



## MATURE UNDERGRADUATE STUDENTS' SATISFACTION WITH ONLINE TEACHING DURING THE COVID-19

Fayyaz Qureshi<sup>i</sup>,

Sarwar Khawaja,

Tayyaba Zia

Oxford Business College (OBC),

United Kingdom

### Abstract:

The online teaching accelerated at an unprecedented pace in the wake of the physical closure of educational institutions in the United Kingdom on 23 March 2020 due to the COVID-19 crisis. This study is based on a survey of mature undergraduate students in private higher education institutes in the South of England and their experience with online teaching during the COVID-19. The questionnaire was sent out to mature undergraduate students studying in three private higher education institutes, and we received 225 responses. A quantitative approach was used to analyse the results. Majority of students 95% were using online teaching for the first time, and they were novice with the online teaching software (Zoom and Microsoft Teams, etc.). They were provided with training for online teaching, especially how to use the software, and they were satisfied with the training. The study also identified challenges students faced during the online teaching such as weak Internet connection, old devices (computer and laptop etc.) low level of digital competency especially among older students, lack of technical support from the institute and stressful transition period. The final findings from the study indicated that the quick decision of switching to online teaching was right, and the majority of students found online teaching excited. Consequently, the majority of students wanted to continue online teaching after the COVID-19 because it provides ease and convenience, no travelling time & cost, freedom and autonomy. The online teaching training for students could be made more effective, and private higher education institutions could also address challenges such as weak Internet connection and old devices (computer, laptop, etc.).

**Keywords:** COVID-19, mature undergraduate students, online teaching, student satisfaction and private higher education institutions

---

<sup>i</sup> Correspondence: email [fayyaz.qureshi@oxfordbusinesscollege.ac.uk](mailto:fayyaz.qureshi@oxfordbusinesscollege.ac.uk),  
[sarwar.khawaja@oxfordbusinesscollege.ac.uk](mailto:sarwar.khawaja@oxfordbusinesscollege.ac.uk), [tayyaba.zia@oxfordbusinesscollege.ac.uk](mailto:tayyaba.zia@oxfordbusinesscollege.ac.uk)

## 1. Introduction

The aim of this study was twofold one to assess the level of mature undergraduate students' satisfaction with online teaching support (training) and second to determine which teaching method they prefer online teaching or traditional classroom teaching. How was the experience of mature undergraduate students' online teaching and support during the COVID-19?

The widespread of **Corona Virus Disease 2019 (COVID-19)** first in Wuhan City China in December 2019, and then in the European Countries and the United States of America in the early 2020s has created significant challenges for all the industries, including higher education industry worldwide. A particular challenge faced by higher education was the urgent request for suspension of face-to-face teaching and replacement with online teaching.

The COVID-19 outbreak continued spreading rapidly and hit 114 countries and declared a pandemic on 11 March 2020 by World Health Organisation (WHO, 2020). The COVID-19 started to spread in February 2020 in the UK. The UK government was considering the lockdown to control the outbreak of the disease. Since the lockdown started in the UK on 23 March 2020, the UK higher education institutions have been experiencing an unprecedented massive migration from traditional in-class face-to-face teaching to online teaching. According to UNESCO (2020), 1.5 billion students were engaged in remote learning at the height of the COVID-19 Pandemic in March 2020. The UK government decided closure of educational institutions but wanted to continue teaching online. In a short period of time, higher education institutions started to teach online, comparing private higher education institutions to public higher education institutions in the UK, the former is smaller and with limited resources, therefore, started to offer online teaching to students by using easily available online teaching software such as Zoom, Microsoft Teams, Skype, Face Time etc. Academic staff and students were not ready for this sudden change, within a short time the academic staff had to plan and deliver their lectures from home with all the practical and technological challenges this involves, and often without proper technical support (Hodges et al. 2020). On the other side students need to be trained with the online software (Zoom, Microsoft Teams etc.), the private higher education institutes required to arrange online training sessions for students and also to provide training manuals to make sure smooth running of online courses. A recent study by Chen et al. (2020) finds that online teaching during the COVID-19 Pandemic is not without many problems. The big challenge for Private Higher Education Institutes (PrHEIs) was to make sure the online software could meet the needs of academic staff and students and ultimately effective online teaching without difficulties. Therefore, it was essential to see the experience of mature undergraduate students with online teaching during the lockdown period to help the private higher education institutions to take appropriate actions on the outcomes of this study.

## 2. Literature Review

Levy (1986) defines private higher education institutes are those, which are defined by national authorities. The Department for Business, Innovation & Skills (BIS) defines private institutes as:

*“Any provider of higher education courses which is not in direct receipt of recurrent funding from the Higher Education Funding Council for England (HEFCE) or from equivalent funding bodies in the Devolved Administrations; or does not receive direct recurrent public funding (for example, from a local authority, or from the Secretary of State for Education); and is not a Further Education College”*. (Applying student number controls to alternative providers with designated courses, 2012, p. 6)

The UK private higher education institutes also referred to as fully autonomous alternative providers which operate for profit, do not receive any grant from the government and are *“responsible for their own funding”* (Altbach, 1999: 2). Another definition conveys the similar meaning, *“Education can be privatized if students enrol at private schools or if higher education is privately funded”* (Belfield and Levin 2002: 19). To sum up private higher education institutes are independent, do not receive government funding and operate for profit.

The term 'mature student' refers to anyone going to college or university after some time out of full-time education. Typically, this will mean students who are over 21 years of age at the beginning of their undergraduate studies or over 25 years of age at the beginning of their postgraduate studies (UCAS, 2020) and up to pensionable age (NUS, 2012).

**Table 1:** Private Higher Education Institutes (Alternative Providers)  
Mature Students' Enrolment Academic Years 2015/16 to 2018/19 in the UK

Age	2015/16	2016/17	2017/18	2018/19
21-24	11,680	14,400	19,995	20,615
25-29	6,870	8,110	10,420	10,840
30 and over	21,995	23,360	27,200	26,225

Source: HESA, (2020).

The above table shows the largest group of mature students belong to the age group 30 and over, and the smallest group belongs to the age group 25-29. The UK higher education institutes provide opportunities to mature students to boost their employment prospects for themselves and their families. The UK higher education institutions are at the forefront of advanced learning, offering students of all ages and backgrounds meaningful and engaging learning opportunities and promoting social mobility.

