

See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/391524607>

# Impact of War on Gaza on University Students' Academic Performance–Case of Challenges and Adaptation Strategies

Article in *International Journal of Multidisciplinary Research and Growth Evaluation* · May 2025

DOI: 10.54660/IJMRGE.2025.6.3.270-279

CITATIONS

0

READS

191

3 authors, including:



Mohammed Ibrahim Migdad  
Islamic University of Gaza

80 PUBLICATIONS 105 CITATIONS

[SEE PROFILE](#)



Mohamed Buheji  
Socioeconomic Institute for Advanced Studies (SIAS)

2,507 PUBLICATIONS 7,349 CITATIONS

[SEE PROFILE](#)



## Impact of War on Gaza on University Students' Academic Performance- Case of Challenges and Adaptation Strategies

Shahira Khattab <sup>1\*</sup>, Mohammed Migdad <sup>2</sup>, Mohamed Buheji <sup>3</sup>

<sup>1</sup> PhD Student- Islamic University of Gaza

<sup>2</sup> Professor of Economics Islamic University of Gaza – Palestine

<sup>3</sup> Founder- International Institute of Inspiration Economy -Bahrain  
Socioeconomic Institute for Advanced Studies (SIAS)- Rwanda  
Gaza Resilience Lab

\* Corresponding Author: **Shahira Khattab**

---

### Article Info

**ISSN (online):** 2582-7138

**Volume:** 06

**Issue:** 03

**May-June 2025**

**Received:** 09-03-2025

**Accepted:** 10-04-2025

**Page No:** 270-279

### Abstract

The study aimed to identify the impact of war on the academic performance of university students in the Gaza Strip: Challenges and adaptation strategies. In order to achieve the objectives of the study, the study relied on the descriptive analytical approach and used a qualitative approach to collect data through semi-structured interviews for a group of university students in the Gaza Strip and observations as a full participant, in addition to books, researches and previous studies related to the subject of the study, published scientific reports, articles published online, and the use of visual documents (videos published online) by some universities and news channels. The type of non-probability samples was taken, specifically the purposive sample. The study adopted the method of content analysis in order to analyse the data to deeply understand students' experiences and the impact of war on their academic performance. After analysing the data, the study concluded a set of results, including, that the war has a significant negative impact on the academic performance of students and that the war led to instability in students' study and academic achievement due to the challenges of daily life and the responsibilities of many students in order to survive. For psychological and social conditions, they negatively affect the level of their academic achievement in addition to the insufficiency of e-learning, as there are practical materials that need laboratories and studios, as well as the weakness of the Internet and the difficulty of providing it and not having a suitable environment for study, students go to cafes or public places in order to attend lectures and complete tests. The researchers recommended many recommendations, including, the establishment of temporary educational centers for students of practical disciplines to help them complete practical materials that can only be accomplished through the presence of an educational infrastructure and not electronically, taking into account the time and weakness of the Internet as well as the psychological situation of students when setting tests and giving them enough time to perform tests in addition to improving the conditions of the displaced by providing environments dedicated to students and suitable for study, so that students do not have to go to cafes or public places to study.

**DOI:** <https://doi.org/10.54660/IJMRGE.2025.6.3.270-279>

**Keywords:** War on Gaza, Higher Education, Students Academic Performance, Academic Challenges, Adaptation Strategies.

---

### 1. Introduction

The education sector is a fundamental sector for promoting equal opportunities for all individuals and communities, and it is a basic human right granted to everyone under Article 26 of the Universal Declaration of Human Rights (PCBS, SDGs Today, UN SDSN, & UNESCWA, 2024) <sup>[11]</sup>. While countries around the world strive to achieve the Sustainable Development Goal of ensuring quality, inclusive education and promoting lifelong learning opportunities for all, students in the Gaza Strip at all educational levels are being deprived of their right to education (Mahmoud Salama, 2024).

Students in Gaza, their bodies exhausted by war, are fighting another battle for survival—all while being far from their classrooms, burdened with new responsibilities imposed on them by the war (Maysaa Abu Sitta, 2024) <sup>[27]</sup>.

During wars, the education sector suffers devastating setbacks with long-term effects on development, which is crucial for future economic stability, social cohesion, and cognitive growth (PCBS, SDGs Today, UN SDSN, & UNESCWA, 2024) <sup>[11]</sup>. Moreover, the continuous destruction of educational infrastructure in Gaza has a devastating long-term impact on people's fundamental right to learn, as well as depriving yet another generation of Palestinians of their future (UN, 2024) <sup>[11]</sup>.

Amid the ongoing Israeli aggression on the Gaza Strip since October 7, 2023, the population struggles to survive and preserve what remains of their future—especially university students in the Strip, who face immense difficulties in continuing their higher education (Ahmed Jalal, 2024) <sup>[33]</sup>. A student's day in Gaza has shifted from attending lectures to standing in lines for water, bread, and food (Maysaa Abu Sitta, 2024) <sup>[27]</sup>.

During this brutal war, educational infrastructure has been destroyed, and the educational process has been disrupted for months (Ismail Abdel Hadi, 2024) <sup>[31]</sup>. Jonathan Crickx, UNICEF spokesperson, stated in recent months that there is no form of education taking place in the Gaza Strip (Al-Sharq Al-Awsat, 2023) <sup>[32]</sup>. A large number of universities have been completely destroyed, making the resumption of in-person education impossible. Four major universities in the Strip, including the Islamic University—ranked first in educational performance have been demolished (Ismail Abdel Hadi, 2024) <sup>[31]</sup>. Hasan (2024) <sup>[5]</sup> Despite all the challenges and obstacles students in Gaza face in continuing their education, higher education institutions persist in their mission of building educated and cultured generations (Dawwas, 2023). Students still strive to pursue their studies despite the extreme hardships they endure. Several universities in Gaza have announced the opening of distance learning for students wishing to continue their education (Loay Ali, 2024). Additionally, some universities in the West Bank have allowed Gaza students to enrol as "visiting students" in remote learning programs. Sadiq Khadour, spokesperson for the Palestinian Ministry of Education, explained that this arrangement helps students continue their university education as a temporary emergency measure (Zeinab Dabaa, 2024) <sup>[29]</sup>.

