

RESEARCH ARTICLE

The Impact of the Escalating Sudanese Civil War on Medical School Students' Interest and Academic Performance: A Case Study of Ibn Sina University & Al-Maktarbeen University

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ABSTRACT

This study investigates the impact of the escalating Sudanese Civil War on the interest and academic performance of 4th, 5th and 6th-year medical students at Ibn Sina University and Al-Maktarbeen University. It focuses on their ability to adapt to the new educational environment provided by their universities to enable them to continue their education, and whether they were able to overcome displacement and psychological distress to successfully continue their studies, overcoming all war-related barriers. It reveals how the war affected their mental well-being, academic performance, and participation in different academic activities. The findings reveal that while many students faced significant challenges, a majority demonstrated resilience and perseverance, showing strong positive academic outcomes and mature personal growth. The availability of supportive educational settings provided by their universities in safe areas in Sudan and in neighboring countries such as Saudi Arabia, and Egypt played a key role in mitigating the negative effects of the conflict. However, a smaller group of students continued to struggle with emotional and logistical barriers due to the loss of relatives, friends, and colleagues, dissatisfaction with some of the educational alternatives provided, an inability to adapt to new situations, and being unable to release themselves from the war's effects and pain. This study finds that students were able to overcome the pain and stress of war and strongly agree that the war motivated them positively, changing the way they think about their education and shaping their personality and providing them with real life lessons opening doors for their coming future and career. They now perceive it as a catalyst for personal growth and resilience. It changed their perspectives on their future and inspired them to care more about their education, reshaping their attitudes toward both their education and future careers.

KEYWORDS

Impact, escalating, Civil war, students' interest and performance

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I. Introduction

This paper investigates the ongoing civil war in Sudan, a conflict that began on April 15, 2023, between two military factions: the Sudanese Armed Forces (SAF), led by Abdelfattah Al-Burhan, and the paramilitary Rapid Support Forces (RSF), commanded by Hemedti. This war erupted during the holy month of Ramadan and has primarily affected the capital city, Khartoum, as well as the Darfur region extending to a large number of regions. The conflict has resulted in severe humanitarian consequences, with over 7.2 million people internally displaced and more than 2.1 million fleeing the country as refugees, in addition to a tragic loss of life. https://en.wikipedia.org/wiki/Sudanese-civil-War.

As a result of this one-year continuing war most if not all Sudanese life changed within seconds. All features of their life were changed 180 degree and all their plans were changed drawing dark paths for them to go through unconsciously. This conflict has

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led to the closure of over 10,400 schools and about 52 universities scattered in different regions in Sudan, leaving 19 million children without access to education.

This war has had a profound impact on all Sudanese children's futures drawing different paths of education and plans for their future. This study focused on the efficacy of this war on the university students' interest and performance towards education. This study specifically aims to explore how the ongoing conflict has impacted university students, particularly those in their fourth, fifth, and sixth years of medical programs at Ibn Sina University and Al-Maktarbeen University.

The study will focus on the impact of war on their interest and their performance due to the new educational environment they have been involved in to continue their educational life. Did this war affect them positively, in a way to heal their wounds and involve them in a path which encourages them that the future is theirs and that still they can work hard to build their future and have hope that tomorrow is hiding a better life for them or this war not only it destroy their past but stole their coming future and their interest to think of tomorrow and study to make their dreams come true.

Central to this research paper investigation is a question raised about perseverance and hope. Has the adversity brought about by the war fostered a sense of determination among these students, encouraging them to work even harder than before to strive for their future and fulfil their goals over coming all obstacles they face? Or has this trauma and disruption caused by the war weaken and led to a diminish interest in education, making it difficult for them to envision a future where they can achieve their dreams? By examining these issues, this study aims to shed light on the profound impact of the civil war on Sudanese university students and to contribute to a broader understanding of the challenges they encounter during these unpredictable times.

1.1 Objectives of the study

This research paper will try to give a clear understanding for the various ways the war has influenced these students' interest in their studies and their overall academic performance. As they navigate a new and challenging educational environment shaped by the conflict, it is crucial to assess how their experiences are affecting their motivation and aspirations.

Since this civil war began in Sudan in the 15th of April 2023 all if not most of the Sudanese children suddenly found themselves without access to education in all different educational stages. This study is after finding the impact drawn on their interest and success after settling in different regions in Sudan and neighboring countries. This newly starting of education did it influence them positively or negatively and how are they performing in these new educational environments. The population will be the university medical school students whom they settled in Port Sudan, Atbara, Saudi Arabia and Egypt.

1.2 Questions of the study

1- To what extent did the escalation of the Sudanese Civil War impact medical students' interest and academic success?

2. Related Literature

"Impact" is defined as "a powerful effect that something, especially something new, has on a situation or person. It can describe both positive and negative outcomes, depending on the context. In this research, the word impact refers to the effect or consequence of the escalation of the Sudanese Civil War on medical students' interest and academic success. It focuses on how the war changed or influenced these students' experiences, behavior, and outcomes <u>(Cambridge Dictionary, n.d.)</u>.

The concept of "escalation" in warfare refers to the intensification or broadening of a conflict, which may be either intentional or accidental, ultimately leading to the highest level of violence achievable with the military resources available. This term became widely recognized alongside the rise of nuclear weapons as the primary instruments of warfare.

A historical review of how conflicts escalate reveals two key insights. First, once the great powers engage in conflict, escalation is almost inevitable. Second, when hostilities begin with significant violence, they tend to increase to the greatest possible level of destruction that the opposing forces can sustain and find beneficial. Efforts to moderate or control the violence become increasingly difficult once the fighting starts and are virtually impossible as the escalation progresses. (Alfred Goldberg, 1966)

A civil war happens when a country's government fights against one or more organized groups within the country. It is different from wars between countries, where one nation fights another, or from smaller riots or violent incidents that don't involve the government. Civil wars are also not the same as when a government uses force against individuals or unorganized groups, like in cases of genocide, or violence carried out by non-government groups, such as terrorism or crime.

Although civil wars usually cause fewer direct deaths than wars between countries, they happen more often and tend to last longer. Since the Cold War, civil wars have caused most of the deaths in battle. Besides the loss of life, civil wars also have serious long-term effects on people's lives. Studies show that countries affected by civil war suffer major drops in their economy, and they often never recover to their previous levels of growth. These wars also disrupt trade and investment, and they leave behind social problems like unemployed former soldiers and large numbers of displaced people. The negative impact of civil wars is not limited to the country where the fighting happens. Neighboring countries often feel the economic impact and may even experience their own violence or instability as a result. (Encyclopedia Britannica,(2024)

Students' interest in learning and their academic performance are key factors in assessing the quality of education. Interest plays a crucial role in how people engage with learning and affects other areas of their development. It is a powerful motivator that encourages students to stay focused and succeed in their studies. Because of this, understanding how students' interest in learning impacts their academic results is very important. <u>Chen, Zhenglin, (2024)</u>

This study aims to explore how domestic violence impacts the academic performance of students in a few government-run primary schools in Namanyonyi Sub-County, Mbale City. The study will focus on three main goals: i) to identify the types of domestic violence that affect students' school performance; ii) to understand the causes of domestic violence and how they influence students' academic results; and iii) to examine the overall effects of domestic violence on students' success in school in Namanyonyi Sub-County. Information will be gathered through structured questionnaires from students and staff at five primary schools in the area.

The existing research shows that domestic violence negatively affects students' academic performance, causing emotional, psychological, physical, and financial problems. Although this is widely recognized, there are no studies yet that specifically look at how domestic violence impacts students in Namanyonyi Sub-County. This study aims to address this gap by examining how domestic violence affects the academic performance of students in selected government primary schools in the area. <u>Akiriat</u>, <u>Alice Ewogu</u>. (2021).

When looking at how violent conflict affects education, this paper highlights the harm caused by violence, including deaths, injuries, disabilities, and psychological trauma for both adults and children. It also discusses how violent conflicts impact the education of young people, including children and young adults of both genders.

For many years, studies on the effects of violent conflict focused mainly on measuring the overall costs that civil wars bring to countries (e.g., Knight et al., 1996; Collier, 1999; Stewart and Fitz Gerald, 2001).

In recent years, the focus on studying the effects of conflict at the national level has been criticized for not giving enough attention to how armed violence directly affects individuals and families (Justino, 2009; Verwimp, Justino, and Bruck, 2009).

Recent research looking at the local effects of violent conflict shows that civil wars generally have a harmful effect on people's education levels.

For example, a study by Alderman, Hoddinott, and Kinsey (2006) found that children in Zimbabwe who were affected by the civil war in the 1970s completed fewer years of school and started their education later compared to children who were not affected by the conflict.

Violent conflicts tend to have a stronger impact on secondary education than on primary education (Swee, 2009; Shemyakina, 2006). This might indicate that around 16 elementary schools managed to continue functioning, showing that even during conflict, families and communities still try to ensure children receive at least a basic education. Additionally, gender does not appear to influence the effects on education. However, social, economic, and political changes brought on by conflict can make it harder for certain groups, especially girls, to return to school (Shemyakina, 2006; Chamarbagwala, 2008).

