed to Turkey, where 23% disagree; as well as 23% strongly disagree that they believe their communication skills have improved due to online classes, 17% are undecided, 21.5% agree, and about 17% strongly agree. If we compare Afghanistan and Turkey, the percentage of respondents who disagree is higher in Afghanistan, however the percentage of those who strongly disagree is lower in Afghanistan than in Turkey, and additionally, the percentage of respondents who agree is higher in Afghanistan than in

Turkey, and the percentage of respondents who strongly agree is less in Afghanistan than in Turkey.

Table 4.15. Online Classes Helped Me to Be More Active in Classroom Discussions

		Afghanistan		Turkey	
		Frequency	Percentage	Frequency	Percentage
1	Strongly Disagree	37	18.5%	54	27%
2	Disagree	80	40%	43	21.5%
3	Undecided	36	18%	32	16%
4	Agree	40	20%	40	20%
5	Strongly Agree	7	3.5%	31	15.5%
	Total	***200***	***100%***	***200***	***100%***

Most of the students in Afghanistan, (40%) disagree that online classes helped them to be more active and participative in classroom discussions; 18.5% strongly disagree; 18% are undecided; 20% agree, and only 3.5% strongly agree. On the contrary in Turkey, where the majority of respondents (27%) strongly disagree that online classes helped them to be more active and participative in classroom discussions, 21.5% disagree, 16% are undecided, 20% agree, and only 15.5% strongly agree. If we compare Afghanistan and Turkey, the percentage of respondents who disagree is higher in Afghanistan, the percentage of those who strongly disagree is lower in Afghanistan than in Turkey, and the percentage of those who are undecided is higher in Afghanistan than in Turkey. The percentage of respondents who agree is the same in both countries, and the percentage of respondents who strongly agree is extremely lower in Afghanistan and higher in Turkey.

Table 4.16. My Instructors Were Able to Apply the Whole Course Syllabus

		Afghanistan		Turkey	
		Frequency	Percentage	Frequency	Percentage
1	Strongly Disagree	48	24%	31	15.5%
2	Disagree	83	41.5%	34	17%
3	Undecided	21	10.5%	39	19.5%
4	Agree	40	20%	61	30.5%
5	Strongly Agree	8	4%	35	17.5%
	Total	***200***	***100%***	***200***	***100%***

Table 4.16 illustrates that the majority of respondents in Afghanistan, (41.5%) disagree that instructors were able to apply the whole course syllabus during online courses; 24% strongly disagree; 10.5% are undecided; 20% agree, and only 4% strongly agree. In contrast to Turkey, where the majority of respondents (30.5%) agree that their instructors were able to apply the whole course syllabus during online courses, 17.5% strongly agree, 19.5% are undecided, 17% agree, and only 15.5% strongly agree. If we compare Afghanistan and Turkey, the percentage of respondents who agree that the instructors were able to apply the whole course syllabus during online courses is higher in Turkey and lower in Afghanistan, the percentage of those who strongly agree is also higher in Turkey than in Afghanistan, and the percentage of those who are undecided is higher in Turkey compared to Afghanistan. In addition, the percentage of respondents who disagree and strongly disagree is extremely higher in Afghanistan than in Turkey.

4.5. The Satisfaction of Students with Online Learning

Table 4.17. I Am Satisfied with My Active Participation and Performance

		Afghanistan		**Turkey**	
		Frequency	Percentage	Frequency	Percentage
1	Strongly Disagree	31	15.5%	43	21.5%
2	Disagree	65	32.5%	28	14%
3	Undecided	34	17%	39	19.5%
4	Agree	57	28.5%	64	32%
5	Strongly Agree	13	6.5%	26	13%
	Total	***200***	***100%***	***200***	***100%***

As illustrated in table 4.17, the majority of students (32.5%) disagree with their active participation in online classes; 28.5% agree; 17% are undecided; 15.5% strongly disagree and only 6.5% of them strongly agree. On the other hand, in Turkey, the majority of students (32%) agree with their active participation in online classes during the pandemic; 21.5% strongly disagree; 14% disagree, and more surprisingly 19.5% of the students in Turkey are undecided and only 13% strongly agree. When comparing Afghanistan and Turkey, the proportion of respondents who are dissatisfied with their active engagement in online classes is higher in Afghanistan, whereas the proportion of those who are very dissatisfied is lower in Afghanistan and the percentage of those

who are undecided is lower in Afghanistan than in Turkey. The percentage of those who agree and those who strongly agree is lower in Afghanistan compared to Turkey.

Table 4.18. Contribution of Online Courses to Student's Academic Performance

		Afghanistan		Turkey	
		Frequency	Percentage	Frequency	Percentage
1	Strongly Disagree	42	21%	34	17%
2	Disagree	78	39%	39	19.5%
3	Undecided	27	13.5%	51	25.5%
4	Agree	45	22.5%	49	24.5%
5	Strongly Agree	8	4%	27	13.5%
	Total	***200***	***100%***	***200***	***100%***

Table 4.18 illustrates some interesting facts about the significant contribution of online courses to students' academic performance. The majority of students (39%) in Afghanistan disagree with the significant contribution of online courses to their academic performance; 22.5% of them agree; 21% strongly disagree; 13.5% are undecided and only 4% of them strongly agree. On the other hand, the majority of students (25.5%) in Turkey are undecided about the significant contribution of online courses to their academic performance. 19.5% disagree; 24.5% agree; 17% strongly disagree and only 13.5% of the students strongly agree.

Table 4.19. I Am Satisfied With the Content and Quality of My Online Courses

		Afghanistan		Turkey	
		Frequency	Percentage	Frequency	Percentage
1	Strongly Disagree	54	27%	30	15%
2	Disagree	79	39.5%	50	25%
3	Undecided	22	11%	39	19.5%
4	Agree	39	19.5%	59	29.5%
5	Strongly Agree	6	3%	22	11%
	Total	***200***	***100%***	***200***	***100%***

As presented in table 4.19, the majority of respondents (39.5%) disagree in Afghanistan, that they are satisfied with the information and instruction they received from online courses; 27% strongly disagree; 11% are unsure; 19.5% agree, and 3%

strongly agree. In contrast to Turkey, where the majority of respondents (29.5%) agree that they are satisfied with the content and quality of online courses, 11% strongly agree; 25% disagree; only 15% strongly disagree, and 21.5% are undecided. If we compare both countries, Afghanistan has a higher number of respondents who are dissatisfied with the quality and substance of their online courses, whereas Turkey has a higher percentage of respondents who agree with the quality and content of online courses and a lower percentage of respondents who disagree.

Table 4.20. I Am Satisfied With the Performance of My Instructors During Online Courses

		Afghanistan		**Turkey**	
		Frequency	Percentage	Frequency	Percentage
1	Strongly Disagree	41	20.5%	28	14%
2	Disagree	74	37%	35	17.5%
3	Undecided	28	14%	38	19%
4	Agree	52	26%	67	33.5%
5	Strongly Agree	5	2.5%	32	16%
	Total	***200***	***100%***	***200***	***100%***

According to table 4.20, the majority of students in Afghanistan (37%) disagree with the teaching performance of the instructors during online courses; 20.5% strongly disagree, 14 percent are unsure, 26 percent agree, and just 2.5 percent strongly agree. As opposed to Turkey, where the majority of respondents —33.5%— agree; 16% strongly agree, and only 14 percent strongly disagree that they are satisfied with how the professors teach online courses. Of those who disagree, 17.5 percent strongly disagree. If we compare Afghanistan and Turkey, the percentage of respondents who are dissatisfied with the way the instructors deliver their lectures in online courses is higher in Afghanistan than in Turkey, the percentage of those who are strongly dissatisfied is also higher in Afghanistan, and the percentage of those who are unsure is lower in Afghanistan than in Turkey. However, the percentage of satisfied students is extremely higher in Turkey than students in Afghanistan.

Table 4.21. I Am Satisfied With Our Online Discussion Among Team Members and Instructors

		Afghanistan		Turkey	
		Frequency	Percentage	Frequency	Percentage
1	Strongly Disagree	42	21%	36	18%
2	Disagree	64	32%	28	14%
3	Undecided	32	16%	42	21%
4	Agree	53	26.5%	60	30%
5	Strongly Agree	9	4.5%	34	17%
	Total	***200***	***100%***	***200***	***100%***

Table 4.21 indicates that 32% of students who participated in this study disagree with online course project discussions among team members and instructors. 21% strongly disagree; 16% are undecided; 26.5% agree; and only 4.5% strongly agree. On the other hand, in Turkey, the majority (30%) of students are satisfied with their project discussions; 17% strongly agree and 21% of the respondents are undecided. In addition, 18% strongly disagree and 14% disagree. If we compare Afghanistan and Turkey, the percentage of respondents who disagree and are not satisfied with online course project discussions between team members and instructors is higher in Afghanistan, the percentage of those who strongly disagree is also higher in Afghanistan than in Turkey, and the percentage of those who are undecided is lower in Afghanistan than in Turkey. However, the percentage of those who agree and are satisfied respondents is higher in Turkey compared to Afghanistan. Also, the percentage of respondents who strongly agree is extremely lower in Afghanistan than in Turkey.

Table 4.22. I Am Satisfied With the Comfort of the Online Education Environment

		Afghanistan		Turkey	
		Frequency	Percentage	Frequency	Percentage
1	Strongly Disagree	47	23.5%	32	16%
2	Disagree	63	31.5%	29	14.5%
3	Undecided	25	12.5%	26	13%
4	Agree	56	28%	69	34.5%
5	Strongly Agree	9	4.5%	44	22%
	Total	***200***	***100%***	***200***	***100%***

In Afghanistan, the majority of students (31.5%) do not think that the convenience of the online learning environment is satisfactory, while only 4.5 percent strongly approve, 23.5 percent strongly disagree, 12.5 percent are undecided, and 28 percent agree. Unlike in Turkey, where the majority of respondents (34.5%) agree; 22 percent strongly agree, and only 16% of respondents in that nation say they are not satisfied with the comfort of the online courses' environment. Comparing Afghanistan and Turkey, we can say that Turkey has a higher percentage of respondents who agree and are satisfied that the online learning environment is convenient, while the majority of respondents disagree in Afghanistan. The percentage of respondents who strongly agree is also extremely higher in Turkey than in Afghanistan, and the percentage of unsure respondents is almost the same in both countries.

Table 4.23. I Am Satisfied With the Technical Support Provided by My University Regarding Online Classes During the COVID-19 Pandemic

		Afghanistan		**Turkey**	
		Frequency	Percentage	Frequency	Percentage
1	Strongly Disagree	55	27.5%	33	16.5%
2	Disagree	64	32%	34	17%
3	Undecided	33	16.5%	39	19.5%
4	Agree	42	21%	55	27.5%
5	Strongly Agree	6	3%	39	19.5%
	Total	***200***	***100%***	***200***	***100%***

According to table 4.23, most of the students (32%) in Afghanistan were unsatisfied with the technical support provided by their university regarding online classes; only 3% of respondents are firmly in agreement, compared to 27.5 % who are highly opposed, 16.5 % who are unsure, and 21% who agree. Unlike in Turkey, the majority of students (27.5%) agreed with the technical support provided by their university regarding online classes; 19.5% strongly agree; 17% disagree; 19.5% of them are undecided and 17% strongly disagree. Compared to Afghanistan, Turkey has a higher percentage of respondents who are satisfied with the technical support provided by their university regarding online classes, whereas in Afghanistan most of the students are not satisfied.

Table 4.24. I Have Enjoyed My Online Courses During the COVID-19 Pandemic

		Afghanistan		Turkey	
		Frequency	Percentage	Frequency	Percentage
1	Strongly Disagree	57	28.5%	31	15.5%
2	Disagree	71	35.5%	61	30.5%
3	Undecided	32	16%	35	17.5%
4	Agree	37	18.5%	45	22.5%
5	Strongly Agree	3	1.5%	28	14%
	Total	***200***	***100%***	***200***	***100%***

According to table 4.24, the majority of respondents in Afghanistan (35.5%) disagree that they have enjoyed online courses during the COVID-19 pandemic; 28.5% strongly disagree; 16% are undecided; 18.5% agree, and only 1.5% strongly agree. On the other hand, similar to Afghanistan, the majority of students in Turkey (30.5%) also disagree that they have enjoyed online courses during the COVID-19 pandemic, 15.5% strongly disagree, and 17.5% are undecided, 22.5% agree, and only 14% strongly agree. If we compare Afghanistan and Turkey, the majority of students in both countries are not satisfied with enjoying their online classes during the COVID-19 pandemic. However, the percentage of students who agree and are satisfied is higher in Turkey compared to Afghanistan.

CHAPTER V

DISCUSSION OF THE RESULTS

This chapter is comprised of the main findings of the study and discusses the findings of this study according to the communication and media theories.

5.1. Comparison of Online Learning Patterns between Afghan and Turkish Respondents during the COVID-19 Pandemic – Chi-Square Test Analysis

After the COVID-19 pandemic, the learning process of students has changed as schools are closed and classes have been taken in online session. To analyze differences in online learning patterns between Afghan and Turkish respondents, the study conducted a chi-square test for independence analysis (Table 5.1) given the categorical nature of all variables. For this analysis, the hypothesis is as below:

$H_{1\text{-}0}$: There is no association between online learning patterns and country.

H_1: There is an association between online learning patterns and country.

5.1.1. Comparison of Physical Classes before the COVID-19 Pandemic between Afghan and Turkish Respondent – Chi-Square Test Analysis

To analyze the comparison of physical classes conducted before the COVID-19 pandemic between Afghan and Turkish respondents, the hypothesis is as below:

$H_{1a\text{-}0}$: There is no association between physical classes before the COVID-19 pandemic and country.

H_{1a}: There is an association between physical classes before the COVID-19 pandemic and country.

The chi-square test for independence was conducted to analyze this hypothesis (H_{1a}). Results showed that there is a significant association between physical classes before

the COVID-19 pandemic and country, $\chi^2(1) = 0.958$, $p = 0.328$. Hence, H1a is rejected. The descriptive statistics support this result, showing that a similar proportion of Afghan (88.0%) and Turkish (91.0%) respondents were taking physical classes before the COVID-19 pandemic.

Table 5.1. Comparison of Physical Classes Before the Pandemic (N = 400)

Variables	Afghanistan (N = 200) N (%)	Turkey (N = 200) N (%)	Chi-square (χ^2)	p-value
Physical Class Before COVID-19 Pandemic				
Yes	176 (88.0%)	182 (91.0%)	0.958	p = 0.328
No	24 (12.0%)	18 (9.0%)		

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

5.1.2. Comparison of Online learning Participation before the COVID-19 Pandemic between Afghan and Turkish Respondents – Chi-Square Test Analysis

To analyze the comparison of online learning participation before the COVID-19 pandemic between Afghan and Turkish respondents, the hypothesis is as below:

$H_{1b\text{-}0}$: There is no association between online learning participation before the pandemic and country.

H_{1b}: There is an association between online learning participation before the pandemic and country.

The chi-square test for independence was conducted to analyze this hypothesis (H_{1b}). Results showed that there is a significant association between online learning participation before the pandemic and country, $\chi^2(1) = 5.438$, $p < 0.05$. Hence, H1b is accepted. The descriptive statistics support this result, showing that the number of online learning participants before the pandemic was higher in Turkey (47.5%) as compared to Afghanistan (36.0%).

Table 5.2. Comparison of Online Learning Participation Before the Pandemic (N = 400)

Variables	Afghanistan (N = 200) N (%)	Turkey (N = 200) N (%)	Chi-square (χ^2)	p-value
Participated in Online learning Before the Pandemic				
Yes	72 (36.0%)	95 (47.5%)	5.438	$p < 0.05$*
No	128 (64.0%)	105 (52.5%)		

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

5.1.3. Comparison of Online Classes during the COVID-19 Pandemic between Afghan and Turkish Respondents – Chi-Square Test Analysis

To analyze the comparison of online classes conducted during the COVID-19 pandemic between Afghan and Turkish respondents, the hypothesis is as below:

$H_{1c\text{-}0}$: There is no association between online classes during the COVID-19 pandemic and country.

H_{1c}: There is an association between online classes during the COVID-19 pandemic and country.

The chi-square test for independence was conducted to analyze this hypothesis (H_{1c}). Results showed that there is a significant association between online classes during the COVID-19 pandemic and country, $\chi^2(1) = 28.376$, $p < 0.001$. Hence, H1c is accepted. The descriptive statistics support this result, showing that almost all Turkish respondents had taken online classes during the COVID-19 pandemic (97.5%), while a few Afghan respondents were not taking online classes during the COVID-19 pandemic (19.0%).

Table 5.3. Comparison of Online Classes During the COVID-19 Pandemic (N = 400)

Variables	Afghanistan (N = 200) N (%)	Turkey (N = 200) N (%)	Chi-square (χ^2)	p-value
Online Classes During COVID-19 Pandemic				
Yes	162 (81.0%)	195 (97.5%)	28.376	p < 0.001***
No	38 (19.0%)	5 (2.5%)		

* p < 0.05, ** p < 0.01, *** p < 0.001

5.1.4. Comparison of Access to Device for Online learning between Afghan and Turkish Respondents – Chi-Square Test Analysis

To analyze the comparison of access to a device for online learning during the COVID-19 pandemic between Afghan and Turkish respondents, the hypothesis is as below:

$H_{1d\text{-}0}$: There is no association between access to a device for online learning during the COVID-19 pandemic and country.

H_{1d}: There is an association between access to a device for online learning during the COVID-19 pandemic and country.

The chi-square test for independence was conducted to analyze this hypothesis (H_{1d}). Results showed that there is a significant association between access to a device for online learning during the COVID-19 pandemic and country, $\chi^2(1) = 2.832$, $p = 0.092$. Hence, H1d is rejected. The descriptive statistics support this result, showing that a large and equal proportion of Afghan and Turkish respondents had access to a digital device for participating in online learning (Afghanistan – 90.0%, Turkey – 94.5%).

Table 5.4. Comparison of Access to Digital Devices for Online Learning (N = 400)

Variables	Afghanistan (N = 200) N (%)	Turkey (N = 200) N (%)	Chi-square (χ^2)	p-value
Access to Device for Learning Online				
Yes	180 (90.0%)	189 (94.5%)	2.832	p = 0.092
No	20 (10.0%)	11 (5.5%)		

* p < 0.05, ** p < 0.01, *** p < 0.001

5.1.5. Comparison of Types of Electronic Devices used between Afghan and Turkish Respondents – Chi-Square Test Analysis

To analyze the comparison of types of electronic devices used by students between Afghan and Turkish respondents, the hypothesis is as below:

$H_{1e\text{-}0}$: There is no association between types of electronic devices and country.

H_{1e}: There is an association between types of electronic devices and country.

The chi-square test for independence was conducted to analyze this hypothesis (H_{1f}). Results showed that there is a significant association between types of electronic devices and country, $\chi^2(4) = 109.004$, $p < 0.001$. Hence, H1f is accepted. The descriptive statistics support this result, showing that Turkish respondents were mostly using smartphones for online lectures (61.4%), while Afghan students either used laptops (39.7%) or smartphones (37.5%) during online lectures.

Table 5.5. Comparison of Types of Electronic Devices Used (N = 400)

Variables	Afghanistan (N = 200) N (%)	Turkey (N = 200) N (%)	Chi-square (χ^2)	p-value
Types of Electronic Device				
Desktop	6 (2.1%)	49 (13.5%)	109.004	p < 0.001***
Laptop	87 (31.1%)	145 (39.7%)		
Tablet	8 (2.9%)	34 (9.3%)		
Smartphone	172 (61.4%)	137 (37.5%)		

* p < 0.05, ** p < 0.01, *** p < 0.001

5.1.6. Comparison of Number of Semester Studied Online During Pandemic between Afghan and Turkish Respondents – Chi-Square Test Analysis

To analyze the comparison of the number of semesters studied online during the COVID-19 pandemic between Afghan and Turkish respondents, the hypothesis is as below:

$H_{1f\text{-}0}$: There is no association between the number of semesters studied online during the COVID-19 pandemic and country.

H_{1f}: There is an association between the number of semesters studied online during the COVID-19 pandemic and country.

The chi-square test for independence was conducted to analyze this hypothesis (H_{1e}). Results showed that there is a significant association between the number of semesters studied online during the COVID-19 pandemic and country, $\chi^2(2) = 50.969$, $p < 0.001$. Hence, H1e is accepted. The descriptive statistics support this result, showing that Afghan respondents studied a considerably lesser number of semesters online during the pandemic as compared to Turkish respondents.

