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Digital Natives' Academician-Student Relationships

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ABSTRACT

Digital natives born with advanced digital media technologies are acknowledged as the first generation of the 21st century. This quantitative study seeks to explore digital natives' stimuli and perceptions towards technology-oriented academician-student interactions at a major university in North Cyprus amid the COVID-19 pandemic. Participants (N=259 Gen Z learners) in a developing country seem to value the virtualization of academician-student interactions in higher education because digital technologies eliminate the existing and possible communication obstacles between educators and learners especially during the crisis situations. It was underlined that digital natives mostly prefer mobile communication in their lives with the belief that technology facilitates, enhances, enriches and triggers interactions between educators and learners. Hence, digital learners mostly prefer blended education and digital communication because participants claim that digitalization escalates the effectiveness of teaching and communication. Digital-assisted education ascends learners' self-confidence and desire towards initiating interactions and comprehending the course contents.

Keywords : Digital Natives, Educational Technologies, Interpersonal Communication, New Media Technologies, Tertiary Education

Dijital Yerlilerin Akademisyen-Öğrenci İlişkileri

ÖZ

Dijital yerliler, 21. yüzyılın gelişmiş dijital medya teknolojileriyle doğmuş ilk kuşağı olarak kabul edilmektedir. Bu nicel çalışma, COVID-19 pandemisi sırasında Kuzey Kıbrıs'taki en köklü devlet üniversitesinde bulunan dijital yerlilerin teknoloji odaklı akademisyen-öğrenci etkileşimlerine yönelik uyaranlarını ve algılarını keşfetmeyi amaçlamaktadır. Gelişmekte olan bu ülkedeki katılımcıların (N=259 Z kuşağı öğrencileri), yüksek öğretimde akademisyen-öğrenci etkileşimlerinin dijitalleşmesine değer verdiği ortaya çıkmıştır. Çünkü katılımcılara göre dijital teknolojiler, özellikle kriz durumlarında eğitimciler ve öğrenciler arasındaki ve olası iletişim engellerini ortadan kaldırmaktadır. Teknolojinin eğitimciler ve öğrenciler arasındaki etkileşimi kolaylaştırdığı, geliştirdiği, zenginleştirdiği ve tetiklediği inancıyla dijital yerlilerin

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hayatlarında çoğunlukla dijital iletişimi tercih ettikleri bulguları öne çıkmıştır. Dijital öğrenenler çoğunlukla harmanlanmış eğitimi ve dijital iletişimi tercih etmiştir çünkü katılımcılar dijitalleşmenin öğretim ve iletişimin etkinliğini artırdığı üzerinde durmuşlardır. Çalışmanın diğer bir bulgusu ise, dijital destekli eğitimin, öğrencilerin özgüvenini ve sınıf içi etkileşimi başlatma ve ders içeriğini anlama isteğini artırdığıdır.

Anahtar Kelimeler : Dijital Yerliler, Kişilerarası İletişim, Eğitim Teknolojileri, Yeni Medya Teknolojileri, Yüksek Öğretim

INTRODUCTION

Recent technological, cultural and social improvements all around the world have dramatically affected the lifestyles, interpersonal communication and upbringing of the young individuals called the digital natives (Ivan, 2022). Each generation holds unique and distinct attributes such as cultural, historical, personal and intellectual that eventually form the generational line (Lengel et al., 2022). Consequently, individuals are classified according to their similarities and differences, which are determined by their common positions in the historical process, biological and physical age phenomena and the course of life (Zhou & Charoensukmongkol, 2022).

