
***The Impact of Digital Technology Usage on Enhancing the Continuity of
Higher Education During War:
An Applied Study on Postgraduate Students at the Faculty of Economics
at the I.U.G.***

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Abstract

The study aimed to identify the Impact of Digital Technology Usage on Enhancing the Continuity of Higher Education During War: An Applied Study on Students at the Faculty of Economics at the I.U.G. The study adopted a quantitative approach by randomly distributing questionnaires to a sample of 242 students, of which 104 responses were retrieved. In addition, secondary data was collected through books, previous studies, and other literatures related to similar topics. Data analysis was conducted using the (SPSS 31).

Findings include there is a statistically significant positive correlation and impact between digital technology usage and the continuity of higher education. Furthermore, no statistically significant differences were found between males and females regarding "digital technology usage" while significant differences were found in the variable "continuity of higher education" in favor of females.

There are no statistically significant differences between master's and PhD students in "digital technology usage" but significant differences in the "continuity of higher education," in favor of PhD students. There are no strong statistically significant differences in either variable based on the current place of residence or age, while significant differences were found based on the level of internet availability in students' residences.

The study presented several recommendations, including the need to provide designated study spaces with internet access, rather than public places like cafés that may distract students and hinder their ability to focus during lectures and exams. Also, it is important to offer a psychological support to help students cope with the stress and challenges that affect their ability to continue their education. Furthermore, it recommended organizing training courses to enhance students' digital technology skills, particularly in using university platforms in Gaza. It is important to adopt digital technology as an integral part of the educational process, not only in the crisis.

Keywords: *Digital Technology Usage, Continuity of Higher Education, Education in Emergencies, Challenges of Educational Continuity, Online Education, E-Learning.*

1. Introduction

The Current era is experiencing a rapid development and widespread use of digital technology, as it forms the basis for communication and interactions while providing various services, and contributes to provide new educational opportunities (Taylor; Fudge, Mirriahi, & de Laat, 2021).

Several studies including Al-Buqami,(2025);UNESCO (2023), have emphasized the necessity of integrating technology into the educational process, which contributes to achieving scientific progress and ensuring the continuity of education in emergency situations. Afzal, Khan, Daud, Ahmad, & Butt, (2023) stated that technology has helped in transforming education and learning experience. While Taylor et al., (2021) emphasized that digital technology offers an inspiring and motivating learning environment, so that, in order to engage in the digital world, students need to develop digital skills that support innovation in learning and facilitate their participation.

Higher education institutions are undergoing numerous educational changes, as the digital technologies provide a range of tools that students can use to enhance learning (Alenezi, 2023). These new technologies include learning management systems such as Moodle, cloud storage like google drive and other internet-based technologies that enhance the educational and learning process (Ng, 2015). Therefore, it is crucial for higher education institutions to seek benefit from technology impact for providing high quality education, resulting from digital transformation that enables teachers to discover better ways to improve the students` learning experience (Alenezi, Wardat, & Akour, 2023).

Regarding the Gaza Strip, the educational process was disrupted since the beginning of war 2023 (Sky News Arabia, 2025). Since the unstable conditions in Gaza threaten the continuity of the educational process, this study aims to examine the impact of using digital technology in enhancing the continuity of higher education during wartime, the challenges faced in utilizing such technology, and the strategies employed to manage these technologies.

2- Study Problem and Questions

During the conflict in Gaza, educational institutions suffered from temporary disruptions in the continuity of the educational process, in addition to the damage of infrastructure, university campuses, and essential services. This, led to delays for students in completing their scheduled courses.

The Minister of Education and Higher Education, Amjad Barham, stated that more than 30 university buildings were destroyed (about 80%) is not suitable for education, and this impacted around 88,000 students enrolled in the universities, hindering them from continuing their academic studies (Wafa News Agency, 2024).



In Gaza, some universities, including the Islamic University, Al-Azhar University, and the University of Palestine, resumed the educational process through e-learning using digital platforms such as Moodle, Google Meet, Zoom, etc. However, students still face numerous challenges, including the continuous displacement and internet outages, as students must attend to daily survival needs like finding water and food, charging phones and batteries, despite all these challenges, many students have continued their education and developed strategies to mitigate the impact of the war (Khattab, Migdad, & Buheji, 2025).

Based on the foregoing, the research problem can be formulated through the main question:

What is the impact of using digital technology on enhancing the continuity of higher education during wartime?