Thus, students in Gaza face numerous challenges in completing their higher education and building their futures, which affects their academic performance and ability to continue their studies effectively. Therefore, this research seeks to examine the impact of war on the academic performance of students in the Gaza Strip, focusing on challenges and coping strategies. Hasan (2024) <sup>[5]</sup>

## 2. Research problem and questions

### 2.1 The research problem

The ongoing war in the Gaza Strip has not been limited to the destruction of infrastructure and loss of life, but has also extended to education and the future of new generations. Education is a fundamental pillar for building a sustainable society, but the war in Gaza poses a significant challenge for students. Moreover, the continuous war has led to a deterioration in students' educational conditions, threatening their future and hindering sustainable development in society

(Abu Sharkh & Abu Sharkh, 2024) <sup>[19]</sup>.

The destruction in the Palestinian education sector has affected schools and universities, with 20 higher education institutions suffering major damage, more than 35 university buildings completely destroyed, and 57 partially damaged. This has left 88,000 students and 5,000 professors unable to attend or even reach their universities (PCBS, SDGs Today, UN SDSN, and UNESCWA, 2024) <sup>[11]</sup>. Sadiq Khadour, spokesperson for the Ministry of Education, stated that "630,000 students have been deprived of their right to education in schools for an entire academic year, in addition to 78,000 university students. Furthermore, 39,000 students were unable to take their high school exams" (BBC, 2024) <sup>[34]</sup>. According to the Euro-Mediterranean Human Rights Monitor, about 90% of educational facilities have been destroyed, and the remaining institutions have been turned into shelters for displaced people (Islam Sharaf, 2024) <sup>[36]</sup>. The UN reports that approximately 1.9 million people—about 90% of Gaza's population—are displaced (UN, 2024) <sup>[17]</sup>. Phusavat and Buheji (2024) <sup>[12]</sup>

Studies confirm that during this ongoing war on Gaza, education faces severe and complex crises—not only due to the destruction of infrastructure but also the disruption of the educational process and the future of generations, in addition to its psychological impact on both students and faculty (Abu Sharkh & Abu Sharkh, 2024) <sup>[20]</sup>. Ahmed Jalal (2024) <sup>[33]</sup> explains that Gaza students face major challenges and difficulties in continuing their university education, even after some universities announced the resumption of online learning. While remote learning has begun, with students attending classes and taking exams electronically, a study by Gaza's Ministry of Communications found that less than 30% of students have reliable internet access, making distance learning another difficult solution (Iman Al-Waraqi, 2024). Additionally, remote learning under such harsh conditions is arduous, as it requires resources that students struggle to obtain, such as stable internet, electricity, and charged devices (Loay Ali, 2024).

A review of theoretical literature and previous studies related to this topic reveals that they have not sufficiently addressed the relationship between war and the academic performance of higher education students, nor have they explored the challenges or coping strategies students adopt during wars and conflicts. To address this research gap, this study focuses on examining the impact of war on the academic performance of university students in Gaza, along with their challenges and coping strategies.

Thus, the research problem can be formulated through the following main question: 'What is the impact of war on the academic performance of university students in the Gaza Strip?'

### 2.2 Research Objectives

The primary objective of this study is to determine the extent to which war affects the academic performance of university students in Gaza by exploring their personal experiences, the challenges they face, and their coping strategies. Several secondary objectives stem from this main goal:

- To examine the impact of war on the academic stability of university students in Gaza.
- To investigate the relationship between the war in Gaza and the academic performance of university students in the Strip.
- To clarify the psychological and social effects of war on

students' academic performance through their personal experience.

- To explore the key challenges students face in accessing educational resources during the war.
- To identify the most important coping strategies students in Gaza use to overcome the effects of war and achieve academic success.

### 2.3 Significance of the study

This study focuses on a critical issue with long-term implications for the future of students and society. Its significance encompasses several aspects:

This study is among the few that address the impact of war on the academic performance of university students in the Gaza Strip by examining their personal experiences and analysing how the war has affected their academic levels, using qualitative research methods for data collection and analysis. It also contributes to the body of research on education during wars and conflicts—a topic that requires further investigation to understand the long-term effects of war on students.

This research aids in designing appropriate educational policies by providing insights for academics to develop support programs for students. For instance, it raises awareness among students, families, and the broader community about the impact of war on academic performance and achievement levels. Additionally, it offers coping strategies for students in wartime conditions. The study also provides findings and recommendations to support war-affected students in continuing their higher education.

### 2.4 Limitations of the study

- Geographical Scope: This study is limited to the Gaza Strip.
- Temporal Scope: The study covers the years 2024–2025.
- Human Scope: The study focuses on university students in the Gaza Strip.

## 3. Literature Review

### 3.1 The concept of war and conflict

Sanaa Al-Bazaz (2005) defines "war" as a conflict between two or more parties, where one side seeks to eliminate the other. Wars take various forms, including military combat, ideological battles, and even internal strife aimed at sowing discord within a society. In other words, war signifies a large-scale conflict in which one group seeks to destroy or dominate the other (Al-Azizi & Bakeel, 2023). Operationally, this study defines war as the armed conflict that began on October 7, 2023, in the Gaza Strip and continues to the present (Abu Al-Rub, 2024) <sup>[18]</sup>.