The daily lives of digital natives are influenced and governed intensely by the advancements in new media technologies due to being born in the digital opportunities such as advanced technological tools like smartphones with fast and uninterrupted internet connection (Fortunati, 2022). All these innovations and digital transformations induce major changes in personality traits of each generation as means for communication especially amid the COVID-19 pandemic (Holzer et al., 2022). As He and Zhang (2022) point out, new media technologies provide positive contributions in terms of security and belonging, which are the affective needs of individuals. Yet, a new phenomenon known as "phubbing", caused by the excessive use of smartphones, has been proposed to describe the tension and discomfort felt by the individuals when one of the parties in a social environment is constantly busy with their smartphone instead of communicating with one another (Büttner et al., 2021). The important feature of this era in terms of communication is that the COVID-19 is the first pandemic of the social media era that declined the face-to-face interactions and enhanced the mobile interpersonal communication among people (Dumas & Stough, 2022).

Generation Z learners, who were born between the years of 1997-2010 and are intertwined with multifarious mobile media innovations can easily adapt to the new media technologies to access information or gratify such needs as socialization, entertainment and education (Giray, 2022). Generation Z has a nature that is goal-oriented, tech-enthusiast and peaceful with diversities, who tend to skip the procedures and formalities to reach to the end promptly (Gabrielova & Buchko, 2021). The reason is parallel with the fact that the majority of fast-learners with technology belong to the Generation Z (Dumas & Stough, 2022).

Additionally, this young, curious and resourceful generation grew up with all the innovations that facilitate their lives in such fields as communication and education (Azimi et al., 2021). The majority of students utilize educational technologies like Microsoft Teams and Zoom to connect their courses during the COVID-19 pandemic (Aagaard, 2022). Especially at the earlier times of pandemic, the almost only mobile communication channels were social media platforms. Therefore, curriculum and further educational activities should be assembled and maintained in a way to embrace the needs of digital natives, ongoing technological advancements and harmony in usage and preferences of technologies (Martínez & Olsson, 2022). The recent studies have manifested that the Z generation learners tend to communicate and interact with others through new media technologies intensively. As Ho et al. (2022) argue, the concept of technology-mediated interpersonal communication was derived from the growing usage and attachment of new media technologies as means for communication with the COVID-19 pandemic. Bearing that in mind, the present study was carried out to reveal technology-oriented interactions between digital natives and educators at tertiary education during the crisis times.

1. LITERATURE REVIEW

1.1. Digital Natives and Digital Interpersonal Communication

The effectiveness of new media technologies in the COVID-19 pandemic and individuals' devotions to technologies have led to a prompt alteration in digital natives' communication habits (Wei, 2022). Mobile communication technologies like WhatsApp, take an exceptional place in the communications of Z youngsters (Yue et al., 2023). Although the release date has not been determined yet, WhatsApp application will also allow users, as Facebook and Instagram, to convert their profile pictures into avatars and also share them with other people as emojis (Tech, 2022). Lately, young people employ such mobile communication platforms as WhatsApp, more adeptly than the older population like X generation (Karthika et al., 2022). Generation Z is considered as the first and leading generation of the 21st century holding the opportunities of the information age. Majority of countries seem to have prepared appropriate multi-level technological conditions so far for the younger generation, especially the centennials to be able to operate their inner tech-skills and benefit highly from technology (Proszek, 2019). Zuo and Hong's (2022) study confirm that although this generation is considered as natural technologists, such inventive individuals still need a guidance for the productive use of the Internet and digital tools towards perpetually evolving and growing telecommunications.

Digital natives dissociate from prior generations in that they are exceptionally dependent on the Internet. They track technological developments closely, interact and communicate regularly through several mobile communications such as mobile phones and social networking sites, can easily articulate their wishes and provide continuous and more access to the virtual environments (Azimi et al., 2021). As Menon's (2022) study affirms, due to the fact that digital natives feel more comfortable with technology, social media are one of their prominent communication platforms especially Instagram and WhatsApp. Apart from their socialization needs, Z generation prefer digital possibilities to access information in their daily and academic lives during the COVID-19 pandemic (Lausch & Rossetto, 2022). Accelerated developments in mobile communications turn generation Z into a courageous,

curious, learning/solution-oriented and impatient individuals, who seek for shortcuts in life as they do in virtual settings (Ntshangase, 2022).