3- Study Objectives

Main Objective: To examine the role of using digital technology in enhancing the continuity of education during wartime.

Sub-objectives:

- 1. To assess the ability of graduate students in the Faculty of Economics at the Islamic University of Gaza to use digital technology in education during the war.*
- 2. To study the impact of using digital technology on students' regularity and completion of academic tasks.*
- 3. To examine the challenges faced by students when using digital technology during the war.*

4 Study Hypotheses

- 1. There is a statistically significant relationship at the significance level ($\alpha \leq 0.05$) between the digital technology usage and the continuity of higher education.*
- 2. There is a statistically significant impact at the significance level ($\alpha \leq 0.05$) of digital technology usage on the continuity of higher education.*
- 3. There are statistically significant differences at the significance level ($\alpha \leq 0.05$) among respondents due to demographic variables, including gender, age, academic level, current place of residence, and availability of internet at the place of residence.*

5- Literature Review

Digital technology is considered a set of technologies that evolve around processing the digital information through modern computer systems, converting both complicated and diverse information into precise digital signals that are processed, stored and transmitted quickly and accurately, enabling the efficient use of that information, in other words, collecting a variety of data through electronic devices (Hongjun, Qinglingzi, Zhihao, & Xinyi, 2025).

Digital technology includes a range of educational tools such as desktop computers, mobile phones, digital recording devices (like audio and video recorders), and online information resources such as Skype, Moodle, and other technological tools that are used in the educational process (Ng, 2015).

It provides a positive educational outcome which inspires and motivate students as learners in the digital world that goes beyond the boundaries and limitations of the traditional classrooms (Taylor, Fudge, Mirriahi, & de Laat, 2021).

Continuity regarding the educational system is considered the most important element and factor in implementing the concept of “lifelong learning” (Shaposhnikova, Shabanova, & Vyazankova, 2023). Avdeeva, Averina, and Balashova (2023) stated that continuous education is a priority, as it represents a socially and economically significant component in the process of social development, and among the factors that play role in shaping the mechanism of continuous education, is the widespread use of information and communication technology.

According to Unicef, (n.d), to ensure the continuity of education, it is essential to provide learning opportunities through distance learning platforms and access to educational content. This can help in implementing continuous education, as it reaches an unlimited number of students and provide the ability to access and acquire the knowledge at the right time (B, 2022).

Nowadays, Digital technology usage in education is considered one of the most important and sustainable trends in developing the educational process (Bielova, 2023). Nassar & Khattab (2024) emphasized a strong relationship between digital literacy and its three levels (digital competence, digital usage, and digital transformation) and students’ academic performance, noting a significant positive impact of digital usage and digital transformation on academic outcomes.

Although both students and teachers prefer distance learning as a primary method for learning, it is not entirely suitable for the long term (Kononova, Berbyuk Lindström, & Panchuk, 2024). Therefore, educational institutions adopt merged learning, which combines traditional face-to-face education with e-learning using digital resources, providing learners with greater independency and adaptability (Prasad et al., 2024).

During times of war, there is a significant negative impact on the educational process, as students are deprived of opportunities to continue their education, especially due to the destruction of educational institutions and forced displacement, which prevents access to learning facilities and in this context, distance education can provide students with an opportunity to continue their studies using digital technologies as they can help meet students’ educational needs and provide academic support (Londar & Pietsch, 2023).

According to Rami Marjan, Vice Dean of the Faculty of Science at the Islamic University of Gaza, the demand for e-learning exceeded expectations, especially after the availability of places and cafés that allow internet access, as the total number of students enrolled in all the university’s online programs reached 12,677 across undergraduate, master’s, and Ph.D levels, out of 17,000 students (Al-Araby Al-Jadeed. 2025). Many other universities in Gaza have also contributed to providing the necessary support to help students continue their education through the concept of e-learning, using digital platforms that include textbooks, recorded lectures, and other essential educational materials (Khattab, Migdad, & Buheji, 2025).

6- Previous Studies



The study by Turcheniuk & Kugai (2024) examined the important role of digital technologies and online platforms in ensuring the continuity of the educational process during conflict periods. Data collection relied on interviews with teachers, surveys of students and parents, and institutional data on platform usage and learning outcomes. The results indicated that digital platforms such as Google Classroom, Zoom, Moodle, and Microsoft Teams were widely adopted in Ukrainian educational institutions, making them essential tools for maintaining educational continuity during the war. One of the major challenges identified was unequal access to technology: 40% of students in conflict-affected areas lacked reliable internet access, while others did not have suitable computers or mobile devices for online learning. Additionally, damaged infrastructure hindered effective implementation of online education, and many students required stronger technical skills to navigate the digital platforms.