For our superficial understanding of online teaching is a type of instructions in which (1) the learner is at a distance from the educator, (2) the learner uses some form of technology (Internet and a device-computer, laptop, tablet or smartphone etc.) to access

the learning materials or interact with an educator and other learners (3) some kind of support is provided to learners (Anderson, 2011a).

Online teaching is an integral part of the new millennium learning. A growing number of students are now opting for online classes. Especially the 'Z' generation finds traditional classroom modality restrictive, inflexible, and impractical. The 'Z' generation has already joined higher education for their studies. In comparison, the other two generations 'X' and 'Y' (Y is also known as a millennial generation) are also in the higher education for study purposes. Please see Table 2 for an overview of the generations. Generational classification varies, for example, Howe (2014) classified the 'X' generation (1961 to 1981) while Bresman and Rao (2017) consider 'X' generation who born before 1980, similarly other negligible variations, Bresman and Rao (2017) consider 'Y' generation (1984 to 1996) while Gurau, (2012) refers them who born between 1984 and 1996, we have just ignored small variations of generations. All three types of generations are in higher education, the 'Z' generation is the first generation, which has recently joined the higher education. In contrast, the 'X' generation, is the last generation and the 'Y' generation is the majority student group in higher education. Y Generation is considered the first high-tech generation (Norum, 2003).

**Table 2: X, Y and Z generations**

Generation	Years (Born between)	Notable Occurrence
X	1965-85	Vietnam War, Cold War, Rise of Mass Media, Analogue childhood and digital adulthood
Y	1986-1996	End of Cold War, Disintegration of USSR, Rise of the Information Age/Internet, Novel modes of communication
Z	1997-2012	Dot com bubble Digital globalization, Emergence of Social Media

**Source:** Adopted from: Howe, 2014; Stankorb & Oelbaum, 2014; Sterbenz, 2015; Jenkins, 2017; Bresman and Rao, 2017 and Swanzen 2018.

Millennial (Y) generation grew up with the Internet and Information Technology, and they perceive living in a global village. The millennial generation is fascinated with new technologies, love to use communication and information technology (ICT) in studies, desire group activities and interaction, emphasize extracurricular activities, and are motivated by grades and achievement. Majority of mature student belong to 'Y' generation, (please see Table 2) while a few belong to 'X' generation.

In this age of technological advancement, and especially during the COVID-19 lockdown educational institutions have already started to provide online teaching. This shift due to COVID-19 in pedagogical and andragogical media is forcing academic

institutions to rethink how they want to continue to deliver their courses in future, especially after the COVID-19 Pandemic.

Part of the disconnect between teaching online and face-to-face is that digital learning has become much more student-centric (at least in most asynchronous or semi-asynchronous online courses (Barbosa, Barbosa, & Rabello, 2016). Online teaching has its critics. Brooks (1997) is quite blunt and to some extent, right in saying that the support for multimedia learning styles is much weaker than many think it. Jagers (2014) is quite right in saying that students have to teach themselves and other researchers agree to limited support for more vulnerable students. Although opinions may have changed during the past few years, there still may be a prevalence of negative stereotypes or labels about online teaching (see Heines, 2005, pp.145-150). Shank & Sitze (2004) state, "*online learning lacks physical cues, has technology and access hurdles, and favours those who communicate well in writing*" (p. 11). Several researchers also mentioned technology and access hurdles such as weak Internet connectivity and low technology competency of some students, especially mature students who belong to "X" generation. There are several researchers who strongly support online teaching for several reasons such as accessibility, affordability, flexibility, availability, convenience, cost effective, time effective, emerging trend, learning pedagogy, life-long learning, and policy are some of the strong arguments for online teaching (Shivani, 2020). It is evident from the lockdown that online teaching is not an option rather a necessity.

Zoom and Microsoft Teams are online digital platforms easily available for educational institutions to create vibrant learning environments for students. These platforms improve student outcomes with secure video communication services. Majority of private higher education institutes in the UK use these platforms for online teaching and they have created training manuals for staff and students. They also organised training for both the teachers and students prior to moving to online teaching in March 2020.

Satisfaction may have varying interpretations, but it is frequently encountered in literature as well as in daily life. Job satisfaction, customer satisfaction and patient satisfaction are the terms one frequently comes across. This presence, particularly in business literature, makes the significance of satisfaction doubtless. Customer satisfaction seems to occur as a mental state or a feeling pertaining to a particular experience - in the customer's case, it is the consumption of a product or service (Rust and Oliver, 1994).

Customer satisfaction is a well-recognised concept in marketing, and student satisfaction has derived from marketing. We also acknowledge higher education is a service. The customer satisfaction classic definition was given by Oliver (1980), according to his definition the satisfaction is the difference between expectation and actual experience that a customer has with a service encounter in reference to what was expected. Customer satisfaction is an overall evaluation based on the customer's total purchase and consumption experience with a good or service over time (Anderson, Fornell, & Rust, 1997). Therefore, satisfaction is the process of meeting expectations (Oliver, 1980; Zeithaml, Bitner, & Gremler, 2009).

Satisfaction can be viewed as the difference between expected and perceived product performance, expectations as predictions of future performance. Customer satisfaction is based on the "critical service attributes" of the organisation. Especially on service organisations pre-, during and post-service delivery, these attributes are encountered by customers and conclude the satisfaction levels of the service obtained. Moreover, it is important to understand and practice excellent service strategically for customer satisfaction, and this contributes to the 'bottom line' of the organisation (Lonial & Raju, 2015).

Marketers strongly believe that monitoring customer satisfaction helps them to manage their business more effectively (Farris; Bendle; Pfeifer and Reibstein, 2010). It is therefore vital that businesses are capable of assessing customer satisfaction so that it can be leveraged to achieve the business objectives.

Researchers have suggested that Higher education is essentially a service industry that endeavours to satisfy its customer (Oldfield and Baron 2000, Elliott & Shin, 2002) and that it should be considered as a service (Ng and Forbes, 2009).

It's widely believed that students in the higher education industry are just like customers and that any marketing context and framework used to attract and retain business customers is applicable to students as well.