Technology facilitates the interactive communication especially in the COVID-19 pandemic among individuals even if they speak different languages regardless of time and space (Tarihoran et al., 2022). For instance, lately, a popular virtual space called the Metaverse provides its users with real-life experiences such as shopping, socializing, purchasing lands and visiting countries in the online environment (Tlili et al., 2022). Yet, people need assisting equipment such as virtual reality glasses in order to take part in this cyberspace. Furthermore, it is vital to recognize the new language developed by young people at the virtual settings consisting of unique communication codes. Nevertheless, the majority of relevant studies underline how the modern technologies enslave and isolate humans at their homes. At this point, Valkenburg et al. (2021) develop a counter-argument that draws attention to the fact that young people also acquire positive attributes including the advanced cooperation skills and the self-confidence in establishing and maintaining online interpersonal communication. In the light of this, parents and adults, who cannot separate their children from digital tools, have no choice but to communicate with these youth via the new media technologies (Djafarova & Foots, 2022).

1.2. Digital Natives and Education

As the Z generation children are pretty intertwined with mobile communication technologies from their early childhood, Z gen initially spend time on their parents' technological appliances as babies, then, the majority of generation Z individuals have their own electronic devices until the primary education age (Karthika et al., 2022). Thus, digital natives have proved to be very fast in speaking, thinking, learning, advancing academically in the distance education settings (Rosen, 2022). Compared to previous generations, these individuals have higher IQ, self-confidence and the ability to multitask. Hence, the education methods that are implemented for the prior generations may be insufficient for the Z generation individuals (Tutgun and Özdener, 2011). The majority of studies conducted during the pandemic emphasize that this new generation has a more enduring capacity for learning through mobile media, thus, technology-assisted educational materials such as games, e-books and e-libraries are required to be integrated into education (Kinsky et al., 2021). Digital natives expect technology-assisted education, such as course videos with animations or avatars, due to their high technological aptitudes (Hicks et al., 2021).

Digital natives learn with technology-oriented teaching/learning methods (Proszek, 2019). Educational technologies such as digital libraries and online discussion boards, facilitate the learning and increase the motivation of Z generation (Chen & Bogachenko, 2021). The process of integrating traditional teaching-learning techniques into educational technologies called "Blended or Hybrid" model, which was popularized amid the COVID-19 pandemic (Moreno-Guerrero et al., 2021). The "Blend Flex" model refers to both blended and resilient learning environments, where conventional and contemporary digital instruction approaches are used together to enhance learning (Miller et al., 2020). In this regard, educators need to learn how to employ online educational materials to capture the essence of their students.

Therefore, electronic learning materials such as e-workbooks and online video lecturing should play an important role in the education process (Aydın-Aitchison, 2022). The reason is related with the fact that the digital innovations allow autonomous learning where learners can regulate their own learning environments (Li et al., 2021).

Intergenerational, educational and technological transformations require educators and learners to revamp their teaching and learning approaches based on the attributes of the ongoing information age (Mateus et al., 2022). The rapid advancements in the new media technologies have caused a change in instruction and learning styles for both the educators and learners (Garris & Fleck, 2022). As argued by Martínez and Olsson (2022), generation Z learners can operate technology more easily, while individuals in the older age groups including X and Y generations confront difficulties in utilizing digital opportunities. This can be considered as a social phenomenon and intergenerational differences that bring up the concept of digital citizenship generation Z holds (Kapoor et al., 2021). Digital citizenship explains the advanced skills to employ mobile communication technologies regularly, ethically, critically, beneficially and safely in representing themselves (Valkenburg et al., 2021). Adoption of the constructivist approach and student-centered model in education facilitate the alterations in academicians' and students' roles in the classroom (Payaprom & Payaprom, 2020).