### 3.2 The comprehensive impact of the war on Gaza

The war in Gaza has resulted in significant losses, both in lives and infrastructure, leading to short- and long-term social and economic repercussions (ESCWA & UNDP, 2023). Wars and conflicts leave severe and multifaceted scars, damaging the environment, buildings, infrastructure, and the economy, in addition to the psychological trauma inflicted on people—especially children (Al-Hasani, 1998) <sup>[23]</sup>. According to a report by Yemen's Ministry of Education, the effects of war extend beyond material damage to the psychological toll on both teachers and students (Al-Azizi & Bakeel, 2023).

Literature now lists that the war on Gaza has created

numerous impacts, including physical, social, economic, and educational consequences, be it physical, psychological, social, economic, and/or educational academic impact.

#### 3.2.1 Physical Effects

Wars result in significant loss of life and injuries, leading to long-term illnesses and fatalities (Asaad, 2021) <sup>[42]</sup>. In Gaza, severe food shortages have caused widespread hunger, particularly in northern and central regions. The Palestinian Foreign Ministry confirmed that many families endure days without food, with four out of five of the world's hungriest people residing in Gaza. UN Secretary-General António Guterres stated that 95% of Gaza's children lack access to milk or basic nutrition, suffering from malnutrition (Al-Sharq, 2024) <sup>[43]</sup>.

#### 3.2.2 Psychological Effects

These include post-traumatic stress disorder (PTSD), depression, and anxiety. Dr. Khaled Saeed, the WHO's Regional Advisor for Mental Health, notes that mental health disorders are significantly higher in conflict zones, with one in eight individuals suffering from war-related mental illness. Most affected individuals experience anxiety, grief, hopelessness, sleep disturbances, and fatigue, with common disorders like depression and anxiety doubling during humanitarian crises (Dima Awda, 2023). Severe mental health issues—such as major depression, anxiety disorders, and sleep disturbances—have a devastating impact on university students' academic performance during war (Pinchuk *et al.*, 2024) <sup>[13]</sup>. A study by Al-Rajabi (2024) <sup>[21]</sup> found that the psychological impact of the 2023 Gaza war on adolescent students in Hebron's public schools was moderate, with anxiety ranking highest, followed by depression and somatic symptoms like difficulty concentrating.

#### 3.2.3 Social Effects

Wars force mass displacement, leading to psychological crises. According to Banyan International (2024) <sup>[2]</sup>, these psychological pressures weaken family cohesion. Displacement is also linked to PTSD and anxiety, though resilience can be fostered through hope and perseverance, improving mental health outcomes (Migdad *et al.*, 2024; Buheji & Mushimiyimana, 2023) <sup>[8, 4]</sup>.

#### 3.2.4 Economic Effects

Wars devastate economic sectors, destroying infrastructure and creating instability (Dr. Abdullah Al-Shaiba, 2024) <sup>[39]</sup>. Gaza's economy has suffered severe shocks due to the blockade, capital destruction, and restrictions on the movement of people and goods (ESCWA & UNDP, 2023). Harsh economic conditions make travel between displacement camps arduous and costly—a six-kilometer trip may take four hours and cost 40 shekels, forcing many to walk (Migdad *et al.*, 2024) <sup>[8]</sup>.

#### 3.2.5 Effects on education and academic performance

Academic performance is defined as a key educational objective, reflecting students' knowledge as measured by grades (Narad & Abdullah, 2016) <sup>[9]</sup>. Grade Point Average (GPA) is widely used to assess academic achievement (Sansgiry *et al.*, 2006) <sup>[14]</sup>. War-induced fear harms students' physical and mental health, leading to poor academic performance (Osofsky *et al.*, 1995) <sup>[10]</sup>. Chronic stress and



depression further degrade learning outcomes (Shahar *et al.*, 2009) <sup>[15]</sup>, sometimes causing students to abandon education altogether. Ullah *et al.* (2017) <sup>[16]</sup> found that war-related trauma significantly lowered students' grades.

In Gaza, academic performance has sharply declined due to cognitive impairment and forced interruptions in education. The suspension of university studies for two semesters directly impacted students' performance, and even after the shift to online learning, many struggle to continue due to war conditions (Abu Sharkh & Abu Sharkh, 2024; Buheji, 2024a) <sup>[19]</sup>.

#### 4. Methodology

To achieve the study's objectives, the research employed a descriptive-analytical approach to deeply examine the phenomenon, explore the relationship between war and students' academic performance, and analyse war-related factors. This method helps interpret complex phenomena, such as the challenges students face, by studying their real-life experiences since October 7, 2023.

##### 4.1 Data collection sources

###### 4.1.1 Primary data collected

The study relied on two primary data sources interviews and observations. The individual interviews were conducted with participants, some in-person (face-to-face) and others online due to the difficulty of meeting all participants physically under harsh conditions. These were semi-structured interviews, structured around six key themes to address the research questions and objectives. The observations were done the first and second authors where they observed a group of graduate students attending an online lecture at the Islamic University to directly describe their behavior, interactions, and discussions about studying under these circumstances.

###### 4.1.2 Secondary data collected

Data was collected from books, previous studies, scientific reports, online articles, and visual documents (videos published by universities and news channels) relevant to the research objectives, providing deeper insights into the topic.

##### 4.2 Study population and sample

The study population includes all university students in Gaza across various disciplines and academic levels. A non-probability purposive sampling method was used to select participants with direct academic experiences during the war, ensuring a focus on personal challenges and coping strategies.