While Kononova et al. (2024) clarified the perceptions of both faculty members and students regarding online education during the war, particularly concerning the digitalization of educational processes. It focused on the impact of the crisis in accelerating the digitalization of higher education. Data were collected through an electronic survey. The results indicated a significant advancement in the digitalization of higher education due to the crisis, with both students and teachers expressing satisfaction with the platforms and the quality of educational content. Additionally, they preferred online education as a primary method for teaching and learning.

In addition, Getenet, Cantle, Redmond, & Albion (2024) applied theories related to online student engagement, attitudes toward digital technology, digital literacy skills, and self-efficacy. The study used an online survey distributed via email to first-year students in Australia. The results showed that students' positive attitudes and digital literacy significantly enhance self-efficacy, which in turn positively affects the five dimensions of online engagement: social, collaborative, cognitive, behavioral, and emotional that should be considered when designing and implementing online courses in higher education.

Whereas, Galynska & Bilous (2022) focused on the challenges faced by university students and faculty members in higher education during the war in Ukraine, as well as examining the availability and effectiveness of distance education. The study employed observation and an exploratory qualitative research approach. The results indicated that the war poses threats to the higher education system, as thousands of students leaving universities, many of which were destroyed, and that interruptions in studies have lasting negative effects on learning. On the other hand, distance learning helps in achieving the universities' educational objectives in war-affected regions.

6-1 Comments on Previous Studies



The current study is similar to previous studies as it addresses the role of using digital technology in enhancing the continuity of education during periods of crisis. It aligns with the studies by Turcheniuk & Kugai (2024), Kononova et al. (2024), and Getenet et al. (2024) in the data collection method that relies on electronic surveys. On the other hand, some studies also included the perspectives of faculty members and employed qualitative methods and observation.

Most previous studies have examined the topic in countries such as Ukraine and Australia. In contrast, the current study focuses on the Gaza Strip in Palestine, specifically on graduate students in the field of business and economics. The conditions in Gaza differ significantly from other countries due to the blockade, frequent electricity outages, and border closures. There is limited knowledge and understanding in the previous studies about how to guarantee the continuity of distance education during wars and conflicts. Therefore, it is essential to evaluate the effectiveness of using digital technology and tools and their role in the continuity of higher education for university students in Gaza.

7- Study Methodology

The study relies on a descriptive-analytical quantitative approach, which measures the relationships between variables and describes the phenomenon under investigation using numerical data. Quantitative data is collected using online questionnaire distributed to the faculty of business and economics students at the Islamic University of Gaza, and the results analyzed using the Statistical Package for the Social Sciences (SPSS 31).

8- Study Population and Sample

According to the latest statistics published by the Palestinian Ministry of Education, for the Gaza Strip, the number of graduate students at the Islamic University for the academic year 2022/2023 reached 2,566, of whom 656 were enrolled in business and management programs (Ministry of Education and Higher Education, 2024). Accordingly, the study population consists of all graduate students in the Faculty of Economics and Administrative Sciences at the Islamic University of Gaza.

The study sample is selected using a convenience sampling method. Based on computer calculations at a 95% confidence level and a 5% margin of error, the sample size is 242 students. However, only 104 responses were retrieved, due to continuous internet outages and limited internet access.

9- Data Analysis

9-1 Demographic Characteristics

Table (01)

Personal Information (N = 104)



<i>Personal Data</i>	<i>Frequency</i>	<i>Percentage</i>	
Gender	<i>Male</i>	<i>47</i>	<i>45.2</i>
	<i>Female</i>	<i>57</i>	<i>54.8</i>
Academic Level	<i>Master`s</i>	<i>94</i>	<i>90.4</i>
	<i>Ph.D</i>	<i>10</i>	<i>9.6</i>
Current place of residence	<i>Northern Gaza</i>	<i>26</i>	<i>25.0</i>
	<i>Middle</i>	<i>45</i>	<i>43.3</i>
	<i>Southern Gaza</i>	<i>33</i>	<i>31.7</i>

Table (01) indicates that female respondents accounted for 54.8% and male respondents for 45.2%, indicating a relatively balanced distribution, which enhances the representativeness of the sample. In terms of academic level, the majority of respondents were master's students, representing 90.4%. This can be attributed to the lower number of Ph.D students compared to master's students at the university. Additionally, the largest proportion of respondents currently reside in the Middle of Gaza, accounting for 43.3%. This may reflect their accessibility to the internet and digital infrastructure.