1.3. Communication between Learners vs Educators during Crisis Times

The ultimate duty of educators can be considered as leading the desired behavioral change in students based on their goals (Wang & Sun, 2021). A positive classroom environment, mutual understanding and efficacious communication between educators and learners should be ensured to achieve the desired goals in education (Errisuriz et al., 2022). Interpersonal relations between academicians and students are considered as a vital element of the teaching/learning process at school due to the necessity of mutual interactions among both parties (Demirdag, 2022). For instance, issues such as the educators' inability to recognize student's needs, inadequacies in communication skills, student's lack of attention and motivation towards the courses influence the classroom atmosphere negatively (Sartor Harada et al., 2022).

Considering the characteristic differences of digital natives, their communication patterns, learning and teaching approaches differ among generations, thus, digital natives prefer to carry on more sincere and close interpersonal relations with their classmates and educators virtually (Garris & Fleck, 2022). As elicited by Aydın-Aitchison (2022), although the Gen Zers are regarded as innovative, creative and original individuals, such youth may distance themselves from their academicians and even their parents in cases of lack of technology. Hence, traditional methods of lecturing in the classroom settings are less effective and need to be enriched with educational technologies such as learning in virtual reality environments like Metaverse (Karahisar, 2013). Metaverse was initially coined by Stephenson (1992) to explain virtual settings, where individuals' perceptions and daily activities in real life are transferred to the digital space by certain equipment such as headsets and 3D glasses (Sanfilippo et al., 2022). Such artificial spaces allow learners to expand their learning by interactive educational equipments (Tlili et al., 2022).

1.4. Generation Z: Patterns of Technology Usage

Digitalization is at the center in every field from lifestyle to production, from health to education especially amid the COVID-19 pandemic (Zuo & Hong, 2022). Generation Z was born into the technology that determines today's trends and they are well-aware of the fact that the path of future passes through digital conformation (Tsatsou, 2021). Therefore, generation Z prepare themselves and their futures for digital transformations. Young people, who integrate their investments, education and future plans into digital, initiate a technology-driven transformation in their communication models as well (Abdullah et al., 2022). Generation Z individuals frequently opt to establish a comfortable communication model through social media within the framework of liberty, equality, mutual understanding and empathy (Kapoor et al., 2021).

Growing up during the tremendous expansion of the technological revolution, Gen Zers have intuitively interiorized high-tech habits and associated them with their social and personal attitudes (Gabrielova & Buchko, 2021). It is the generation that was born and inevitably live with technology, has the highest creativity and the most casualness in different communication platforms (Kolak et al., 2022). To elaborate, generation Z is often considered as pretty complicated and hyperactive individuals, who consume media products quickly and live fast compared to previous generations (Djafarova & Foots, 2022). Generation Z youth, which are distinguished from other generations by their commitment to technology, consider the Internet and mobile media such as smartphones as an imperative need for their social, personal and academic affairs (Menon, 2022).

Digital instruments that constituted for multipurpose, attract generation Z more and make them feel privileged (Zuo & Hong, 2022). Therefore, members of this generation prefer to socialize at home via the social media instead of playing outside and maintaining face-to-face interactions with others (Öngün, 2010). Individuals in this generation consider social media as the primary communication tool and best environment for socialization, due to its rapid information exchange (Dar & Nagrath, 2022). Generation Z do not only seek and acquire information, but also share what they know on websites or online blogs, which in turn facilitate the research of other people, who seek information online on particular issues (Payaprom & Payaprom, 2020). In this regard, it can be concluded that the digital natives, who are freely visible in the virtual space, can influence the masses through TikTok or Instagram (Wong et al., 2020). Social media's power to expand social circles enables Gen Zers to think and act outside the box. Hence, Z generation pursue their passions on an uncapped level through social media. For example, YouTube provides unlimited/free educational videos on a wide range of topics from teaching to initiating personal businesses, taken during real lectures at several reputable universities around the world, thus, the Internet turns everyone's dreams into reality in this digital era (Pires et al., 2022).

2. METHODOLOGY

The empirical data have been gathered using a quantitative survey method to encompass numeric representation of the issue studied. The following research questions have

been set to investigate digital natives' stimuli and perceptions in digital mediated academician-student interactions at tertiary education:

RQ1: To what extent do digital technologies alter digital natives' stimuli and perceptions regarding the technology-mediated communication in education during the COVID-19 pandemic?