Further researchers have used standard marketing vocabulary in the context of higher education, such as 'customer', 'relationship', 'satisfaction', 'customer-centric' and 'competitive-advantage'. For instance, Grönroos (1994) suggested that the marketing aim should be the development of long-term "customer" relationships with students because they are a university's most valuable resource. Similarly, it has been argued that relationships between institutes of higher education and students are important and that organisations should develop a 'market-oriented' approach to improve these relationships. (Helfert, Ritter & Walter, 2002, p. 1119). D'Uggento, Romanazzi (2006) also suggested that universities need a 'customer-centric' approach when it comes to its students. DeShields, Kara, and Kaynak (2005) recommended that the management of Higher Education should apply a market-oriented approach to sustain competitive advantage. Talking specifically about private higher education, the 'customer-centric' approach is even more important relative to public sector higher education. In the UK, public sector higher education students pay tuition fees of up to £9,000 per year for undergraduate level study and gradually pay this back after the completion of their studies when they are earning. In the tuition-based model, students are the primary source of revenue, which forces institutions to think differently about the role of student satisfaction for their own sustainability and success (Kotler and Fox, 1995). The above references strongly suggest that a standard marketing framework should be deployed to manage student relationships with the institute of higher education.

Tonks & Farr (1995), for instance, suggested that students absolutely should be seen as customers. Hill (1995) shares this view with D'Uggento, Petruzzellis, and Romanazzi (2006) also regarded students as customers of universities and made the conclusion that these establishments need to adopt a customer-centric approach.

Higher education is like a service industry. Therefore, students should be considered as customers, but unfortunately in literature, there have been two schools of thoughts, one considers the student as a customer while the other not. This controversial debate should be finished, and student should be considered customers, especially those who pay a fee for their education.

### **3. Methodology**

Following a brief review of the literature on customer satisfaction in general and specifically on student satisfaction with the online learning, we decided to focus on online learning experience of students and the support provided to them during the COVID-19. The purpose of this study was to examine the relationship between online teaching and mature student satisfaction. As such it employed a quantitative design (Creswell, 2012; Saunders et al., 2009)

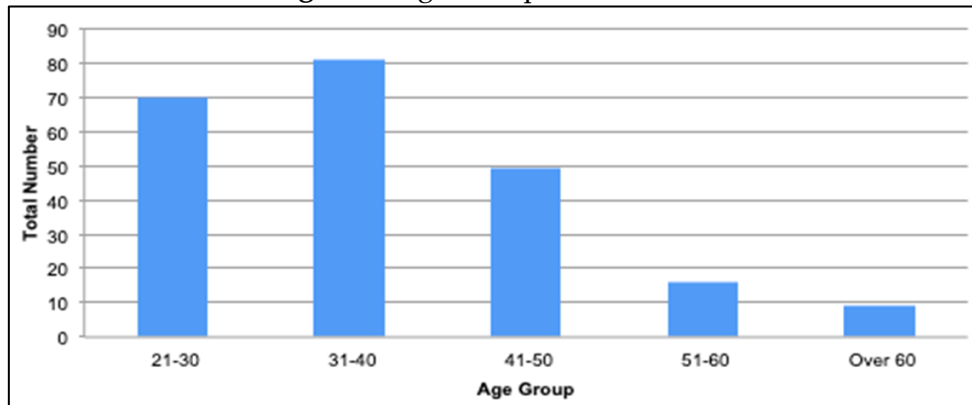
The study used the quantitative methods as the researchers consider quantitative research is more appropriate than qualitative research, especially during the lockdown period, it is difficult rather impossible to conduct face to face interviews. However, there was the option of conducting online interviews, but those are time-consuming. The study applied a proportionate stratified sampling technique in selecting the sample from three private higher education institutes in the South of England.

As for data collection, a self-administered questionnaire was developed by using Google forms and sent to mature undergraduate students studying in three institutions. The faculty member of the institutions briefed the respondents about the survey. The total of 225 questionnaires included 75 from each institution; the error rate has been less than 2%. The survey comprised the 15 items on the two dimensions excluding demographic, training (type, material and overall satisfaction) and online learning experience. The questionnaire was pilot tested before actual distribution to ensure the questions were easily understandable and answerable and where if necessary, correctly rephrased. The final 225 questionnaires were downloaded from Google Forms into Microsoft Excel to perform descriptive statistical analysis.

#### **3.1 Data Analysis and Results**

As previously mentioned, descriptive statistical analysis was conducted on Microsoft Excel. A simple and straightforward questionnaire was designed by using Google Forms comprising of total 15 questions, including demographic questions. The questionnaire focused on the type of training provided to students, challenges faced by students, overall learning experience and their future preference for online or traditional face-to-face teaching after COVID-19 pandemic. In this analysis, we have not analysed all fifteen questions, one by one, instead, focus on the main purpose of the study.

**Figure 1: Age Group Observations**



**Table 3: Age Group Observations**

Age Group	Total
24-30	70
31-40	81
41-50	49
51-60	16
Over 60	9
Observations	225
Average	45
Median	49

We categorised five age groups in the questionnaire and found the largest age group belong to age group 31-40, and the second largest age group 21-30 and the smallest age group is over 60.

**Figure 2: Age Group Observations**

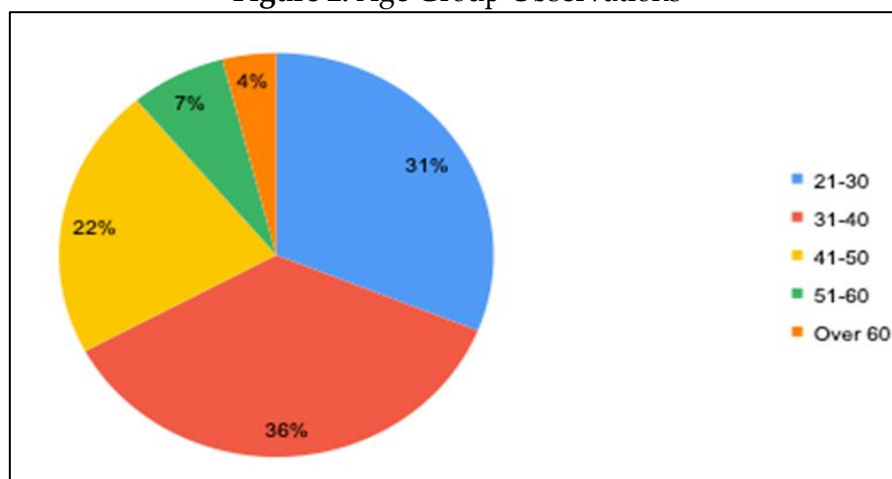


Figure 2 represents all the five age-groups and their percentage. This figure also confirms that 'X' and 'Y' generations (students) are also studying and known as mature students.