Similar findings were reported by Akresh and De Walque (2008) in Rwanda, Angrist and Kugler (2008) and Rodriguez and Sanchez (2009) in Colombia, Chamarbagwala and Moran (2009) in Guatemala, De Walque (2006) in Cambodia, Shemyakina (2006) in Tajikistan, and Swee (2009) in Bosnia.

Another study examines the link between civil conflicts and educational outcomes, focusing on Turkey. The findings show a strong negative connection. This study highlights that education is one of the ways civil conflicts harm societies, contributing to conditions that help continue the conflicts.

A different study conducted in the Katete district of Zambia looked at how domestic violence affects the academic performance of primary school students. The researchers used various methods to collect data, including both structured and open-ended

questionnaires, discussions with key guidance and counseling teachers, and focus group discussions in the Katete area. The study found that domestic violence is widespread, with several contributing factors. Based on these findings, the study suggested ways to reduce or prevent domestic violence in the region.(Mwale, R., and D. Siwila. 2020).

Another study examined how the Israeli-Palestinian conflict affected various education outcomes for Palestinian high school students in the West Bank during the second Intifada (2000-2006). The research found that the conflict lowered students' chances of passing their final exams, achieving higher test scores, and being accepted into university. The impact of the conflict varied depending on the type of violence and when students were exposed to it. The study highlights the negative effects on students' mental health due to direct exposure to violence, as well as the damage to school infrastructure caused by the conflict. (Bruck, T., Di Maio, M., & Miaari, S. H. (2019).

Changes in Students' Psychological Well-Being

Many studies show that a student's mental health plays a key role in their academic performance (Roeser et al., 1998). Previous research has found a link between exposure to violence and poor cognitive abilities (Wilson & Rosenthal, 2003; Sharkey, 2010). Young people who experience or witness violence often have trouble sleeping, feel more anxious, and struggle to concentrate, all of which can negatively affect their school performance (Pynoos et al., 1987; McGill et al., 2014; Gershenson & Tekin, 2018). According to the World Bank (2006), one important factor in understanding why Palestinian children's education is affected is the psychological impact of ongoing security issues. (Bruck, T., Di Maio, M., & Miaari, S. H. (2019).

The topic of civil war has gained a lot of attention recently because of ongoing armed conflicts within countries around the world. However, more research is needed to fully understand the effects of civil wars on people's well-being and to identify exactly how these effects happen. This study uses a special data set that includes information on casualties from the Bosnian War (1992-1995) at the municipal level. By examining differences in war intensity and the birth years of children, the study explores how the civil war affected children's education. The findings show that children in areas with higher levels of war violence were less likely to finish secondary school. However, the war did not appear to affect their chances of completing primary school. Additional evidence suggests that the impact measured in this study is likely short-term, rather than lasting. Moreover, factors like damaged infrastructure and the migration of teachers don't seem to have played a big role. Instead, the involvement of young people as soldiers may be a major factor affecting their education. (Swee, E. L. (2009).

Between 1992 and 1998, Tajikistan was torn apart by a severe civil war. This study examines the impact of that conflict on education, using data from two surveys conducted in 1999 and 2003. The 1999 survey revealed that 6.8% of households experienced damage to their homes during the war, and over 40% of households lived in areas where such damage occurred.

The findings indicate that girls aged 12-15, who lived in areas affected by the war, were significantly less likely to enroll in school. In contrast, boys and younger girls seemed to be less affected. Furthermore, girls who were of school age during the war and lived in conflict zones were 13% less likely to complete their required schooling compared to those who finished school before the war started. They were also 7% less likely to finish school than girls in regions that were less impacted by the conflict. These results suggest that the civil war led to major educational inequalities for girls in different parts of the country. Interestingly, the differences in education were not due to the destruction of schools or other educational resources in the affected regions. (Shemyakina, O. (2006).

The studies reviewed explore how civil wars and violence in conflict-affected regions impact students' interest in learning and academic performance. Here's a summary of the findings:

1. Impact of Violent Conflict on Education:

General Effects: Violent conflicts, like civil wars, have significant negative effects on students' academic outcomes. These conflicts can cause psychological trauma, physical harm, and disrupt education systems. In addition to the loss of life, they create long-term social and economic challenges that make it harder for students to succeed academically (Cambridge Dictionary, n.d.; Encyclopedia Britannica, 2024).

2. Domestic Violence and Academic Performance:

- In Namanyonyi Sub-County (Uganda), a study examined how domestic violence affects the academic performance of primary school students. It found that domestic violence negatively impacts students' learning, causing emotional and psychological harm that affects their ability to perform well in school (Akiriat, 2021).
- 3. Civil Wars and Education in Other Regions:

Studies show that civil wars typically have a stronger impact on secondary education than on primary education. Secondary education is more disrupted because it involves older students who may have to drop out or be delayed in finishing their education due to the conflict. For example, students in countries like Rwanda, Colombia, Bosnia, and Tajikistan experienced lower education levels as a result of exposure to violence during civil wars (Akresh & De Walque, 2008; Angrist & Kugler, 2008; Shemyakina, 2006; Swee, 2009).

4. Gender Differences in Impact:

In some conflict zones, girls are more severely impacted by civil wars, especially in terms of educational attainment. For example, in Tajikistan, girls aged 12-15 living in conflict-affected areas were less likely to finish school compared to girls in peaceful regions. The impact on boys was less pronounced (Shemyakina, 2006). Similarly, studies show that gender disparities exist in many conflict areas, with girls being more likely to drop out due to economic or social pressures exacerbated by the conflict (Chamarbagwala, 2008).

5. Effects of Israeli-Palestinian Conflict:

 The Israeli-Palestinian conflict in the West Bank (2000-2006) had similar effects on education, where exposure to violence lowered students' chances of passing exams, achieving high test scores, and being admitted to universities. The conflict damaged students' mental health and education infrastructure, further hindering their academic progress (Bruck, Di Maio, & Miaari, 2019).

6. Psychological Impact on Learning:

Psychological well-being plays a critical role in students' ability to succeed academically. Exposure to violence leads to anxiety, sleep problems, and difficulty concentrating, which in turn harms their performance in school. The impact is especially notable in regions affected by ongoing violence, such as in **Palestine** (Pynoos et al., 1987; McGill et al., 2014; Gershenson & Tekin, 2018).

7. Effects on Tajikistan's Education:

In Tajikistan, the civil war (1992-1998) led to significant disparities in education, especially for girls. Girls aged 12-15 in conflict-affected areas were 13% less likely to complete mandatory schooling and 7% less likely to finish school compared to girls in unaffected areas. This suggests that the war had a deep impact on girls' education, even though the damage to school infrastructure was not a major factor (Shemyakina, 2006).

8. Long-Term Consequences for Education:

• Exposure to civil war has long-term consequences on academic achievement. Studies suggest that the psychological trauma from living through violence, the destruction of schools, and the loss of teachers contribute to these effects. However, youth soldiering (young people joining armed groups) may also play a significant role in delaying or preventing students from completing their education (Swee, 2009).

3. Conclusion:

In summary, civil wars negatively affect education by harming both the mental and physical well-being of students. The impact is especially severe for girls and those in secondary education. Factors like violence, damage to schools, and the psychological trauma from conflict all lead to poorer academic outcomes. This study specifically looks at how the escalating Sudanese civil war has affected medical students' interest and performance in two universities. Despite the challenges of war, these universities managed to continue their education by creating new spaces and overcoming barriers, ensuring that medical students could finish their studies and pursue their dreams of becoming doctors.

The research underscores the importance of providing support for education during times of conflict. Through this study we will find out the situation of medical students after the support provided by their universities by providing new educational environment in safe places in Sudan like Port Sudan and Atbra as well as in Saudi Arabia and Egypt. After settling in these new areas how was their interest towards education and their performance in the new environment after being faced with difficult times struggling to survive and reach safe areas with their families. Has the war impacted them positively or negatively. Has it change their perspectives and how? As other studies have shown, civil wars often disrupt students' learning, with significant long-term effects on their academic progress. For example, studies in places like Tajikistan, Palestine, and Bosnia revealed that young people who lived through conflict often faced mental health struggles, like anxiety and difficulty concentrating, which hurt

their school performance (Pynoos et al., 1987; Shemyakina, 2006). Additionally, the destruction of school infrastructure and the displacement of teachers can further hinder education (Swee, 2009; Bruck, Di Maio, & Miaari, 2019).

4. Methodology

The methodology section outlines the research design and data collection tools used in this study. To gather the necessary data, the researcher employed a structured questionnaire that utilized a 5-point Likert Scale. This scale is commonly used in research to measure attitudes, perceptions, and opinions on a range of topics. The questionnaire was divided into two sections:

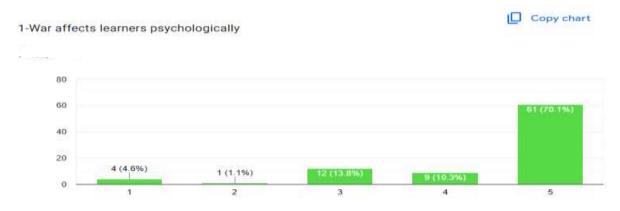
- 1. Interest in learning
- 2. Academic performance

The sample population for this study consisted around (100) of 4th, 5th, and 6th-year medical students from Ibn SINA University and Al Maktarbeen University.