9-2 Analysis of the Study Dimensions

9-2-1 Independent Variable – Digital Technology Usage

Table (02)

Test values and means for “Digital Technology Usage” (N=104, T-Test =50)

<i>Item</i>	<i>Mean</i>	<i>S.D</i>	<i>Minimum</i>	<i>Maximum</i>	<i>T</i>	<i>P-Value (Sig.)</i>	<i>Rank</i>
<i>1. I possess the necessary skills to use e-learning platforms such as Moodle and Zoom.</i>	<i>77.60</i>	<i>10.287</i>	<i>50</i>	<i>100</i>	<i>27.358</i>	<i><.001</i>	<i>1</i>
<i>2. I use digital resources, such as e-books and educational videos, as primary learning materials during the war.</i>	<i>74.90</i>	<i>13.072</i>	<i>20</i>	<i>95</i>	<i>19.429</i>	<i><.001</i>	<i>3</i>
<i>3. I am able to use</i>	<i>37.98</i>	<i>14.805</i>	<i>0</i>	<i>70</i>	<i>-8.279</i>	<i><.001</i>	<i>6</i>

<i>digital technology effectively even amid challenges such as electricity outages and internet disruptions.</i>								
<i>4. I am able to manage the psychological stress caused by the war in a way that does not affect my ability to use digital technology efficiently.</i>	49.81	13.828	20	80	-.142	.887	5	
<i>5. Technology has facilitated the completion of academic tasks and research during the period of distance learning.</i>	75.10	8.273	60	90	30.937	<.001	2	
<i>6. My ability to use digital tools has positively impacted my academic achievement during the period of e-learning in the war.</i>	64.09	10.856	40	90	13.233	<.001	4	
Total mean for participants	63.246	6.107	47.50	76.67				

Table (02) presents a set of questions forming the independent variable, “Digital Technology Usage”. Overall, the total mean for digital technology usage was 63.246, reflecting a generally positive assessment of students’ digital skills. It is evident that technology helped accomplish academic tasks despite significant challenges such as

electricity and internet disruptions, which remain major obstacles to the effective use of digital tools in learning.

9-2-2 Dependent Variable – Continuity of Higher Education

Table (03)

Test values and means for “Continuity of Higher Education” (N=104, T-Test =50)

<i>Item</i>	<i>Mean</i>	<i>S.D</i>	<i>Minimum</i>	<i>Maximum</i>	<i>T</i>	<i>P-Value (Sig.)</i>	<i>Rank</i>
1. I consider digital technology an effective tool and a primary option to ensure the continuity of education during war and crises.	78.70	9.373	60	100	31.227	<.001	1
2. I am able to take exams on the Moodle platform with flexibility and ease.	63.37	11.394	30	90	11.962	<.001	4
3. I am able to attend lectures regularly using digital tools.	48.99	17.382	20	100	-.592	.555	5
4. I benefit from digital technology tools to review lectures and educational content at any time.	64.71	12.284	20	90	12.214	<.001	3
5. I have the ability to continue e-learning using digital technology despite challenges such	67.26	10.678	30	90	16.484	<.001	2

as electricity or internet outages and psychological stress during the war:

Total mean for participants	64.6058	7.57412	45.00	80.00
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Table (03) presents a set of questions forming the dependent variable “Continuity of Higher Education”. Overall, the total mean for participants was 64.6058, reflecting a positive evaluation of using digital technology in education during war. It demonstrates that digital technology is an effective and essential tool for maintaining higher education during wartime.

10 - Hypothesis Testing

1. **There is a statistically significant relationship at ($\alpha \leq 0.05$) between digital technology usage and the continuity of higher education.**

Table (04)
Correlation coefficient between Digital Technology Usage and Continuity of Higher Education

Variables	Pearson Correlation Coefficient	P-Value (Sig.)
Digital Technology Usage And Continuity of Higher Education	.374**	<.001

Correlation is significant at the 0.01 level (2-tailed) **

Table (04) indicates that the Pearson correlation coefficient is 0.374, which points to a positive relationship between digital technology usage and the continuity of higher education. This means that as the use of digital technology increases, the continuity of higher education possibility among the respondents also increases. Therefore, it can be concluded that there is a statistically significant relationship between digital technology usage and the continuity of higher education.