RQ2: To what extent do digital technologies mediate digital natives' interpersonal communication at tertiary education during the COVID-19 pandemic?

RQ3: To what extent do the virtual educational technologies mediate and enrich teaching-learning strategies at tertiary education during crisis times?

2.1. Research Design and Sample

A descriptive quantitative research has been favored to shed light on digital natives' perceptions and feelings concerning the academician-student interactions at the major higher education institution in North Cyprus, a developing country, during the earlier stage of the virus called the SARS-CoV-2. In this respect, a total of 259 Z generation students (N=259) were reached. Participants were selected using the convenience sampling technique, which is one of the non-probability sampling methods that allows sampling from a conveniently close area. The majority of participants were from Middle East countries that are Turkey (23.5%), Iran (13.7%) Jordan (9.8%) and African countries such as Nigeria (17.4%). The data collection process was carried out by online questionnaires directed to Google Forms, which covers the period between the 25th of March 2020 and the 27th of May 2020 at four faculties which are Communication & Media Studies, Education, Engineering and Business and Economics.

2.2. Ethical Considerations

Consequently, all the official processes such as applying for faculties' ethics committees and university's "Research and Publication Ethics Board" have been completed by the researchers in the scope of ethical codes and transparency. As soon as all the research permissions obtained formally, an informed consent form and questionnaire were delivered to faculty deans and chairs. After a screening process and obtaining their permissions to collect data in their faculties and departments, the official data collection process had begun. Participants were informed regarding the study and their permissions were obtained with an informed consent form. Initially a pilot study was conducted to assess the validity and reliability of the questionnaire and research questions. Conducting a pilot study led to a minor alteration in few questions on a sentence basis, which increased the clarity intelligibility of questions.

2.3. Data Collection Tool

A questionnaire and scale were generated by researchers to serve the purposes of the present study. Experts on communication and education fields have contributed in the process of developing this questionnaire. The questionnaire consists of two major sections. The first section presents 16 multiple choice questions and the second part includes Likert Scale questions. A five-point Likert Questions from 5 to 1 (5: Strongly Agree, 4: Agree, 3: Undecided, 2: Disagree, 1: Strongly Disagree) have been used. There are 15 questions in the questionnaire

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and 22 items in the scale. Since the questionnaire was formed specific to this study, validity and reliability tests were inevitable. Performing such tests proved that the Alpha Coefficient rate was 0.925. The Cronbach's Alpha affirms scale's authenticity and accuracy, which suggests the ratio between 0.7 and 0.95 for the studies to be conducted in humanities and social sciences (Tavakol & Dennick, 2011). Considering the value obtained after performing the reliability test (0.925), it could be said that this study is exceptionally reliable (see table 1 below).

Table 1: Cronbach's Alpha

Cronbach's Alpha	N of Items
.925	22

2.4. Data Collection Procedures

The questions/items that the questionnaire encompass were formed by researchers based on the scope and purposes of this research to collect data from the digital natives in higher education. The main theme of the data collection tool stands out as the digitalized academician-student interactions of the digital natives at the higher education amid the SARS-CoV-2. Due to the pandemic rules, traditional print-out surveys cannot be distributed to the participants, thus, the online questionnaire was prepared and distributed with the link in the Google Forms.

2.5. Data Analysis

As a result of conducting the online questionnaire, the data collected from Z generation learners (N=259) at tertiary education and the IBM SPSS Statistics 22 (Statistical Package for Social Sciences) was favored to analyze the data obtained. In this respect, descriptive statistics and frequency tables were taken into account when the votes of digital native learners were 50% and above. Conducting the KMO (Kaiser-Mayer-Olkin) and Bartlett's test proves that the sample ratio is convincing with =0.940>0.5 (see table 2). Additionally, when contemplating factor analysis, KMO and Bartlett's tests are crucial stages since they assist to establish whether the data have adequate intercorrelations across variables to justify dimensionality reduction strategies.