**Table 4:** Analysis of Main Questions

5. How would you rate your online learning competency with Microsoft teams, Zoom, Skype and any other software?		10. The overall training was useful		14. Your overall experience with online teaching and learning during COVID-19	
Mean	1.96	Mean	6.86	Mean	2.32
Standard Error	0.06	Standard Error	0.22	Standard Error	0.04
Median	2	Median	7	Median	2
Mode	1	Mode	10	Mode	2
Standard Deviation	0.90	Standard Deviation	2.57	Standard Deviation	0.62
Sample Variance	0.80	Sample Variance	6.61	Sample Variance	0.38
Kurtosis	-0.75	Kurtosis	-1.19	Kurtosis	-0.65
Skewness	0.48	Skewness	-0.23	Skewness	-0.33
Range	3	Range	9	Range	2
Minimum	1	Minimum	1	Minimum	1
Maximum	4	Maximum	10	Maximum	3
Sum	442	Sum	967	Sum	522
Count	225	Count	225	Count	225

**Question 5:** How would you rate your online learning competency with Microsoft teams, Zoom, Skype and any other software?

Assigned ratings are shown in the Table 4 entitled Key (1 Novice- being the lowest, 2 1=Novice (First time user) 2 = Beginner (with some introductory knowledge) 3= Competent (previous experience and sufficient knowledge) 4 = Expert (advanced knowledge and extraordinary capable). Since the data was non-numeric there was need to assign values so as to analyse it quantitatively.

Mean of 1.96 shows that most of our observations were novice (first time user) of online learning.

Standard Deviation is at 0.90 showing how our ratings revolve around the mean.

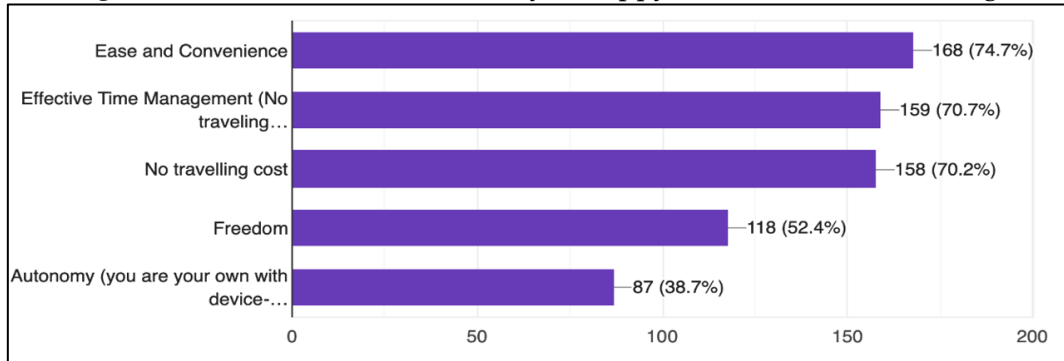
**Question 10:** The overall training was useful.

Out of the score of 10, our respondents' mean came out at 6.86. This is our measure of centre of our scores given in question 10. Since our mean is above 50% it shows that over 50% found it beneficial to have the training.

Mode is 10, that means most respondents gave a score 10, that shows the overall training was useful.

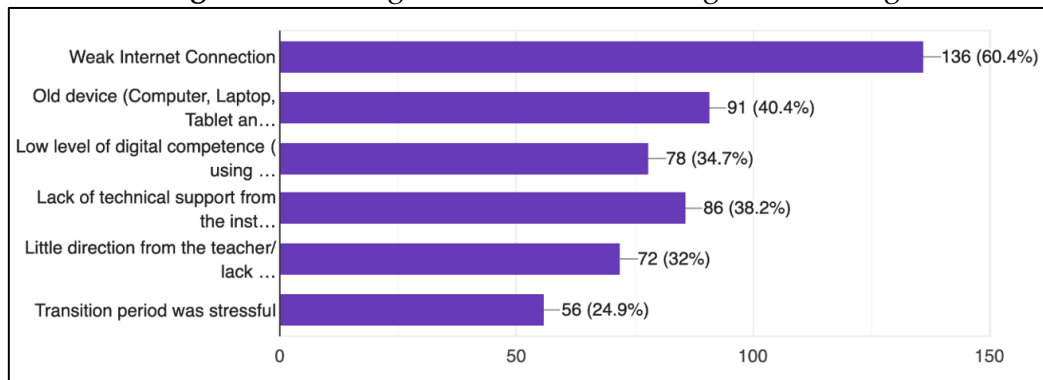
Standard 2.57 shows variation our data around the mean.

**Figure 3:** As a Student what makes you happy with the on-line learning?



As we know there are plenty of benefits of online learning, this particular question focused on main benefits of online learning, the results indicate that 168 students (74.7%) students considered online learning provides ease and convenience as a result no traveling time (159 students 70.7%) and cost involved (158 students, 70.2%) in the online learning. Last but not least it provides freedom and autonomy.

**Figure 4:** Challenges with Online Teaching and Learning



The respondents have reported a range of challenges with online teaching and learning. The results indicate that 136 (60.4%) respondents confirmed weak Internet connection, this may be due to high volume of usage of the Internet during the lockdown and also all students in the country switched to online learning. 91 (40.4%) respondents were using old devices, 78 (34.7%) respondents had a low level of digital competency, 86 (38.2%) respondents confirmed that they did not have technical support from the college. The 72 (32%) respondents confirmed that they did not have any direction from the teacher related to technical problems, and lastly 56 (24.9%) respondents found the transition period stressful. The stress may be due to the issues such as weak Internet connect, old devices lack of technical support from the institute etc.