This result aligns with Khrushch (2024), which confirms that e-learning platforms and other digital tools in the educational process enable the continuity of learning under difficult circumstances. It also corresponds with Turcheniuk & Kugai (2024), who emphasize that using digital platforms and technologies during war allows the continuity of learning and overcoming many challenges, making the educational environment flexible and accessible via technology and Internet, thereby supporting students' continuity in education under such difficult conditions.



Furthermore, Bielova (2023) highlighted that the use of digital technology in education today is one of the most important and sustainable trends in developing the educational process. Galynska & Bilous (2022) indicated that distance learning has the capacity to achieve educational goals in war-affected areas, while Hajjaj, (2022) demonstrated that educational technology has the ability to maintain continuity of the educational process, albeit to varying degrees across different countries.

2. There is a statistically significant impact at the significance level ($\alpha \leq 0.05$) of digital technology usage on the continuity of higher education.

Table (05)
Result of simple linear regression analysis

Variable	B (Regression Coefficient)	T	Sig.	R (Correlation Coefficient)	R-square	F
Constant	35.292	4.877				
Digital Technology Usage	.463	4.069	<.001	.374	.140	16.559

Table (05) shows that the F -value = 16.599, which is a good value indicating the overall adequacy of the model, with $\text{Sig.} < 0.001$. This means that the use of digital technology effectively contributes to explaining the continuity of higher education, confirming the validity of the model.

The regression coefficient $B = 0.463$, and the estimated regression equation for the model is as follows:

$\text{Continuity of Higher Education} = 35.292 + 0.463 \times (\text{Use of Digital Technology})$, where 35.292 represents the value of the dependent variable when the independent variable is zero. This indicates that each one-unit increase in the independent variable leads to an increase of 0.463 in the dependent variable. Therefore, there is a statistically significant effect of using digital technology on the continuity of higher education.

This aligns with the study by Prasad, Sharma, Aran, & Bhardwaj (2024), which confirms that online learning platforms and digital libraries have contributed to increased access to education, highlighting the impact of digital platforms and tools on students' access to academic content. Similarly, Nassar & Khattab (2024) emphasized the positive effect of digital usage on students' academic performance. Additionally, Londar & Pietsch (2023) indicated that digital tools and technologies help meet students' educational requirements and provide them with academic support. The study by Taylor, Fudge, Mirriahi, & de Laat (2021) also points out that digital technology has

a positive impact on learning outcomes, inspiring and motivating students as learners in a digital world that transcends the boundaries and limitations of the traditional classroom.

3. There are statistically significant differences at the significance level ($\alpha \leq 0.05$) among the respondents based on demographic data, including gender, age, academic level, current place of residence, and the availability of the Internet at their place of residence.

This hypothesis was divided into the following sub-hypotheses:

- **There are statistically significant differences at the significance level ($\alpha \leq 0.05$) among respondents based on gender.**

Table (06)
Independent Samples T-test of the fields and their p-values for gender

Variables	Means		Total Mean	T	Sig. (2-tailed)
	Male	Female			
Digital Technology Usage	63.8475	62.7485	63.245	.913	.364
Continuity of Higher Education	62.6383	66.2281	64.605	- 2.464	.015

Table (06) indicates that there are no statistically significant differences between females and males in the independent variable (Digital Technology Usage), as Sig. > 0.05. In contrast, there are statistically significant differences in the dependent variable (Continuity of Higher Education), with the means favoring females, a negative T value, and Sig. < 0.05. This indicates that female students demonstrated a higher ability to continue their education compared to male students during the war period. This finding aligns with the study by Al-Juhani,(2021), which reported statistically significant differences due to gender effects in both self-directed learning and distance education, with the differences favoring females.

- **There are statistically significant differences at the significance level ($\alpha \leq 0.05$) among respondents due to their academic level.**

Table (07)
Independent Sample test of the fields and their p-values for Academic level

Variables	Means		Total	T	Sig. (2-tailed)
	Master	Ph.D			

Digital Technology Usage	62.9167	66.3333	63.2452	- 1.697	.093
Continuity of Higher Education	63.8404	71.8000	64.6058	- 3.308	.001

Table (07) indicates that the independent variable (Digital Technology Usage) has Sig. > 0.05 = 0.093, which shows that there are no statistically significant differences between Master's and PhD students for this variable. However, the Sig. value for the dependent variable (Continuity of Higher Education) = 0.001, indicating a statistically significant difference between Master's and PhD students for this variable. In addition, PhD students are more capable of continuing their education during war compared to Master's students, reflecting greater flexibility and higher adaptability to various challenges.