##### 4.3 Data analysis methods

The researchers used content analysis to interpret textual data, interview responses, observations, and online reports, allowing for a comprehensive understanding of war's impact on academic performance. To answer the research questions, each question was analyzed separately:

###### 4.3. 1 Analysis of the main research questions

What is the impact of war on the academic performance of university students in Gaza?

The Israeli war has left deep scars on students, creating major obstacles to academic progress. Challenges like displacement, internet blackouts, and psychological trauma have severely disrupted education, though universities have

attempted to sustain learning (Abu Sharkh & Abu Sharkh, 2024) <sup>[20]</sup>. Observations of PhD students revealed that many could not attend full lectures due to power shortages and poor internet, relying instead on recordings. Participation in discussions dropped significantly, directly harming academic engagement (Buheji, 2024a; Iriqat *et al.*, 2024) <sup>[21]</sup>.

For example one student shared the following feeling: 'my performance before and after the war is drastically different. Before, I felt accomplished—I understood lectures and materials. Now, my academic level has declined. I struggle to grasp concepts, especially in practical subjects, and often can't even reach professors for clarification.' This statement and many others highlights how war disrupts communication with instructors, reduces focus, and lowers exam performance.

###### 4.3.2 Analysis of sub-question 1: how has the war affected the academic stability of university students in Gaza?

Students now bear survival responsibilities (securing food, water, and shelter) that compete with their studies. For example, one female engineering student, stated 'The war made me fall behind in many subjects, especially practical ones. I'm no longer committed like before.'

The secondary data analysis supports this conclusion, where many students missed two full semesters due to war conditions, displacement, and instability as per (Phusavat & Buheji, 2024) <sup>[12]</sup>. The Islamic University launched a campaign titled "Together... To Strengthen the Resilience of Higher Education." A published video showed a student describing his daily struggles: "Life responsibilities under war—fetching water, finding food, charging phones, collecting firewood—consume time and energy. I have to pause studying repeatedly, but I refuse to give up on my dreams."



Source: Islamic University – Gaza, 21-12-2024

Fig 1

A master's student added "We persist despite difficulties, overcoming obstacles to continue learning." Another engineering student said "I try to survive in a tent, searching for basics like water and food, which steals time from my studies and life." Other student told Al Jazeera News "I only registered for 5 credit hours (3 courses)—better than nothing."

Forced displacement into overcrowded tents, constant bombing, and new survival duties have destroyed stable study

environments. Some subjects are impossible to learn online alone.



Source: Excerpt from Al Jazeera News Live video – 14-07-2024

Fig 2

The key takeaways from this study are that the war has severely degraded academic performance through physical, psychological, and logistical barriers. Students face unprecedented instability, with many unable to attend classes or focus due to survival priorities. Universities and students adapt resiliently, but systemic challenges threaten long-term educational recovery.

#### 4.3.3 Analysis sub-question 2: what are the psychological and social effects on the academic performance of university students in the Gaza Strip?

Academic achievement is influenced by students' psychological and social conditions. Through interviews, the direct effects of psychological and social pressures on students' academic status become evident. The war has destroyed everything—even the students' mental well-being. Many have been displaced from their homes and have lost loved ones, whether family or friends, during the war. This has robbed them of psychological stability and scattered their focus, including their ability to continue learning.

One student said during an interview: "I don't feel mentally capable of studying or continuing my education. I try, but at some point, I feel completely distracted and unable to absorb information." When asked how she copes with the psychological pressures under these circumstances, she replied, "I motivate myself." Regarding communication with professors and peers, the researchers identified a major issue: internet connectivity. The student added, "When I finally get internet to contact my classmates or professors, they often don't have access, and vice versa." This highlights the weak and limited communication between students and their professors during the war, leading to a decline in their academic performance.

An engineering student said in a video published by the Islamic University: "Amid the fear, destruction, and chaos we live in, our mental state is not at all prepared for studying." He added, "Everyone in Gaza needs intensive psychological support just to live a normal life." Another student stated, "There's no mental energy at all." This confirms that the psychological state of students under this war is extremely difficult and hinders their learning process—even if they try to continue their education.

Despite this, the resilience of some students is admirable and astonishing. They motivate and push themselves to pursue education despite all the obstacles and hardships imposed by the war. One university student from the Islamic University said: "I will continue my educational journey no matter what—despite hunger, destruction, chaos, fear, and all the circumstances standing between me and my success. With God's will, I will persevere."

#### 4.3.4 Analysis sub-question 3: how does the damaged educational infrastructure affect the academic performance of university students in the Gaza Strip?

Dr. Salah Abdel Ati, Head of the International Commission for the Defense of Palestinian People's Rights, stated that the massive destruction of universities in the Gaza Strip will be a disaster for the educational process and will take years to recover from, threatening the future of generations in Gaza (Ismail Abdel Hadi, 2024) <sup>[31]</sup>.

In an interview, a student said: "The destruction and damage to universities have affected our ability to study on campus, especially since there are no longer any labs or studios. This has delayed our enrollment in some practical courses, which are prerequisites for other courses."

A student said in a video published by the Islamic University: "When I heard that our place of study had been bombed, I felt like the future had become more distant. Bombs may silence voices, but the hope inside us will never be silenced." An architecture student added: "Architecture requires in-person education, not online learning. Now, there are no educational institutions available—I even attend lectures on my phone." This demonstrates the direct impact of infrastructure destruction on students' academic progress. Additionally, online education is insufficient for many majors, especially those requiring labs and studios, affecting their performance and academic attainment. The lack of proper learning environments leads to gaps in understanding and lower academic and scientific levels. Furthermore, the destruction of university infrastructure has eliminated even the most basic necessities for continuing education. Interviews also revealed that online learning does not provide adequate resources due to shortages of study materials, such as books, internet access, batteries, electricity, and more.