Table 5.6. Comparison of No. of Semesters Studied Online (N = 400)

Variables	Afghanistan (N = 200) N (%)	Turkey (N = 200) N (%)	Chi-square (χ^2)	p-value
No. of Semesters Studied Online				
1	81 (40.5%)	24 (12.0%)	50.969	p < 0.001***
2	75 (37.5%)	79 (39.5%)		
3+	44 (22.0%)	97 (48.5%)		

* p < 0.05, ** p < 0.01, *** p < 0.001

5.1.7. Comparison of Students Currently Studying Online between Afghan and Turkish Respondents – Chi-Square Test Analysis

To analyze the comparison of students currently studying online between Afghan and Turkish respondents, the hypothesis is as below:

$H_{1g\text{-}0}$: There is no association between students currently studying online and their country.

H_{1g}: There is an association between students currently studying online and the country.

The chi-square test for independence was conducted to analyze this hypothesis (H_{1f}). Results showed that there is a significant association between students currently studying online and country, $\chi^2(1) = 47.788$, $p < 0.001$. Hence, H1f is accepted. The descriptive statistics support this result, showing that Turkish respondents were still studying online, while Afghan students did not study online.

Table 5.7. Comparison of Currently Studying Online (N = 400)

Variables	Afghanistan (N = 200) N (%)	Turkey (N = 200) N (%)	Chi-square (χ^2)	p-value
Currently Studying Online				
Yes	48 (24.0%)	116 (58.0%)	47.788	p < 0.001***
No	152 (76.0%)	84 (42.0%)		

* p < 0.05, ** p < 0.01, *** p < 0.001

5.2. Comparison of Attitude Towards Online Learning, Impact of Online Learning on Academic Performance, and Satisfaction with Online Learning among Afghan and Turkish Respondents – Independent T-Test Analysis

The study further aims to analyze the differences of opinion and perception of Afghan and Turkish respondents regarding online learning procedures and their impact on their academic performance. For this purpose, an independent t-test analysis was conducted, which allows determining the differences in the mean of continuous variables among the two groups. Before t-test analysis, the normality and homogeneity of variances were measured as the assumptions for running a parametric test i.e., independent t-test analysis. For this purpose, the hypothesis is as below:

$H_{2\text{-}0}$: There is no difference in the impact of the online learning process among Afghan and Turkish students.

H_2: There is a difference in the impact of the online learning process among Afghan and Turkish students.

5.2.1. Comparison of Attitude Towards Online Learning between Afghan and Turkish Respondents – Independent T-Test Analysis

To analyze the comparison of attitudes toward online learning among Afghan and Turkish respondents, the hypothesis is as below:

$H_{2a\text{-}0}$: There is no difference in attitude towards online learning among Afghan and Turkish students.

H_{2a}: There is a difference in attitude towards online learning among Afghan and Turkish students.

The independent t-test analysis was conducted to analyze this hypothesis (H_{2a}). Before the t-test, normality using the Shapiro-Wilk test and homogeneity of variances using Levene's test for equality of variances were tested on attitude towards online learning for both countries i.e., Afghanistan and Turkey as so to determine the model fit for the data. Both countries were not normally distributed in 'attitude towards online learning' score (Afghanistan – $W(200) = 0.975$, $p < 0.001$; Turkey – $W(200) = 0.986$, $p < 0.05$) (Table 5.8). However, since the sample size for both countries is higher than 30 (n =

200), then the score is considered to be normal under the theory of central tendency. Moreover, an independent t-test can be well performed under non-normal data, considering it a robust test against the violation of normality assumption, so the analysis continued.

Table 5.8. Normality Tests (Attitude)

	Country	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
		Statistic	Df	Sig.	Statistic	Df	Sig.
Attitude	Afghanistan	0.103	200	$p < 0.001$	0.975	200	$p < 0.001$
	Turkey	0.064	200	$p < 0.05$	0.986	200	$p < 0.05$
Note. a. Lilliefors Significance Correction							

For the assumption of 'Levene's test for equality of variances', F-test indicated that there is no significant difference in variance between the two countries ($F = 0.08$, $p = 0.781$), hence t-test with equal variances assumed was used (Table 5.9). A T-test indicated that there is a statistically significant difference in attitude among Afghan and Turkish students ($t(398) = -7.18$, $p < 0.001$). Hence, H2a is accepted. The mean scores also support this result, showing that Turkish students had a better attitude toward online learning ($M = 2.85$, $SD = 0.61$) as compared to Afghan students ($M = 2.40$, $SD = 0.65$).

Table 5.9. Comparison of Attitude Towards Online Learning (N = 400)

	Afghanistan			Turkey		Levene's Test for Equality of Variances		Independent t-test (equal variance assumed)	
	N	Mean	Standard Deviation	Mean	Standard Deviation	F	p-value	T	p-value
Attitude Towards Online Learning	200	2.40	0.65	2.85	0.61	0.08	0.781	−7.18	$p < 0.001$***

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

5.2.2. Comparison of Impact of Online Learning on Academic Performance during the COVID-19 pandemic between Afghan and Turkish Respondents – Independent T-Test Analysis

To analyze the comparison of the impact of online learning on academic performance during the COVID-19 pandemic among Afghan and Turkish respondents, the hypothesis is as below:

$H_{2b\text{-}0}$: There is no difference in the impact of online learning on academic performance during the COVID-19 pandemic among Afghan and Turkish students.

H_{2b}: There is a difference in the impact of online learning on academic performance during the COVID-19 pandemic among Afghan and Turkish students.

The independent t-test analysis was conducted to analyze this hypothesis (H_{2b}). Again, before the t-test, normality using the Shapiro-Wilk test and homogeneity of variances using Levene's test for equality of variances were tested on impact for both countries i.e., Afghanistan and Turkey as so to determine the model fit for the data. The 'impact of online learning on academic performance during the COVID-19 pandemic' for both countries were not normally distributed (Afghanistan – W (200) = 0.980, $p < 0.01$; Turkey – W (200) = 0.969, $p < 0.001$) (Table 37). However, the theory of central tendency implies that the sample size should be greater than 30 to consider the data normal. Here, the sample size for both countries is 200 students, so the t-test is considered to be a robust test against the violation of the normality assumption. Hence, the analysis continued.

Table 5.10. Normality Tests (Impact)

	Country	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Impact	Afghanistan	0.094	200	$p < 0.001$	0.980	200	$p < 0.01$
	Turkey	0.075	200	$p < 0.01$	0.969	200	$p < 0.001$
Note. a. Lilliefors Significance Correction							

For the assumption of 'Levene's test for equality of variances', F-test indicated that there is no significant difference in variance among the two countries (F = 0.20, p = 0.654), hence t-test with equal variances assumed was used (Table 5.11). A T-test indicated that there is a statistically remarkable difference in the impact of online learning on academic performance among Afghan and Turkish students (t (398) = − 3.78, p < 0.001). Hence, H2b is accepted. The mean scores also support this result, showing that Turkish students perceived a higher impact of online learning on their academic performance during the COVID-19 pandemic (M = 3.01, SD = 0.66) as compared to Afghan students (M = 2.76, SD = 0.65).

Table 5.11. Comparison of Impact of Online Learning on Academic Performance (N = 400)

		Afghanistan		Turkey		Levene's Test for Equality of Variances		Independent t-test (equal variance assumed)	
	N	Mean	Standard Deviation	Mean	Standard Deviation	F	p-value	T	p-value
Impact of Online Learning on Academic Performance	200	2.76	0.65	3.01	0.66	0.20	0.654	−3.78	p < 0.001

* p < 0.05, ** p < 0.01, *** p < 0.001

5.2.3. Comparison of Satisfaction with Online Learning During the COVID-19 pandemic between Afghan and Turkish Respondents – Independent T-Test Analysis

To analyze the comparison of satisfaction with online education during the COVID-19 pandemic among Afghan and Turkish respondents, the hypothesis is as below:

$H_{2c\text{-}0}$: There is no difference in satisfaction with online learning during the COVID-19 pandemic among Afghan and Turkish students.

H_{2c}: There is a difference in satisfaction with online learning during the COVID-19 pandemic among Afghan and Turkish students.

The independent t-test analysis was conducted to analyze this hypothesis (H_{2c}). Again, before the t-test, normality using the Shapiro-Wilk test and homogeneity of variances using Levene's test for equality of variances were tested on impact for both countries i.e., Afghanistan and Turkey as so to determine the model fit for the data. Both countries were not normally distributed in 'satisfaction of students during the COVID-19 pandemic' score (Afghanistan – W (200) = 0.965, $p < 0.001$; Turkey – W (200) = 0.950, $p < 0.01$) (Table 5.12). However, by applying the theory of central tendency, it can be observed that the sample size for both countries is more than 30; hence the data is considered to be normal. Hence, the analysis continued.

Table 5.12. Normality Tests (Satisfaction)

	Country	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Satisfaction	Afghanistan	0.089	200	p < 0.001	0.965	200	p < 0.001
	Turkey	0.092	200	p < 0.001	0.950	200	p < 0.001
Note. a. Lilliefors Significance Correction							

For the assumption of 'Levene's test for equality of variances', F-test indicated that there is a statistically remarkable difference in variance among the two countries ($F = 8.61$, $p < 0.01$), hence t-test with unequal variances assumed was used (Table 5.13). A T-test indicated that there is a statistically notable difference in satisfaction with online learning among Afghan and Turkish students ($t(384) = -4.87$, $p < 0.001$). Hence, H2c is accepted. The mean scores also support this result, showing that Turkish students were more satisfied and happier with online learning during the COVID-19 pandemic ($M = 2.92$, $SD = 0.95$) as compared to Afghan students ($M = 2.50$, $SD = 0.95$).

Table 5.13. Comparison of Attitude, Impact, and Satisfaction of Students With Online Learning

Comparison of Attitudes towards online learning, the Impact of online learning on academic performance, and Satisfaction with online learning between Afghan and Turkish respondents (N = 400).

	Afghanistan			Turkey		Levene's Test for Equality of Variances		Independent t-test (unequal variance assumed)	
	N	Mean	Standard Deviation	Mean	Standard Deviation	F	p-value	t	p-value
Satisfaction with Online Learning	200	2.51	0.95	2.93	0.78	8.61	0.004	−4.87	p < 0.001 ***

* p < 0.05, ** p < 0.01, *** p < 0.001

A clustered bar chart was designed to portray the differences in attitude, level of satisfaction, and perceived impact of academic performance among Afghan and Turkish students (Figure 5.1). Overall, it can be observed that Turkish students have a higher bar on all three scales i.e., attitude, level of satisfaction, and perceived impact. Hence, it supports the findings of the study.

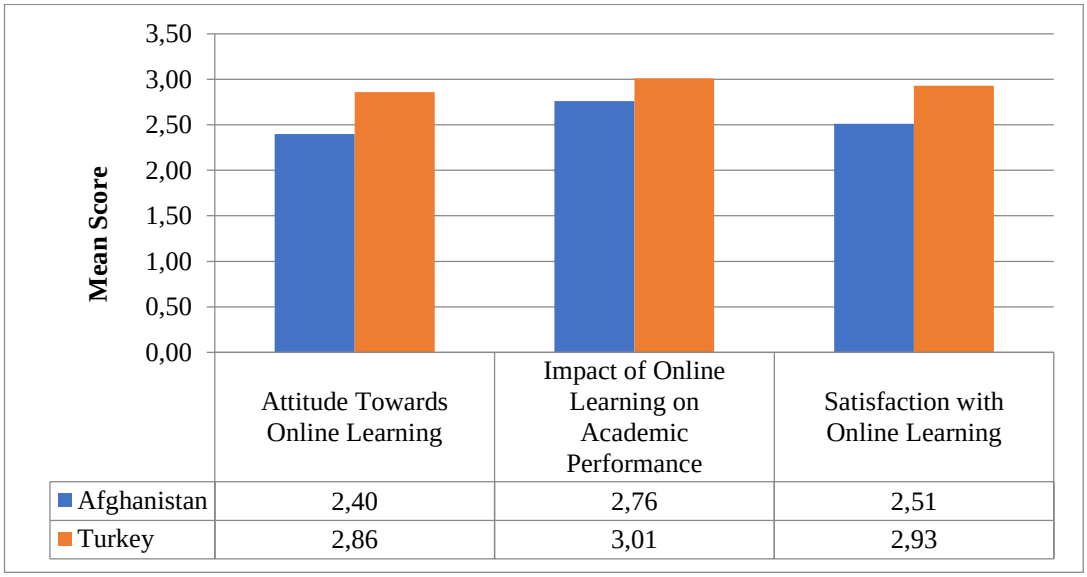

Figure 5.1. Comparison of the Mean Scores of Attitudes, Impact, and Satisfaction with Online Learning During the COVID-19 Pandemic

From the descriptive analysis, the study found an equal distribution of respondents in terms of gender, age, and educational level across both countries. On the contrary, the study found that students' attributes particularly toward the online learning process were found to be different among Afghan and Turkish students. This finding is supported by the study conducted in China by Chen et al. (2020), which discovered that students' personal factors had no direct effect on their satisfaction; rather, the availability of online applications did affect the students' level of satisfaction.

5.3. Evaluations of the Hypotheses

Table 5.14. Summary of the Main Results

Hypothesis	Description	Result
H1	There is no association between online learning patterns and country.	Partially Accepted
H1a	There is an association between physical classes before the COVID-19 pandemic and country.	Rejected
H1b	There is an association between online learning participation before pandemic and country.	Accepted
H1c	There is an association between online classes during the COVID-19 pandemic and country.	Accepted
H1d	There is an association between access to a device for online learning during the COVID-19 pandemic and country.	Rejected
H1e	There is no association between types of electronic devices and country.	Accepted
H1f	There is an association between the number of semesters studied online and country.	Accepted
H1g	There is an association between students currently studying online and the country.	Accepted
H2	There is no difference in the impact of the online learning process among Afghan and Turkish students.	Accepted
H2a	There is a difference in attitude towards online learning among Afghan and Turkish students.	Accepted
H2b	There is a difference in the impact of online learning on academic performance during the COVID-19 pandemic among Afghan and Turkish students.	Accepted
H2c	There is a difference in satisfaction with online learning during the COVID-19 pandemic among Afghan and Turkish students.	Accepted

A comprehensive analysis was conducted to find the statistical significance of differences in these certain students' attributes (Hypothesis 1). The results found that there is a statistically significant association between countries and attributes like online learning participation before and during the COVID-19 pandemic, and the number of semesters studied online and currently studying online, as hypotheses 1b, 1c, 1e, and 1f are accepted. However, there is no association between online classes before the COVID-19 pandemic and access to an electronic device for online learning in different countries, as hypotheses, 1a and 1d are rejected (Table 5.14).

Additionally, the study found that the two countries did not differ in the number of students attending physical classes before the COVID-19 pandemic (Figure 5.2). This finding is consistent with the study of Himat et al. (2021), which found that Afghan students prefer traditional classrooms to virtual classrooms. It is also compatible with the study of Hebebci et al. (2020), which found that Turkish students also prefer onsite classes and believe that online education has a negative impact on their academic performance because they could not have the same level of understanding in online learning as compared to onsite classes.

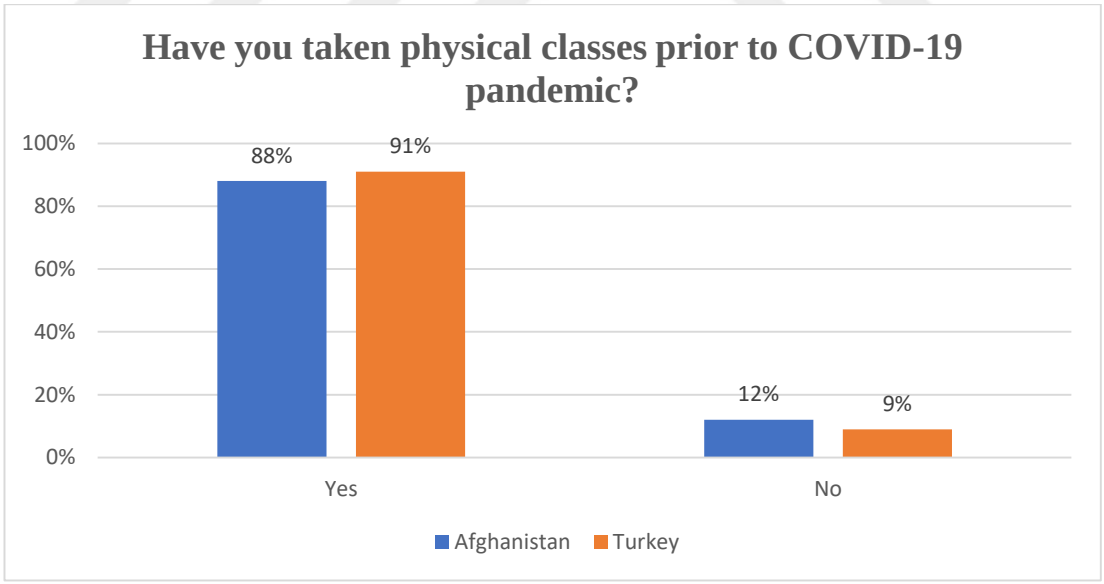

Figure 5.2. Physical Class Before COVID-19 Pandemic

The study also found that, on the contrary, from the beginning of COVID-19, the number of students participating in online learning was statistically different in Afghanistan and Turkey. According to Figure 5.3, the number of students attending

online education before the COVID-19 pandemic is different between the two countries as well. This finding is in accordance with the study of Noori (2021), who found out that the online education system has not been thoroughly evaluated for the COVID-19 pandemic due to the lack of stable internet connections and the lack of infrastructure in cities in Afghanistan. On the contrary, the lack of qualification of Turkish teachers (not students) to use online learning procedures was the only cause of the low academic performance of Turkish students.

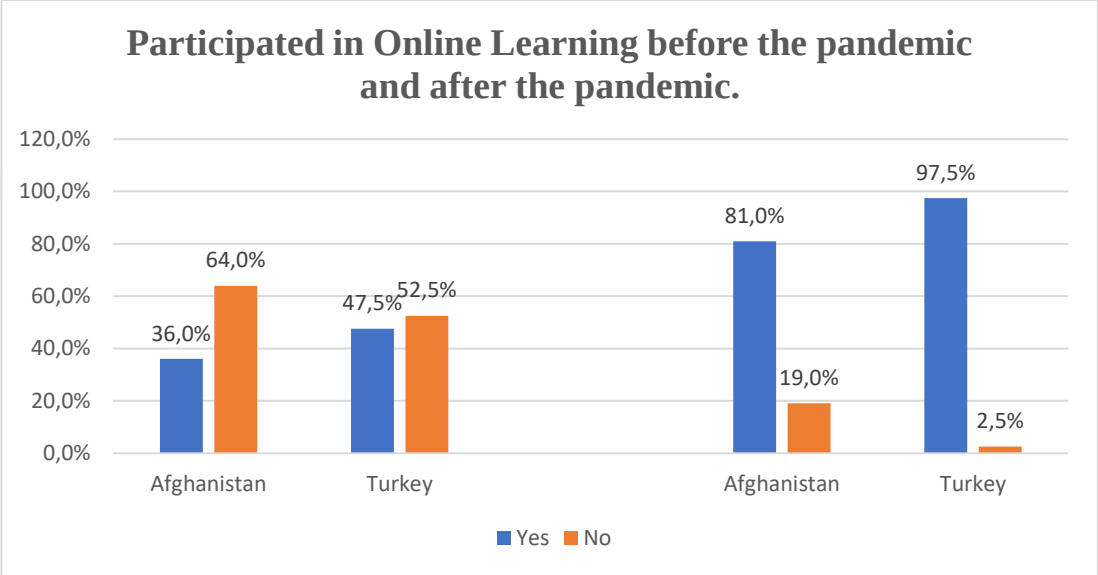

Figure 5.3. Participated in Online Learning Before and During the Pandemic

The study also found that even though Afghan and Turkish students equally have access to electronic devices for online learning during the pandemic (Table 5.4), it is evident from (Figure 5.4) that Afghan students mostly used a smartphone during online classes while Turkish students used smartphones and laptops during online sessions. This finding is consistent with the study of Himat et al. (2021) who found that the majority of Afghan students lacked access to desktops and laptops. As Sarwari et al. (2021) mentioned, Afghanistan is a war-torn country that has poor infrastructure, and students might only be available to use a smartphone during online classes due to their wide availability to everyone in general. This finding is further consistent with the study of Hebebci et al. (2020), who argued that practical use of online learning is difficult for Turkish students as they find it hard to understand online delivered lessons and lose the opportunity to socialize during group tasks.