- **There are statistically significant differences at the significance level ($\alpha \leq 0.05$) among respondents based on their current place of residence.**

Table (08)
ANOVA test of the fields and their p-values for the current place of residence

Variables	Means			Total	F	Sig.
	North Gaza	Middle	South Gaza			
Digital Technology Usage	61.4744	64.6111	62.7778	63.2452	2.377	.098
Continuity of Higher Education	62.0000	66.2889	64.3636	64.6058	2.758	.068

Table (08) shows that the significance value (Sig.) for the variable "Digital Technology Usage" = 0.098, indicating no statistically significant differences. The means suggest that residents of the Middle region have higher digital technology usage, which may be due to slightly better internet availability compared to the northern and southern regions. As for the variable "Continuity of Higher Education," the Sig. value = 0.068, also greater than 0.05. Although the means indicate that residents of the middle region have higher averages than those from other areas, this difference is not statistically significant. This aligns with the study by Turcheniuk & Kugai (2024), which indicated that one of the main challenges was unequal access to technology, as up to 40% of students in conflict-affected areas lacked reliable internet access, and some students did not have suitable computers or mobile devices for e-learning, while damaged infrastructure hindered effective implementation of online education. Similarly,

Hajjaj, (2022) noted that educational technology has the ability to maintain continuity of education to varying degrees across countries due to differences in the quality of technical infrastructure.

- **There are statistically significant differences at the significance level ($\alpha \leq 0.05$) among respondents due to age.**

Table (09)
Pearson correlation test of the fields and their p-values for age

Variable	Person correlation (Age)	Sig.
Digital Technology Usage	.159	.106
Continuity of Higher Education	.037	.710

Table (09) indicates that the Pearson correlation for the variable (Digital Technology Usage) = 0.159, Sig. = 0.106 which represents a weak positive correlation. This indicates that there are no statistically significant differences among respondents regarding age for this variable. Regarding the variable (Continuity of Higher Education), the Pearson correlation = 0.037, Sig. = 0.710 meaning there is no relationship between the student's age and their continuity in education, which also indicates no statistically significant differences among respondents with respect to age for this variable.

This can be attributed to the current era of technological advancement, where there is a significant reliance on digital technology tools, especially following the COVID-19 pandemic, which required students of all ages to interact with digital platforms. For the continuity of education, particularly during war and conflicts, it does not primarily depend on age but rather on factors such as internet and electricity availability, psychological and financial capacity to continue, and other factors that genuinely affect the student's ability to persist in their education.

- **There are statistically significant differences at the significance level ($\alpha \leq 0.05$) among respondents based on the availability of internet at their place of residence.**

Table (10)
Pearson correlation test of the fields and their p-values for Internet availability

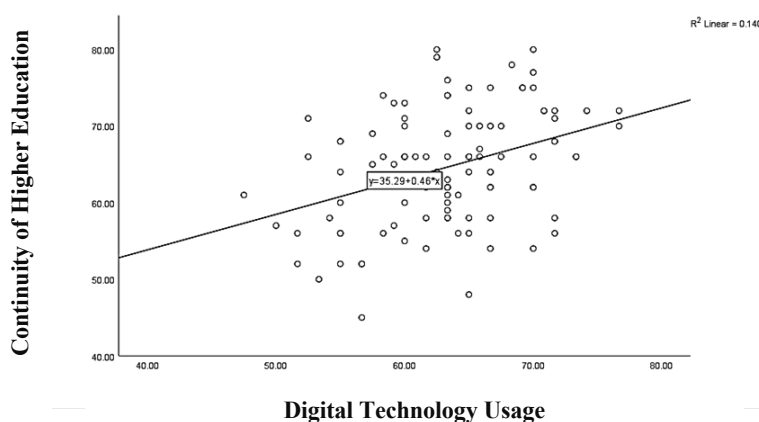
Variable	Person correlation (Internet Availability)	Sig.
Digital Technology Usage	.251	.010



Table (10) indicates that the Sig. value for each variable is less than 0.05, which confirms the existence of statistically significant differences among respondents based on the availability of internet at their place of residence. Additionally, the Pearson correlation confirms a relationship between digital technology usage and the continuity of education with internet availability at the place of residence. This highlights the significant impact of internet access on enhancing students' use of digital technology and supporting their ability to continue their education. This aligns with the study by Khattab, Migdad & Buheji (2025), which indicated that students' ability to continue their education and achieve academic progress was significantly affected by the war, as students faced numerous challenges such as internet outages, leading to disruption and delays in their studies.