**Question 14:** Your overall experience with online teaching and learning.

**Figure 5:** Your overall experience with online teaching and learning

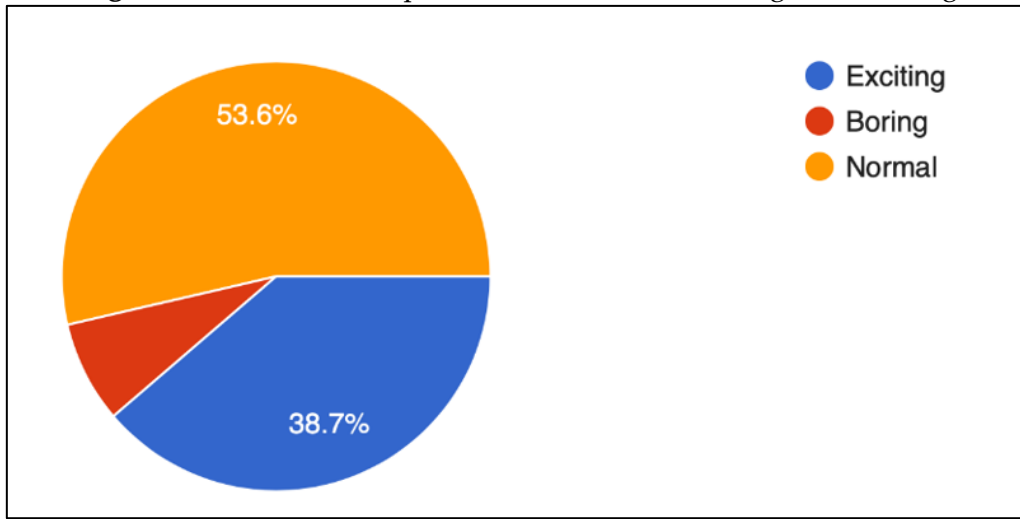


Figure 5 shows that 53.6% respondents find overall teaching experience normal and 38.7% find it exciting and only 7.7% find boring.

Mean of 2.32 shows acceptance, close to excitement of the participants in the online learning and teaching (please see Table 4).

Modal rating is 2 which heavily supports the result shown by our mean. Most respondents feel normal about online learning and teaching.

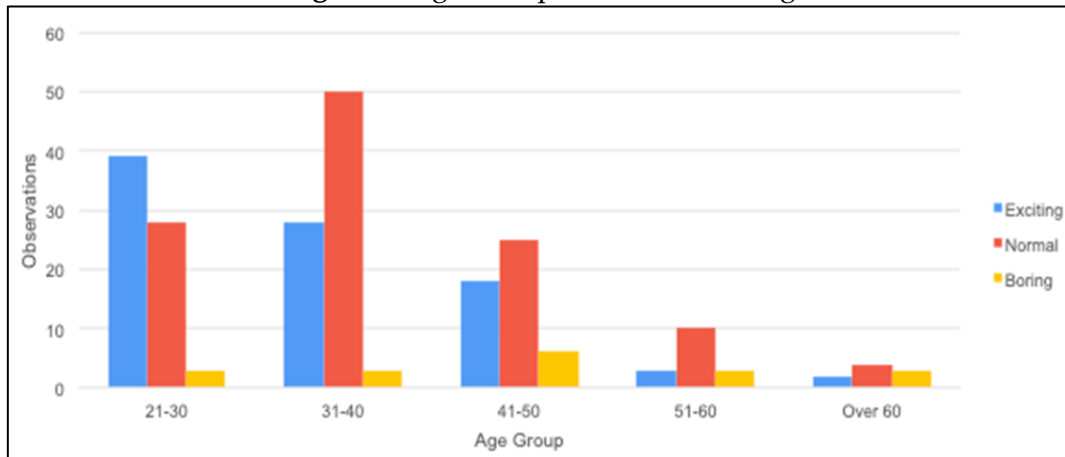
**Table 5:** Two Way Analysis

Age Group	Exciting	Normal	Boring
21-30	39	28	3
31-40	28	50	3
41-50	18	25	6
51-60	3	10	3
Over 60	2	4	3

Table 5 show a regression that the youngest age group (21-30) find online experience exciting and the second age group 31-40 also find exciting but the last age group find it least exciting only two respondents find it exciting.

The graph in Figure 6 depicts that 39 respondents in the Age Group 21-30 are Excited about online learning. 28 feel it is normal and 3 feel it is boring. This Age Group is highly represented.

**Figure 6: Age Group vs. Overall Rating**



Majority (50) in Age Group 31-40 feel that online learning is normal, mainly because they have done it several times before and it is cost effective, ease and convenient and saves time and traveling cost. 28 are excited and most likely these are first timers. Only 3 feel it is boring.

Age Group 51-60 and over is also represented but with a few respondents in terms of numbers.

The representation from above does help but however it is not everyone who participated in those age group. Therefore, we need to use the weighted figures, which in this case are percentages as shown in Figure 7.

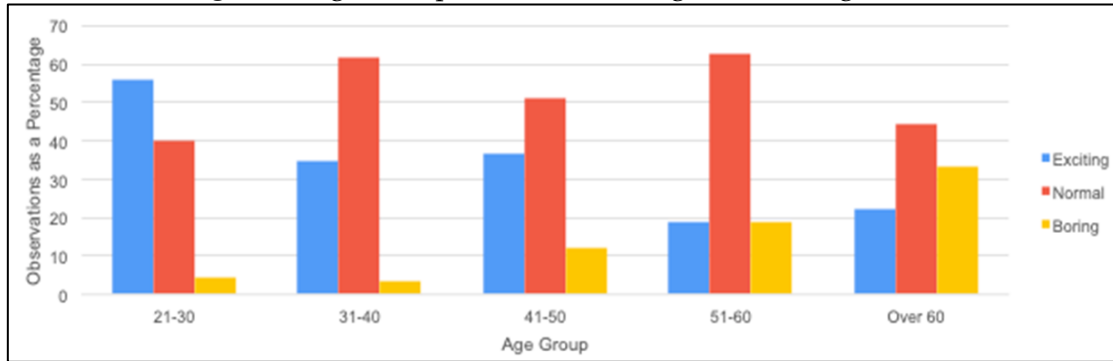
**Table 6: Normal Data Converted as Percentage**

Total (225)	Age Group (%)	Exciting (%)	Normal (%)	Boring (%)	Percentage (%)
70	21-30	56	40	4	100%
81	31-40	35	61	4	100%
49	41-50	37	51	12	100%
16	51-60	19	63	18	100%
9	Over 60	22	44	34	100%

In term of percentage the younger age groups (21-30 (56%) and 31-40 (35%)) find online teaching exciting while the older age groups (51-60 (18% and over 60(34%)) find the online teaching experience boring.