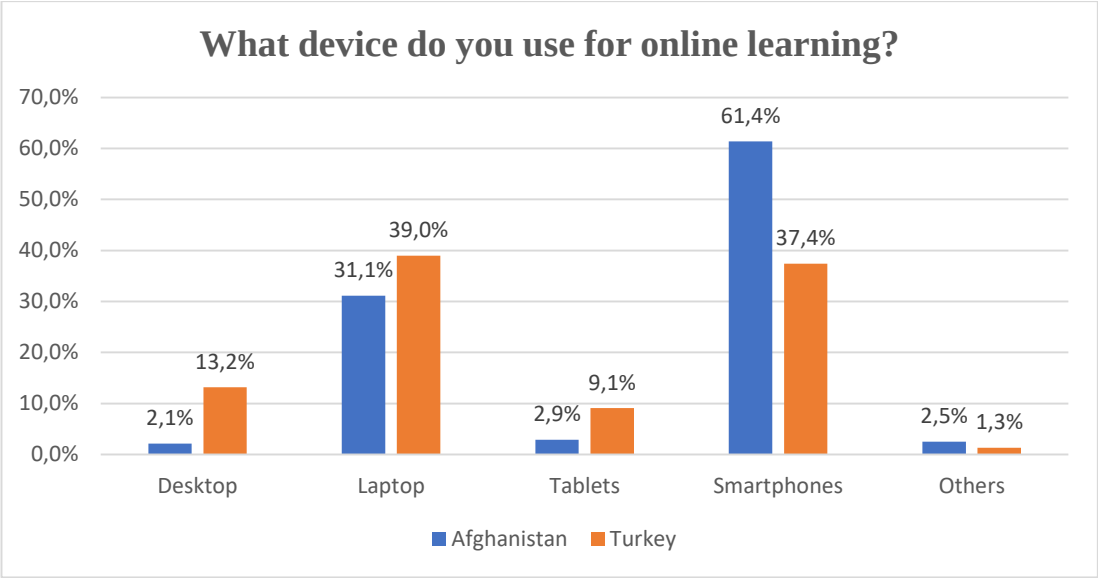

Figure 5.4. Devices Used for Online Learning

According to the **Uses and Gratifications Theory**, smartphones are used for gaining knowledge, data collection, time management, and keeping documents and data. These devices are also used as an instrument in business such as business transactions or business conversations. They are used to socially interact or connect with communities or friends and family. Mobile phones are also utilized for entertainment purposes or passing bore time. They are also used for security and safety purposes in case of an emergency. Collectively, this media technology used in communication and information seeking may compete with other technologies to satisfy desires and needs for gratification (Wang, Costa, Miller, Carr, & Kohlbacher).

The study also found that the differences in the number of semesters studied online were primarily due to different classifications of students currently studying in different semesters in Afghanistan and Turkey. In particular, Afghan students in our sample belonged to the final year or seventh and eighth semesters of their bachelor's degree, while Turkish students belonged to the second year or third and fourth semesters of their bachelor's or master's degree. This finding is consistent with the study of Orfan (2021), which highlighted that those cultural norms and economic discrimination in Afghan society affected the student's academic performance. As a result, a large number of final-year students only remained enrolled in online education in Afghanistan.

An important and interesting finding in the study shows that there is a statistically significant difference in the number of students currently studying online among Afghan and Turkish students (Figure 5.5). It was found that educators in Turkey were still involved in online learning, while in Afghanistan, they were not, possibly switched back to the physical classes learning method. As consistent with the study of Hashemi & Kew (2021), once again, economic and infrastructure constraints in Afghanistan had caused a shortage of digital devices, a high cost of internet, and a lack of pedagogical training on the usage of technological devices and applications, which in turn caused low engagement in online classes and a significant shift from online learning to the traditional classroom.

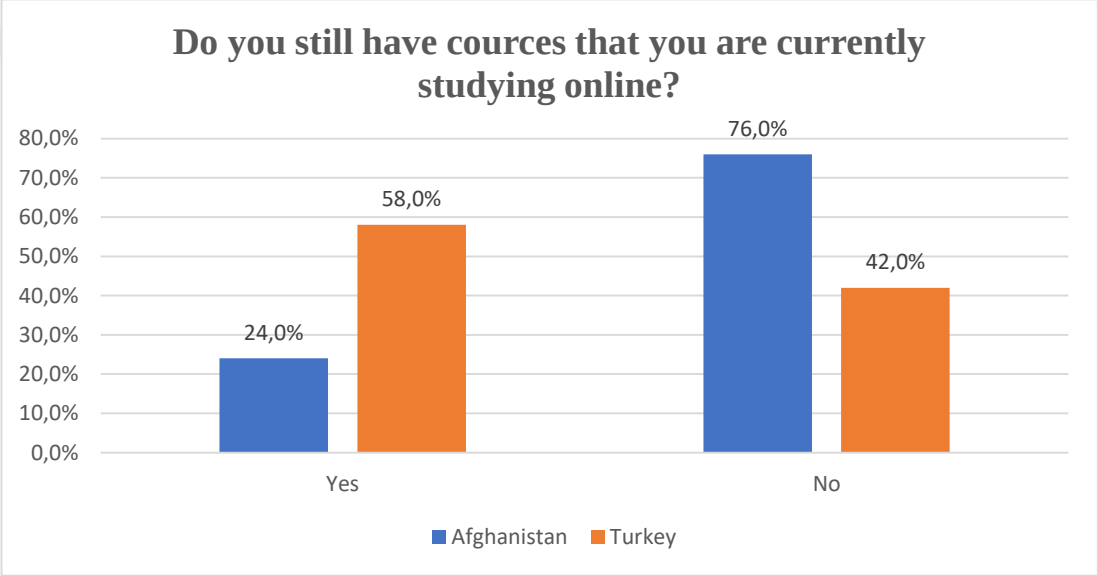

Figure 5.5. Currently Studying Online

Due to the COVID-19 pandemic's rapid spread around the globe, everyone in their homes has been quarantined, and students were not able to continue online learning. Though distance learning is an effective solution to continue education during the COVID times. Based on the findings of this study, during the COVID-19 pandemic students depended on media not only for entertainment and leisure options but according to the Media Dependency theory, for receiving information about the situation and mechanism of online learning. Figure 5.6 indicates that the majority of students in both countries had access to a device for online learning.

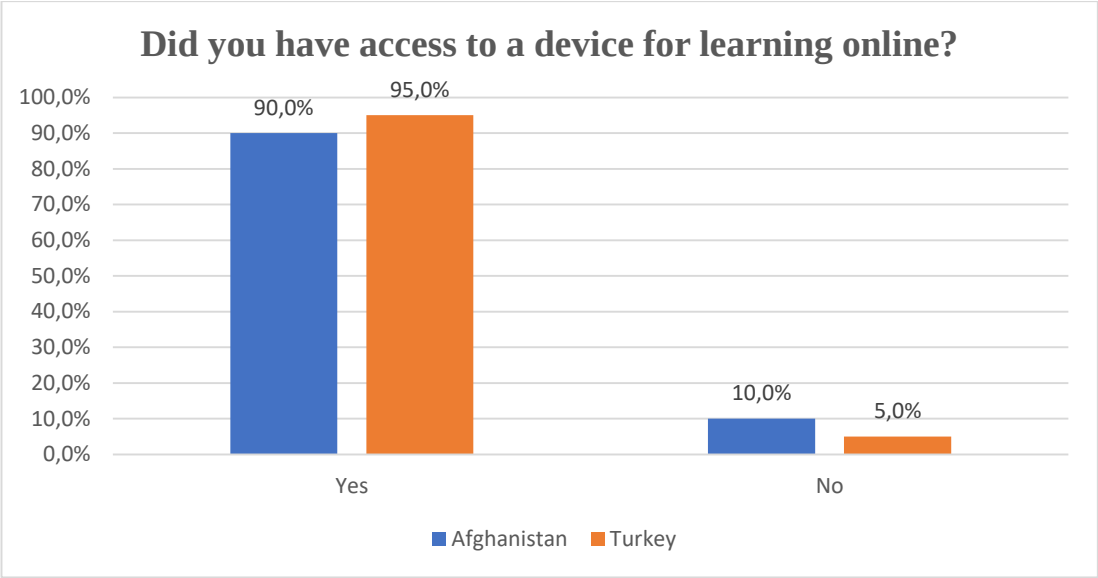

Figure 5.6. Access to a Device for Online Learning

In accordance with **Media Dependency** theory, the results showed that students depended on these devices (Figure 5.7) to participate in their online classes, read PowerPoint lecture slides, and took notes on their devices to support their independent study time. Students' primary simultaneous tasks depended on these devices to listen to the lecture, process information presented by teachers, and take notes (Farley, Risko, & Kingstone, 2013).

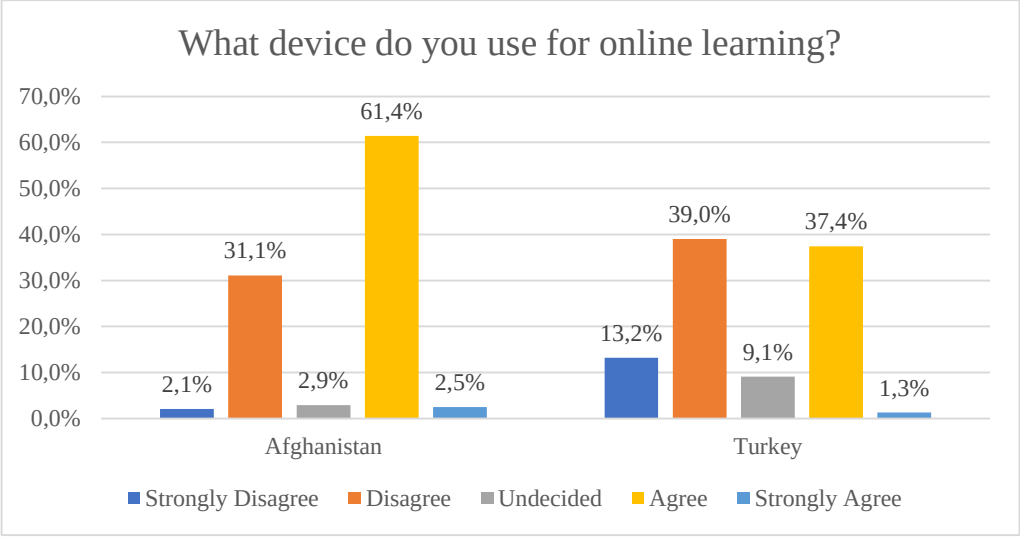

Figure 5.7. Devices Used for Online Learning

It's common knowledge that individuals exchange knowledge when they chat. So, students should not be afraid to express their thoughts because they don't want to be seen as rude or self-conscious. It's better if they're already thinking about what they're

going to talk about when they meet. Subject matter grows when it's discussed in depth by several people (Reimers, 2021). Anyone who takes part in the event. It has been shown that interacting with an instructor in this way increases students' interest and participation in online courses. Students and teachers should keep the conversation going after class, and students are encouraged to do so. Learning doesn't come to a stop after a session is over. Conversations with classmates and teachers may help students remember what they've studied while stressing the significance of interpersonal skills (Manzoor & Safdar, 2020). Based on Figure 5.8, the majority of students in Afghanistan stated that their instructors were not accessible during the online learning compared to in-person classes, while in Turkey the majority of students stated that their instructors were accessible during the online courses.

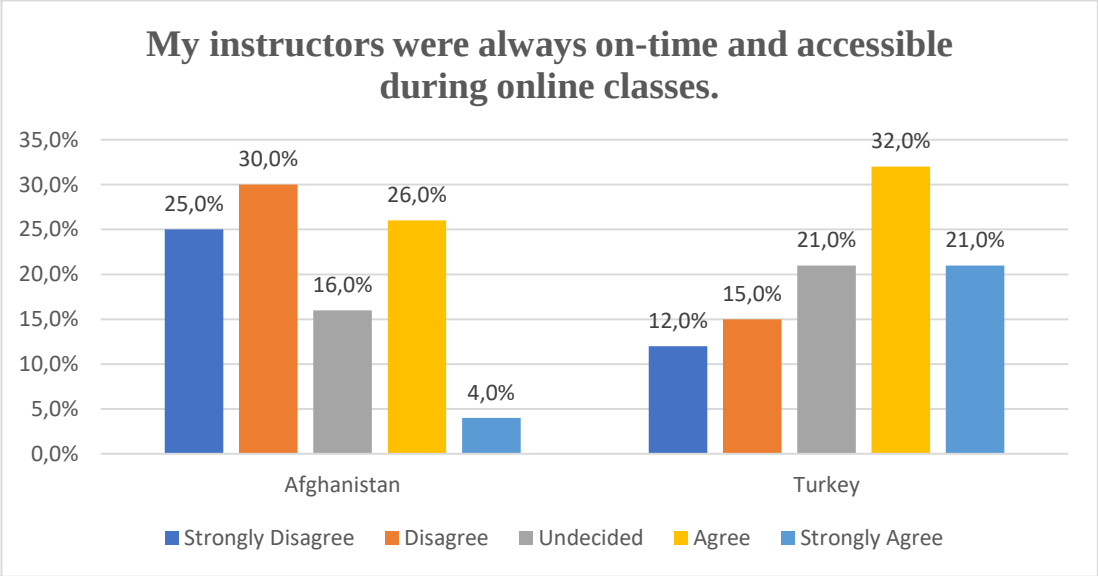

Figure 5.8. Accessibility of Instructors During Online Courses

Accommodating one's present situation and learning in the face of adversity is all that is required to get out of this situation and get back on track. Online learning has arisen as a glimmer of light throughout this pandemic. Online courses may be a cost-effective, high-quality, and engaging way to acquire new knowledge. Participants in online courses must not simply show up, they must engage in the learning process and do so with a positive mindset. The effectiveness of what pupils learn is legitimately questioned due to the differences between online education and conventional classroom training. It is the student's performance that determines the overall success of a class in the most significant way. Attendance and active participation are essential

for getting the most out of online education (Fakhar Naveed, 2017). According to the findings of this study (Figure 5.9), the majority of students in Afghanistan are not satisfied with their active participation in online classes compared to in-person classes, while in Turkey the majority of students were happy and satisfied with their active participation during the online classes. According to these findings, we can argue that for getting better results and positive academic performance from online learning, students must actively attend and participate in their online classes.

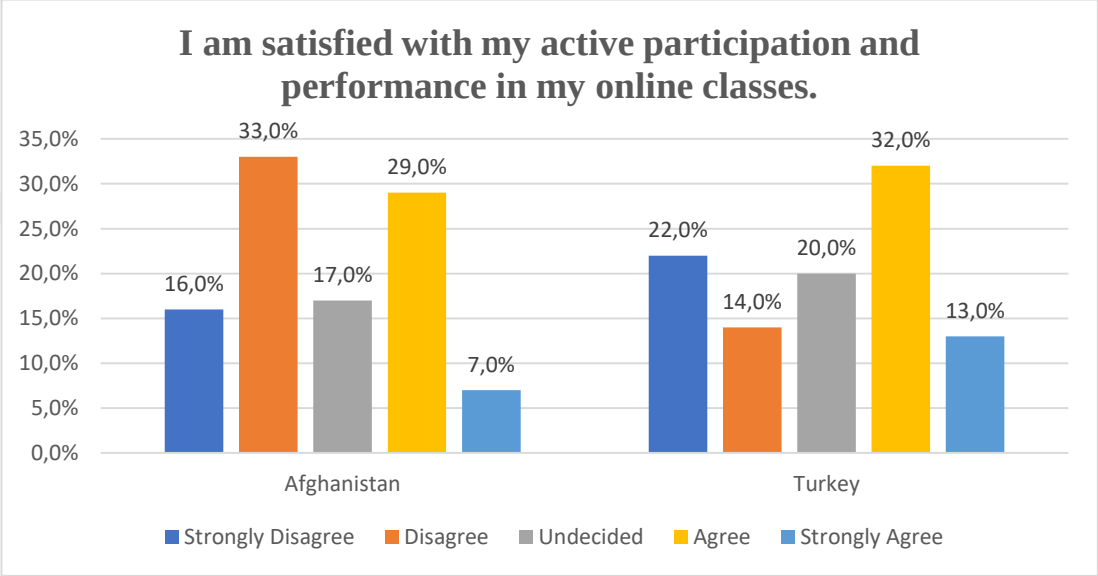

Figure 5.9. Participation in Online Courses During the COVID-19

Through active participation, students develop a hunger for knowledge and want to study. The more time they spend together, the more they learn about one another. Students learn best when they interact with one another, inquire about the subject, and share their thoughts. Teachers are unable to provide individual attention to students in an online class since it is different from a traditional classroom. However, talking to their instructors about the subject would be a start in the right direction. Sharing their views, ideas, and confusion can help them learn more effectively. Furthermore, once they're unsure about anything, they should speak up. Make the most of this by participating in as many of these activities as feasible. Their educational experience will be enhanced by the opportunity to cooperate and exchange ideas with others (Reimers, 2021).

Most importantly, the study found a considerable difference in attitude, perceived impact, and satisfaction with online learning during the COVID-19 pandemic among Afghan and Turkish students (Hypothesis 2) (Figure 5.1). Hence, hypotheses 2a, 2b, and 2c are accepted. Turkish students had a better attitude toward online learning during the pandemic as compared to Afghan students (Figure 5.10). It can be rationalized that the more the students have a better attitude or more lean toward online learning itself, the better their academic performance is. This finding has a connection with the studies of Himat et al. (2021), Noori (2021), and Tadesse & Muluye (2020), which found that Afghan students remarkably have reduced motivation levels and negative attitude toward online learning mainly due to a lack of infrastructure and economic constraints.

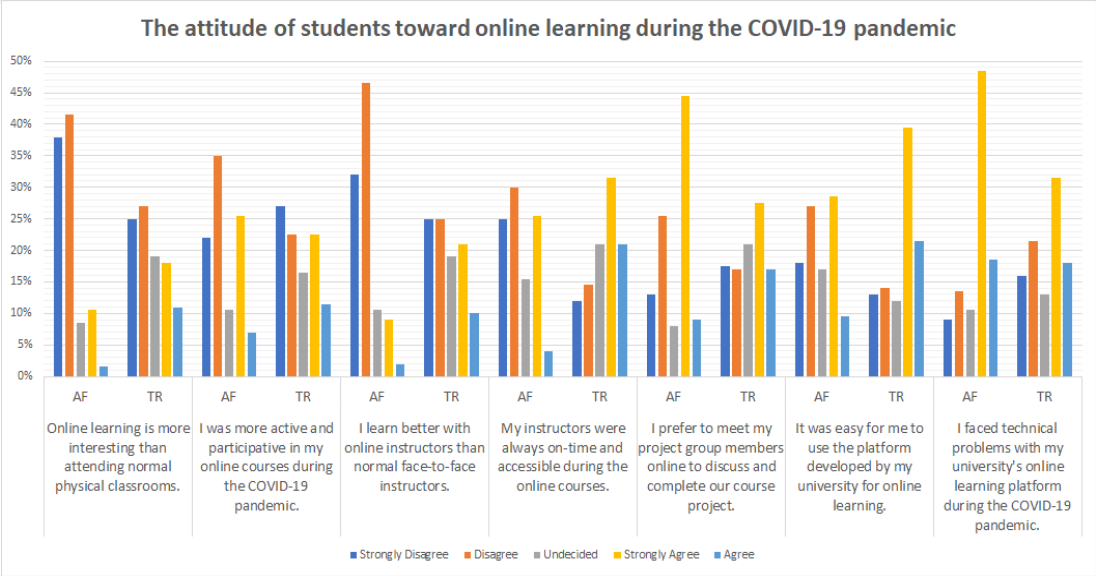

Figure 5.10. The Attitude of Students Toward Online Learning

As we discussed, the more the students have a better attitude toward online learning itself, the better will be their academic performance, based on the findings of this study (Figure 5.11), Turkish students perceived a more significant impact of online learning on their academic performance during the COVID-19 pandemic (Table 5.11) compared to Afghan students. This finding is consistent with the study of Elhadary et al. (2020), which mentioned various factors that affected students' academic performance in Turkey during the COVID-19 crisis, including difficulty in using online learning and educational applications and lack of teacher training. In the case of Afghan students, the finding is consistent with the study of Orfan (2021), which

states that unequal access to electronic devices and applications, and the high cost of the Internet, hinder students' academic performance and lead to student dissatisfaction with online learning.