5. Results and Data Analysis

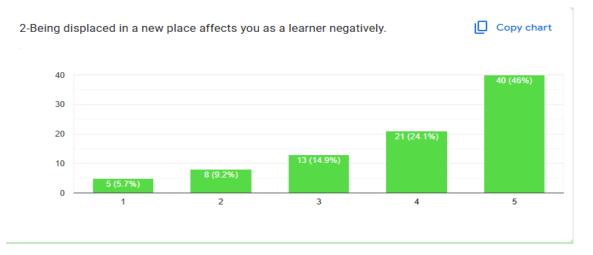
The Results and Data Analysis section presents the findings of this study and addresses the research question regarding the impact of the Sudanese civil war on students' interest and academic performance.

<u> Table (1):</u>



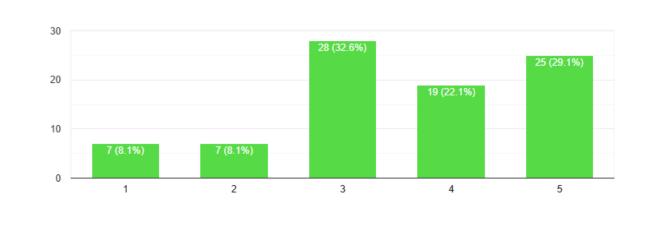
The response in **Table (1)** shows that 70.1% of learners strongly agree that war influences them psychologically, while 4.6%, 13.8%, and 10.3% fall between "strongly disagree," "neutral," and " "agree," respectively. This indicates that the majority of students experience a strong psychological impact from the war. The reasons for this could include increased stress, trauma, and anxiety which might result from the loss of close family members, relatives, neighbors, friends, family properties, fear that their education might not continue, financial problems their families face due to the loss of jobs and business, so because of these issues it may affect their mental well-being and concentration in academic settings. Additionally, the uncertainty and instability brought on by the war may disrupt their learning environment, leading to diminished academic performance.

<u> Table (2):</u>



The responses in **Table (2)** show that 46% of learners strongly agree that being displaced to a new place due to war negatively affects their learning, while 24%, 14.9%, 9.2%, and 5.7% respectively agree, feel neutral, disagree, and strongly disagree. This suggests that a significant portion of students, nearly half, feel the psychological strain of displacement. The reasons behind this may include the stress and trauma caused by the war, which can make it difficult for students to focus and engage in their studies easily. Displacement often leads to a sense of instability and uncertainty, as students are forced to adapt to new environments, which can disrupt their routines and learning habits. Learners need time to get adapted to the new situation either being the new educational environment and far from their families taking the complete responsibilities of themselves especially they were among their families in their own hometown.

<u> Table (3):</u>



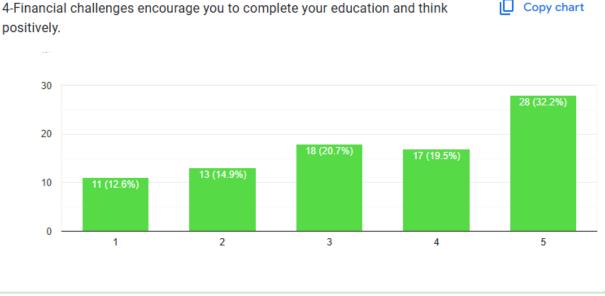
3-Destroying your university affects your attitude towards education.

Table 3 reveals that 51.2% of responses strongly agree or agree that the destruction of their university impacted students' attitudes toward education, while 32.2% remained neutral, and 8.1% disagreed. This indicates a mixed emotional response, with most students showing a positive attitude towards the loss of their university, reflecting on their memories and the changes in their lives due to the destruction. Many students have shown strength during tough times, using the challenges as motivation to keep going and do well in their studies. The learner's attitude towards the destruction increased student's appreciation for education, as they now noticed its importance and belief that it shapes their future and form their identity. This loss strengthens their friendship bonds more and brought sense of care among their communities. This solidarity has helped them cope with the

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challenges they face. The experience has also nurtured a community-driven approach to continuing their studies despite the difficulties. Overall, students have found ways to persevere and adapt in the face of adversity.

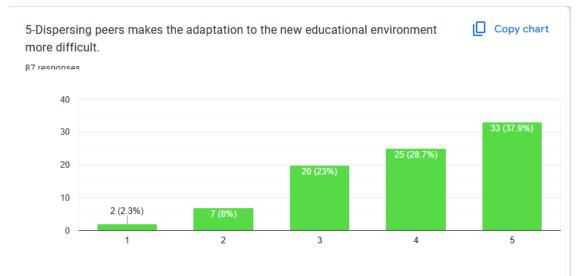
Table (4):



The responses in **Table (4)** show that 32.2% of students strongly agree that financial challenges encourage them to complete their education, view these challenges positively, and seek solutions to overcome them. This indicates that a significant portion of students sees financial difficulties as a motivator, pushing them to persist and find ways to continue their studies despite obstacles. Additionally, 19.5% agree, suggesting that financial challenges may inspire determination for some, while 20.7% are neutral, possibly reflecting uncertainty or a lack of strong feelings about how financial difficulties impact their educational journey.

On the other hand, 14.9% disagree, and 12.6% strongly disagree, which could point to students who may feel overwhelmed or discouraged by financial issues, possibly believing that these challenges are impossible or that they hinder their educational progress. These varied responses reflect different coping mechanisms and mindsets, with some students using financial struggles as a catalyst for perseverance, while others may feel defeated or uncertain about their ability to overcome such barriers.

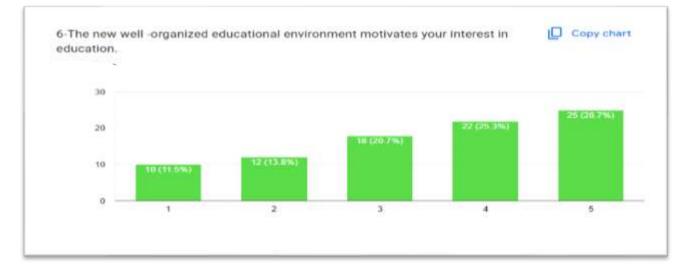
Table (5):



The responses in **Table (5)** indicate that 37.9% of students strongly agree that the dispersal of peers makes it more difficult to adapt to the new educational environment. This suggests that a significant portion of students feel a strong emotional and social impact from being separated from their peers. The reason for this strong agreement could be that students have built close bonds with their peers over the course of their studies, sharing experiences, challenges, and support, which made it easier for them to adapt to the university environment. The separation likely disrupts these support systems, making the transition to a new setting more challenging.

Additionally, 28.7% agree, which further supports the idea that the absence of familiar faces and study partners affects students' ability to adjust to the changes. Only 2.3% were neutral, and 8% disagreed, suggesting that for some students, the dispersal of peers may not be as significant a factor in adapting to the new environment. However, the small percentage of students who strongly disagree may indicate that they are either more independent or have found other ways to cope with the situation. Overall, these results highlight the importance of peer support in the educational experience, and how its disruption can impact students' adaptation and overall well-being.

<u> Table (6):</u>



The responses in **Table (6)** indicate that 28.7% of students strongly agree that a well-organized educational environment motivates their interest in education, suggesting that a structured and efficient learning atmosphere plays a key role in engaging students. This could be because a clear, well-organized environment helps students feel more confident and focused, which boosts their motivation and encourages them to participate more actively in their studies. Additionally, 25.3% agree, further emphasizing the positive impact of organization on students' educational engagement.

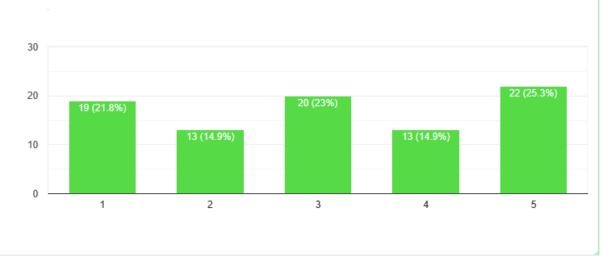
On the other hand, 20.7% of students were neutral, indicating that the structure of the environment may not have a significant effect on their motivation or that they may not have strong opinions on the matter. Meanwhile, 13% disagreed, and 11.5% strongly disagreed, suggesting that a portion of students might not be as influenced by the organization of the environment, possibly because other factors, such as personal interests or external circumstances, are more important to their motivation.

Overall, the results highlight that while a well-organized educational setting can positively impact student motivation, there are still some students for whom this factor may not be as compelling.

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<u>Table (7):</u>

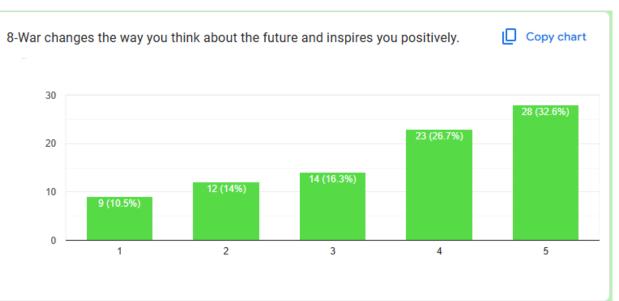
7-Being departed from your family due to the new educational area affects your Copy chart interest positively.