**Source:** Images published by Al Jazeera News showing the Remains and the Destruction of the Islamic University of Gaza on December 14, 2024.

**Fig 3**

#### **4.3.5 Analysis sub-question 4: what challenges do students face in accessing educational resources to continue their university education?**

Students face numerous challenges in accessing books and study materials. In interviews conducted, one student said: "Accessing books and study materials is extremely difficult because the internet is weak and not always available. As a result, I can't complete assignments as quickly as I could before the war." Another added: "I have to go to a café to get internet access so I can attend lectures and complete assignments. But the café is far away and very noisy, making it hard to focus or even understand the lectures properly." A third student explained: "Printing books and slides is very expensive during the war, and even downloading them takes a long time." She continued: "Many professors don't account for the limited time during exams or the poor internet connection. Course content that was previously covered over an entire semester is now expected to be learned in a much shorter period."

In an interview with Al Jazeera, one student shared: "We don't have the full means to continue our education, but we try our best. I ask my friends where there's internet access so I can go and study. Of course, getting there requires transportation." Another student added: "We charge our phones all day using solar power and only use them for studying—downloading books, summaries, and slides so we can keep up with our education."

Through interviews and documents, the researchers found that although many universities have resumed education online, accessing the internet remains a major obstacle for students. They often have to travel long distances to find internet access, which is usually weak, especially since refugee camps lack connectivity entirely. Additionally, study materials such as books and paper are prohibitively expensive, making online education even more difficult. Even when the internet is available, the environment is far from suitable for studying, leading to distractions, poor concentration, and a decline in academic performance.

Furthermore, the shortened semester lengths mean students must cover the same amount of material in less time. Some

professors do not adjust for these constraints, assigning excessive work within tight deadlines while students struggle with unreliable internet. This further hinders their ability to keep up with academic demands.

#### **4.3.6 Analysis sub-question 5: what strategies do students use to overcome challenges amid war?**

In one of the interviews conducted about strategies for overcoming the challenges of war, a student responded: "Honestly, I don't have any strategy. It's very difficult to overcome the impact of war on our lives and education." She added, "Nevertheless, I keep trying and don't lose hope." Another student shared: "I wake up very early in the morning—at dawn—when there's minimal noise and better internet connectivity. This allows me to study and download summaries more quickly and efficiently."

When asked about the support they receive to face these challenges, one student answered: "My family supports, motivates, and encourages me to continue my education." Another added: "The University is trying hard to support us by providing e-learning platforms, books, and study materials online." A third student said: "My friends and I keep encouraging each other and studying together."

When asked to offer advice to fellow students facing the same difficult circumstances, one student said: "Don't despair, motivate yourselves, and work hard now so you can build your future." A student from the Islamic University stated: "We will continue our education, God willing, even if they try to strip us of this right. We will pursue our dreams and passions and build our future—even if only a small part of it." Another student added: "My message to students is to keep going and not stop. This is a dream we must achieve, no matter how hard we have to work for it."

This demonstrates the students' determination and perseverance in building their future and continuing their education despite fear, hunger, siege, and destruction. They defy all odds and strive to do their best under extremely limited circumstances to complete their education. Buheji (2025) <sup>[1]</sup>





Source: Image captured from a video published by Al Jazeera Mubasher on July 14, 2024.

Fig 4

## 5. Findings

The war has had profoundly negative psychological, social, economic, and educational impacts on the population. It has significantly undermined many students' ability to continue their education and achieve academic progress due to severe challenges such as constant displacement, internet outages, and numerous other obstacles. The researchers also observed substantial declines in academic performance among many Gazan students, attributable to war-related factors. Among these significant factors was the impaired concentration and inability to fully comprehend course material, besides the inadequate study time and insufficient exam preparation opportunities. This affected their academic regression and reduced achievement compared to pre-war performance (Buheji, 2024b) <sup>[3]</sup>. The war has disrupted students' educational stability due to: survival responsibilities (searching for water, food, firewood, and charging phones/batteries), consuming time and energy, and unreliable internet access and connectivity challenges. The lack of suitable study environments, especially for displaced students in tents, also increased their challenges.

The findings show also show that there are critical educational limitations for practical disciplines (requiring labs, studios, and physical infrastructure) that are particularly compromised, as online alternatives prove ineffective. Also, the study shows that there are psychological and social conditions (fear, trauma, and war-related stress) that are substantially degrading the students academic performance. Despite siege, hunger, destruction, and extreme hardship, the students persisted in pursuing education, developing adaptive strategies to mitigate war impacts. The universities in Gaza tried to provide support through digital platforms hosting essential resources (e-books, recorded lectures). Also, the students' families served as primary motivators, encouraging educational continuity

Based on interviews and student experiences, this study proposes that more psychological support centers to address war trauma and coping mechanisms. Also, learning facilities need to include physical spaces for practical disciplines requiring labs/studios. The students also require more adapted assessment protocols that could accommodate internet limitations and psychological stress in exam design, besides have the flexibility of extending the testing durations. The students also asked to create suitable environments for displaced students to reduce dependency on cafes/public areas.