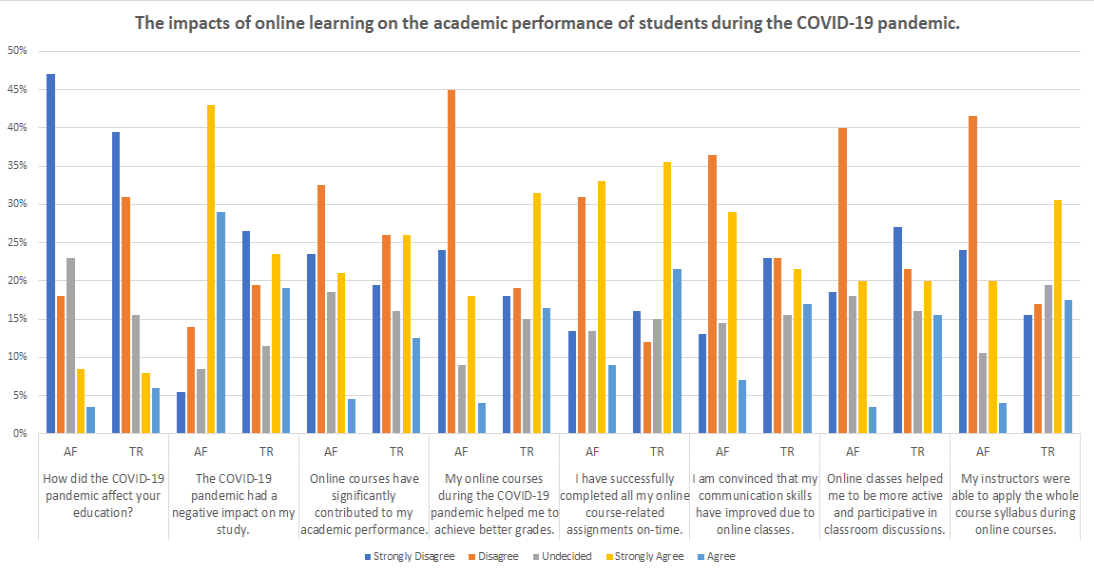

Figure 5.11. The Impacts of Online Learning on Students' Academic Performance

Socioeconomic demographics are taken into consideration when it comes to comparing the effects of teaching and online learning on the student's academic performances in two different countries and that is clear as **Knowledge Gap Theory** states that there is a greater benefit to those located in higher socioeconomic demographics than to those located in lower socioeconomic demographics (Tichenor, et. al., 1970). However, according to the findings of this study, it could be different according to the students themselves as well. As (Figure 5.12) indicates, the majority of students in Afghanistan were more skilled with IT than the majority of students in Turkey.

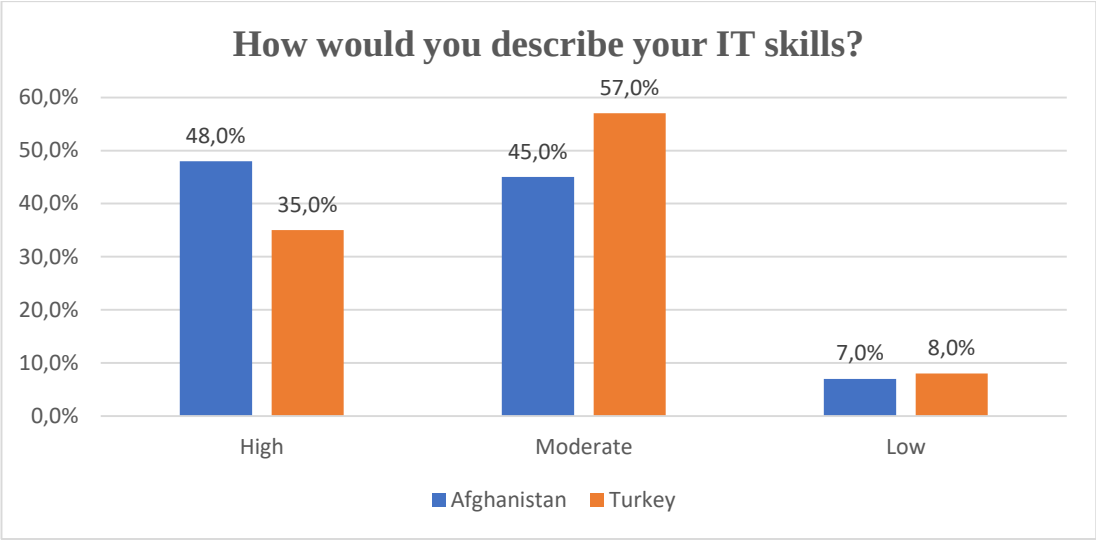

Figure 5.12. Respondents' IT Skills

Learning is more likely to take place when students participate actively in the courses, ask questions, and create a positive learning atmosphere. To get the most out of online learning options during COVID-19, student self-discipline is also essential. According to Figure 5.9, since a greater number of students in Afghanistan were not active and participative in online classes, this results that online courses did not contribute to their academic performance (Figure 5.10). On the other hand, in Turkey, since the majority of students were active and participative in their online classes, this results that online learning contributed to their academic performance (Figure 5.13).

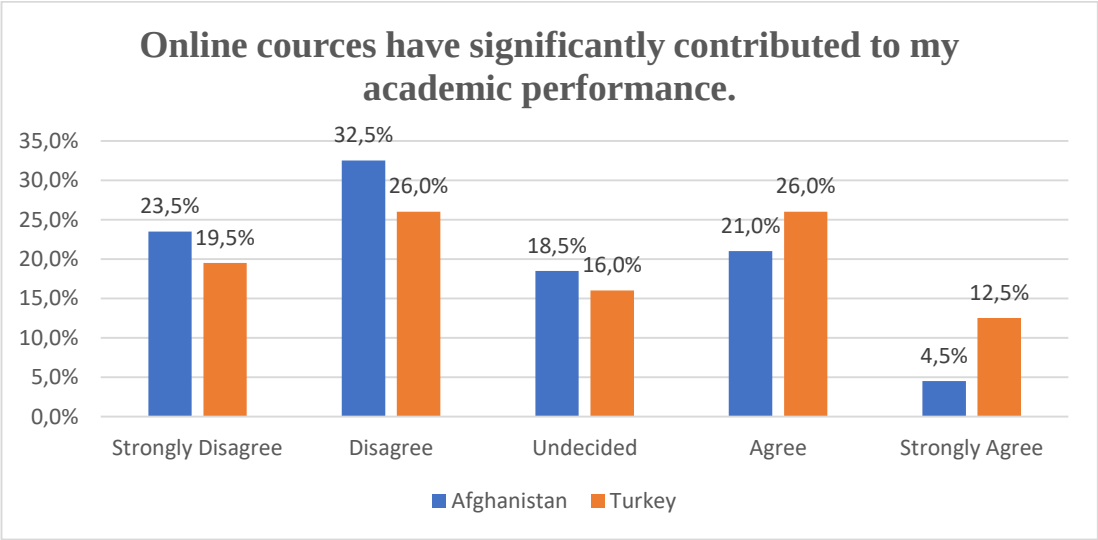

Figure 5.13. Contribution of Online Classes on Student's Academic Performance

Lastly, the study found that Turkish students were found to be more satisfied with the online learning process during the COVID-19 pandemic, as compared to Afghan students that the majority of them are not happy and satisfied with online learning during the pandemic (Figure 5.14) due to the different factors which we have discussed earlier on this chapter. It can be further confirmed that when students are more excited and happier about how they are being taught by their instructors, they will be more focused on their education, and this will have positive results on their academic performances. This finding is accordant with the study of Elhadary et al. (2020), which mentioned that despite many factors affecting the student's academic performance, both students and instructors in Turkey are satisfied with online learning. Moreover, this finding is consistent with the study of Hashemi (2021), which found that Afghan students were highly dissatisfied with online education due to low levels of understanding during the webinars and online delivered lectures.

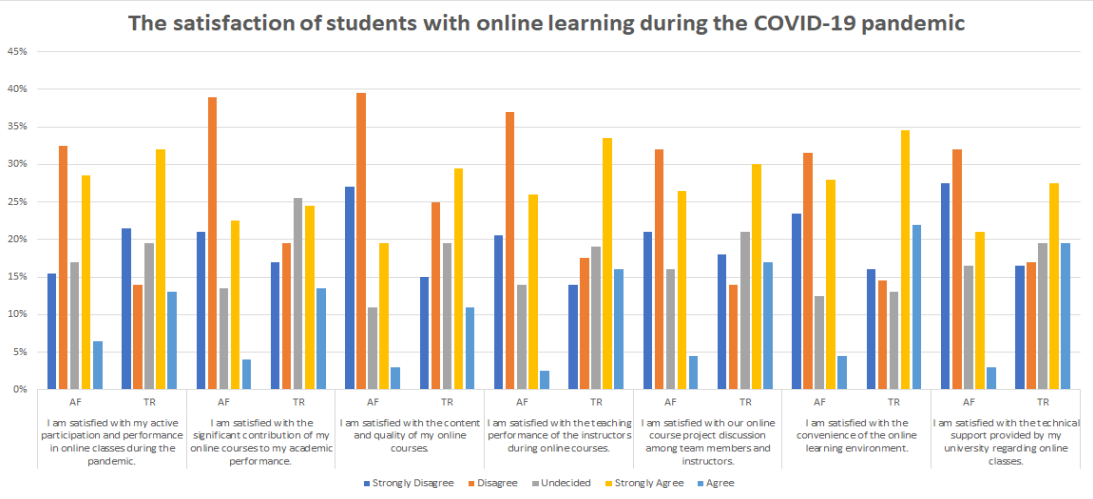

Figure 5.14. The Satisfaction of Students with Online

From the discussion made above it becomes clear that the online learning experience is different for students from different cultures having different digital skills. These differences serve as the barrier to achieving the goals and objectives of online learning in an ideal manner. These obstacles can be removed by working on some areas. For example, improving digital skills, gaining cross-cultural awareness, and improving digital communication skills can help learners improve their academic performance in online classes. In a nutshell, the pandemic has set forth a new set of rules for digital

communication and by adapting to these rules students can ultimately get benefit from online learning.

Apart from these major issues, both Turkish and Afghan students faced some minor issues such as lack of understanding due to unqualified and untrained teachers from a technological viewpoint, non-availability of books, high cost of internet, and lack of assessment criteria that have somehow negatively affected the academic performance of the students. Additionally, procrastination plays a role in the ineffectiveness of online learning. Because of this, students must stop utilizing COVID-19 as an excuse to avoid studying and come to appreciate the importance of online education instead. This is an opportunity for students to broaden their horizons and hone their mental abilities via this course. It is possible to boost online learning by being attentive, active, and involved. The ability to maintain focus and self-control when studying online is a skill that every student should be able to develop (González-Pienda & Rodríguez, 2017).

CHAPTER VI

CONCLUSION AND RECOMMENDATIONS

6.1. Conclusion

The study was conducted by adopting a quantitative method to analyze the impacts of online learning on the student's academic performance during the COVID-19 pandemic with a specific focus on Afghanistan and Turkey. A survey was conducted among 400 students, 200 students from Afghanistan, and 200 students from Turkey, and in order to collect the responses, the snowball technique has been used. In addition, to reach more students, the survey link has been shared on social media as well.

The study found quite interesting results. Afghan and Turkish have quite different learning procedures. The research has found that there is a statistically significant association between countries and attributes like online learning participation before and during the COVID-19 pandemic, the number of semesters studied online, and currently studying online; therefore, the learning outcomes are different for different countries. The findings also showed that Turkish students participated in online learning even before the pandemic Afghan students did and their online participation increased during the pandemic. According to media dependency theory, the availability of different media to Turkish students before the pandemic allowed learners to use them more efficiently during the pandemic. Also, Afghan students were less dependent on digital media for learning purposes before the pandemic; therefore, their access to different media for learning remained low during the pandemic. In addition, the number of semesters studied online was higher in the case of Turkish students; they were still found to be enrolled in online courses compared to Afghan students.

The two countries did not differ in the number of students attending physical classes before the COVID-19 pandemic and students in both countries had the access to

electronic devices for attending online classes before the pandemic. Despite having access to electronic devices to take online classes, the number of Afghan students attending online classes was lower compared to Turkish students largely because of their dependency on digital media before the pandemic was less compared to Turkish students.

Additionally, a difference in the choice of an electronic device to take online classes was also seen. Afghan students relied solely on smartphones to access classes whereas the majority of Turkish students used both laptops as well as smartphones to take online classes. According to the Uses and Gratification theory, in underdeveloped countries, like Afghanistan, most people have only access to smartphones because smartphones are easily available at cheap prices for people and everyone uses a smartphone to fulfill many gratifications like knowledge, interaction, communication, etc. Moreover, The Knowledge Gap Theory also explains this difference in trend for students from both countries. According to this theory, society plays a pivotal role in determining the behavior of people. The Afghan society is technologically less advanced than Turkish society which made Afghan students follow conventional learning procedures.

An important and interesting finding in the study shows that there is a statistically significant difference in the number of students currently studying online among Afghan and Turkish students. It was found that students in Turkey were still involved in online learning, while in Afghanistan, they were not, possibly switched back to the physical classes learning method. The study also found that the differences in the number of semesters studied online were primarily due to different classifications of students currently studying in different semesters in Afghanistan and Turkey.

More surprisingly, the study found a considerable difference in attitude, perceived impact, and satisfaction with online learning during the COVID-19 pandemic. Turkish students had a better attitude toward online learning during the pandemic as compared to Afghan students. Furthermore, the more the students have a better attitude toward online learning itself, the better their academic performance will be; Turkish students perceived a more significant impact of online learning on their academic performance during the COVID-19 pandemic compared to Afghan students. Afghan students did

not have economic and technological resources to participate in online learning during the COVID-19 pandemic, which in turn negatively affected their academic performance of these students. Additionally, since Afghanistan is a war-torn country that has a serious infrastructure problem, the online education system in response to the COVID-19 pandemic was not much appreciated, and the technology knowledge gap among Afghan students also impacted their attitude toward online learning, which prohibited them from properly utilizing digital learning technologies.

The higher performance of Turkish students learning online can also be explained by the Uses and Gratification Theory. As Turkish students were handy in using different technological gadgets before the pandemic, the outcomes produced by these gadgets for Turkish were better compared to Afghan students. The more people depend on the media, the stronger the media's influence is on them. Limited access to different media for Afghan students shaped their learning outcomes by lowering their academic performance.

This is the reason that satisfaction from online learning was less among Afghan students compared to Turkish students. Turkish ones were found to be more satisfied with the online learning process during the COVID-19 pandemic, as compared to Afghan students who are not happy and satisfied with online learning during the pandemic.

6.2. Recommendations

The study recommends that every government should consider the scope of their infrastructure and the economic status of their people before making any decision. According to the Knowledge Gap theory, those who are living in higher socioeconomic demographics have greater benefits than those living in a lower socioeconomic condition. Thus, during the difficult period of the COVID-19 pandemic, it was necessary to close down the schools, but having online classes instead of the temporary closing of schools would have a more adverse effect on the outcome i.e., the academic performance of the students, particularly in countries like Afghanistan, where there is a lack of technology and infrastructure, and the cost of living is already too high.

Furthermore, educational institutions must conduct pedagogical training sessions for the instructors to support them in the easy and quick use of the technology. Such training will allow the instructors to apply those teaching activities that better comply with the limited scope of online teaching. This will resolve the problem of the technology knowledge gap and reduce the understanding and motivation levels of the students, hence indirectly contributing to better academic performance.

In addition, the school administration and educators must develop a comprehensive assessment plan as well as a pre-defined course outline for a better understanding of students. Such a plan will increase the support for both teachers and students in maintaining the quality of education even during the hard times of the COVID-19 pandemic. Moreover, writing articles or other resources on the subject of online learning, and holding various classes about the benefits of online learning may also improve the experience and the attitude of students toward online education itself. Students may also engage in extracurricular activities in which they may explore a wide range of materials and expand their creative abilities.

Most importantly, self-discipline is also essential for students to get the most out of online learning options during the COVID-19 pandemic. Since students are dependent on media to continue their education during the pandemic, they should also have strategies to manage this dependency, to not affect their academic performance negatively. For example, overuse of social media, as well as addiction to the internet, may have a negative impact on their academic performance and lower learning satisfaction of students in online learning. If students manage to have self-discipline, their uses for online learning options become more refined and gratification for online learning options grows in the process.

Lastly, the school administration, educators, and the government should ensure the availability of books online or at least presentation slides so that the students would learn with ease on their own. Since the students are more familiar and used to books in traditional classes, the non-availability of books would be a major setback for their academic performance. Most importantly, students' engagement is improved when their parents provide them with a dedicated learning location that is free of other

distractions. They must provide a conducive learning atmosphere in which students can open up to their peers and instructors without fear of being bullied or distracted.

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APPENDICES

APPENDIX A

QUESTIONNAIRE

Demographic Information: Please mark √ where applicable

1. Gender:

(a) Male	(b) Female

2. Age:

(a) 17 - 21	(b) 22 – 26 years	(c) 27 – 31 years	(d) Above 31 years

3. What is your city? List of All Cities.

4. Which educational degree are you currently pursuing?

(a) Bachelor	(b) Masters	(c) PhD

5. In which semester are you currently enrolled?

(a) 1-2	(b) 3-4	(c) 5-6	(d) 7-8

6. How would you describe your IT skills?

(a) High	(b) Moderate	(c) Low

7. Have you ever participated in any type of online learning before the pandemic?

(a) Yes	(b) No

8. Have you taken online classes during the COVID-19 pandemic?

(a) Yes	(b) No

9. Did you have access to a device for learning online?

(a) Yes	(b) Yes, but it doesn't work well	(c) No, I share with others

10. What device do you use for distance learning?

(a) Laptop	(b) Desktop	(c) Tablet	(d) Smartphone

11. Have you taken Physical classes before the COVID-19 pandemic?

(a) Yes	(b) No

12. How many semesters have you studied online till now?

(a) 1	(b) 2	(c) 3+

13. Do you still have courses that you are currently studying online?

(a) Yes	(b) No

Please indicate the extent to which you agree or disagree with the following: Statement on each dimension of Online Learning and its impact on the Academic Performances of Students during the COVID-19 pandemic by ticking appropriate options, with 1 being strongly disagreed and 5 strongly agree.

1	**The attitude of Afghan and Turkish students toward online learning during the COVID-19 pandemic.**	**Strongly Agree**	**Agree**	**Not sure**	**Disagree**	**Strongly Disagree**
A	Online learning is more interesting than attending normal physical classrooms.					
B	I was more active and participative in my online courses during the COVID-19 pandemic.					
C	I learn better with online instructors than with normal face-to-face instructors.					
D	My instructors were always on-time and accessible during the online courses.					
E	I prefer to meet my project group members online to discuss and complete our course project.					

F	It was easy for me to use the platform developed by my university for online learning.					
G	I faced technical problems with my university's online learning platform during the COVID-19 pandemic.					
H	In the future, I prefer to attend physical classrooms rather than online classrooms.					
2	**The impact of online learning on the academic performance of Afghan and Turkish students during the COVID-19 pandemic.**	**Strongly Agree**	**Agree**	**Not sure**	**Disagree**	**Strongly Disagree**
A	How did the COVID-19 pandemic affect your education?					
B	The COVID-19 pandemic had a negative impact on my study.					
C	Online courses have significantly contributed to my academic performance.					
D	My online courses during the COVID-19 pandemic helped me to achieve better grades.					
E	I have completed all my online course-related assignments and projects on time during the COVID-19 pandemic.					
F	I am convinced that my communication skills have improved due to online classes.					
	Online classes helped me to be more active and participative in classroom discussions.					
G	My instructors were able to apply the whole course syllabus during online courses.					

H	Due to my online courses during the COVID-19 pandemic, I got into the habit of reading more books.					
3	**The satisfaction of Afghan and Turkish students with online learning during the COVID-19 pandemic**	**Strongly Agree**	**Agree**	**Not sure**	**Disagree**	**Strongly Disagree**
A	I am satisfied with my active participation and performance in online classes during the pandemic.					
B	I am satisfied with the significant contribution of my online courses to my academic performance.					
C	I am satisfied with the content and quality of my online courses.					
D	I am satisfied with the teaching performance of the instructors during online courses.					
E	I am satisfied with our online course project discussion among team members and instructors.					
F	I am satisfied with the convenience of the online learning environment.					
G	I am satisfied with the technical support provided by my university regarding online classes.					
H	I have enjoyed my online courses during the COVID-19 pandemic.					