The responses in **Table (7)** show that a significant portion of students, 25.3%, strongly agree that being separated from their families due to the new educational environment has a positive impact on their interest in education. This may be because the challenging circumstances of displacement have led students to become more independent, responsible, and focused on their studies, potentially strengthening their personality and determination. These students may view the challenges as opportunities for growth, which increases their motivation to continue their education despite the difficulties. Additionally, this separation encourages them to support their families emotionally, showing that they are capable of overcoming tough situations. This resilience can inspire both the students and their families, reinforcing the idea that education is a powerful tool to navigate through adversity and continue making progress despite challenging circumstances.

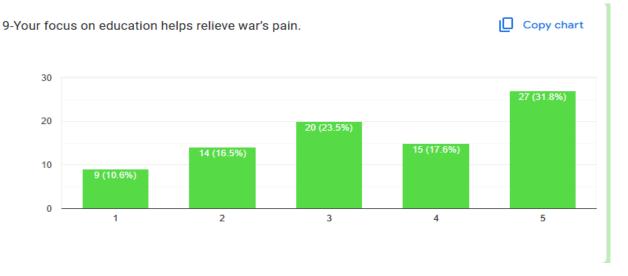
14.9% of students agree, indicating that for some, the new environment has had a positive influence, but not to the same extent as those who strongly agree. However, 23% of students remained neutral, suggesting uncertainty or indifference about the impact of separation on their academic interest. On the other hand, 14.9% disagreed, and 21.8% strongly disagreed, pointing to a portion of students who either did not experience any positive effects from being apart from their families or perhaps found the separation emotionally challenging, leading to disengagement or a decline in their academic motivation.

The responses also highlight that some universities, like Ibn Sina University, successfully managed to continue education in alternative locations, such as Saudi Arabia, Egypt, and safe areas within Sudan, which helped students continue their studies despite the war. This adaptability and resilience might explain why some students feel more motivated, as they were still able to pursue their education in a more secure environment.



The responses in **Table (8)** indicate a generally positive view, with 32.6% of students strongly agreeing that the war has changed the way they think about their future and inspired them to care more about their education. This suggests that the hardships caused by the conflict have prompted many students to reassess their priorities and recognize the importance of education as a path toward a better future. The war may have acted as a wake-up call, encouraging students to overcome bad habits and neglect towards their studies. Furthermore, 26.7% of students agree with this sentiment, further emphasizing that the majority are seeing education in a new light. However, 16.3% remain neutral, and 24.5% disagree or strongly disagree, indicating that for some, the challenges may have not had the same motivating effect, possibly due to personal or situational factors. These responses highlight how adversity can shape attitudes toward education, motivating some while leaving others unaffected.

<u> Table (9):</u>



The responses in **Table (9)** reveal that a significant portion of students, 31.8%, strongly agree that focusing on their education rather than the war helps relieve their pain and heal their emotional wounds. This suggests that many students view their studies as a form of escape and a way to regain a sense of normalcy amidst the chaos. Education may serve as a coping mechanism, allowing them to channel their energy and thoughts into something productive, thus reducing the psychological toll of the

T0able (8):

conflict. Additionally, 17.6% of students agree with this sentiment, highlighting that a considerable number of students find solace in focusing on their academic pursuits.

However, 23.5% remain neutral, suggesting that not all students feel the same way, and some may struggle to fully engage with their studies due to the emotional impact of the war. The remaining 27.1% who disagree or strongly disagree could be experiencing a more difficult time in finding the emotional strength to concentrate on their education, possibly due to ongoing trauma or personal circumstances.

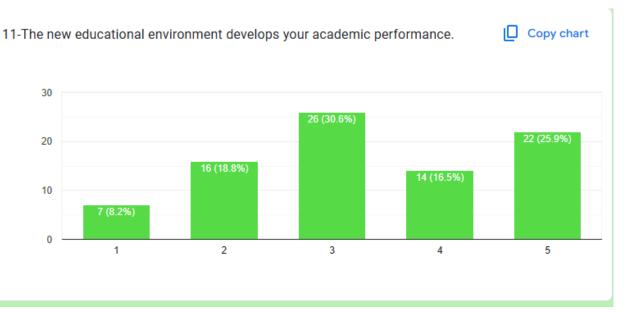
Table (10):



The responses in **Table (10)** show a strong consensus among students, with 42.4% strongly agreeing and 18.8% agreeing that education has become the only pathway to their future and hope during these difficult times of war. This suggests that many students view their studies as a source of light amidst the darkness of the conflict, offering them a sense of purpose and optimism for the future. Education provides them with an avenue for personal growth, skill development, and the possibility of a better life, despite the surrounding hardships. The 18.8% of students who remain neutral may be uncertain or struggling with the emotional toll of the war, which might make it difficult for them to fully embrace education as a source of hope. The 8.2% who disagree and 11.8% who strongly disagree may be feeling overwhelmed by the immediate challenges of the war, which could hinder their ability to focus on education as a means of escape or improvement.

The responses in **Tables (9) and (10)** highlight a powerful theme: education as a means of relief and escape from the psychological burden caused by war. In Table (9), a significant portion of students (31.8% strongly agree and 17.6% agree) express that focusing on their education helps alleviate their emotional pain, offering a form of healing amidst the chaos. This suggests that education serves as a coping mechanism, helping students to regain a sense of normalcy and focus despite the trauma surrounding them. In Table (10), 42.4% of students strongly agree, and 18.8% agree that education has become their only pathway to hope during these difficult times. This reinforces the idea that students view their studies as a source of light, motivation, and future opportunities, helping them escape from the immediate suffering of war. However, a portion of students remains neutral or disagrees, which could indicate the varying degrees of emotional and psychological impact the war has had on them. For some, education might be hard to embrace as a source of hope or relief, possibly due to the overwhelming trauma they are experiencing. Overall, both tables emphasize the role of education in offering solace, providing a sense of purpose, and helping students navigate the difficult realities of war.

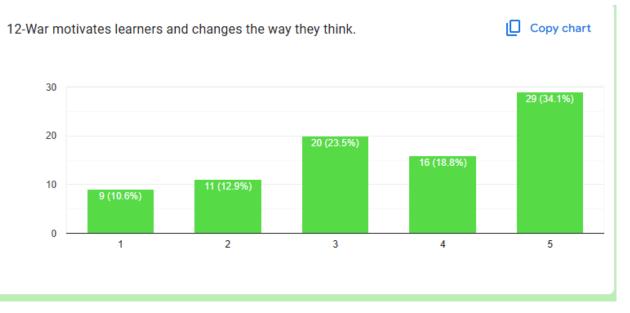
<u>Table (11):</u>



The responses in **Table (11)** suggest that a significant portion of students (42.4%) strongly agree or agree that the new environment positively impacts their academic performance, particularly for medical students. This highlights that the students appreciate the preparedness of the new educational setting, which provides them with the necessary resources, including both online and face-to-face lectures, as well as practical experiences in hospitals. The ability to continue practical training and gain hands-on experience despite the challenges posed by the war appears to be a crucial factor in maintaining academic progress.

However, 30.6% of students remain neutral, which could indicate that some students are still adjusting to the new environment or may not yet feel the full benefits of the changes. The 18.8% who disagree and the 8.2% who strongly disagree may be facing difficulties in adapting to the new setting, possibly due to logistical issues, emotional stress, or a lack of sufficient support in the transition. Despite these challenges, the overall response reflects that the new environment has been conducive to academic growth, especially in a practical field like medicine, where hands-on experience is vital.

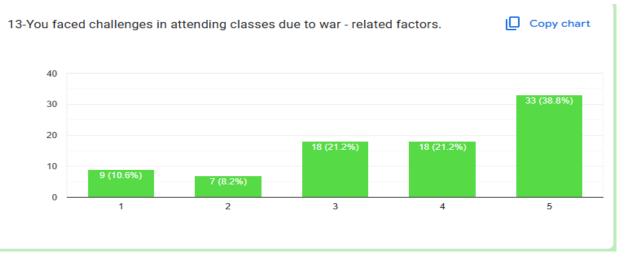
<u>Table (12):</u>



The responses in **Table (12)** indicate a mixed but generally positive reaction to the statement that war motivates learners and changes the way they think. A significant portion of students, 34.1%, strongly agree, and 18.8% agree, suggesting that many learners perceive the war as a catalyst for change in their mindset, motivating them to approach their education and future with a renewed perspective. The war may have led students to become more resilient, focused, and determined to succeed, viewing their education as a way to overcome the challenges they face. However, 23.5% remain neutral, which could indicate that some students feel uncertain or conflicted about how the war affects their motivation.

This neutrality might stem from emotional exhaustion, trauma, or a lack of clear support, making it difficult to translate the hardship into motivation. Additionally, 12.9% disagree, and 10.6% strongly disagree, suggesting that for a portion of the student body, the war may have a demotivating or overwhelming effect, making it difficult to focus on education and future goals. These students may be struggling with the immediate psychological toll of the conflict, which hampers their ability to view it as a source of motivation.