## 6. References

1. Buheji M. Reconstruction of an anti-fragile universities in Gaza. Conference on the Rebuilding of Higher Education in Gaza; 2025 Apr 14-15; Doha, Qatar: Hamad Bin Khalifa University; 2025.
2. Buheji M. Avoiding resilience fatigue - navigating 'collective pain' and 'collective happiness' in Gaza (War of 2023/2024). *International Journal of Psychology and Behavioral Sciences*. 2024;14(1):22-33.
3. Buheji M. Streams of inspiration from Gaza despite genocide, reflections from 2023/2024 war. *International Journal of Inspiration & Resilience Economy*. 2024;8(2):57-64.
4. Buheji M, Mushimiyimana E. "Gaza" - towards an agile resilience. *International Journal of Management*. 2023;14(7):120-136.
5. Hasan A. Education resilience under the occupation - case of Palestine. *International Journal of Inspiration, Resilience & Youth Economy*. 2024;8(1):33-45.
6. Hassoun A. War on Gaza, consequences on sustainability and global security. Springer; 2025.
7. Iriqat D, Alousi R, Aldahdouh T, Aldahdouh A, Dankar I, Alburai D, *et al*. Educide amid conflict: the struggle of the Palestinian education system. *Quality Education for All*. 2025;2(1):81-99.
8. Migdad M, Buheji M, Migdad IM. Reviving resilience from the tents - Gaza (2024). *International Journal of Management*. 2024;15(6).
9. Narad A, Abdullah B. Academic performance of senior secondary school students: influence of parental encouragement and school environment. *Rupkatha Journal on Interdisciplinary Studies in Humanities*. 2016;8(2):12-19.
10. Osofsky JD, Cohen G, Drell M. The effects of trauma on young children: a case of two-year-old twins. *International Journal of Psychoanalysis*. 1995;76:595-607.
11. Palestinian Central Bureau of Statistics, SDGs Today, UN SDSN, UNESCWA. The impact of war on health and education in Gaza [Internet]. 2024 [cited 2025 May 7]. Available from: <https://storymaps.arcgis.com/stories/80f7dcf4a9a9467e87cc75784eea801a>
12. Phusavat K, Buheji M. Mapping informal learning for displaced learners during the war on Gaza 2023 - application of situated cognition. *International Journal of Learning and Development*. 2024;14(1):1-16.
13. Pinchuk I, Feldman I, Seleznova V, Virchenko V. Braving the dark: mental health challenges and academic performance of Ukrainian university students during the war. 2024.
14. Sangsiry SS, Bhosle M, Sail K. Factors that affect academic performance among pharmacy students. *American Journal of Pharmaceutical Education*. 2006;70(5).
15. Shahar G, Cohen G, Grogan KE, Barile JP, Henrich CC. Terrorism related perceived stress, adolescent depression, and social support from friends. *Pediatrics*. 2009;124:235-240.
16. Ullah M, Khan MS, Sultan K. Relationship between fear and the students' academic achievement in the context of war hazards. *Gomal University Journal of Research*. 2017;32(1):111-118.
17. United Nations. Gaza: UN experts decry 'systemic