The graph in Figure 7 depicts that 56% of respondents in the Age Group 21-30 are Excited about online learning. 40% feel it is normal and 4% feel it is boring. This Age Group is highly represented.

**Figure 7: Age Group vs Overall Rating in Percentage Form**



Age Group 31-40 is the most represented group, 62% feel that online learning is normal, mainly because they have done it several times before and it is cost effective, ease and convenient and saves time. 35% are excited and most likely these are first timers. Only 4% feel it is boring.

63% in the Age Group 51-60 feel it is normal, 19% are excited and 19% feel it is boring.

44% of those who represented the Age Group Over 60 feel normal about online learning, 22% feel it is exciting and 33% feel it is boring.

The information in Figure 5 represents all age groups fairly because of weighting.

**Table 7: Age Group vs Preference**

Age Group	Continue online teaching	Offer blended learning	Return to original face to face teaching
21-30	47	12	11
31-40	39	26	16
41-50	19	17	13
51-60	4	3	9
Over 60	1	1	7

The majority of younger age groups (21-30 and 31-40) prefer to continue online teaching after the COVID-19. A few among these group prefer blended learning and a small number (11) of respondents want face to face teaching after Covid-19. Among older age groups (51-60 and over 60) majority prefer face to face traditional teaching after COVID-19 and a small number prefer online and blended learning.

**Figure 8: Age Group vs After COVID 19 in Percentage Form**

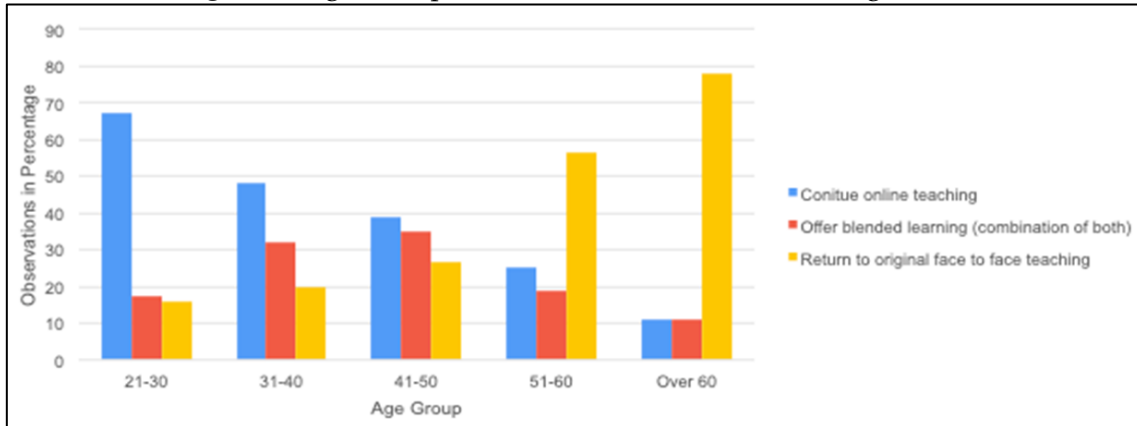


Figure 8 shows respondents' preferences post COVID-19.

67% in the Age Group 21-30 would love to continue online learning post COVID-19 and lockdowns. 17% prefer blended learning and 16% would love to return to original face-to-face teaching.

48% in Age Group 31-40 want to continue online learning, 32% want blended learning and 20% want to return to original face-to-face teaching.

39% of the Age Group 41-50 prefers to continue online learning, 35% prefer blended learning and 27% prefer to return to original face-to-face teaching. The distribution in this group is fairly normal.

25% of 51-60 age group prefer to continue online teaching, 19% want blended and 56% want to return to original face-to-face teaching. This was very much expected given the age of the people involved.

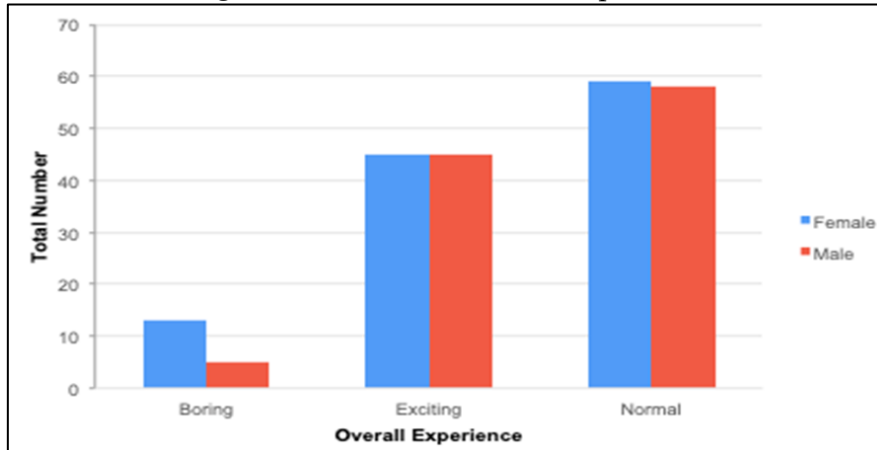
Those over 60 strongly prefer to return to original face-to-face teaching. This is not an anomaly since it was expected they would respond that way.

**Table 8: Classification by Gender**

Online Teaching	Female	Male	Total
Boring	13	5	18
Exciting	45	45	90
Normal	59	58	117
<b>Total</b>	<b>117</b>	<b>108</b>	<b>225</b>

In terms of analysis from gender perspective, the results show that majority female find online teaching boring as compared to males. Interesting results in terms of online teaching excitement both males and females equally find it exciting.