Table (13):

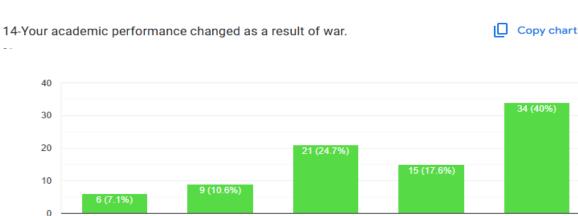


The responses in **Table (13)** show that a majority of students, 38.8%, strongly agree, and 21.2% agree, that they faced challenges in attending classes due to war-related factors at the beginning of the conflict. This indicates that the war had a significant impact on students in all educational levels and not only university level whom are considered as grown up and responsible learners. It impacts their ability to access education since the main concern would be on saving their own selves and reaching safe areas.

Those students whom remained neutral 21.2% not agreeing or disagreeing reveal a deeper understanding through their response which might be due to their unconsciousness or uncertainty about the results or consequences of war on education or they were able to leave to safe areas either inside the country or outside the country since some of them have their families outside, family member or close relatives setting in European, Gulf countries and neighboring countries. Those who responded with 8.2% and 10.6% strongly disagreeing and disagreeing could have adapted the challenges by utilizing self-study, depending on alternative platforms for education. They recognized the importance of staying focused on their studies than burying themselves in the stress and worries of war.

34 (40%)

5



2

Table (14):

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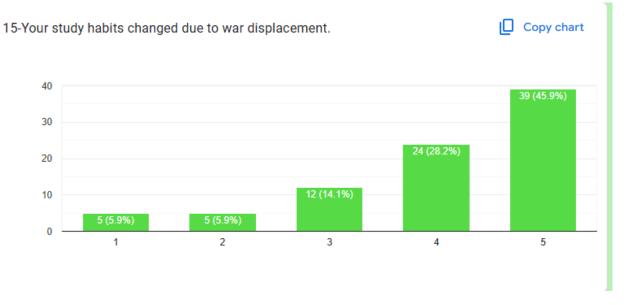
The responses in Table 14 show that the majority of students, 57.6%, strongly agree or agree that their academic performance has improved as a result of the war. This suggests that, despite the hardships and challenges, many students have been motivated to excel academically, viewing their education as a source of relief from the pain and trauma caused by the conflict. The positive performance of 5th-year students at Ibn Sina University, who demonstrated excellent results in their exams, further supports this notion. These students appear to have been driven by the belief that their studies are a way to overcome the difficult circumstances they face, possibly viewing education as a means of both personal growth and a way to honor the sacrifices their families have made during the war.

3

4

On the other hand, 24.7% of students remained neutral, indicating that they may have had mixed experiences, not sure about their feelings or they have strong determination so they did not feel that war could impact their academic performance overcoming all challenges. Opposite is those who respond with 10.6% and 7.1% disagreeing and strongly disagreeing due to the hard times they face so as to get the visa to neighboring countries or settling in an apartment with colleagues and even getting adapted to the new situation especially after being among your family shelter and suddenly losing this shelter and depending on yourself for arranging all your requirements. Those learners need time to cope with the sudden changes created by war.

Table (15):



The responses in Table 15 indicate that a significant portion of students, 45.9%, strongly agree, and 28.2% agree that their study habits have changed due to the war, displacement, and the new environment they moved to. This suggests that the disruption

caused by the war and the need to adapt to a new living and learning situation has had a noticeable impact on their academic behaviors. Displacement often requires students to find new study spaces, adjust to different routines, and deal with unfamiliar surroundings, which can alter how they approach their studies.

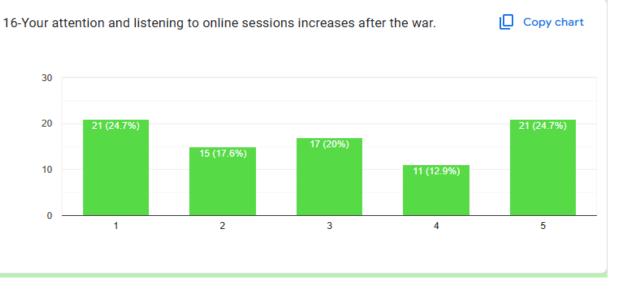
The 14.1% who remain neutral may be unsure about the extent of the impact or might have had an easier time adjusting to their new situation, while the 14.1% who disagree and the 5.9% who strongly disagree indicate that, for some, the war and displacement may not have led to significant changes in their study habits. These students may have already developed strong coping strategies or adapted more quickly to the new environment, maintaining their focus on their studies despite external disruptions. Overall, the responses suggest that while many students have had to adjust their study routines due to the war and displacement, others have managed to maintain consistency in their academic approach.

The responses in **Table 15 and Table 11** present a clear contrast between the changes in students' study habits due to the war and displacement and the impact of the new educational environment on their academic performance. Table 15 shows that 45.9% of students strongly agree and 28.2% agree that their study habits have changed because of the war and displacement, reflecting the disruptions caused by the conflict. The need to adjust to new living and learning conditions, unfamiliar surroundings, and different routines has altered how many students approach their studies. This suggests that the war and displacement have had a tangible effect on their academic behaviors, requiring them to adapt and find new ways to study.

However, despite these changes, Table 11 provides a positive perspective, showing that 42.4% of students strongly agree and 28.2% agree that the new educational environment has positively impacted their academic performance, particularly for medical students. The readiness of the new educational setting, which includes both face-to-face and online lectures, as well as practical experiences in hospitals, has played a crucial role in supporting academic growth. The fact that students can continue their practical training and gain hands-on experience despite the challenges of the war suggests that the new environment has helped maintain academic momentum, even in difficult circumstances.

While 30.6% of students in Table 11 remain neutral, indicating some uncertainty or difficulty adjusting, and 18.8% disagree and 8.2% strongly disagree, suggesting that not all students have adapted well to the new environment, the overall trend in both tables is one of resilience. Despite disruptions to their study habits due to displacement and the war, students are still benefiting from the supportive educational environment that encourages their academic development. This demonstrates that, even though students have had to adjust their study routines, the new educational setting has played a positive role in encouraging academic growth and performance.

<u> Table (16):</u>

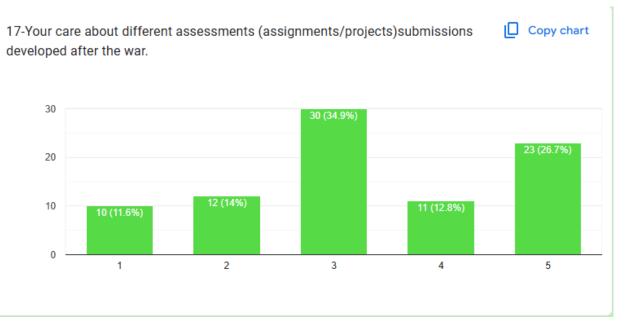


The responses in **Table 16** show mixed reactions regarding the impact of the war on students' attention and listening to online sessions. A significant portion of students, 24.7%, strongly agree or strongly disagree, suggesting that while some students have become more focused and attentive during online sessions after the war, others disagree because they are attentive to their education either face to face ones or online sessions before war. Additionally, 12.9% agree that they changed positively in their attention and participation in online classes after the war driven by their desire to accept the challenges and overcome it with a

positive attitude towards the only opened door towards their future. Those 20% who remain neutral suggests that many students might not experience any changes in their online habits and care about their education no matter how it is given. On the other hand, the 17.6% who disagree could indicate that their habits toward online sessions did not change and no impact can change the way they look to their education and future career and all the stress, displacement and worries encourages them and strengthen their will towards education.

In conclusion, the responses reveal that while some students have managed to increase their attention during online sessions due to the war, others continue remain focused as they were before. This reflects the broader impact of the war on students' ability to fully engage with their education. Challenges such as internet connectivity issues, staying in crowded living conditions, financial constraints, and a preference for face-to-face sessions and group discussions are contributing factors that hinder students' ability to concentrate or continue their online learning.

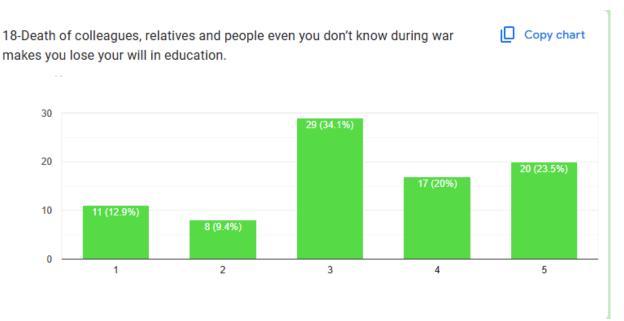
Table (17):



The responses in **Table 17** show that 39.5% of students strongly agree or agree that their care about different assessments and submissions developed after the war. This suggests that a significant portion of students has become more focused and diligent in their academic responsibilities as a result of the challenging circumstances of the war. The disruption caused by the war may have motivated students to prioritize their studies and use education as a source of stability and hope, leading to a greater sense of responsibility in completing assignments and assessments.