APPENDIX B

GRAPHS

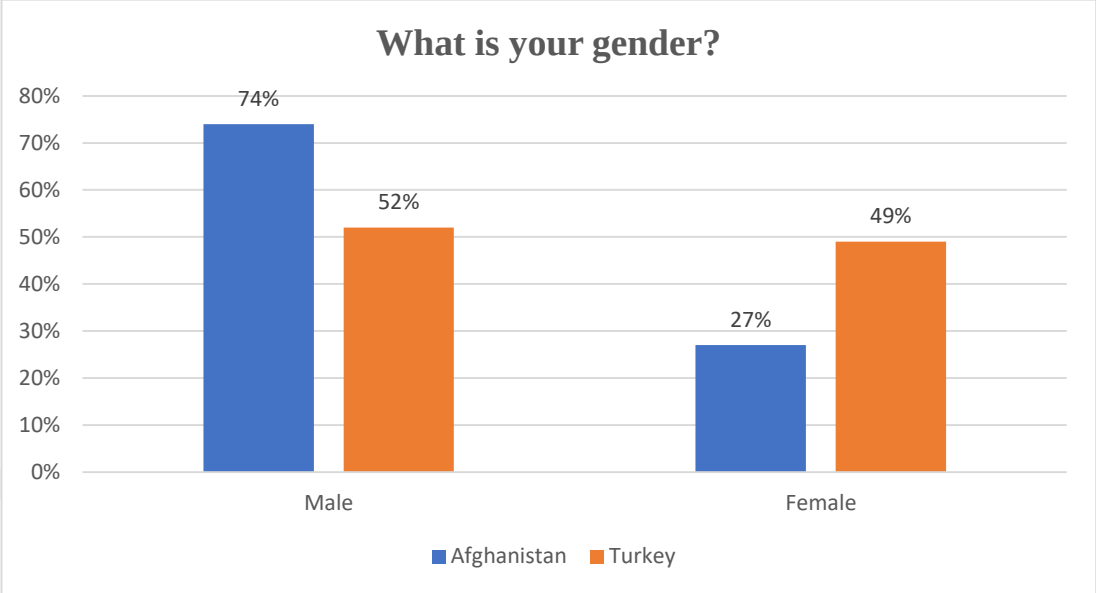

Figure B.1. Respondents' Gender

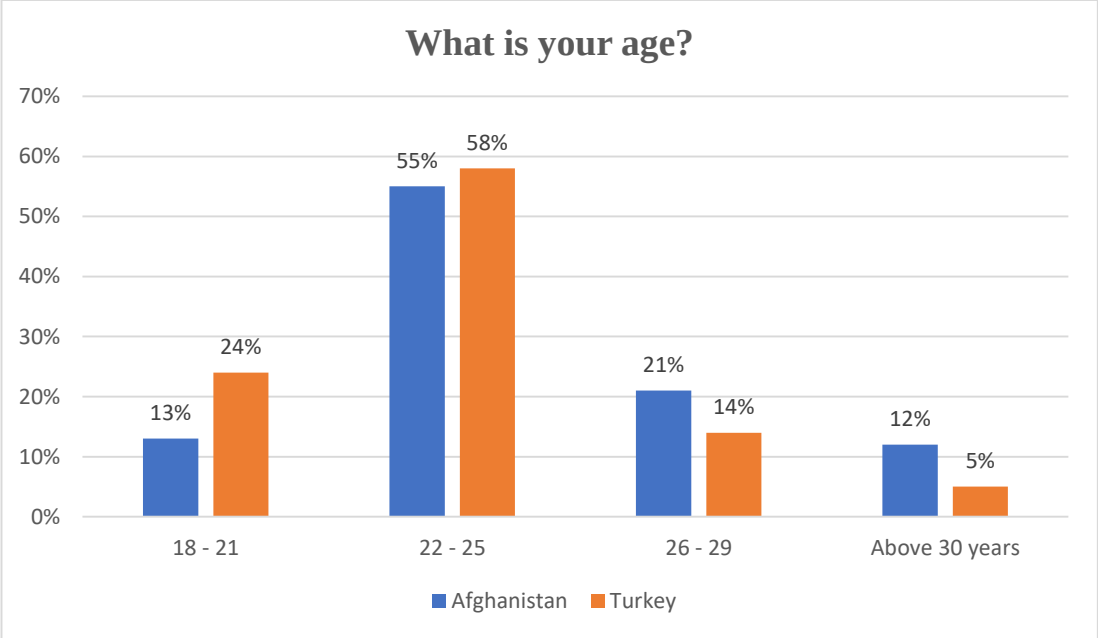

Figure B.2. Respondents' Age

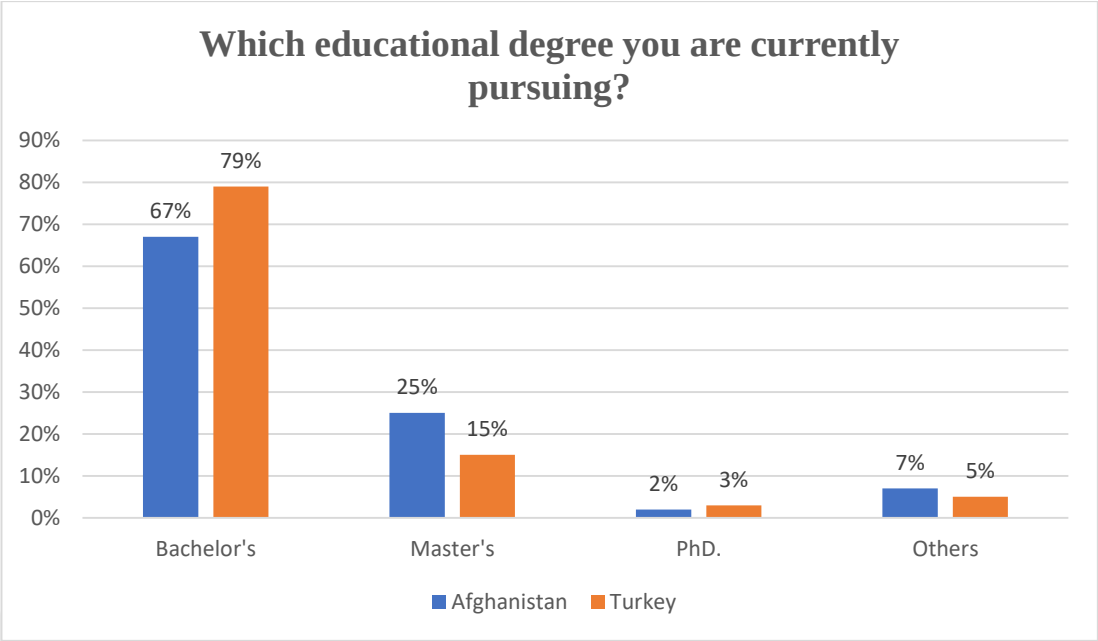

Figure B.3. Respondents' Educational Degree

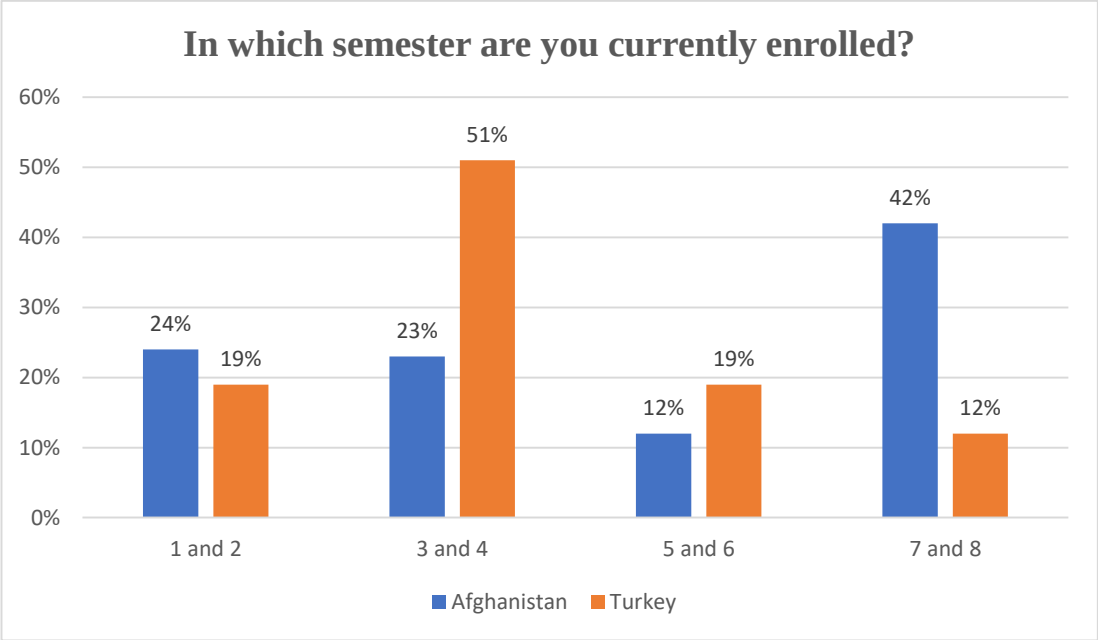

Figure B.4. Respondents' Current Semester

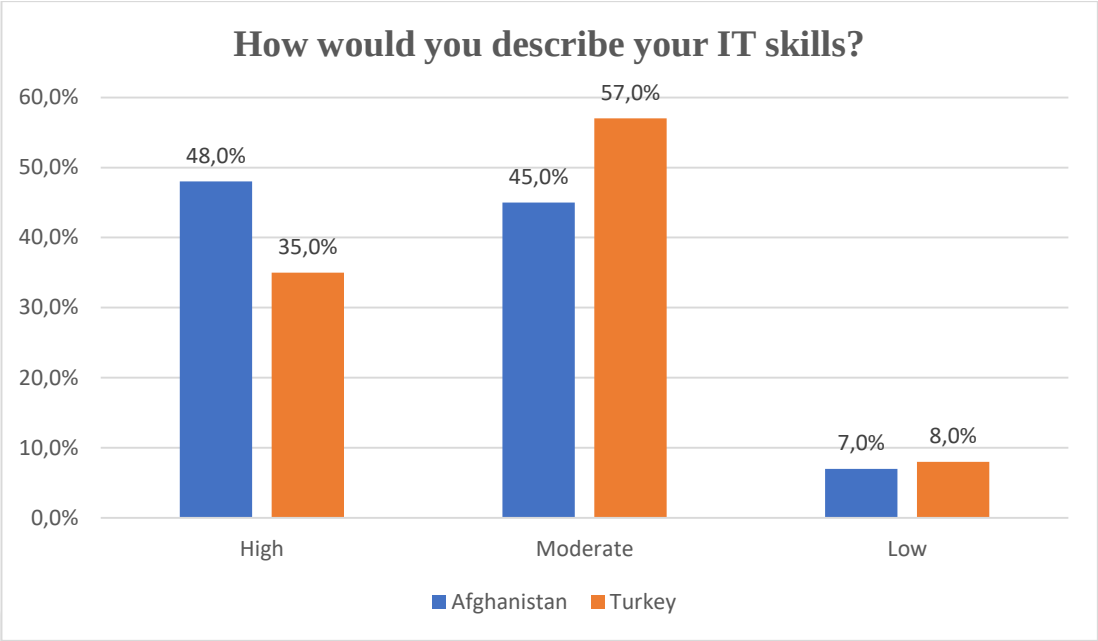

Figure B.5. Respondents' IT Skills

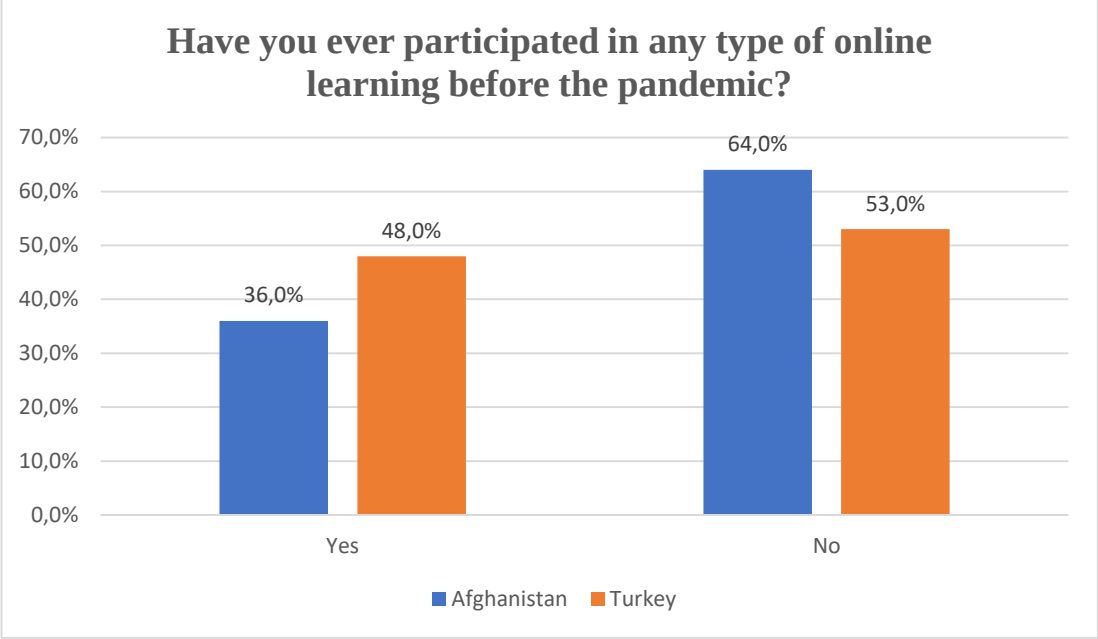

Figure B.6. Participation in Online Learning Before the Pandemic

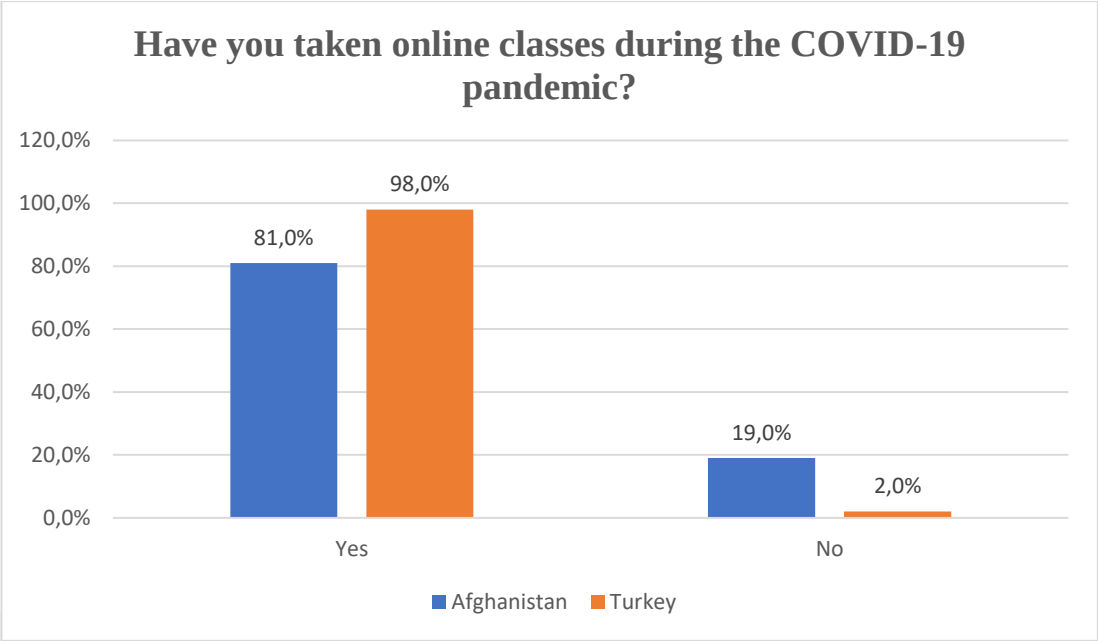

Figure B.7. Attendance of Online Classes During the Pandemic

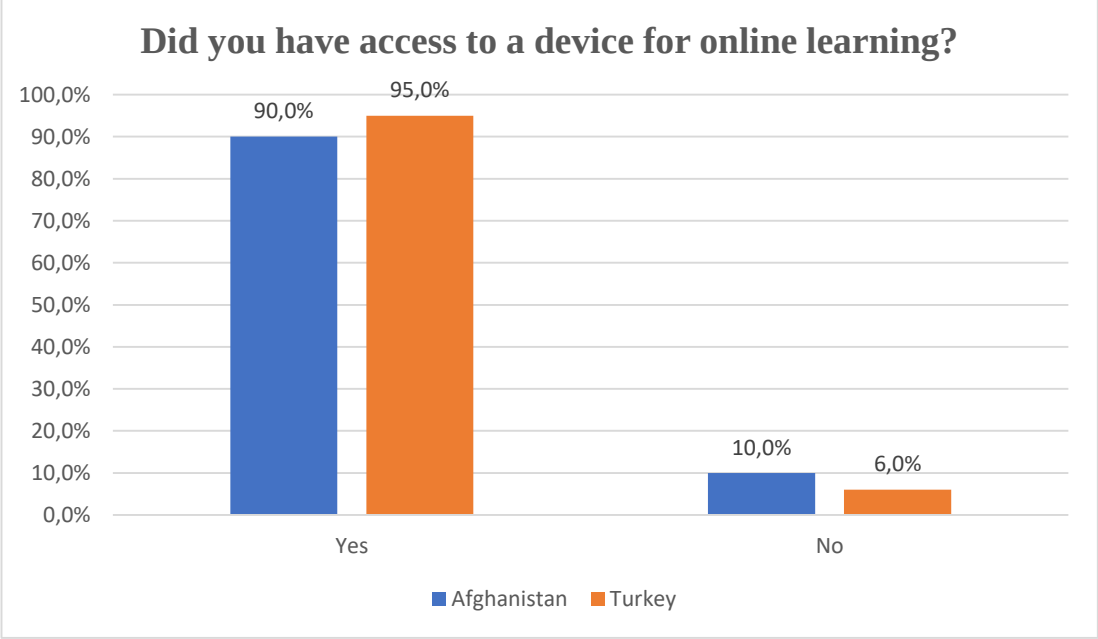

Figure B.8. Access to a Device for Online Learning

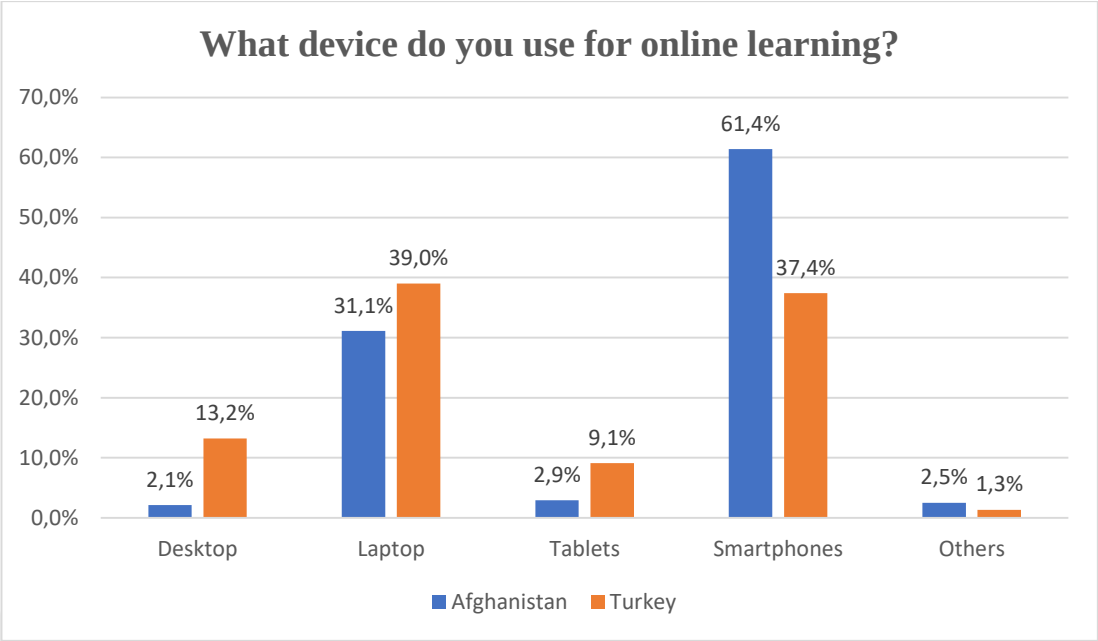

Figure B.9. What Device Do You Use for Online Learning?