Table 2: KMO and Bartlett's Test

	Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.940
Bartlett's Test of Sphericity	**Approx. Chi-Square**	4223.039
	df	351
	Sig.	.000

3. RESULTS AND DISCUSSIONS

The usage of mobile media technologies in education and communication has gained a momentum in recent years due to manifestation of the SARS-CoV-2 that commonly

acknowledged as the COVID-19 pandemic (Tran, 2022). In online education model that varies the duties and responsibilities of educators and learners greatly, the quality of education in these environments has begun to be discussed exhaustively.

Earlier discussions regarding the Z generation's increaing reliance over mobile media platforms are also confirmed by the 53.5% of the student participants, who mostly opt to initiate technology-mediated interpersonal communication (See table 3). This statement contradicts with the regular communication patterns of older generations, which, according to Faulkner et al. (2022) is beneficial because intergenerational tenets regarding the aging process, life experiences and communication patterns can be passed on among generations.

Table 3: Digital Natives' Communication Preferences in Academician-Student Interactions

Which one of the following do you prefer the most for interpersonal communication?	**Frequency**	**Percent**	**Valid Percent**	**Cumulative Percent**
Communicating through Social Media Platforms (e.g., WhatsApp, Facebook etc.)	128	53.5	53.5	91.5
Communicating face to face	109	39.0	39.0	39.0
Communicating on phone	15	5.8	5.8	97.3
Communicating through e-mail	7	1.7	1.7	100.0
Total	259	100.0	100.0	

The majority of the participants (65.3%) claim that mobile media technologies led to a shift from physical communication to digitalized interpersonal communication. While the 79.5% of the participants approve that the mobile communication platforms improve interpersonal relations between people, 54.4% of the Gen Z learners argue that the new technologies enhance individuals' communication skills (see table 4). While the majority of participants (76.4%) assert that the digital tools facilitate communication initiatives among individuals, 85.7% of the pandemic learners point out that they prefer technology-assisted communication more due to the absence of time and distance issues. The present study revealed that the majority of learners (89.6%) claim that computer-mediated education enables easier and faster access to information and learning materials. Since the technology-mediated education platforms are classified as interactive learning environments, social presence in interpersonal communication can be experienced by sender and receiver in their two-way communications. To elaborate, social presence can be defined as the communication between individuals through the digital tools feeling in the real environment and perceiving depth of relations with the community as it is in the physical settings (Zou et al., 2021). At the end of the data collection process, findings verified that the strongly agree/ agree rates that were provided by Gen Zers on the 5-point Likert Scale were considerably higher than the strongly disagree/ disagree and undecided rates. Therefore, in order to assure reliability and accuracy among findings, researchers solely decided to demonstrate the number of consensus in tables 4 and 5.

Table 4: Digital Natives' Responds to Digitalization of Academician-Student Interactions

[#]	**Items**	**Agree rates out of 259**	**Percentage [%]**

1	Digitalization enriches communication and education sources	218	84.1%
2	Digitalization improves interpersonal communication among academicians and students	206	79.5%
3	Digitalization facilitates the initiation of communication in the classroom	198	76.4%
4	Digitalization facilitates academician-student interactions	193	74.5%
5	Digitalization facilitates sincere interpersonal relations among academicians and students	191	73.8%
6	Digitalization encourages students' active participation in the classroom	189	73%
7	Digitalization eliminates the communication barriers between academicians and students	173	66.8%
8	Digitalization reduces face-to-face interactions	171	66%
9	Digitalization enhances communication skills among academicians and students	141	54.4%
10	Digital tools are more preferred for educational communication	128	53.5%

As illustrated in the table 4, although the majority of participants agree that mobile media facilities enhance interpersonal communication (79.5%), the findings proved that 46.5% of the participants still remain hesitant towards digital interpersonal communication. As mentioned earlier, the major portion of sample has been constituted by students from Middle Eastern and African countries. Even though the respondents were digital natives, such countries as Africa may still experience the digital divide. Despite the digital divide, >50% of the participants still provided positive responses on items regarding the use of mobile media technologies. So, Z generation learners still seem to be more hesitant considering the impacts of digital tools in interpersonal communication.