**Figure 9: Gender vs. Overall Experience**

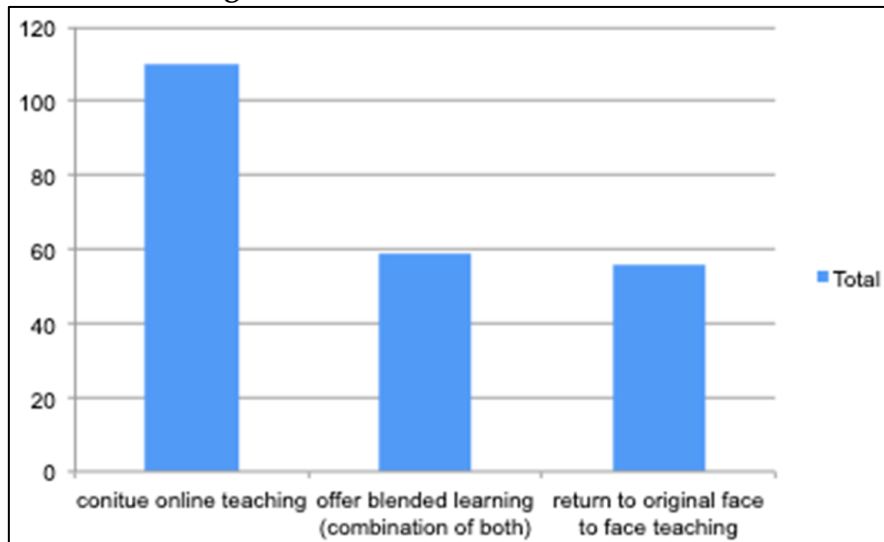


There is only variation among males and females on boring aspect of online teaching. There is agreement between the two on Exciting and Normal online teaching. This can be seen in Figure 9.

**Table 9: Overall Students' Preference**

Preference	Total Number of Students
Continue online teaching	110
Offer blended learning	59
Return to original face to face teaching	56
<b>Grand Total</b>	<b>225</b>

**Figure 10: Overall Students' Preference**



Overall, from our observations we conclude that at least 110 respondents want to continue online learning and this constitutes a largest portion of our observed data. The ones who want blended and those who want to return to original face-to-face teaching are evenly balanced. 59% want blended and 56% want to return to the original face to face.

#### **4. Conclusion**

The main purpose of the study was to explore the level of student satisfaction with online teaching during the lockdown period of COVID-19. As the survey sample size was small (225), therefore the findings cannot be generalised for all the sector of the Higher Education. The findings indicate that majority of students under age group 50 prefer online teaching or blended and wanted to continue after COVID-19. The most common challenges students faced were Weak Internet Connection, Old Devices (Computer, Laptop etc.), Low Level of Digital Competency and Lack of Technical Support. Lastly, the abrupt transition to online teaching had been a stressful experience for some students.

#### **5. Recommendations**

Based on the results derived from this research, the following specific recommendations are presented to the senior management and the policy makers of the private higher education institutions.

It was not easy to suddenly switching from face-to-face in-class learning to remote online learning. It was noted that higher education institutions had to do quickly due to COVID-19 and Lockdown in the country but post COVID-19 if private higher education institutes want to continue online teaching, they require to train students especially mature students belonging to age groups 41-50, 51-60 and over 60. These age groups students lack a certain degree of technological proficiency. The higher education institutions need to create training manuals, video and provision of online technical support.

The Private higher education institutions need to provide latest computers or laptops to students and this provision could be on subsidised prices, or on easy and affordable instalments or provision of borrowing these devices and return after the completion of the course.

Millions of students around the world are experiencing technical difficulties because of the high usage rate of online learning systems, video streaming software, & other digital tools. The platforms are overloaded: poor quality video and audio, Internet problems. Internet connection is either unstable or the current data plan is not enough to cover the progressive e-learning needs.

It is recommended that HEIs need to provide broadband speed guidance to students. The students should know the minimum speed at which the broadband can download data easily. Therefore, students need realistic information about the top broadband companies and their broadband packages with speed.

It is not easy for students, especially mature, to start using online learning software (Zoom, Microsoft Teams etc.) without additional training. Additional training of basic computer literacy for mature students is always a good idea. Besides, this, PrHEIs can provide them with online support as well as tutorials.



It is recommended to get regular feedback from the students on how they experience online teaching and what should be improved.

The mature students are at the forefront of the education process. When education becomes a commercial transaction, especially at private higher education institutions, then students should be treated as customers and Private Higher Education Institutions need to meet their needs.

## References

- Anderson, Eugene W., Fornell, Claes, and Lehmann, Donald R., and Rust, Roland T. (1997). Customer Satisfaction, Productivity, and Profitability: Differences Between Goods and Services, *Marketing Science*, 16 (2), 129–45.
- Anderson, T. (2011a). Towards a theory of online learning. In T. Anderson (Ed.), *The theory and practice of online learning*, 2nd Edition (pp. 45–74). Edmonton: Athabasca University Press.
- Altbach, G. Philip (1999). *Private Prometheus: Private Higher Education and Development in the 21st Century*. Westport, CT: Greenwood Press
- Belfield, C. R., and H. M. Levin (2002). *Education privatization: Causes, consequences and planning implications*. Paris: UNESCO.
- Barbosa, J., Barbosa, D., & Rabello, S. (2016). A collaborative model for ubiquitous learning environments, *International Journal on E-Learning: Corporate, Government, Healthcare, and Higher Education*.
- Bresman, H., and Rao, V. D. (2017). A Survey of 19 Countries Shows How Generations X, Y, and Z Are – and Aren't – Different, *Harvard Business Review*
- Brooks, D. W. (1997). *Web-teaching: A guide to designing interactive teaching/or the World Wide Web*. New York, NY: Plenum Press.
- Chen, T., Peng, L., Yin, X., Rong, J., Yang, J., Cong, G. (2020). Analysis of User Satisfaction with Online Education Platforms in China during the COVID-19 Pandemic, *Healthcare*, 8,200, MDPI.
- Creswell, J. W. (2012). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*, 4th Edition.
- Department for Business, Innovation & Skills (BIS), *Applying student number controls to alternative providers with designated courses*, (2012). Retrieved from: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/32725/12-1292-applying-student-number-controls-consultation.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/32725/12-1292-applying-student-number-controls-consultation.pdf)
- D'Uggento, A., M., Romanazzi, S. Petruzzellis, L. (2006). Student satisfaction and quality of service in Italian universities, *Journal of Managing Service Quality*
- DeShields Jr., O. W., Kara, A. and Kaynak, E. (2005). Determinants of business student satisfaction and retention in higher education: applying Herzberg's two factor theory, *International Journal of Educational Management*, 19(2), 28-139.