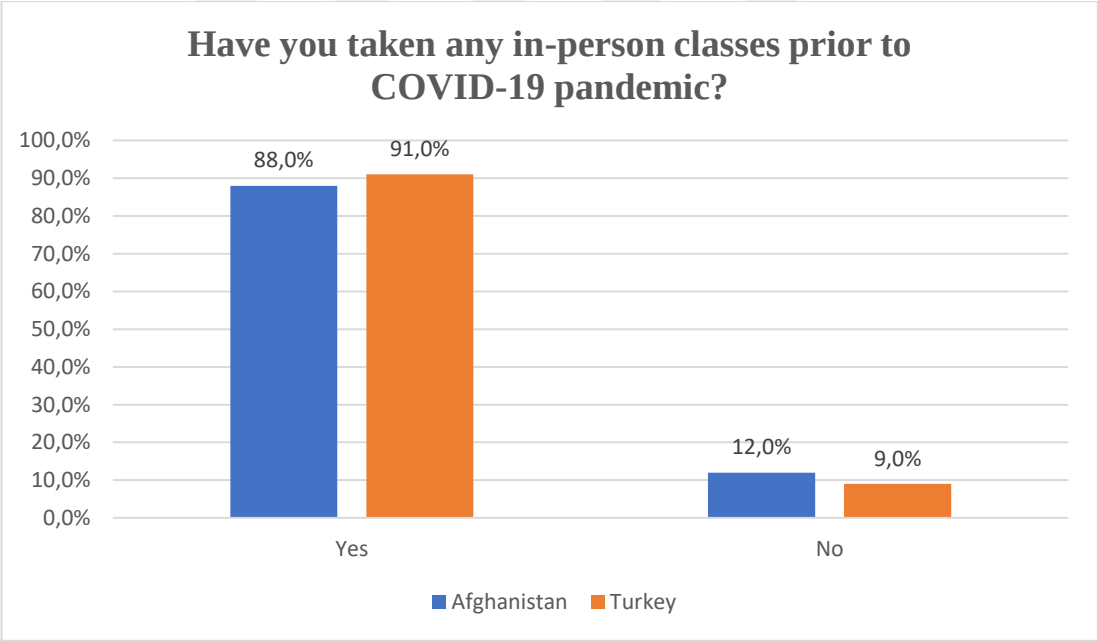

Figure B.10. Physical Classes Before the Pandemic

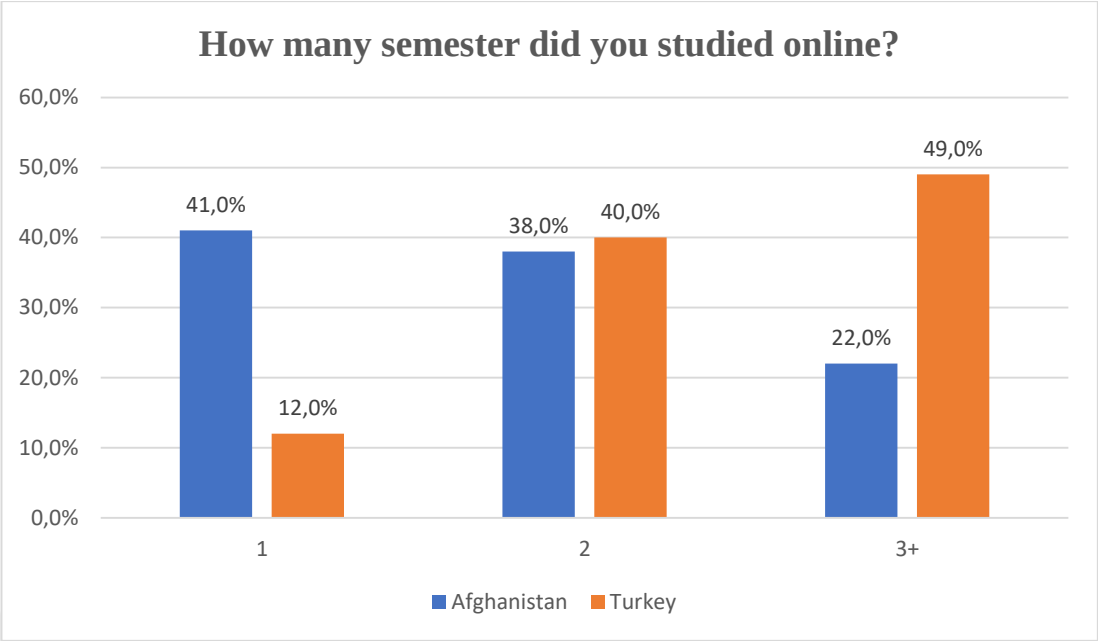

Figure B.11. Number of Semester Studies Online

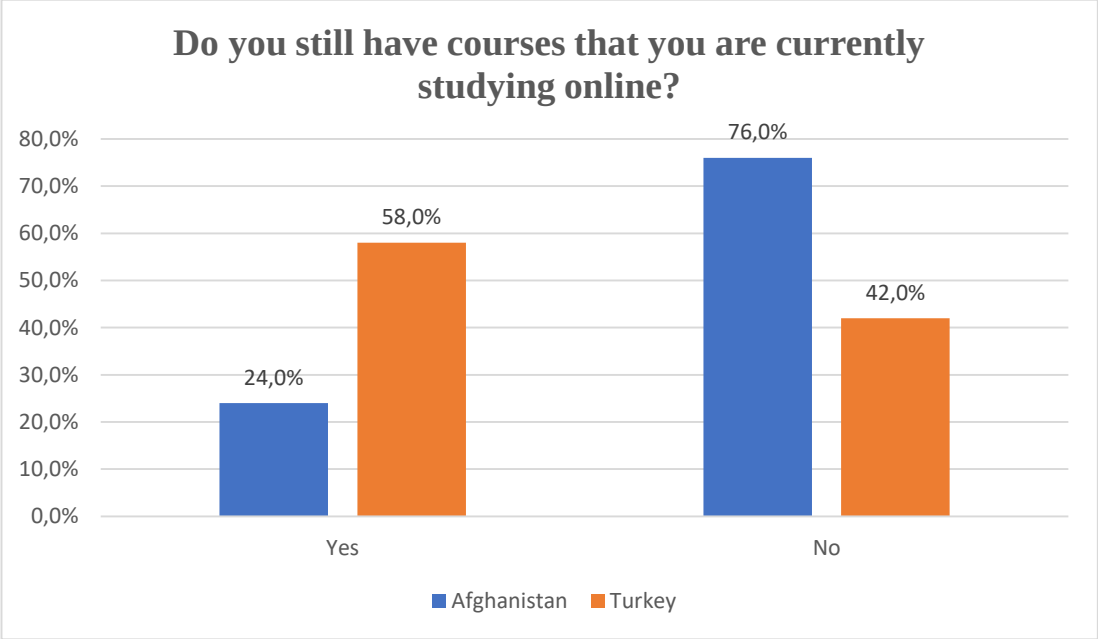

Figure B.12. Current Online Courses

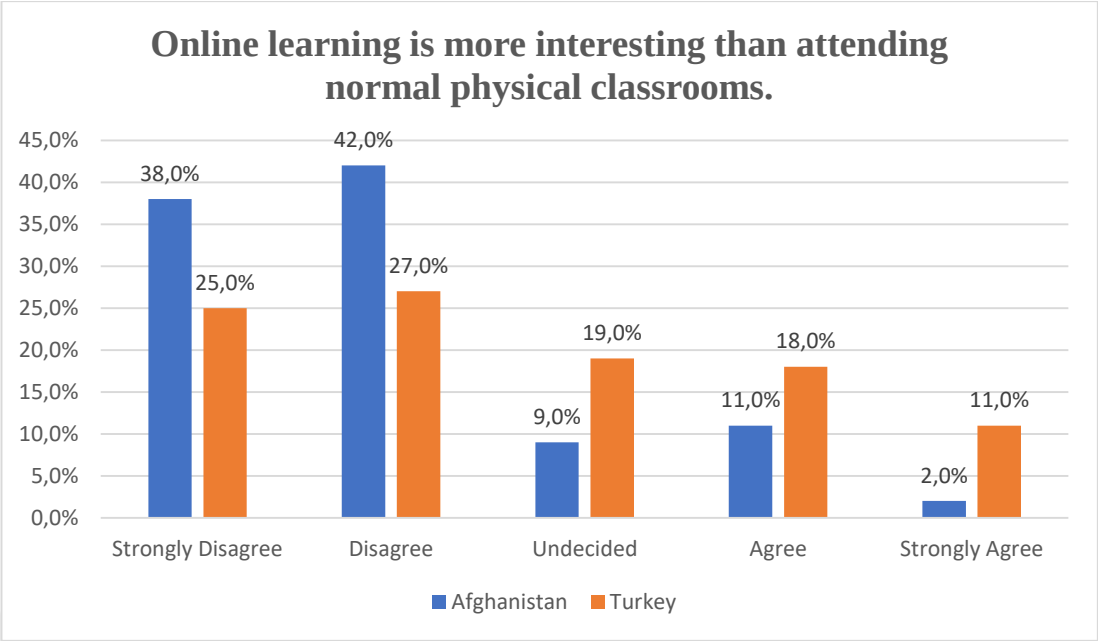

Figure B.13. Online Learning Is More Interesting Than Physical Classrooms

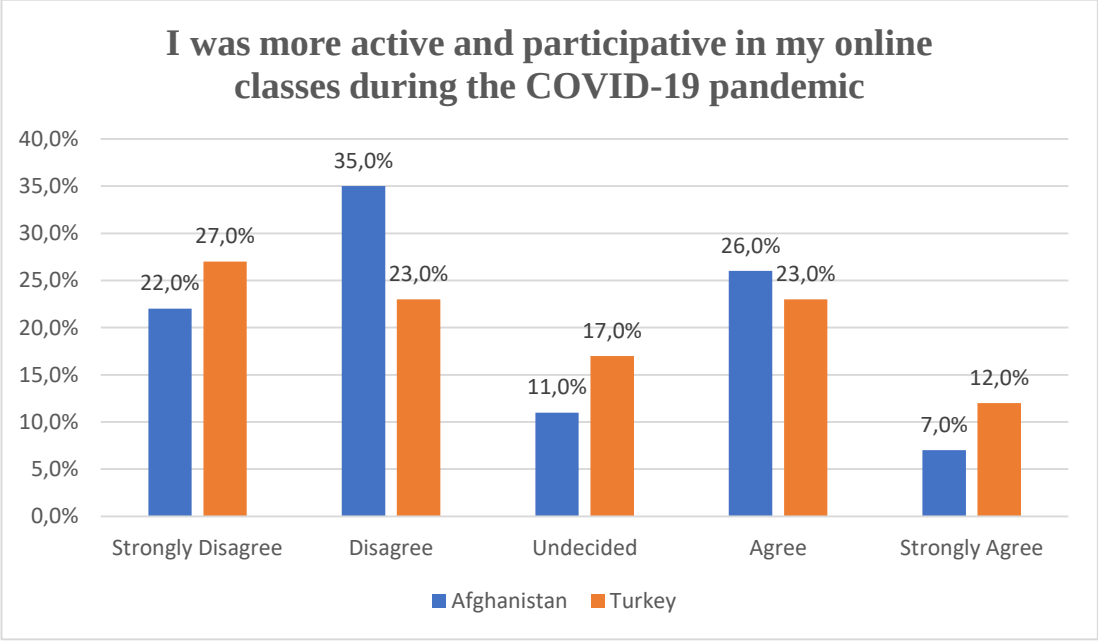

Figure B.14. I Was More Active and Participative in My Online Classes

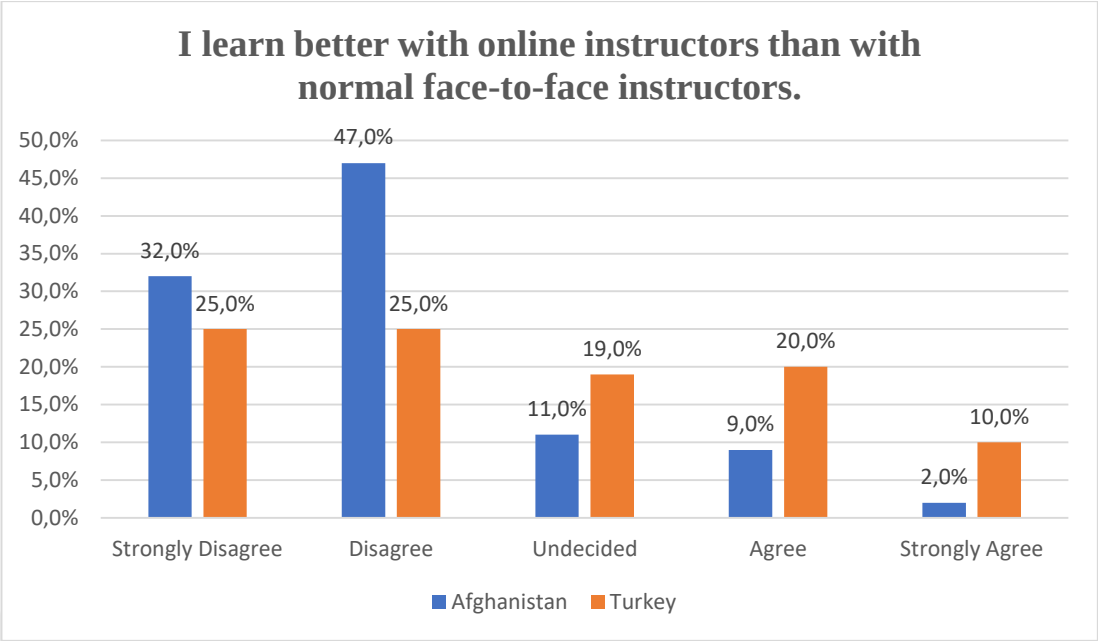

Figure B.15. I Learn Better With Online Instructors Than With Normal Face-to-Face Instructors

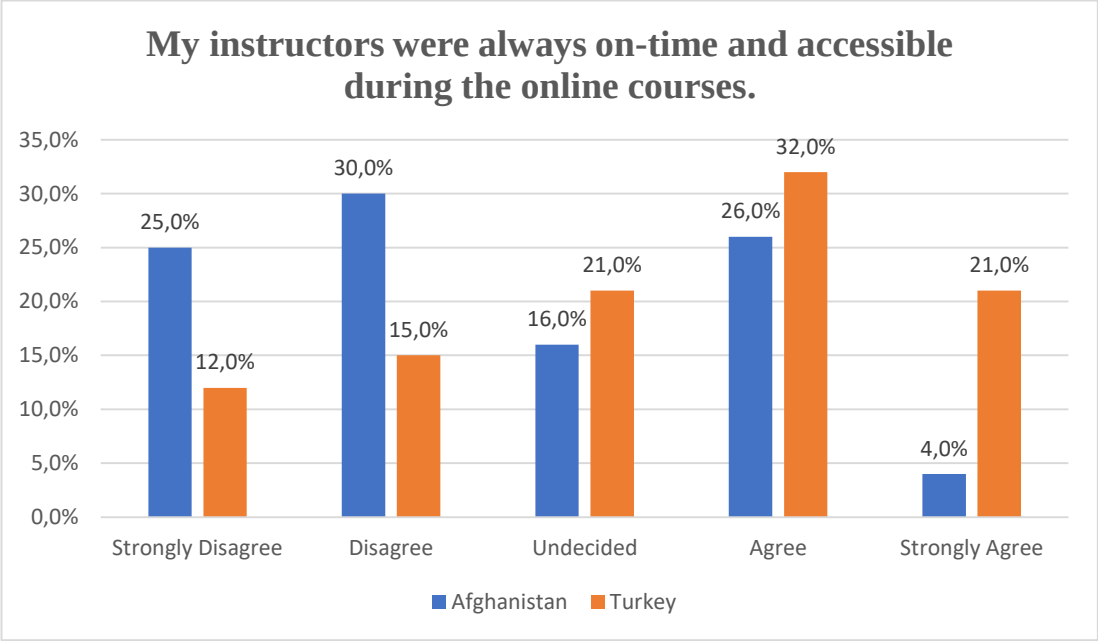

Figure B.16. My Instructors Were Always on-time and Accessible During the Online Courses

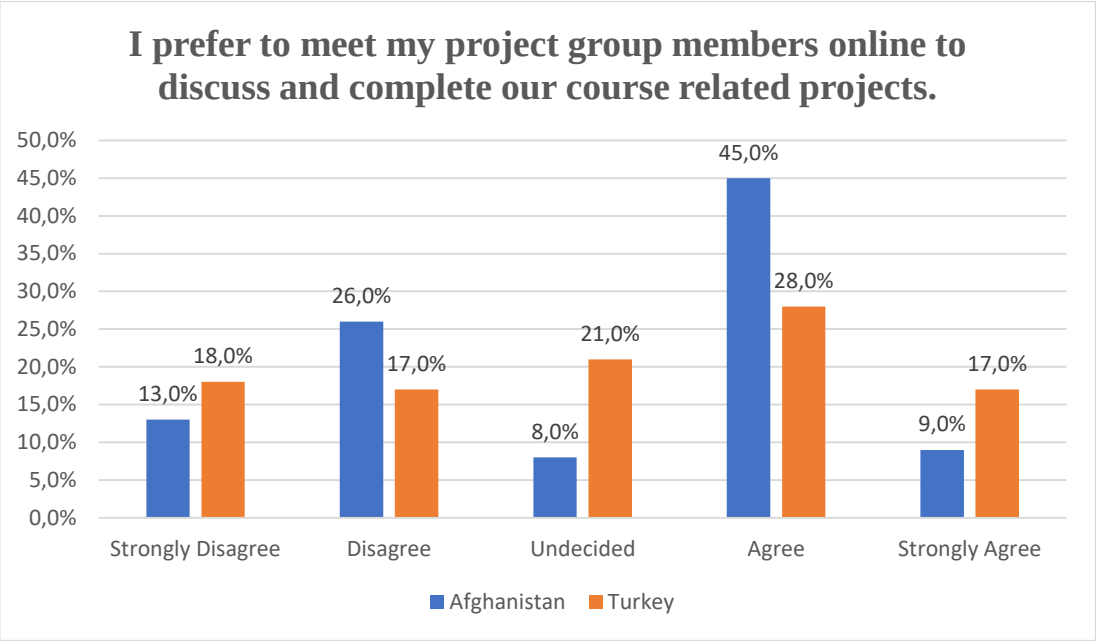

Figure B.17. I Prefer to Meet My Project Group Members Online to Discuss and Complete Our Course Related Projects

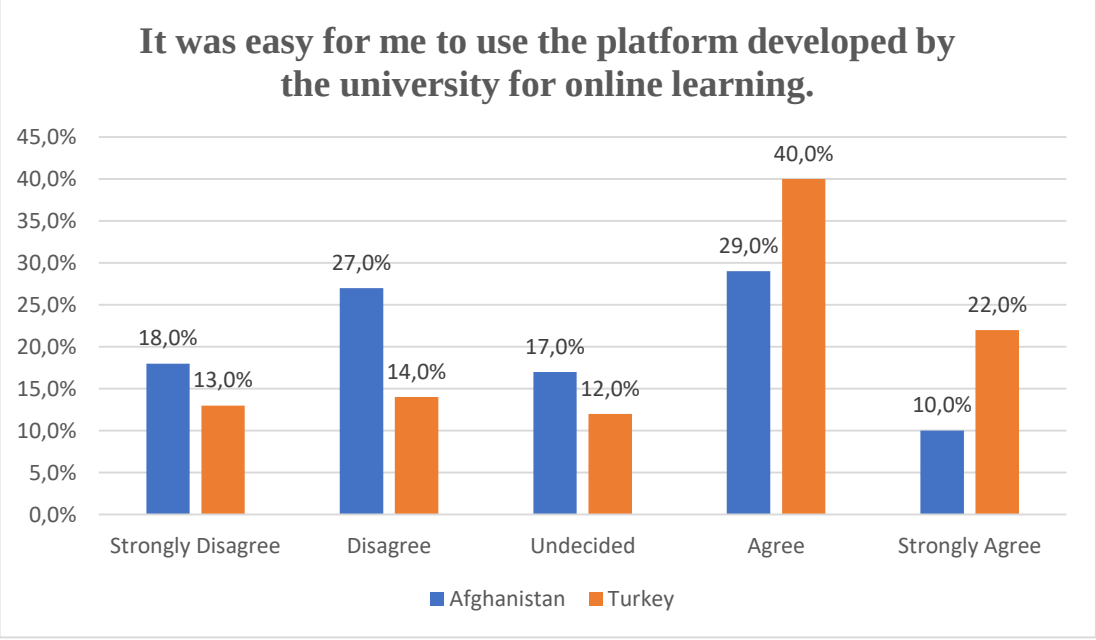

Figure B.18. Use of Platform Developed by the University for Online Learning

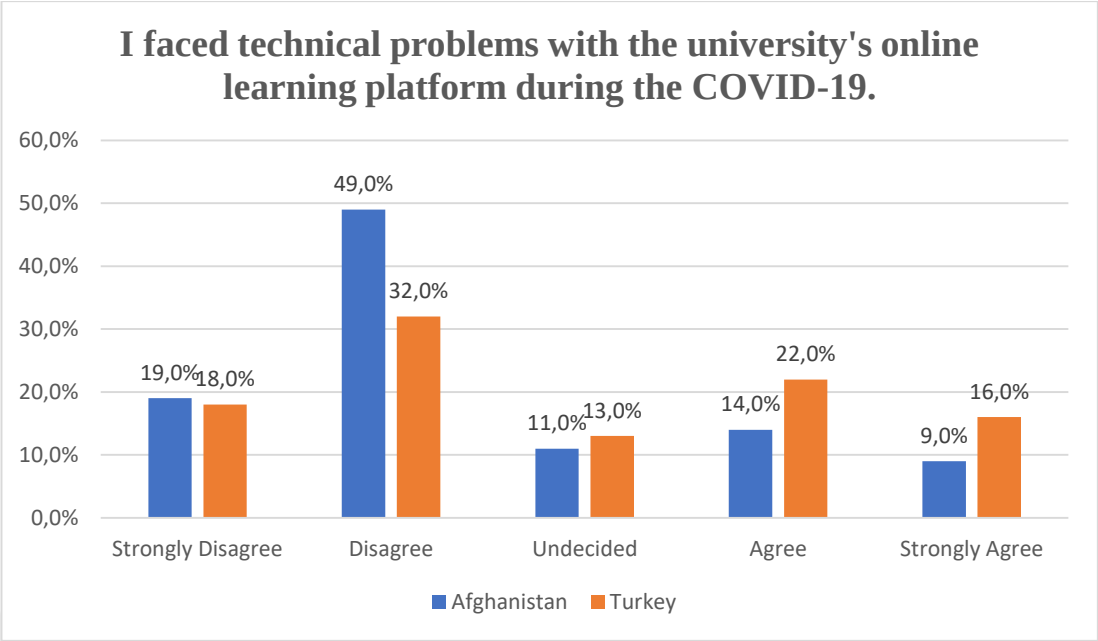

Figure B.19. Technical Problems with the University's Platform During the COVID-19