- obliteration' of education system [Internet]. 2024 [cited 2025 May 7]. Available from: <https://news.un.org/en/story/2024/04/1148716>
18. Abu Al-Rub H. [The psychological and academic repercussions of the October 7th war on displaced children in the Gaza Strip: an analytical study of the effects of displacement on educational and behavioral stability in wartime]. *Journal of the Palestinian Educators Association for Literature, Educational, and Psychological Studies*. 2024;6(14):59-83. Arabic.
  19. Abu Sharkh N, Abu Sharkh M. [The structural and cognitive impacts of the Israeli war (2023-2024) on higher education in Gaza: an analytical study of strategic and educational dimensions amid persistent disruptions]. *Journal of the Palestinian Educators Association for Literature, Educational, and Psychological Studies*. 2024;6(14):151-167. Arabic.
  20. Abu Sharkh N, Abu Sharkh M. [A year of suffering and deliberate destruction in the Gaza Strip]. Report; 2024 Oct 10. Arabic.
  21. Al-Rajabi A. [The impact of the Gaza war (2023) on the mental health of middle adolescent students in public schools under the Hebron directorate of education]. 2024. Arabic.
  22. Al-Azizi MAHM, Mareet BAMS. [The impact of wars and armed conflicts on the academic achievement of basic education students in the capital secretariat from teachers' perspectives]. *Andalus Journal of Humanities and Social Sciences*. 2018;5(17):36-68. Arabic.
  23. Al-Hasani AMA. [Psychological warfare and its impact on public morale] [dissertation]. Baghdad (Iraq): University of Baghdad; 1998. Arabic.
  24. Al-Bazzaz SMJ. [The social and psychological effects of the U.S.-Iraq war on children in Iraqi society] [dissertation]. Baghdad (Iraq): University of Baghdad; 2005. Arabic.
  25. Economic and Social Commission for Western Asia, United Nations Development Programme. [The Gaza war: expected socioeconomic impacts on the state of Palestine] [Internet]. 2023 [cited 2025 May 7]. Available from: [https://www.unescwa.org/sites/default/files/pubs/pdf/war-gaza-expected-socioeconomic-impact-palestine-arabic\\_4.pdf](https://www.unescwa.org/sites/default/files/pubs/pdf/war-gaza-expected-socioeconomic-impact-palestine-arabic_4.pdf). Arabic.
  26. Salama M. [Education in wartime: who will compensate Gaza's children?] [Internet]. Egyptian Center for Strategic Studies; 2024 [cited 2025 May 7]. Available from: <https://ecss.com.eg/45667/>. Arabic.
  27. Abu Sitta M. [The impact of the Israeli war on the mental health of school students in Gaza] [Internet]. 2024 [cited 2025 May 7]. Available from: <https://gazahcsector.palestine-studies.org/ar/node/3129>. Arabic.
  28. Ali L. [Al-Azhar observatory: the Zionist entity systematically targets educational institutions in Gaza]. 2024. Arabic.
  29. Dabaa Z. [Entire cohorts of Gaza's children unable to continue education for the second consecutive year] [Internet]. BBC; 2024 [cited 2025 May 7]. Available from: <https://www.bbc.com/arabic/articles/c7v51dy5d9vo>. Arabic.
  30. Dawas. [Dawas reviews the effects of the Israeli war on higher education and scientific research institutions] [Internet]. 2023 [cited 2025 May 7]. Available from: <https://www.plo.ps/ar/Article/61556>. Arabic.
  31. Abdul Hadi I. [The halt of education in Gaza after the occupation's destruction of universities and killing of teachers and academics] [Internet]. 2024 [cited 2025 May 7]. Available from: <https://www.alquds.co.uk/%D8%AA%D9%88%D9%82%D9%81-%D8%A7%D9%84%D9%85%D8%B3%D9%8A%D8%B1%D8%A9-%D8%A7%D9%84%D8%AA%D8%B9%D9%84%D9%8A%D9%85%D9%8A%D8%A9-%D9%81%D9%8A-%D8%BA%D8%B2%D8%A9-%D8%A8%D8%B9%D8%AF-%D8%AA%D8%AF%D9%85%D9%8A/>. Arabic.
  32. Asharq Al-Awsat. [Education in Gaza: another tragedy compounding the losses of war] [Internet]. 2023 [cited 2025 May 7]. Available from: <https://aawsat.com/%D8%A7%D9%84%D8%B9%D8%A7%D9%84%D9%85-%D8%A7%D9%84%D8%B9%D8%B1%D8%A8%D9%8A/%D8%A7%D9%84%D9%85%D8%B4%D8%B1%D9%82-%D8%A7%D9%84%D8%B9%D8%B1%D8%A8%D9%8A/4735751-%D8%A7%D9%84%D8%AA%D8%B9%D9%84%D9%8A%D9%85-%D9%81%D9%8A-%D8%BA%D8%B2%D8%A9-%D9%85%D8%A3%D8%B3%D8%A7%D8%A9-%D8%A3%D8%AE%D8%B1%D9%89-%D8%AA%D9%81%D8%A7%D9%82%D9%85-%D8%AE%D8%B3%D8%A7%D8%A6%D8%B1-%D8%A7%D9%84%D8%AD%D8%B1%D8%A8>. Arabic.
  33. Jalal A. [Gaza university students continue remote learning despite war and siege challenges] [Internet]. Al Jazeera Mubasher; 2024 Jul 14 [cited 2025 May 7]. Available from: <https://www.aljazeeramubasher.net/news/politics/2024/7/14/%D8%B7%D9%84%D8%A7%D8%A8-%D8%AC%D8%A7%D9%85%D8%B9%D8%A7%D8%AA-%D8%BA%D8%B2%D8%A9-%D9%8A%D8%B3%D8%AA%D9%83%D9%85%D9%84%D9%88%D9%86-%D8%A7%D9%84%D8%AF%D8%B1%D8%A7%D8%B3%D8%A9-%D8%B9%D9%86>. Arabic.
  34. BBC. [Gaza war: how does the ongoing conflict affect the future of a generation of children?] [Internet]. 2024 [cited 2025 May 7]. Available from: <https://www.bbc.com/arabic/articles/cj6eez7d9e3o>. Arabic.
  35. United Nations Relief and Works Agency. [UNRWA report no. 145 on the situation in the Gaza Strip and the West Bank, including East Jerusalem] [Internet]. 2024 [cited 2025 May 7]. Available from: <https://www.unrwa.org/ar/resources/reports/%D8%AA%D9%82%D8%B1%D9%8A%D8%B1-%D8%A7%D9%84%D8%A3%D9%88%D9%86%D8%B1%D9%88%D8%A7-%D8%B1%D9%82%D9%85-145-%D8%AD%D9%88%D9%84-%D8%A7%D9%84%D9%88%D8%B6%D8%B9-%D9%81%D9%8A-%D9%82%D8%B7%D8%A7%D8%B9-%D8%BA%D8%B2%D8%A9>