- Elliott, K. M. and Shin, D. (2002). Student satisfaction: an alternative approach assessing this important concept. *Journal of Higher Education Policy and Management*, 24(2), 197-209.
- Farris, P., Bendle, N., Pfeifer, P., and Reibstein, D. (2010). Metrics that Matter - to Marketing Managers, *Journal of Research and Management*.
- Grönroos, C. (1994). From Marketing Mix to Relationship Marketing, *Management Decision*, Vol. 32 Iss. 2 pp. 4 – 20.
- Heines, J. M. (2005). In G. Kearsley (Ed.) *Online learning: Personal reflections on the transformation of education* (pp. 144-162). Englewood Cliffs, NJ: Educational Technology Publications.
- Helfert, G., Ritter, T., & Walter, A. (2002). Redefining market orientation from a relationship perspective: Theoretical considerations and empirical results, *European Journal of Marketing*
- HESA (2020). Retrieved from: <https://www.hesa.ac.uk/data-and-analysis/students/whos-in-he>
- Hill, F. M. (1995). Managing service quality in higher education, paper presented at the Quality Assurance in Education Conference, Manchester.
- Hodges, C., Moore, S., Lockee, B., Trust, T., & Bond, A. (2020). The difference between emergency remote teaching and online learning, *Educause Review*, 27 March, Retrieved from: <https://er.educause.edu/articles/2020/3/the-difference-between-emergency-remote-teaching-and-online-learning>.
- Howe, N. (2014). *Introducing the Homeland Generation* (Part 1 & 2). Retrieved from <https://www.forbes.com/sites/neilhowe/2014/10/27/introducing-the-homeland-generation-part-1-of-2/#7bce43102bd6>
- Jaggars, S. (2014). Choosing Between Online and Face-to-Face Courses: Community College Student Voices, *American Journal of Distance Education*. Retrieved from: <https://ccrc.tc.columbia.edu/media/k2/attachments/online-demand-student-voices.pdf>
- Jenkins, R. (2017, July 30). *Who are the generations?* [Video file]. Retrieved from <https://www.youtube.com/watch?v=IYOeDIOxKjc>.
- Kotler, P. and Fox, K. (1995). *Strategic Marketing for Educational Institutes*, 2nd edition, Prentice-Hall, Inc., New Jersey.
- Levy, D. (1986). *Higher Education and the State in Latin America: Private Challenges to Public Dominance*. Chicago, Illinois: University of Chicago Press.
- Lonial, S. & Raju, P. (2015). Impact of service attributes on customer satisfaction and loyalty in a healthcare context *Journal of Leadership in health services* (Bradford, England).
- Ng, R. C. L., & Forbes, J. (2009). Education as Service: The Understanding of University Experience Through the Service Logic, *Journal of Marketing for Higher Education*, 19:1, 38-64.
- NUS (2012). Never Too Late To Learn Mature students in higher education, Retrieved from:

[https://www.researchgate.net/profile/Katy\\_Morris2/publication/301683614\\_Never\\_Too\\_Late\\_To\\_Learn\\_Mature\\_students\\_in\\_higher\\_education/links/5721d98e08ae0926eb46c7f0/Never-Too-Late-To-Learn-Mature-students-in-higher-education.pdf](https://www.researchgate.net/profile/Katy_Morris2/publication/301683614_Never_Too_Late_To_Learn_Mature_students_in_higher_education/links/5721d98e08ae0926eb46c7f0/Never-Too-Late-To-Learn-Mature-students-in-higher-education.pdf)

- Oldfield, B., M. and Baron, S. (2000). Student perceptions of service quality in a UK university business and management facility. *Quality Assurance in Education*, 8(2).
- Oliver, R. L. (1980). A cognitive model of the antecedents and consequences of satisfaction decisions. *Journal of Marketing Research*, 17, 460-469.
- Rust, R. T., & Oliver, R. L. (1994). *Service quality: New directions in theory and practice*. Thousand Oaks: SAGE.
- Saunders, M., Lewis, P. and Thornill, A. (2009). *Research Methods for Business Students*. Pearson Education Limited, 1-614.
- Shank, P. & Sitze, A. (2004). *Making sense of online learning: A guide for beginners and truly skeptical*. San Francisco, CA: John Wiley & Sons.
- Stankorb, S., & Oelbaum, J. (2014). Reasonable people disagree about the post-Gen X, pre-Millennial generation.
- Sterbenz, C. (2015). Here's who comes after Generation Z – and they'll be the most transformative age group ever.
- Swanzen, R. (2018). Facing the Generation Chasm: The Parenting and Teaching of Generations Y and Z, *International Journal of Child Youth and Family Studies* Vol.9, No.2.
- Tonks, D. and Farr, M. (1995). Market segments for Higher Education: using geodemographics, *Marketing Intelligence & Planning*, volume 13, number 4, pp. 24-37.
- WHO (2020). WHO Director-General's opening remarks at the media briefing on COVID-19, 11 March 2020 Retrieved from: <https://www.who.int/dg/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19---11-march-2020>.
- UCAS (2020). Retrieved from: <https://www.ucas.com/undergraduate/student-life/mature-undergraduate-students>.
- UNESCO (2020). COVID-19 Educational Disruption and Response. Retrieved from: <https://en.unesco.org/covid19/educationresponse>.
- Zeithaml, V. A., Bitner, M. J. & Gremler, D. (2009). *Services Marketing - Integrating Customers Focus across the Firm*, Fifth Edition, Boston: McGraw-Hill.

Creative Commons licensing terms

Author(s) will retain the copyright of their published articles agreeing that a Creative Commons Attribution 4.0 International License (CC BY 4.0) terms will be applied to their work. Under the terms of this license, no permission is required from the author(s) or publisher for members of the community to copy, distribute, transmit or adapt the article content, providing a proper, prominent and unambiguous attribution to the authors in a manner that makes clear that the materials are being reused under permission of a Creative Commons License. Views, opinions and conclusions expressed in this research article are views, opinions and conclusions of the author(s). Open Access Publishing Group and European Journal of Education Studies shall not be responsible or answerable for any loss, damage or liability caused in relation to/arising out of conflicts of interest, copyright violations and inappropriate or inaccurate use of any kind content related or integrated into the research work. All the published works are meeting the Open Access Publishing requirements and can be freely accessed, shared, modified, distributed and used in educational, commercial and non-commercial purposes under a [Creative Commons Attribution 4.0 International License \(CC BY 4.0\)](https://creativecommons.org/licenses/by/4.0/).