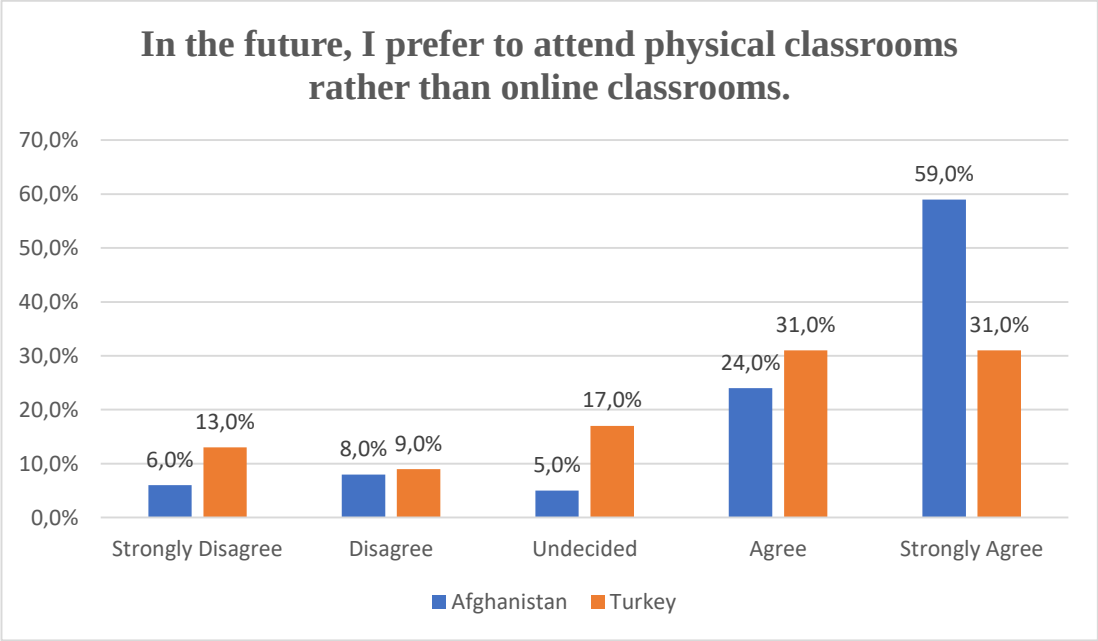

Figure B.20. In the Future, I Prefer to Attend Physical Classrooms Rather Than Online Classrooms

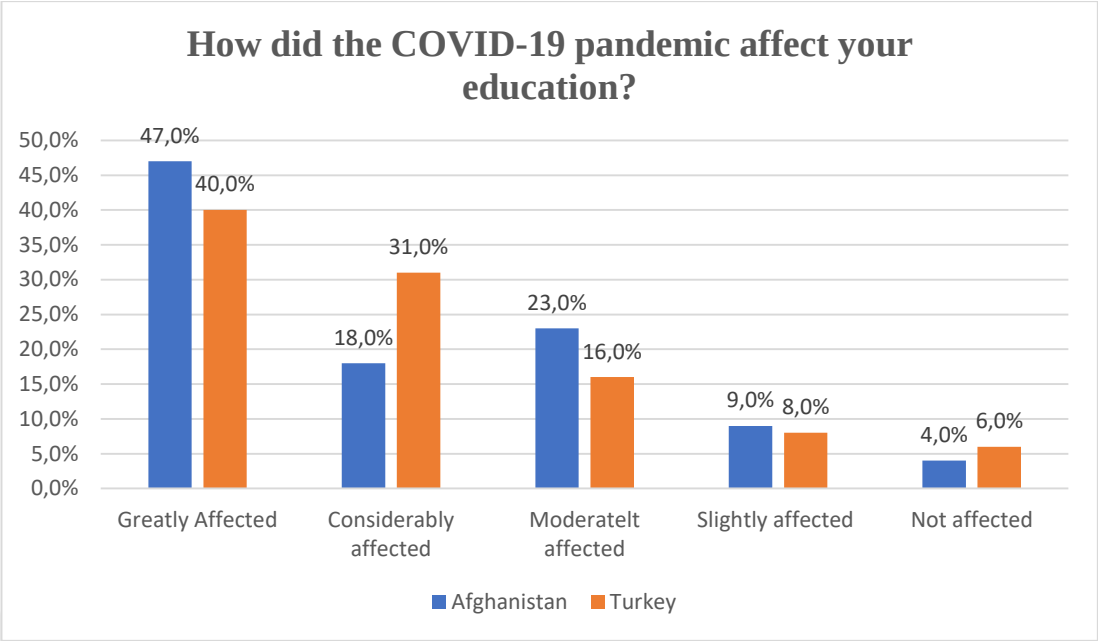

Figure B.21. How Did the COVID-19 Pandemic Affect Your Education?

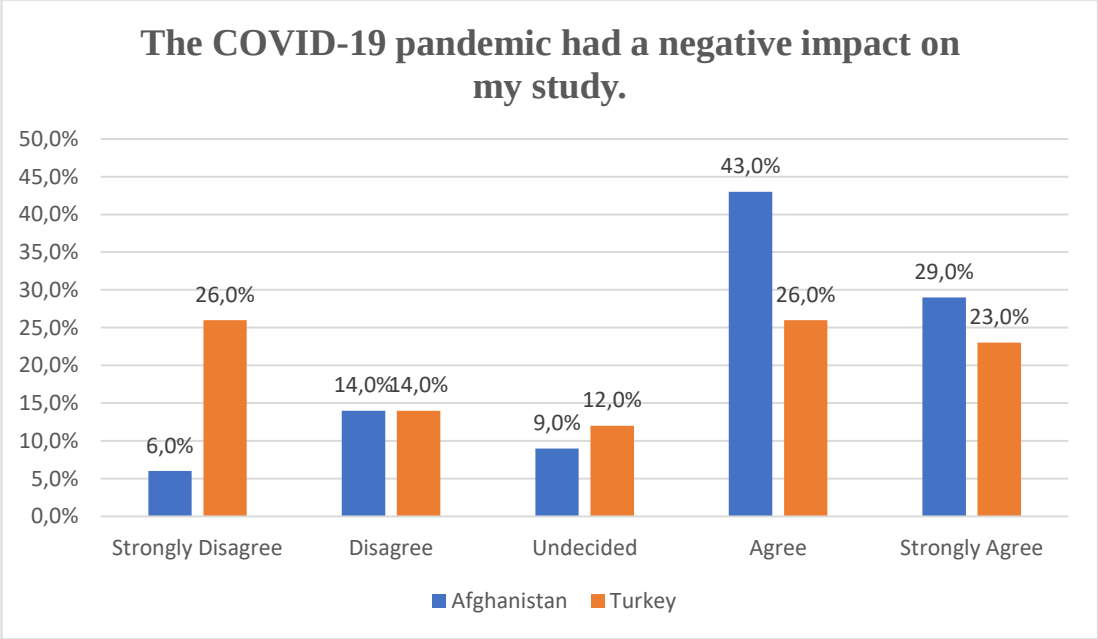

Figure B.22. The COVID-19 Pandemic Had A Negative Impact on My Study

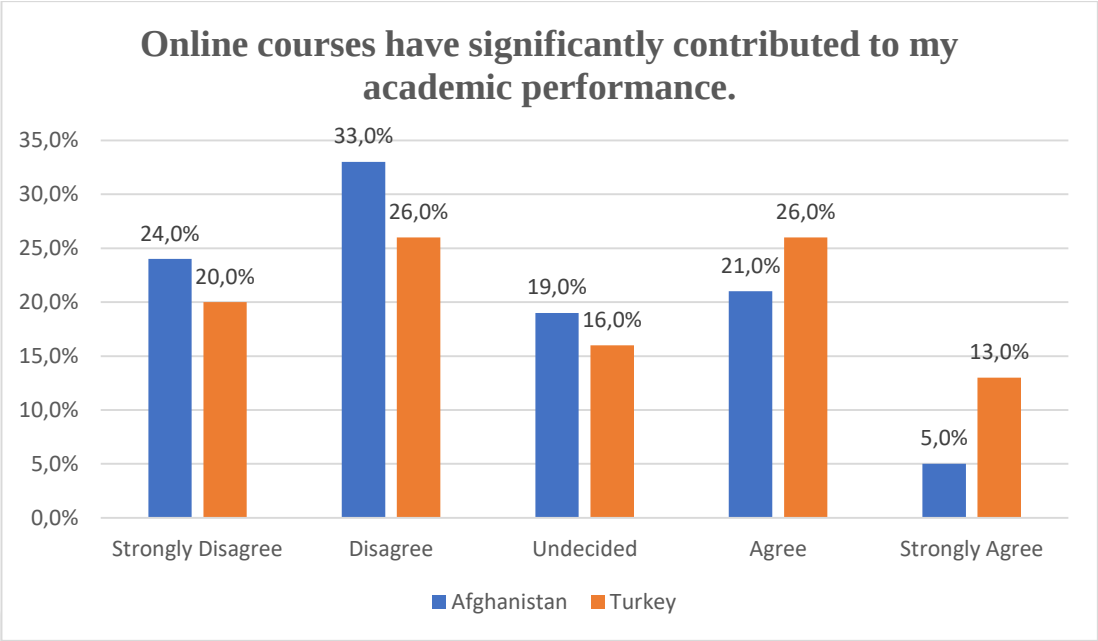

Figure B.23. Online Courses Have Significantly Contributed to My Academic Performance

