

Article

The Interaction of War Impacts on Education: Experiences of School Teachers and Leaders

Abdulghani Muthanna ^{1,*}, Mohammed Almahfali ² and Abdullateef Haider ³

¹ Department of Teacher Education, Norwegian University of Science and Technology, 7491 Trondheim, Norway

² Columbia Global Centers, Columbia University, Amman 11814, Jordan

³ Department of Science Teaching, Sana'a University, Sana'a 00967, Yemen

* Correspondence: abdulghani.muthanna@ntnu.no or am96715@gmail.com

Abstract: Education, the backbone of any nation's development, demands the presence of not only infrastructure and facilities but also a peaceful environment. The war in Yemen has had a strong, negative impact on education. In our study, we employed narrative inquiry and developed a structured interview guideline to explore the experiences of school teachers and leaders regarding the war's impacts on education. After collecting and analyzing one hundred written narratives, we developed and conducted a semi-structured interview with four female and six male school teachers and leaders to answer the study questions. The findings highlighted the displacement and discrimination, the use of children as fighters for the future, the conflict of identities among children, the destruction of children's physical and mental health, the exploitation of education for financial benefits, the normalization of negative behaviors, and the destruction of teacher's dignity. These findings were also conceptualized in a simple model that showed the interaction of these war impacts on the teachers and learners. Further, focusing on how the domestic cultural and social contexts interact with these impacts is necessary to enhance understanding, solidarity, and tolerance among individuals and achieve a peaceful and cohesive society.



Citation: Muthanna, A.; Almahfali, M.; Haider, A. The Interaction of War Impacts on Education: Experiences of School Teachers and Leaders. *Educ. Sci.* **2022**, *12*, 719. <https://doi.org/10.3390/educsci12100719>

Academic Editor: James Albright

Received: 16 September 2022

Accepted: 16 October 2022

Published: 19 October 2022

Publisher's Note: MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



Copyright: © 2022 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

Keywords: children; conflict and education; education; war impact; Yemen

1. Introduction

Conflict takes place in many parts of the world, with negative impacts on education. While education might continue during times of conflict, this conflict has a negative, direct effect on education and its quality due to the prevalence and risk of violence, fear, and safety concerns. It destroys schools; causes schools to be used for military purposes or as shelters for displaced families; puts teachers and students at risk of being killed, wounded, or kidnapped; and causes psychological trauma [1]. The indirect consequences of conflict relate to displacement, the deterioration of health services, increasing demand for domestic workers, and a lack of social capacity to provide educational services [2–4]. Pressured government budgets are also redirected to deal with the consequences of the conflict [5]. While conflict can destroy the foundations of educational systems, it can also overlap with other problems that differ from one society to another, posing new obstacles related to, for example, expanding the conflict and impeding the progress of any developmental measures.

In the Middle East, the conflict has a strong impact on education. For example, UNICEF [6] reported on the effect of the war on education in Syria, stating that the number of school-age Syrian refugees increased from 100,000 in 2012 to 1.3 million in 2015, with an additional 1.4 million children at risk. Furthermore, the report mentioned that access to education is a major concern for displaced children, who constitute at least 20% of all enrollments at schools in government-controlled areas. War in the neighboring country of Iraq led to children's feelings of fear, which resulted in social isolation, psychological

disorders, a decline in academic achievement, and a lack of advancement due to conditions that negatively affect their attention and interest [7]. Armed conflicts in Iraq also led to lower government budgets and budget mismanagement for education, causing a poor student-to-teacher ratio and a lack of qualified and trained teachers [8]. Such factors forced many children not to attend school, and those who enrolled in education at a later age do not continue their education. These direct impacts lead to other indirect ones that may be more harmful to society, and therefore, require accurate scholarship of these effects from different angles, including teachers, children, families, and other components of society.

In the Yemeni context where the conflict is forgotten, around two million school-age learners are currently out of school, of whom 62% are girls [9]. Additionally, the war has led to the closure of 3700 schools across the country, preventing approximately 1.8 million learners from continuing their education; the complete destruction of 195 schools, the partial destruction of 720 schools, the repurposing of 466 schools as centers for displaced people, and the use of 134 schools for military purposes have taken place [10]. In a recent report, the Ministry of Education [11] stated that the war caused the destruction of 412 schools, partial damage to 1491, and the use of 993 as shelters for displaced persons. The number of learners being deprived of education is 1,898,220 learners (p. 8). However, to explore these effects, how they interact with one another, and the dynamics of their impact on society, these above-mentioned statistics need to be analyzed in relation to political, cultural, and social contexts.

Thinking of peacebuilding in the post-conflict era is a sustainable approach; however, it is crucial to emphasize social development; address the underlying impacts of conflict, such as political, economic, and sociocultural inequality and injustice; and understand the politics and other complex factors [12]. Before developing a peacebuilding approach for the Yemeni context, it is vital to initially reach a deep understanding of the impacts of the war on education in Yemen wherein the conflict overlaps between ethnic and sectarian influences, and regional and international interventions, considering the social and cultural components. In other words, analyses of the conflict's impacts on education are needed because designing educational pathways without carefully examining social contexts may lead to opposite impacts. It is therefore crucial to have positive peacebuilding initiatives that seek to deconstruct the structures of violence and construct the structures of peace [13]. In this paper, we argue that understanding these contexts helps to develop education on the one hand and helps to develop peace on the other. This paper mainly answers these research questions: (1) What are the direct impacts of war on education in Yemen? (2) How do local contexts shape these impacts? (3) How do the negative aspects of war interact to affect education? The originality of our paper mainly relates to highlighting the negative impacts of the war in the Yemeni context, providing a simple model of the interaction of the war's impacts on education, and that any future treatments dealing with peacebuilding in Yemen need to consider these findings in advance.