Regarding the question, **“Did your use of digital technology help you continue higher education during the war?”** The results confirmed that students' use of digital technology helped them to continuity their education, with 100% of respondents answering “Yes.” This highlights the significant impact of digital technology on the continuity of higher education for students during wartime.

Figure 01:
Scatter Plot of Continuity of Higher Education by Digital technology Usage



The chart shows a horizontal axis representing the overall mean of the independent variable and a vertical axis representing the overall mean of the dependent variable. The equation of the straight line is $y = 35.29 + 0.46x$. with R square value of 0.140. This indicates a positive relationship between the two variables, although it is not

strong, which may be due to the presence of other factors and variables affecting the continuity of higher education.

11- Results and Recommendations

11-1 Results:

1. *There is a statistically significant relationship at the significance level ($\alpha \leq 0.05$) between digital technology usage and the continuity of higher education.*
2. *There is a statistically significant impact at the significance level ($\alpha \leq 0.05$) of digital technology usage on the continuity of higher education.*
3. *There are no statistically significant differences between females and males in the variable "Digital Technology Usage." However, there are statistically significant differences in the variable "Continuity of Higher Education," in favor of females.*
4. *There are no statistically significant differences between Master's and PhD students in the variable "Digital Technology Usage." But there are statistically significant differences in the variable "Continuity of Higher Education," in favor of PhD students.*
5. *There are no strong statistically significant differences in the variables "Digital Technology Usage" and "Continuity of Higher Education" based on the current place of residence.*
6. *There are no statistically significant differences among respondents due to age in the variables "Digital Technology Usage" and "Continuity of Higher Education."*
7. *There are statistically significant differences among respondents regarding the availability of internet at their residence for both variables "Digital Technology Usage" and "Continuity of Higher Education."*

11-2 Recommendations:

- *Ensure the availability of dedicated study spaces with reliable internet, rather than public places like cafés, which may distract students and reduce their ability to focus during lectures and exams.*
- *Provide psychological support to students to help reduce the intensity of pressures and challenges that hinder their ability to continue education.*
- *Organize training courses to enhance students' skills in using digital technology, especially regarding the platforms commonly used in universities in Gaza.*
- *Support the use of digital resources, such as e-books and educational platforms, which have proven its effectiveness in enabling students to continue their education despite challenges.*

12 - References

Khattab, S. & Migdad, M. & Buheji, M. (2025). Impact of War on Gaza on University Students' Academic Performance-Case of Challenges and Adaptation Strategies.



International Journal of Multidisciplinary Research and Growth Evaluation. 6. [10.54660/IJMRGE.2025.6.3.270-279](https://doi.org/10.54660/IJMRGE.2025.6.3.270-279)

Al-Buqami, H. M. R (2025). *The role of technology in improving the quality of education and enhancing sustainability in pre-university education in the Kingdom of Saudi Arabia*. *Journal of the Faculty of Education, Tanta University*, 91(1), 67–110. [In Arabic].

Hongjun, L. I., Qinglingzi, L. I., Zhihao, X. U., & Xinyi, Y. E. (2025). *Digital Technologies*. *Journal of Digital Economy*.

Al-Araby Al-Jadeed. (2025). *Students of Gaza Universities... Increased Enrollment in online education despite the challenges*. [In Arabic]. <https://2u.pw/Yzjr8x>

Nassar, S., Khattab, S. (2024). *The Effect of Digital Literacy on the Academic Performance of Islamic University Students in Gaza During COVID-19*. In: Houry, R.E., Nasrallah, N. (eds) *Intelligent Systems, Business, and Innovation Research. Studies in Systems, Decision and Control*, vol 489. Springer, Cham. https://doi.org/10.1007/978-3-031-36895-0_81

Turcheniuk, V. A. & Kugai, K. V. (2024). *The use of online platforms and digital technologies in education during wartime*. In *Інноватика в освіті, науці та бізнесі: виклики та можливості*. Київський національний університет технологій та дизайну.