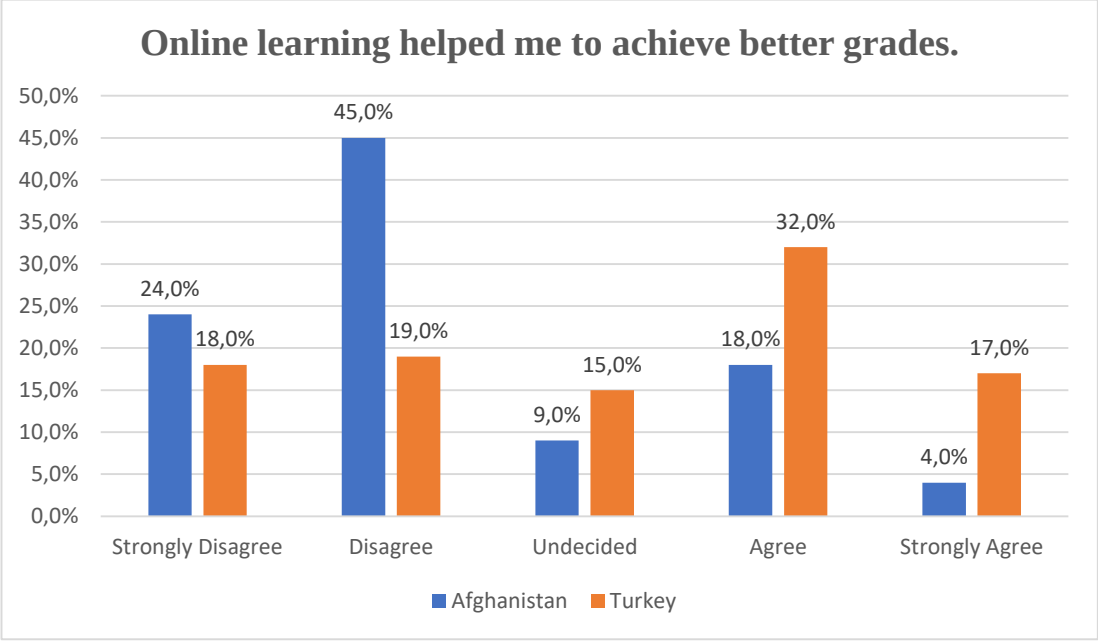

Figure B.24. Online Learning Helped Me to Achieve Better Grades

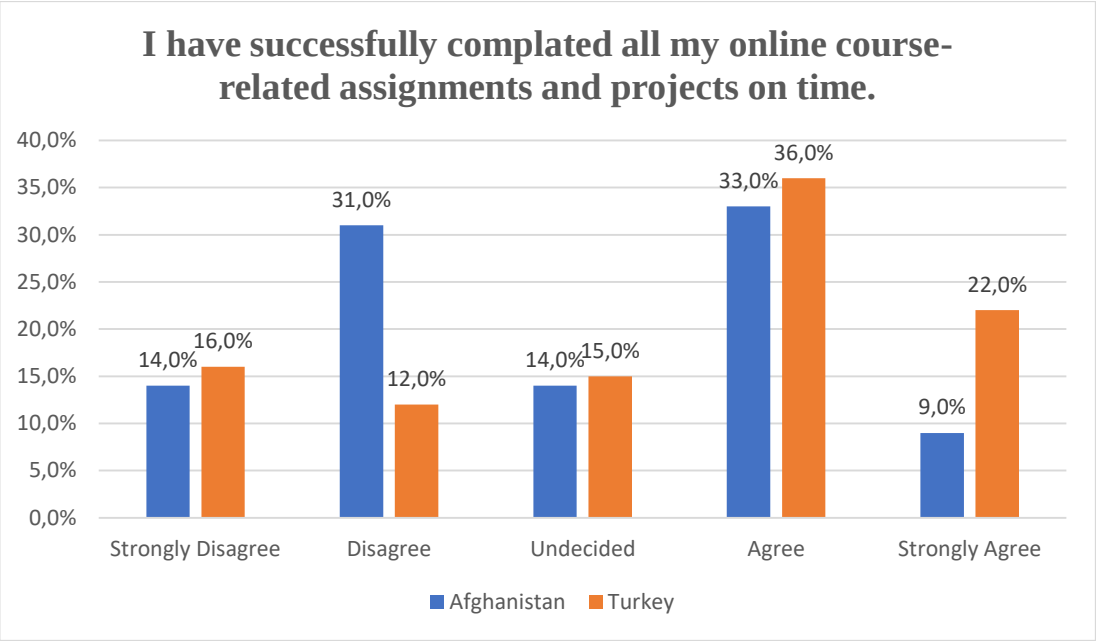

Figure B.25. Completion of Assignments and Projects on Time

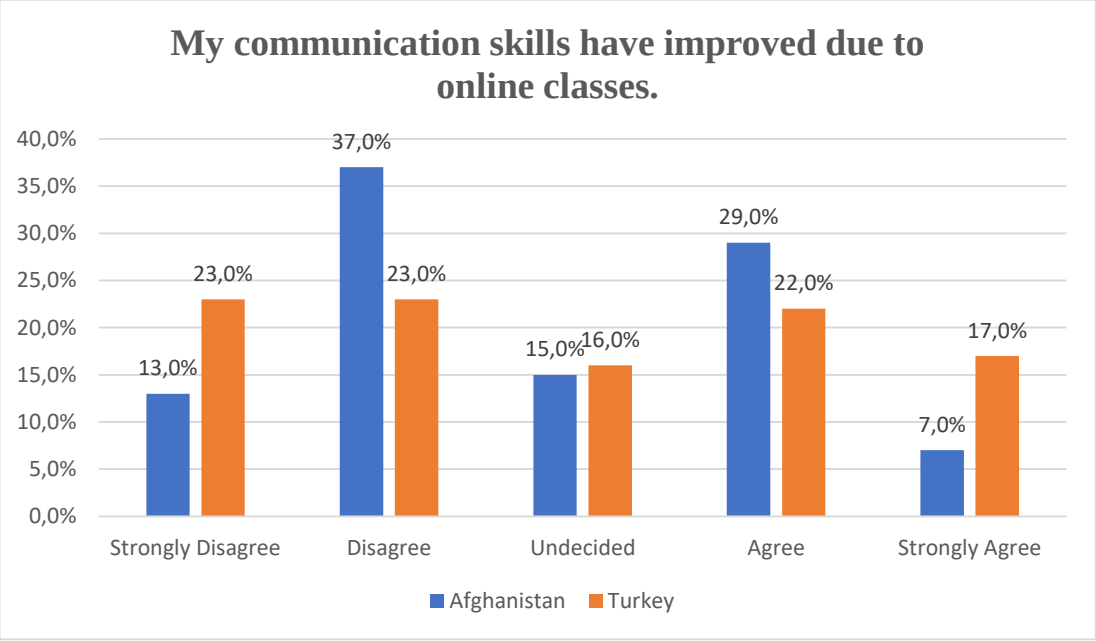

Figure B.26. Communication Skills Have Improved Due to Online Classes

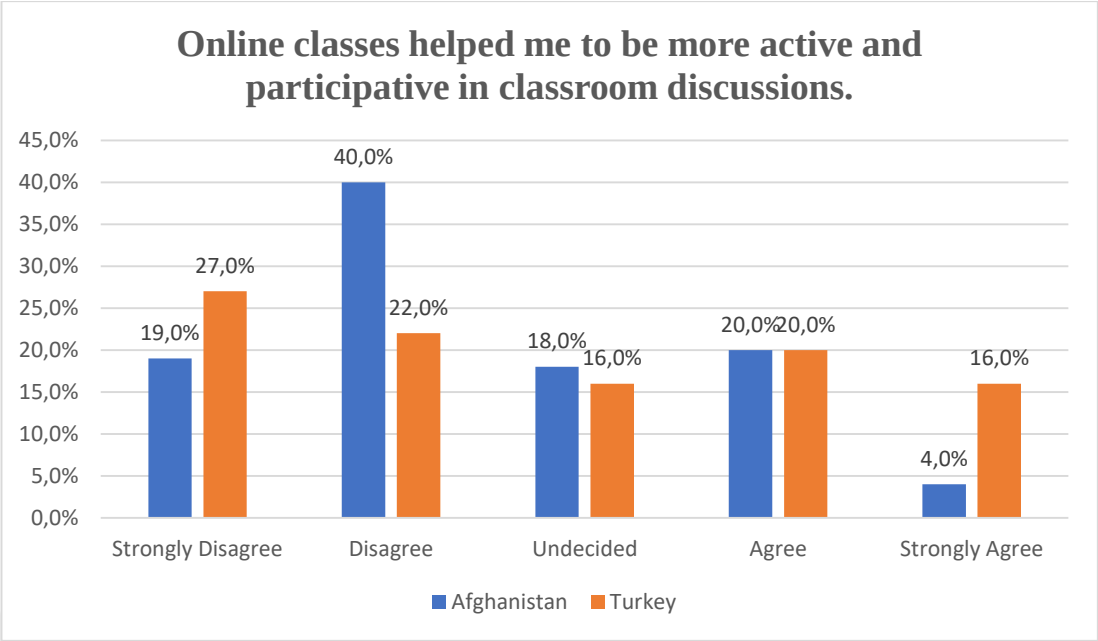

Figure B.27. More Active and Participative in Classroom Discussions

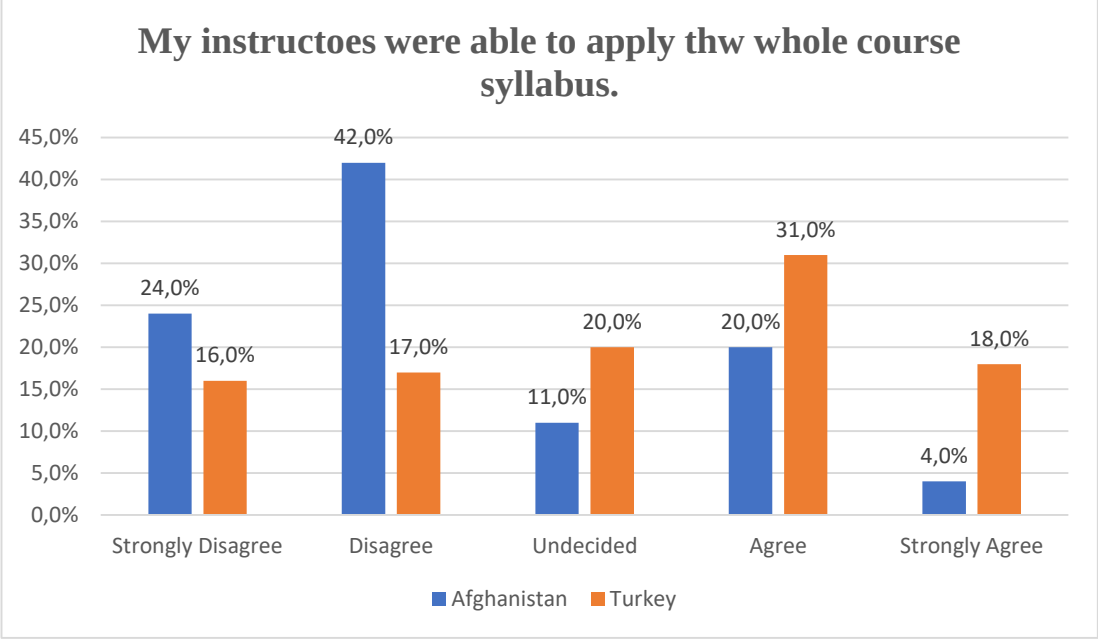

Figure B.28. Instructors Applied the Whole Course Syllabus

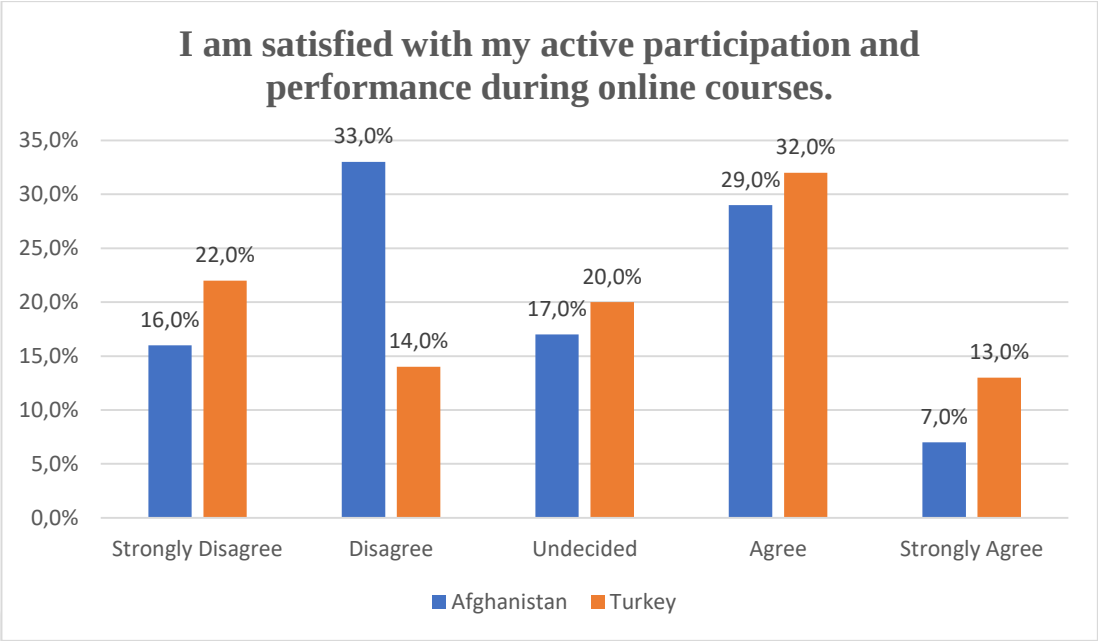

Figure B.29. Satisfaction with My Active Participation in Online Classes

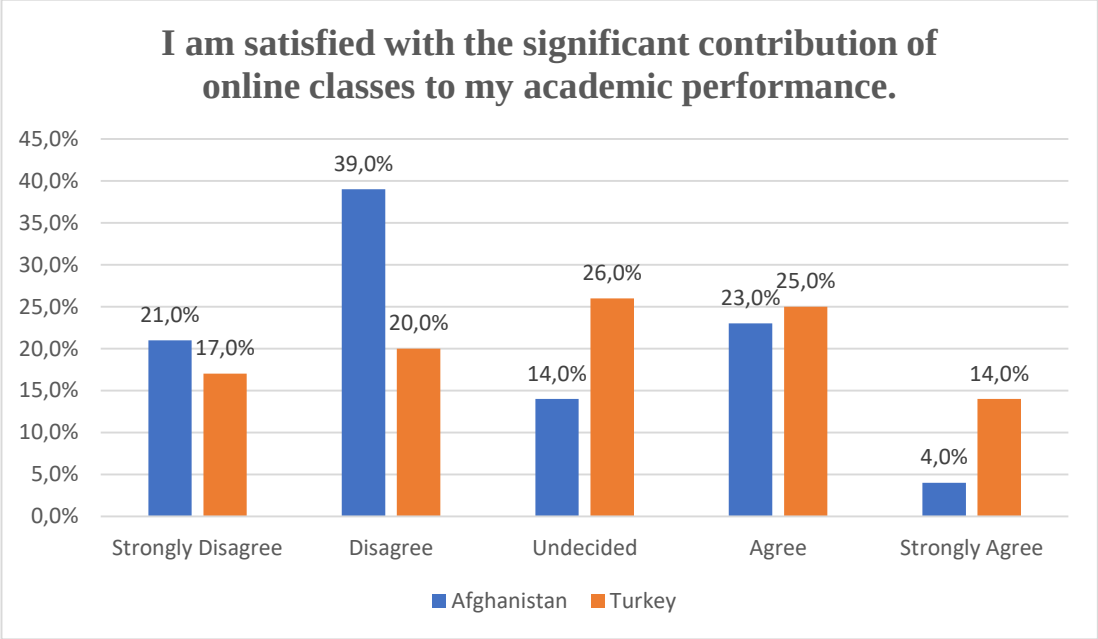

Figure B.30. Contribution of Online Courses to Academic Performance

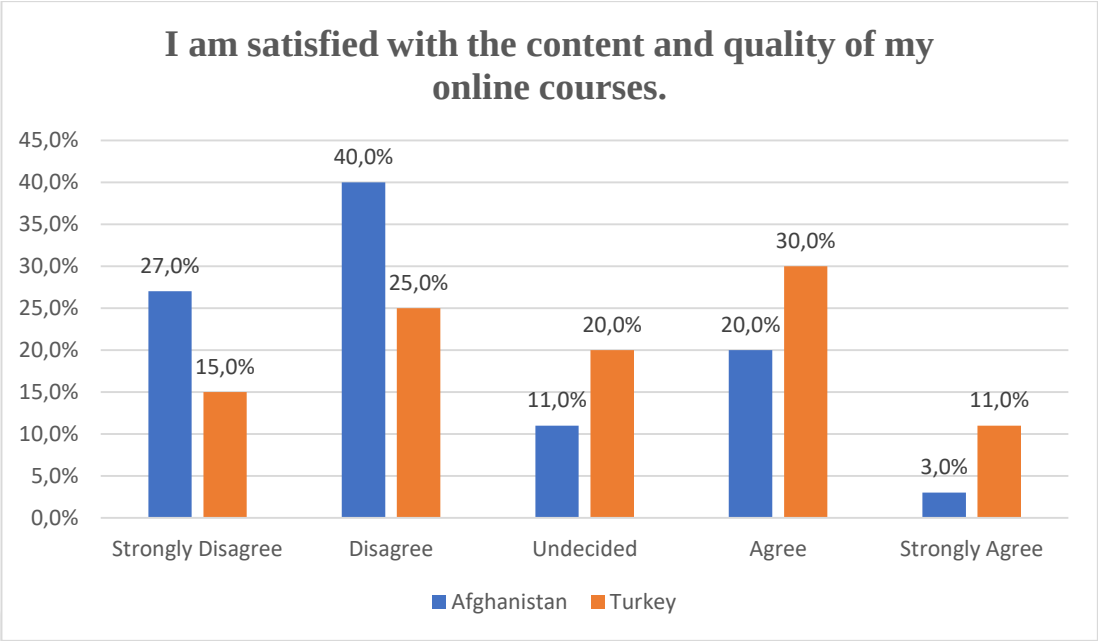

Figure B.31. Satisfaction with the Content and Quality of My Online Courses

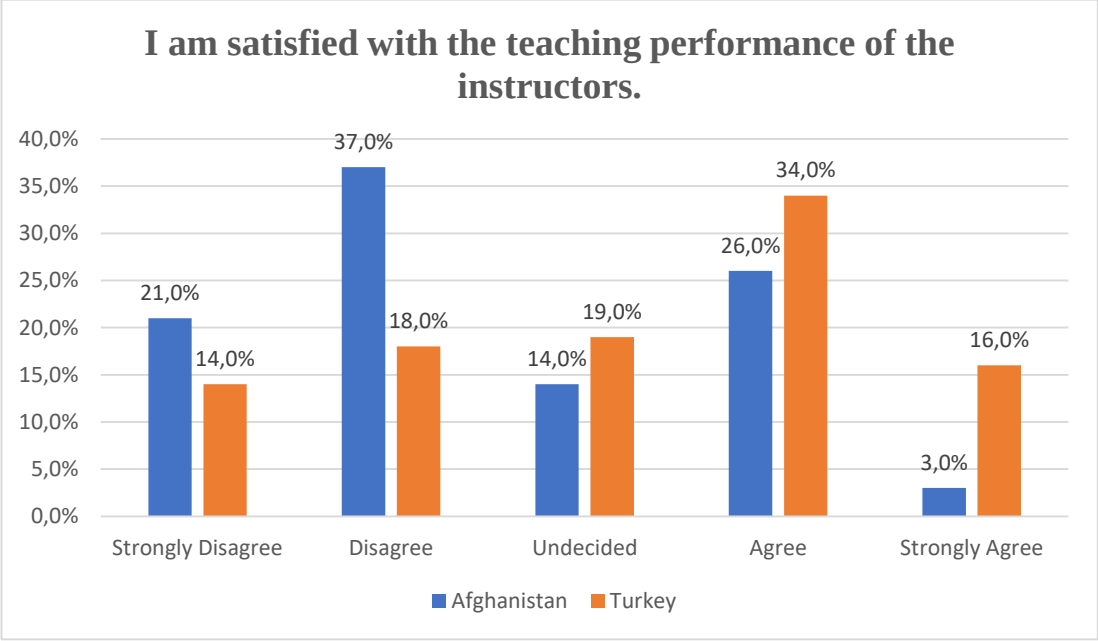

Figure B.32. Satisfaction with the Teaching Performance of the Instructors

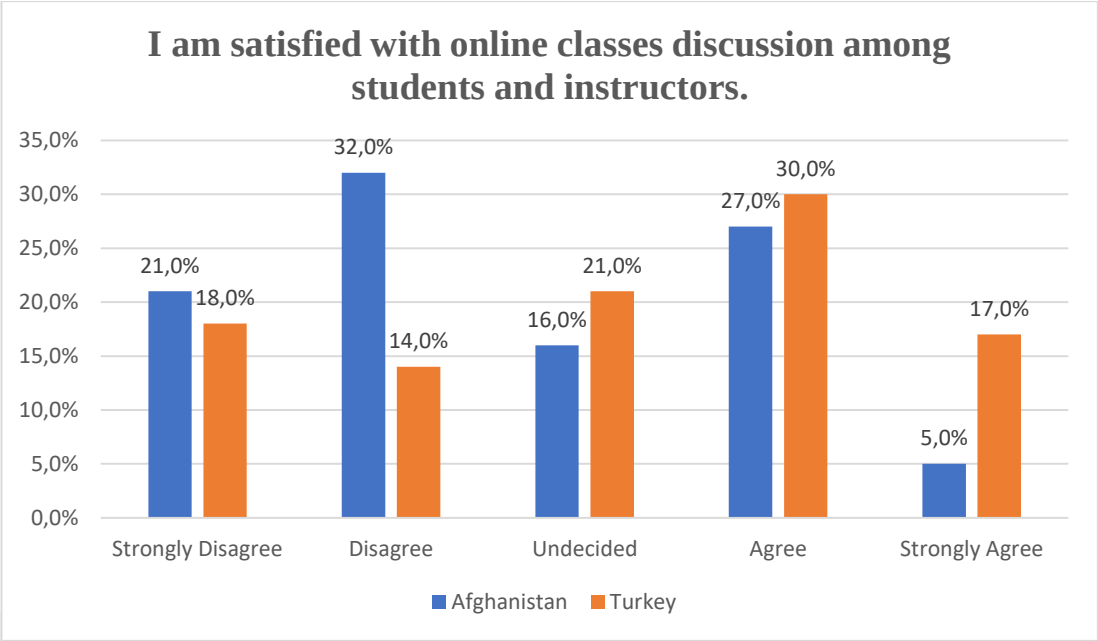

Figure B.33. Project Discussion Among Team Members and Instructors

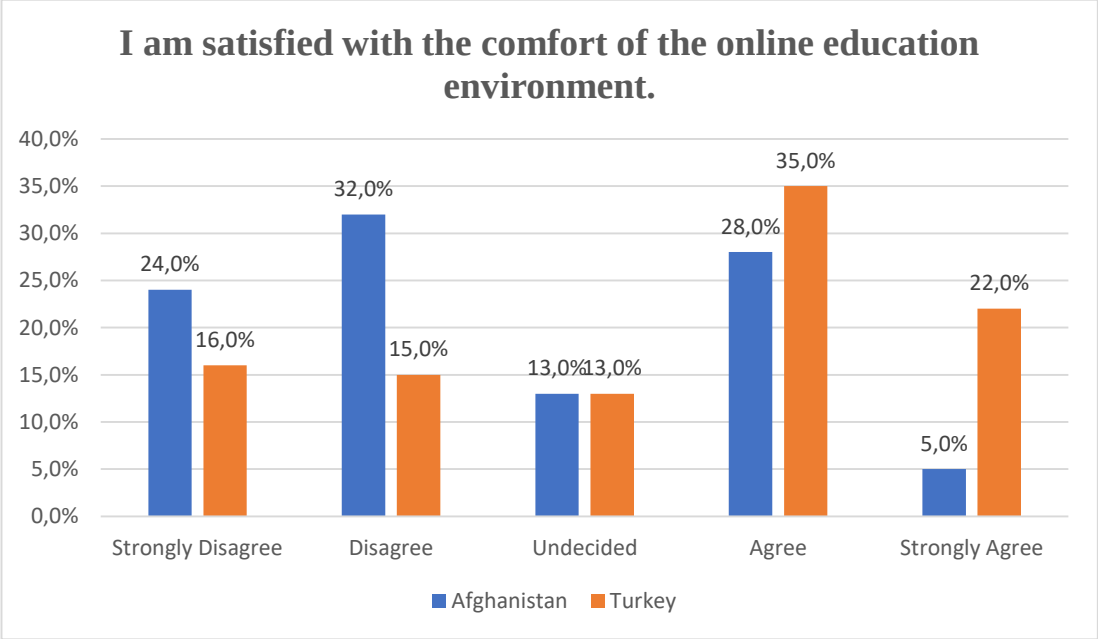

Figure B.34. Satisfaction with the Comfort of the Online Education Environment

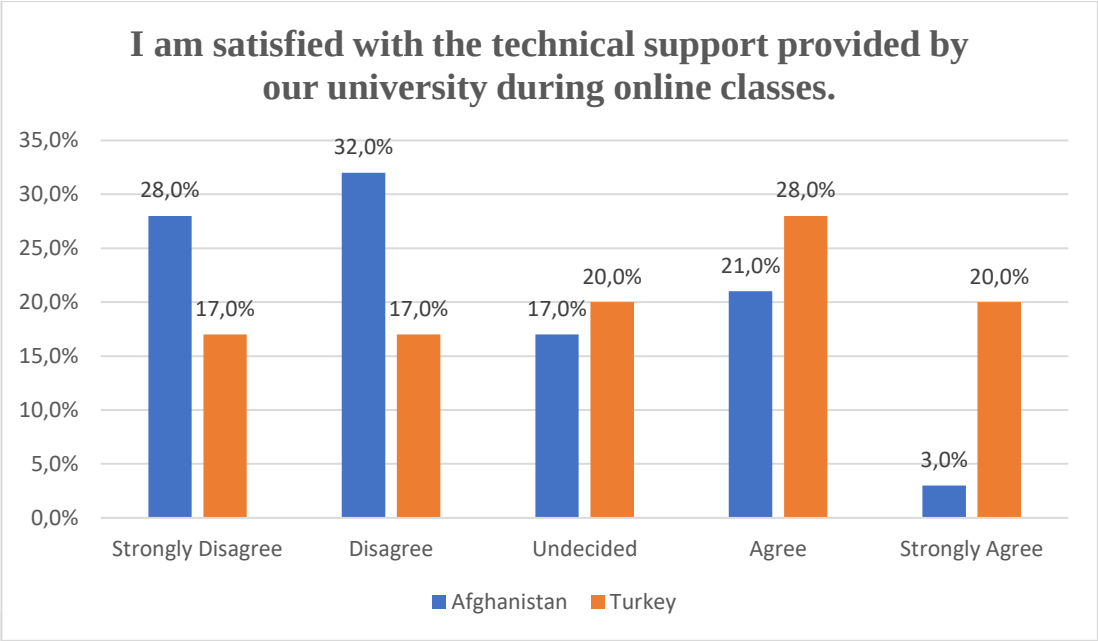

Figure B.35. Technical Support Provided by the University

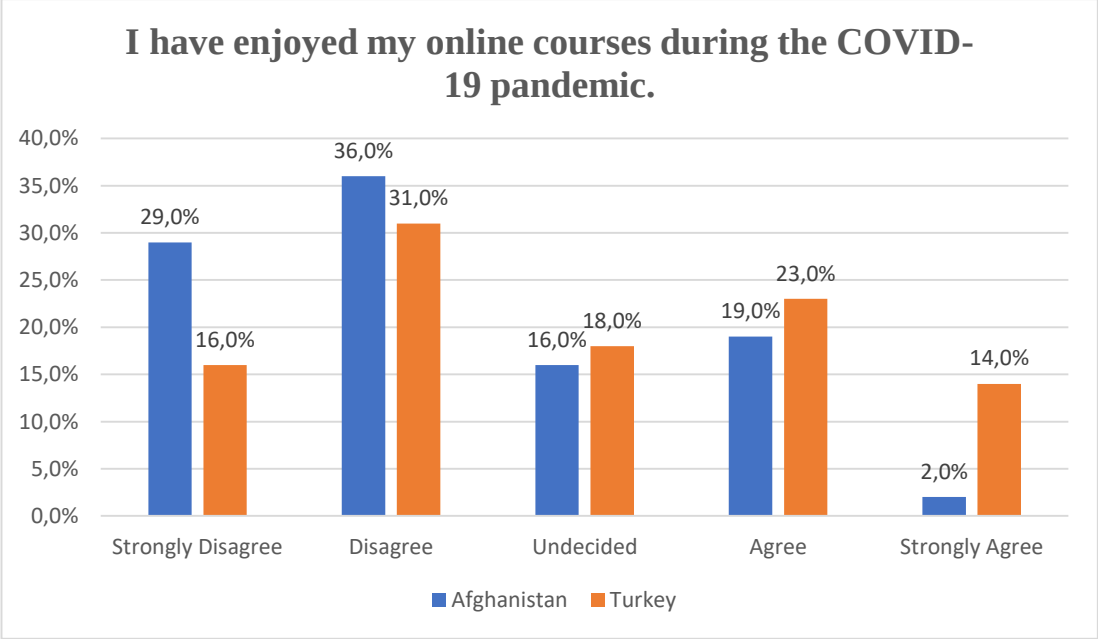

Figure B.36. I Have Enjoyed My Online Courses During the COVID-19 Pandemic

CURRICULUM VITAE

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- Farsi (Dari)
- Pashto