As portrayed in the table 5 below, 80.3% of Z generation learners assert that the new media technologies should take a significant part in instruction and learning processes. Recently implementing hybrid education approaches encompass both conventional and contemporary teaching methods in interactive environments, where various needs of students such as communication, education and entertainment are met simultaneously (Purba, 2021). As 84.1% of the learner participants declare, interactive learning platforms offer diverse and unique sources for accessing knowledge, which, in turn, allow the Z generation students to elevate their interpersonal communication with their classmates and instructors along with the quality of their assignments and projects (74.9%).

66.8% of the post-millenial students affirm that the usage of digital tools either in education or communication eliminate the existing and possible communication barriers among educators and learners. Removing communication impediments with the integration of digital tools ascend the effectiveness of interpersonal communication and teaching/learning. 74.5% of the respondents highlight that the usage of mobile media platforms such as WhatsApp and Facebook are crucial for the betterment of the academician-student relationships. Followed by 76.5% of the participants pointing out that the mobile communication technologies are also vital for academic achivement in higher education during the COVID-19 pandemic (see table 5). In this respect, 73.8% of the Z generation

participants confirm that taking advantage of mobile media apps such as WhatsApp class groups for educational matters allow students to build genuine and pacifist interpersonal relations with their academicians and classmates inside or outside of the school settings. As 83% of the Z generation learners underline, such online ensembles also ensure the continuity of learnings and social interactions regardless of formal settings. 64.4% of the participants report that incorporating educational technologies such as animated course videos at tertiary education is an effective way to improve teaching and learning. Apart from the contributions in teaching and learning processes, 73% of the learners from Z generation affirm that pursuing academician-student interactions outside of the school settings via mobile media make it easier for students to initiate an interaction in the classroom during crisis times. However, 85.3% of the participants confirm that the uncertainty amid the COVID-19 pandemic has normalized students' ignorance towards official working hours of professionals by establishing intense interactions with academicians almost 24 hours a day via social media platforms. As 52.1% of the digital natives participants assert, such distortions eventually lead to the major alterations in educators' roles in the classroom (see table 5). For instance, traditionalist academicians, who desire to be the only authority and source of information in the classroom, would never modify their roles according to the students' expectations (Szymkowiak et al., 2021). Contemporary instructors eager to utilize digital innovations in delivering lectures and the present research revealed that the Z generation learners are happier when education is computer-mediated and they take part in the decision-making processes in the classroom (63.3%). As table 5 illustrates, 72.6% of Z generation learners affirm that the use of technologies as means for teaching and learning facilitate the comprehension of information while 61.4% of them report that the educational technologies boost their motivations towards the courses. Stewart and Smith (2022) claim that the digital classes assisted with virtual reality instruments and mobile media tools, which can be exemplified as educational games, prompt learners to a better academic pathway by ascending their motivations. Followed by 51.9% of respondents underlining that embedding mobile communications to learning materials rise students' self-esteem, which results in active participation and uninterrupted attention in the classroom (see table 5). On the other hand, it is worthy stating the fact that the mobile communications decline face-to-face interactions among people (66%).

Table 5: Digital Natives' Responses to Usage of Educational Technologies at Tertiary Education

[#]	Items	Agree rates out of 259	Percentage [%]
1	Educational technologies ensure reaching diverse information	232	89.6%
2	Educational technologies extend educators' working hours	221	85.3%
3	Educational technologies encourage online class groups and reinforce learning-instruction	215	83%
4	Educational technologies should take part in the education system	208	80.3%
5	Educational technologies enhance academic achievement	198	76.5%
6	Educational technologies enhance the quality of learning	194	74.9%
7	Educational technologies facilitate students' comprehension of new information	188	72.6%
8	Educational technologies improve the quality of education	167	64.4%