Kononova, N., Berbyuk Lindström, N., & Panchuk, A. (2024). *Teaching and Learning amid War Crisis: Perceptions of Ukrainian Academic Staff and Students on Online Education*. *IBIMA Business Review*. <https://doi.org/10.5171/2024.465847>

Getenet, S., Cantle, R., Redmond, P., & Albion, P. (2024). *Students' digital technology attitude, literacy and self-efficacy and their effect on online learning engagement*. *International Journal of Educational Technology in Higher Education*, 21(1), 3.

Khrushch, S. (2024). *Digital Literacy as a Key Factor in the Preservation and Development of the Educational Process in Times of War*. *Cifrova Platforma: Informacijni Tehnologii v Sociokul'turnij Sferi*, 7(2), 311–322. <https://doi.org/10.31866/2617-796x.7.2.2024.317739>

Prasad, R. S., Sharma, R., Aran, A., & Bhardwaj, V. (2024). *Digital transformation in higher education: analysis of student learning outcomes*. *ShodhKosh Journal of Visual and Performing Arts*, 5(6). <https://doi.org/10.29121/shodhkosh.v5.i6.2024.2088>

Wafa News Agency. (2024). *Barham: The occupation deprived 39,000 students from taking the high school exam*. [In Arabic]. <https://wafa.ps/Pages/Details/99113>

Ministry of Education and Higher Education. (2024). *Annual statistical book of Palestinian higher education institutions for the academic year 2022/2023*. Ramallah, Palestine. [In Arabic].



Afzal, A., Khan, S., Daud, S., Ahmad, Z., & Butt, A. (2023). Addressing the Digital Divide: Access and Use of Technology in Education. *Journal of Social Sciences Review*, 3(2), 883-895.

Alenezi, M. (2023). Digital learning and digital institution in higher education. *Education Sciences*, 13(1), 88.

Avdeeva, E., Averina, T. A., & Balashova, N. A. (2023). Formation of a Continuous Education System in the Digital Environment. 76–78. <https://doi.org/10.1109/TELE58910.2023.10184338>

Alenezi, M., Wardat, S., & Akour, M. (2023). The need of integrating digital education in higher education: Challenges and opportunities. *Sustainability*, 15(6), 4782.

Londar, L., & Pietsch, M. (2023). Providing distance education during the war: the experience of Ukraine. *Information Technologies and Learning Tools*, 98(6), 31.

UNESCO. (2023). *Global education monitoring report summary, 2023: Technology in education: A tool on whose terms? (Arabic edition)*. United Nations Educational, Scientific and Cultural Organization (UNESCO). DOI: <https://doi.org/10.54676/FYOY3009>

Bielova, V. (2023). Educational activities of higher education institutions in the conditions of war and the use of digital technologies: domestic and foreign experience. *Pedagogika i Psihologija Formuvannâ Tvorçoi Osobistosti: Problemi i Poşuki*, 88, 58–63. <https://doi.org/10.32840/1992-5786.2023.88.10>

Shaposhnikova, T., Shabanova, T., & Vyazankova, V. V. (2023). Modern mathematical models of continuity of educational programs. *Problemy Sovremennogo Obrazovaniâ*, 3. <https://doi.org/10.31862/2218-8711-2023-3-144-152>

Galynska, O., & Bilous, S. (2022). Remote learning during the war: challenges for higher education in Ukraine. *International Science Journal of Education & Linguistics*, 1(5), 1-6.

Hajjaj, M. (2022). Employing educational technology to achieve the continuity of the educational process during the COVID-19 pandemic. *Journal of Faculty of Education (Assiut)*, 38(11), 229–250. [In Arabic].

Savitska V. V. (2022). Continuity of vocational education as an innovative challenge in the conditions of european integration and digitalization. *Pedagogical almanac*, (52), 120-126. <https://doi.org/10.37915/pa.vi52.399>

Al-Juhani, U. H. (2021). The impact of self-directed learning among graduate students on the effectiveness of distance education during the COVID-19 pandemic (Taif University as a case study). *Journal of Faculty of Education (Assiut)*, 37(3), 131–156. <https://doi.org/10.21608/mfes.2021.158192>. [In Arabic].



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Taylor, M., Fudge, A., Mirriahi, N., & de Laat, M. (2021). *Use of digital technology in education: Literature review*. South Australian Department for Education on behalf of The Centre for Change and Complexity in Learning, The University of South Australia.

Ng, W. (2015). *New digital technology in education*. Switzerland: Springer.

Unicef. (n.d). *Learning continuity-Learning during the COVID-19 pandemic*
<https://www.unicef.org/lac/en/learning-continuity>

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