However, 34.9% of students remained neutral, indicating that some may not have experienced a significant change in their attitude toward assessments or may still be adjusting to the new environment. On the other hand, 14% who disagree and 11.6% who strongly disagree suggest that a portion of students remain the same as before war in their commitment towards assessments completion considering these hard times as personal challenges which they can overcome. These responses highlight the mixed impact of the war on students' approach to their academic work, with many showing increased dedication, while others showing strong determinations.

<u>Table (18):</u>

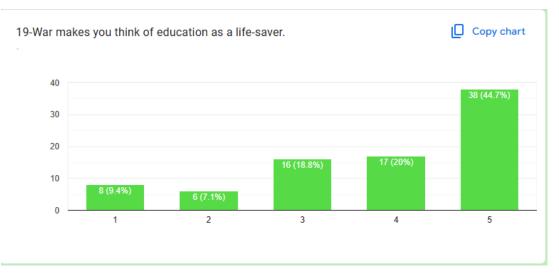


The responses in **Table 18** indicate that 43.5% of students strongly agree or agree that the death of colleagues, relatives, and even strangers during the war has led to a loss of motivation in their education. This reflects the profound emotional toll that the conflict has taken on students, as the loss of loved ones or familiar faces can create significant psychological distress, making it difficult for students to stay focused on their studies. Grieving, emotional instability, and the ongoing trauma may overshadow their academic responsibilities, leading to decreased motivation and a sense of helplessness regarding their future.

On the other hand, 34.1% of students remain neutral, suggesting that while they may acknowledge the pain caused by these losses, they have not yet experienced a direct impact on their academic motivation or are perhaps still processing their emotions. A smaller percentage, 9.4% disagree and 12.9% strongly disagree, indicating that for some students, the death of others during the war significantly affects their drive to continue their education. These students may focus on their academic goals for their own self and for those whom they lost during war.

Overall, the responses highlight the mixed effects of war-related losses on students' educational engagement, with a large portion experiencing mixture of emotions, while others seem to retain their focus and academic determination.

Table (19):



The responses in **Table 19** indicate that a significant portion of students, 44.7%, strongly agree and 20% agree that the war has led them to view education as a life-saver. This suggests that, for many students, education has become a source of comfort and security during the turmoil of war. With the challenges and disruptions caused by the conflict, students may perceive their education as a means to rebuild their lives and secure a better future. The pursuit of knowledge offers them a sense of purpose and control in a time of uncertainty, which can be crucial for mental well-being and motivation.

On the other hand, 18.8% of students remain neutral, indicating that while they may recognize the importance of education, they may not feel as strongly about it being a life-saver, possibly due to the overwhelming nature of the war or personal issues such as financial ones or others. A smaller group, 7.1% disagree and 9.4% strongly disagree, which suggests that for some students, the emotional and physical effects of the war may make it difficult to view education as a priority or a means of escape since they may not have a strong control of their emotions and trying to overcome the obstacles and find hope in their studies.

Overall, the responses reflect that for the majority of students, education has become a vital source of strength and a way to cope with the adversity of war, but there are still some who may be struggling to find this perspective amidst the overwhelming impacts of the conflict.

The responses across **Tables 8**, **12**, **and 19** demonstrate a common theme that the war has had a profound impact on students' views toward education, motivating them to consider it as a life-saver or a means of overcoming adversity.

Table 19 shows that 44.7% of students strongly agree, and 20% agree that the war has led them to view education as a lifesaver. This emphasizes that, for many students, education has become a source of hope and stability amidst the chaos of war. Education is perceived as a means to rebuild their lives and secure a better future, giving them a sense of purpose during an uncertain and traumatic time. The sense of direction that education provides is crucial for mental well-being, helping them to cope with the emotional toll of the conflict. These students likely view education as a way to escape from the negative circumstances of war, offering them something to hold onto in an otherwise tumultuous situation.

Table 12 highlights that 34.1% strongly agree and 18.8% agree that the war motivates them and changes the way they think about their education. This suggests that many students perceive the war as a catalyst for personal growth and resilience. The adversity caused by the war has encouraged students to reassess their priorities, with many seeing education as a path to a better life. For these students, the war has ignited a renewed focus and determination, motivating them to perform better academically and approach their future with more commitment. The shared experience of facing hardship may have strengthened their resolve to overcome obstacles through education, making it a powerful tool for personal empowerment.

Table 8 provides further support for this, with 32.6% of students strongly agreeing and 26.7% agreeing that the war has changed the way they think about their future and inspired them to care more about their education. This indicates that the war has reshaped their attitudes toward their studies, motivating them to invest more in their education as a way to improve their future prospects. The hardships of war have prompted students to recognize the value of education in shaping their future and to overcome any previous neglect or bad habits in their studies. This shift in mindset underscores the transformative effect of war, making education a crucial factor in their personal development and survival.

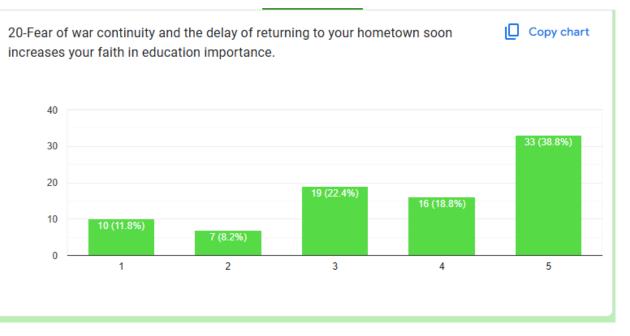
Connecting the three tables, there is a clear and consistent theme: the war has motivated many students to view education not only as a tool for success but also as a means of emotional and psychological survival. The idea of education as a life-saver is echoed across all three tables, with students acknowledging that despite the difficulties posed by the war, education has provided them with a sense of purpose and direction. The adversity has served as a wake-up call for many, encouraging them to value education more deeply and to see it as a way to overcome personal and societal challenges.

However, while the majority of students seem to find motivation and inspiration in their studies, there is also a portion who remain neutral or disagree, as indicated by some responses in all three tables. These students may be struggling with the immediate psychological toll of the war, emotional exhaustion, or a lack of support which help them cope with the situation and change their perspectives towards a positive one which can enable them to focus on education as a source of motivation.

In conclusion, the responses from these three tables collectively highlight that, for many students, the war has led them to think of education as a lifeline—an opportunity to escape the hardships of war and secure a better future. Despite some mixed responses, the general consensus points to education playing a crucial role in helping students cope with the challenges posed by the conflict.

The Impact of the Escalating Sudanese Civil War on Medical School Students' Interest and Academic Performance: A Case Study of Ibn Sina University & Al-Maktarbeen University

Table (20):



The responses in **Table 20** suggest that a significant portion of students, 38.8% strongly agree and 18.8% agree, believe that the fear of the continuation of the war and the delay in returning to their hometowns have increased their belief in the importance of education. This indicates that for many students, the uncertain and prolonged nature of the war has served as a catalyst for focusing more on their education as a means of securing a better future. In the face of adversity, education becomes a way to maintain hope and a sense of purpose, providing a constructive outlet to focus on despite the instability and trauma caused by the war. The prolonged disruption caused by the war seems to have heightened students' awareness of the need to build their futures, making them view education as a tool for long-term survival and success.

Additionally, the fear of war's continuation and the extended displacement seem to have encouraged many students to depend on their education as a way to escape the painful present and look toward a better future. Education, in this context, acts as a source of strength, motivation, and forward-looking optimism. By focusing on their studies, students may find it easier to ignore the past pains and the immediate stresses of their situation, instead channeling their energies into achieving academic and personal goals. This coping mechanism allows them to gain a sense of control and direction amidst the chaos and uncertainty of the ongoing conflict.

However, 22.4% of students remain neutral, suggesting that while they may recognize the importance of education, they may have a partial feeling about its role in overcoming the emotional and physical toll of war. The neutral responses could indicate that some students are still struggling with the immediate effects of the war, such as trauma, displacement, working hard to cope with all changes or financial instability, which may make it little difficult for them to focus solely on education as a means of healing or escape.

The 8.2% who disagree and the 11.8% who strongly disagree may represent a smaller group of students who feel disconnected from education due to the overwhelming emotional burden of the war which caused a financial problem for them to continue. These students might be experiencing significant trauma, loss, or despair, which makes it harder for them to see education as a positive force or as a way to overcome their current situation. They may find it challenging to concentrate on their studies or may feel that education is irrelevant in light of their immediate concerns about survival and personal safety.

In conclusion, the majority of students appear to have developed a stronger belief in the value of education due to the ongoing war, viewing it as a means of securing their future and overcoming the present difficulties which will relief all their pains. However, there is a smaller portion of students who struggle to maintain this perspective, either due to emotional exhaustion or the profound impact of the war on their mental well-being. Education, for these students, becomes both a refuge from the chaos and a tool for building a brighter future.