9	Educational technologies equalize power between students and academicians, thus, students are included in the decision-making processes in class	164	63.3%
10	Educational technologies boost students' motivation to learn	159	61.4%
11	Educational technologies emerge student-centered approaches that turn educators into guides-facilitators	135	52.1%
12	Educational technologies elevate students' self-confidence	129	51.9%

CONCLUSIONS

This study attempts to divulge digital natives' feelings and perceptions concerning the digital academician-student interactions and teaching-learning at the higher education during the COVID-19 pandemic. This study confirms that the majority of digital native students at tertiary education choose to sustain mobile media assisted interpersonal communication, which confirms that in-person face-to-face communication is a second option for Z generation. In this regard, it is reported that the participants are well-aware of the fact that the nature of communication has been transformed from physical to digital space. Considering all, the major finding of the study that "digital technologies altered digital natives' stimuli and perceptions in higher education to a great extent" addresses the first research question. Yet, Z generation learners believe that the technology facilitate, enhance and elevate interpersonal communication among people. The reason appears to be related with the common belief that the information and communication technologies (ICT) make it easier for people to initiate two-way interactions. In this regard, the data exhaustively respond the second research question with the finding that the modern technologies mediate Gen Zers interpersonal communication to the significant and positive extent. Moreover, the majority of participants agreed upon items presented in the scale such as "digital tools elevate interpersonal communication, motivation and cultivate self-esteem of Z generation in higher education". When participants (*N*=259) were asked about interactive teaching and learning, the majority declare that they prefer blended education at tertiary education, which is the combination of traditional and modern teaching/learning methods. As participants affirm, technology-driven education foster digital natives' enthusiasm in courses considering the rapid and easy access to educational materials online. That is why, digital natives feel positive regarding technology-mediated communication and education. As the data assert, digitalization provides Gen Zers with a great assistance in their learnings by enabling them to explore new horizons in education and learn with enriched educational materials. Given all, these findings address the third research question and highlight how innovative technologies mediate teaching and learning strategies at tertiary education during such crisis times as the COVID-19 pandemic.

To conclude, there are abundant evidence parallel to the present study that the digital opportunities alter Z generation learners' perceptions and feelings positively by offering digitally-assisted communication and education during the COVID-19 pandemic at tertiary education. As declared by the majority of participants, the information and communication technologies in education gratify Z generation students' needs and expectations. This study also proves that the mobile communication tools improve students' academic achievements in universities. Research findings and the relevant literature affirm that the post-millenial

learners anticipate blended learning approaches from the educators at higher education especially in such crisis periods. Although the mobile media innovations lead to positive changes in the form of communication, the digital native learners approve that integration of digital tools have reduced face-to-face communication by shifting physical communication to the cyberspace. Yet, digital native learners are pretty happy with that alteration due to their technology affection. As this research further proves, digital native learners want digital-mediated communication and education, which serve more to students' cognitive, affective and psychological needs. Finally, the findings verify that screen-based lecturing and digital interpersonal relations are preferred by digital native learners during the COVID-19 pandemic.

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APPENDIX: Ethical Approval Form

Doğu Akdeniz Üniversitesi
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Etik Kurulu / *Ethics Committee*

Reference No: ETK00-2020-0121 06.04.2020

Subject: Your application for ethical approval.

Re: Ahmet İyici (18500078)

Faculty of Communication and Media Studies.

EMU's Scientific Research and Publication Ethics Board (BAYEK) has approved the decision of the Ethics Board of Communication (date: **02.03.2020**, issue: **70**) granting Ahmet İyici from the Faculty of Communication and Media Studies to pursue with his MA thesis work titled **"The Impacts of New Media Technlogies on Interpersonal Communication : Case Study of Teacher Student Interaction at EMU"** supervised by Assist. Prof. Dr. Ülfet Kutoğlu Kuruç.

Prof. Dr. Yücel Vural
Chair, Board of Scientific Research and Publication Ethics - EMU

YV/ns.

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