- %D9%88%D8%A7%D9%84%D8%B6%D9%81%D8%A9-  
%D8%A7%D9%84%D8%BA%D8%B1%D8%A8%D9%8A%D8%A9%D8%8C-  
%D8%A7%D9%84%D8%AA%D9%8A-  
%D8%AA%D8%B4%D9%85%D9%84-  
%D8%A7%D9%84%D9%82%D8%AF%D8%B3.  
Arabic.
36. Sharaf I. [The tragedy of education in Gaza: the war's impact on future generations] [Internet]. 2024 [cited 2025 May 7]. Available from: <https://sotour.net/1531/>. Arabic.
37. Al-Warraqi I. ["A generation without schools": how has the war on Gaza robbed children of their right to education?] [Internet]. 2024 [cited 2025 May 7]. Available from: <https://jusoormapost.com/ar/posts/45546/gyl-bla-mdars-kyf-slbt-alhrb-aal-ghz-hk-alatfal-fy-altaalym>. Arabic.
38. Al-Adsani H. [Qualitative data analysis – practical steps in thematic analysis] [Video]. 2021 [cited 2025 May 7]. Available from: [https://www.youtube.com/watch?v=2mKDsksPPQU&t=2446s&ab\\_channel=Dr.HibahAladsani](https://www.youtube.com/watch?v=2mKDsksPPQU&t=2446s&ab_channel=Dr.HibahAladsani). Arabic.
39. Al-Shaiba A. [Wars and their impact on societies] [Internet]. 2024 [cited 2025 May 7]. Available from: <https://www.aletihad.ae/opinion/4497992/%D8%A7%D9%84%D8%AD%D8%B1%D9%88%D8%A8-%D9%88%D8%AA%D8%A3%D8%AB%D9%8A%D8%B1%D9%87%D8%A7-%D8%B9%D9%84%D9%89-%D8%A7%D9%84%D9%85%D8%AC%D8%AA%D9%85%D8%B9%D8%A7%D8%AA>. Arabic.
40. Bonyan International Organization. [The psychological effects of wars and conflicts on children and adolescents] [Internet]. 2024 [cited 2025 May 7]. Available from: <https://bonyan.ngo/protection-program/psychological-effects-wars-conflicts/?lang=ar>. Arabic.
41. Odeh D. [What psychological trauma does war cause, and is there treatment for it?] [Internet]. BBC; 2023 [cited 2025 May 7]. Available from: <https://www.bbc.com/arabic/articles/cy0238j01gmo>. Arabic.
42. Asaad S. [The effects of war on humans] [Internet]. 2021 [cited 2025 May 7]. Available from: [https://mawdoo3.com/%D8%A2%D8%AB%D8%A7%D8%B1\\_%D8%A7%D9%84%D8%AD%D8%B1%D9%88%D8%A8\\_%D8%B9%D9%84%D9%89\\_%D8%A7%D9%84%D8%A5%D9%86%D8%B3%D8%A7%D9%86](https://mawdoo3.com/%D8%A2%D8%AB%D8%A7%D8%B1_%D8%A7%D9%84%D8%AD%D8%B1%D9%88%D8%A8_%D8%B9%D9%84%D9%89_%D8%A7%D9%84%D8%A5%D9%86%D8%B3%D8%A7%D9%86). Arabic.
43. Asharq. [Palestinian foreign ministry calls on UN to declare "famine" in Gaza] [Internet]. 2024 [cited 2025 May 7]. Available from: <https://asharq.com/reports/75719/%D8%A7%D9%84%D8%AE%D8%A7%D8%B1%D8%AC%D9%8A%D8%A9-%D8%A7%D9%84%D9%81%D9%84%D8%B3%D8%B7%D9%8A%D9%86%D9%8A%D8%A9-%D8%AA%D8%B7%D8%A7%D9%84%D8%A8-%D8%A7%D9%84%D8%A3%D9%85%D9%85-%D8%A7%D9%84%D9%85%D8%AA%D8%AD%D8%AF%D8%A9-%D8%A8%D8%A5%D8%B9%D9%84%D8%A7%D9%86-%D9%85%D8%AC%D8%A7%D8%B9%D8%A9->. Arabic.
44. Asharq. [UN: 10% of Gaza's children under five suffer from severe malnutrition] [Internet]. 2024 [cited 2025 May 7]. Available from: <https://asharq.com/reports/79834/%D8%A7%D9%84%D8%A3%D9%85%D9%85-%D8%A7%D9%84%D9%85%D8%AA%D8%AD%D8%AF%D8%A9-10-%D9%85%D9%86-%D8%A3%D8%B7%D9%81%D8%A7%D9%84-%D8%BA%D8%B2%D8%A9-%D9%8A%D8%B9%D8%A7%D9%86%D9%88%D9%86-%D8%B3%D9%88%D8%A1-%D8%A7%D9%84%D8%AA%D8%BA%D8%B0%D9%8A%D8%A9-%D8%A7%D9%84%D8%AD%D8%A7%E2%80%8F/>. Arabic.

## Appendix (1): Interview Questions

### Interview Structure

This set of questions is organized into thematic axes aligned with the research objectives. Some sections contain predefined questions (particularly the personal/academic data section), while others consist primarily of open-ended questions, allowing for follow-up inquiries to enrich understanding.

The questions were designed in accordance with the research proposal's criteria, targeting the purposive sample while addressing all study objectives.

### Axis 1: Personal and academic data

- Gender:
- Male
- Female
- Age: \_\_\_\_\_
- Current academic year: \_\_\_\_\_
- Academic major: \_\_\_\_\_
- Did you enroll in online education during the war?
- Yes
- No
- Are you willing to share your personal experience about education during wartime?
- Yes
- No

### Axis 2: Relationship between war and academic performance

1. Describe your academic performance before and after the war. Has it changed?
2. If yes, how has your academic performance differed during the war compared to before?
3. In your opinion, what factors contributed to these changes in your academic performance during the war?

### Axis 3: Educational Stability

4. Has the war affected your ability to maintain consistent study habits and progress normally? If so, how?
5. Based on your experience, how has the war impacted your participation in online lectures and academic activities?

### Axis 4: Psychological and Social Effects

6. Describe how your psychological state has influenced your ability to learn during the war.
7. How do you cope with the psychological pressures of these

extreme circumstances?

8. Have you faced difficulties communicating with peers or professors due to these conditions? Explain.

#### **Axis 5: Challenges in Accessing Educational Resources**

9. How has the damage to educational infrastructure affected your academic performance?

10. Share your experience using the internet for learning and completing academic tasks.

11. Have you encountered difficulties accessing study materials (e.g., textbooks)?

12. If yes, specify these challenges.

#### **Axis 6: Coping Strategies**

13. Have you adopted specific strategies to mitigate the war's impact on your academic performance?

14. If yes, list these strategies.

15. Have you received support from any source (family, university, etc.) to help you adapt to current challenges? Elaborate.

16. What recommendations would you propose to improve the online learning experience during wartime?

17. What advice would you give other students facing similar circumstances to persevere in their education?