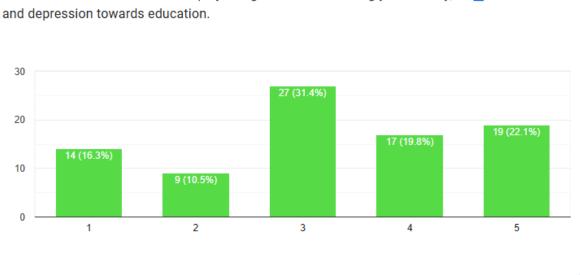


Table (21):

Copy chart 21-The new educational environment played a great role in reducing your anxiety, ILI. fear and depression towards education.

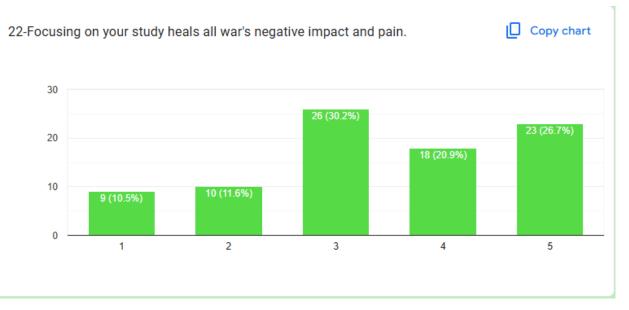
The responses in Table 21 highlight the positive impact of the new educational environment on students' mental well-being, with 41.9% of students strongly agreeing and agreeing that it helped reduce their anxiety, fear, and depression towards education. This suggests that for many students, the provision of a supportive well prepared and motivative stable learning environment in countries like Saudi Arabia and Egypt, or even within safer parts of Sudan, played a crucial role in alleviating the psychological burdens they were carrying and the sense of lacking their home country due to war. This new environment likely offered students a place to focus on their studies, away from the immediate trauma and dangers of the conflict, allowing them to regain some sense of control over their future. For many medical students, particularly those in their 5th and 6th years, continuing their education in a structured environment may have helped maintain their focus on their academic goals and their passion for the medical field, which in turn could reduce feelings of anxiety and hopelessness. These students may have feared that the war would permanently disrupt their education, but the relocation and continued support have provided them with a pathway forward, helping to counteract the emotional toll of the conflict.

However, 31.4% of students remain neutral, indicating that some may not have experienced the same reduction in anxiety, fear, or depression, or displacement since they continued their education in the safer parts of Sudan among their families and relatives and the great generosity, they felt from the residence of the regions they settled in.

On the other hand, 10.5% of students disagree and 16.3% strongly disagree with the statement, suggesting that for a portion of students, the new educational environment may not have had a significant impact in alleviating their anxiety or depression since they are far from their families and they are taking all the responsibility which was of huge burden for them and a challenge that go beyond the educational environment not allowing them to view all the positive side of the new situation .

In conclusion, the responses suggest that the new educational environment has generally been successful in reducing the psychological impacts of the war, particularly for students who were able to continue their education in safe and well-equipped settings. However, a smaller group of students remains neutral or dissatisfied with the support they received, likely due to personal or emotional factors that prevent them from valuing the new environment properly. The majority of students, however, appear to have benefitted from the stability and opportunities provided by these new educational areas, which helped them cope with the stress and uncertainty caused by the war.

<u>Table (22):</u>



The responses in **Table 22** show that 47.6% of the learners strongly agree and agree, which indicates that a significant portion of students believe that certain factors, likely related to their new educational environment or other aspects of their experience, positively impacted their academic journey despite the challenges of the war. This suggests that the majority of students found something beneficial in their situation that helped them continue their education, whether it was the structure provided by their studies, the support from educational institutions, or their determination to overcome the hardships posed by the conflict.

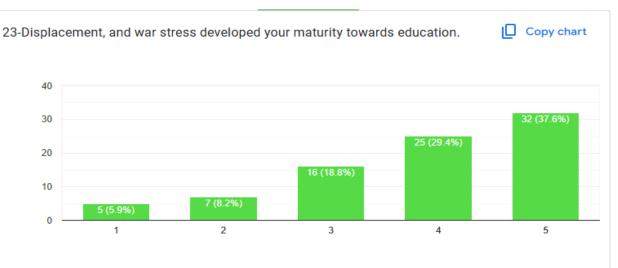
The 30.2% of students who remained neutral might reflect individuals who were satisfied about with their academic performance or felt that their situation was not particularly affected either positively or negatively by external factors. This could suggest a variety of reasons, such as personal resilience or a lack of resources or support that did not lead to a noticeable improvement in their educational experience.

On the other hand, 11.6% of students disagree and 10.5% strongly disagree, indicating that for some students, the challenges of war, displacement, or the adjustment to a new environment may have had a negative effect on their academic experience due to significant emotional, psychological and financial issue they are facing which gives them satisfaction with any performance done.

In conclusion, the data suggests that while a majority of students experienced positive changes or support in their academic journey due to the war, a sizable portion of students either remained neutral or did not feel the same level of benefit. This reflects the complex and varied nature of the experiences of students displaced by conflict, with different factors influencing their ability to thrive academically under such challenging circumstances.

When comparing the responses from **Tables 8, 12, 19, and 22** it reveals a common and powerful theme of war, despite all hardships caused it has had a positive impact on students, particularly in terms of reshaping their views on education and their future as well as their personal growth and their relationship which directs them to view education not only as a means to achieve success but also as vital tool for future survival or life-saver.

In conclusion, this war has positively reshaped students' perspective on education. It motivated them to work harder, be responsible and caring and value all efforts done by their families to support them.

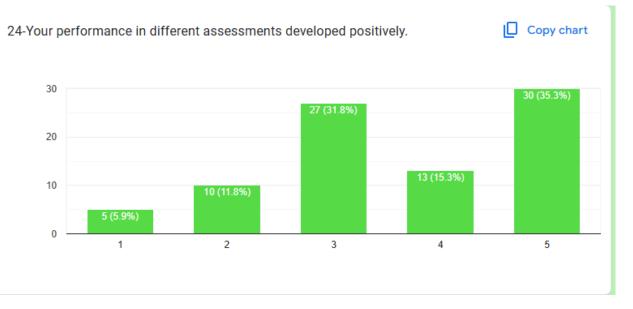


<u>Table (23):</u>

The responses in **Table 23** show that a significant portion of students, 37.6% strongly agree and 29.4% agree, believe that displacement and the stress caused by war have contributed to their increased maturity toward education. This suggests that the hardships and challenges brought on by the war, including displacement, emotional strain, and the disruption of their daily lives, have fostered a sense of personal growth and responsibility in these students.

The war and displacement have made many students rethink the importance of education. They realized that education is key to overcoming difficulties and building a stable future. Some students, represented by 18.8%, may not have experienced a major change in their attitude toward education, either because they were less affected or their situation is stable. A smaller group, 8.2%, disagrees or strongly disagrees, suggesting that they did not experience significant changes. These students may have already been mature or disciplined before the war or struggled to adjust to their new situations. Overall, the data shows that the majority of students have developed a stronger appreciation for education and are using it as a way to build a better future. The adversity caused by the war seems to have helped many students grow personally and academically.

Table (24):

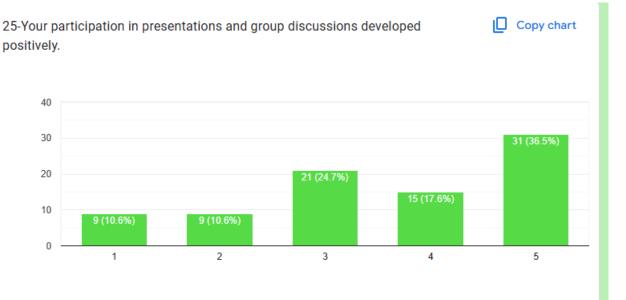


The responses in **Table 24** show that a majority of students, 50.6%, strongly agree or agree that their performance in different assessments has developed positively. This suggests that, despite the challenges posed by the war and displacement, many students have experienced an improvement in their academic performance, possibly as a result of their increased focus on education and their determination to succeed despite the hardships.

The improvement in students' performance could be due to their personal growth and maturity after experiencing war and displacement. Many students realized that education is a way to build a better future, so they focused more on their studies. Their new educational environments, which offered support and resources, likely helped them perform better. These students became more disciplined and dedicated to their work. The challenges they faced made them appreciate education more and work harder to succeed. Overall, the support they received and their own growth helped them improve academically.

The 31.8% of students who stayed neutral may not have seen a noticeable change in their academic performance, possibly because their performance remained the same despite the challenges or they didn't feel the full impact of their experiences. Some of these students might not have had enough support or resources, which could have affected their ability to improve. The 11.8% who disagreed and the 5.9% who strongly disagreed represent students who see that their performance is stable. Overall, most students have seen improvement in their academic performance despite the tough circumstances. This suggests that many students used education as a way to overcome adversity and build a better future.

Table (25):



The responses in **Table 25** show that the majority of students, 54.1%, reported that their participation in presentations and group discussions has improved, indicating that the challenges of war and displacement have motivated them to engage more in these activities. This could be because they are adapting to new learning environments and see the value of improving their communication and teamwork skills, especially in a field like medicine where collaboration is key. Several factors may have contributed to this positive change, including increased motivation to succeed despite the difficulties they face, the supportive new educational environments in places like Saudi Arabia and Egypt, and a sense of purpose that comes from staying focused on education. These students likely recognized the importance of actively participating in academic activities to enhance their learning experience and work well in teams.

However, 24.7% of students remained neutral, suggesting that the change in their participation was either not significant or still developing. Some of these students might have been unsure about how the new situation affected them, or other academic challenges may have limited their involvement in group activities. Additionally, 10.6% of students disagreed, and 5.9% strongly disagreed, indicating that a smaller group struggled with participation in presentations and discussions. Emotional stress, lack of confidence, or logistical challenges may have made it difficult for these students to engage. The upheaval caused by the war and displacement could have hindered their ability to take part in interactive academic activities. Overall, while most students showed improvement, some still need extra support to overcome these barriers.

6. Final Results

This paper examines the impact of the escalating Sudanese Civil War on medical students, focusing on how displacement affected their mental well-being, academic performance, and participation in education. Using data from Tables 1 to 25, the study reveals the challenges faced by students relocated to safer environments like Saudi Arabia and Egypt and safe regions inside Sudan. The findings highlight both the positive and negative effects of these circumstances, showing how students adapted and coped with displacement. This discussion explores factors that contributed to students' resilience, the role of supportive educational systems, and how war influenced their academic focus. The analysis provides insights into the complex relationship between adversity and academic engagement during times of crisis.

- 1. **Psychological Impact of War (Table 1)**: A large majority (70.1%) of students report a significant psychological impact from the war, with trauma, mix and complex feeling affecting their mental health and academic focus.
- 2. **Displacement's Negative Effect on Learning (Table 2)**: Nearly half (46%) at the beginning of the war feel that displacement disrupts their learning because it was difficult for them to leave their families and adjust to a new environment after experiencing difficult times during their journey to settle.
- 3. **University Destruction's Impact on Attitudes (Table 3)**: The physical destruction of their university did not strongly affect students' attitudes toward education holding in their mind and heart their gratitude to it and the great effort done by the owners by continuing their work in alternatives such as safe places in Sudan, Saudi Arabia and Egypt.
- 4. **Financial Challenges as Motivation (Table 4)**: Many students (32.2%) see financial challenges as a motivator to continue their education having a strong determination to find the simplest ways to fulfil all their educational needs, though some (14.9%) feel overwhelmed by them.
- 5. **Peer Dispersal and Adaptation (Table 5)**: The separation from peers affects some students' ability to adapt to new environments, highlighting the importance of peer support which they were once accustomed to.
- 6. **Importance of a Well-Organized Educational Environment (Table 6)**: A well prepared and structured learning environment boosts motivation for many students (28.7%), although some are less influenced by it.
- 7. **Impact of Family Separation (Table 7)**: Separation from family has mixed effects, with some students (25.3%) becoming more focused on their education valuing the supports provided by the university and their families, while others (21.8%) struggle emotionally holding promises to heal their pain by successfully finishing their academic year and opening doors for their future careers.
- 8. **Education as a Path to a Better Future (Table 8)**: The war has motivated many students (32.6%) to reassess their priorities and value education as a way to secure a better future and reward their families with their own success, although not all students share the same perspective but it more wider ones.
- 9. Education as Emotional Healing (Table 9): Many students (31.8%) find solace in their studies finding it as an escape from wars pain and distress. They view education as the tool that will heal all their pains and wounds and open the door to a better future.
- 10. Education as the Only Path to Hope (Table 10): An important portion (42.4%) views education as life saver for a better future amidst the war, though some still feel overwhelmed.
- 11. **Positive Academic Impact:** Many students, especially those of 5th & 6^{th year} medical fields, feel that the new educational environment, including online and face-to-face learning, has positively developed their academic performance. The continuation of practical training, despite the challenges, is particularly appreciated.
- 12. **Motivation and Resilience:** The war has served as a motivator for some students, changing their mindset and strengthening their determination to succeed. However, emotional trauma and uncertainty have left others feeling demotivated or neutral about the war's effect on their motivation.
- 13. **Disruption to Learning:** The war significantly disrupted students' ability to attend classes, particularly at the start, due to safety and logistical challenges. Despite this, many students adapted through alternative learning methods, though flexibility in education remains crucial.
- 14. **Emotional and Psychological Toll:** The emotional toll of the war, including the loss of colleagues and family members, has negatively affected some students' motivation and academic focus. However, others have found strength in their studies and maintained their academic commitment.

- 15. **Education as a Lifeline:** For many, education has become a source of hope and stability during the conflict, offering a sense of purpose and a path to a better future. Some students have increased their focus on their studies, viewing education as essential for long-term survival.
- 16. **Mixed Reactions:** While a majority of students have adapted and seen academic improvement, others are struggling to concentrate or engage fully due to ongoing financial problems and emotional stress.
- 17. **Mental Well-Being (Table 21)**: The majority of students (41.9%) found the new educational environments alleviated their anxiety, fear, and depression, reflecting that these environments helped reduce the psychological toll of the war. However, a portion of students (27.1%) still reported feeling little to no relief from these issues, suggesting that the emotional and psychological impacts of war were not entirely mitigated by the shift to a new location.
- 18. **Academic Journey (Table 22)**: About 47.6% of students experienced positive changes in their academic journey due to the stability and support provided by the new educational environments. Nevertheless, 30.2% remained neutral, indicating that some students did not feel significant improvement or change in their academic experiences. This highlights that while many benefited from the new environment, others continued to face academic challenges stemming from the emotional and psychological effects of war and displacement.
- 19. **Maturity Toward Education (Table 23)**: The hardship caused by the war and displacement contributed to a greater sense of maturity and responsibility towards education for 67% of the students. This suggests that the adversity students faced in the conflict led them to appreciate the importance of education more deeply, potentially motivating them to become more focused and disciplined. However, a smaller percentage (14.1%) did not experience this maturation, which could be due to personal struggles or difficulties in processing the trauma of war.
- 20. Academic Performance (Table 24): A significant portion (50.6%) of students reported improvements in their academic performance, likely driven by increased focus on education as a means of overcoming adversity. However, 31.8% remained neutral and 17.7% did not see an improvement, reflecting that for some students, the ongoing emotional strain from the war continued to hinder their academic success, despite structural support.
- 21. **Engagement in Presentations and Group Discussions (Table 25)**: Over half of the students (54.1%) saw positive development in their participation in group discussions and presentations. This indicates that many students, despite the external challenges, found a sense of purpose and motivation through active academic engagement, especially in the medical field. However, 35.3% either remained neutral or were dissatisfied with their engagement, suggesting that emotional and logistical barriers continued to limit full participation for some students.

The data collected across **Tables 1 to 25** offer a comprehensive view of how the escalation of the Sudanese Civil War impacted medical students, focusing on their mental well-being, academic success, and engagement in the context of displacement and relocation to safer educational environments.

The escalation of the Sudanese Civil War had a significant, though not uniform, impact on medical students' interest and academic success. The data suggest that for many students, the war and its accompanying displacement initially posed serious challenges to their mental well-being, academic focus, and engagement. However, the relocation to safer and more stable educational environments, particularly in countries like Saudi Arabia, Egypt, and other regions of Sudan, provided a sense of structure, normalcy, and support. This new environment helped many students regain a sense of control and focus, leading to a significant reduction in anxiety, fear, and depression and strengthen their relationship bonds and improve their academic performance.

In terms of **interest in education**, the data indicate that the hardship and adversity caused by the war led many students to develop a stronger appreciation for their academic pursuits, enhancing their focus and discipline. This was particularly evident in the positive developments in maturity (67%) and participation in group discussions and presentations (54.1%).

In terms of **academic success**, most students experienced either stability where their performance remain similar as before showing the great effort done by this portion to keep focus on their studies despite the environment they were surrounded with, this portion show strong determination in struggling to continue. Other portion show improvement in their performance due to the facilities provided in the new educational areas and the hard work shown by this portion to develop their performance and benefit from the new experienced educators provided in it, with 50.6% reporting positive changes in their academic assessments. The war and displacement seemed to enhance students' resilience and determination to succeed academically and value the opportunities provided in the relocation educational areas, especially as they viewed education as a means to secure a better future. However, the data also show that a smaller group of students (around 30-35%) either remained neutral or struggled with

academic success, indicating that for some, the emotional toll of the war and the difficulties of adaptation to new educational systems impeded their progress.

In conclusion, this study highlights the resilience and adaptability of medical students amidst the challenges posed by the Sudanese Civil War. Despite the significant disruptions caused by displacement, trauma, and psychological distress, a majority of students showed remarkable perseverance, maintaining their academic focus and demonstrating personal growth. The supportive educational environments and mental health resources available in safe regions in Sudan and countries like Saudi Arabia and Egypt played a crucial role in fostering academic success and rekindling students' interest in education. While the war did have a lasting impact on many students, with some still facing emotional and logistical challenges, the overall response to the new academic settings was positive.

These findings highlight the importance of providing immediate stable, supportive environments and along with mental health services during times of wars. This help to mitigate the negative effects of displacement and ensure that students can continue their education and contribute meaningfully to their communities. The findings also highlighted and proved that having strong determination and valuing education can help learners overcome all the challenges they might come across and that education is the only path which is of great value and can be reached under any circumstances.

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