1.1. Key Factors for the Conflict's Continuity, and the Education Status in Yemen

Two main factors drive the continuity of the war in Yemen: the first associates with external interventions and the second relates to the local roots of the conflict [14]. Among many, there are political and religious factors, including the conflict between the north and the south, which began directly and sharply in the 1994 civil war, and the following political crisis with the emergence of the so-called Southern Movement. There is also a cultural conflict that was not strongly visible before the ongoing war, but it was present in literary and cultural practices. It concerns the difference between the Sunni ideology represented by the internationally recognized government backed up by Saudi Arabia and the Zaydi-Shiite ideology represented by the Iran-backed Houthis. All these factors affect the children's psychological well-being, leading to psychological disorders [15]. A further impact is on the displaced people who find it challenging to adapt to and integrate into the host communities, leading to feelings of marginalization and discrimination [16], which have been visibly practiced against the Black community (known as Almuhamashin)

who lived in settlements outside of the cities [17] but currently live in camps with other communities because of the forced displacement.

The basic (primary and secondary) education planning and improvement is the responsibility of the Ministry of Education in Yemen [18], which developed the national basic education development strategy 2003–2015 to raise the enrollment rate of the 4–16 age groups to 95%. However, the war and the political crises impeded attempts to conduct evaluative studies to examine the outcome of the strategy [19]. Even before the current war, education faced many challenges, such as outdated or insufficient educational buildings and facilities; lack of qualified teachers, particularly female teachers [20]; lack of in-service teacher training [21]; lack of providing salaries for teachers [22]; and scarcity of educational resources [23]. As the war continues, the number of losses increases, and the problem becomes more prevalent, especially through its interaction with other factors within the society.

The development of basic (primary and secondary) education has been slow because of the country's long history of conflicts during 1948, 1955, 1962–1969, 1972, 1986, 1994, and 2015 to present. Furthermore, the six wars in Sa'ada city between 2004 and 2009 and the power dispute with the Southern Movement since 2007 have all contributed to the instability in the nation, affecting the continuity of education development. Further, the conflict directly affects child learners, with 11.3 million requiring some form of protection assistance. Between 2015 and 2021, around 3336 children were killed, and 465 attacks and military use of education facilities occurred. In the meantime, 8.1 million children needed emergency education support, over 2 million school-age girls and boys were out of school, and around 171,600 teachers, i.e., two-thirds of the teaching workforce, have not been paid a regular salary for four years [24]. Behind these statistics are a set of complex problems, such as the problems of displacement, conflict between learners, school violence, discrimination, and the prevalence of psychological conditions [25]. All these overlapping problems require an in-depth study to develop effective models that can help future decision-makers to develop policies that are capable of overcoming this difficult reality in an appropriate manner.

1.2. War Impact on Education and the Initiatives for Repairing War-Torn Education Systems

Although there is a consensus that education can have both positive and negative effects on social relations [13], scholars agree that education is important for building peace in conflict-affected countries through focusing on educational structure; decreasing ethnic, religious, and regional inequalities; alleviating poverty; and teaching about controversial issues, the history of violence, and human rights [12]. By sensing the importance of education in post-conflict stages, many nations have implemented policies and initiatives that help to repair their war-torn education systems. For example, Somalia progressed in increasing the number of schools and/or encouraging learners to enroll in education [26]. Such progress is attributed to the implementation of several initiatives and policies, namely, the preparation of a Somali-own curriculum framework with consistent language instruction, the expansion of affordable mobile phone and internet services, the collaboration between the community members and international organizations in creating educational opportunities, the development of a school census for collecting and reporting education system data, and the piloting of an early grade reading assessment strategy in Mogadishu in 2013–15 [27]. Specifically, the collaboration between the community members and international organizations helped with providing basic and vocational education, leading to the betterment of education in Somalia [28]. Although Somalia is the closest country to Yemen, the cultural and social differences between the two countries make it difficult to transfer the experience. Further, the nature of the differences in the roots of the conflict calls for different peacebuilding approaches.

Another example is Kenya, which focused on providing peace education as a core subject (with no exam) for pupils in the 1–8 grades and established a peace club for pupils to discuss emerging conflicts and possible solutions [29], which, of course, helped

with repairing the education system. A further example is Uganda, which successfully implemented the northern Uganda social action fund and youth opportunities program that provided cash assistance to young adults so they can acquire skills and initiate self-employment businesses [30]. While Yemen can benefit from these experiences in the future, it is crucial that Yemen develops its own developmental plans based on its own experiences in order to prevent the possibility of negative consequences resulting from education, such as cultural exclusion, the discrimination in policies and practices due to the uneven distribution of education, manipulating history and culture for political purposes, self-worth and hating others, and segregated education to ensure inequality [12]. Therefore, we argue that our paper helps to bridge such a gap in the Yemeni context and ensures avoiding negative consequences in the post-conflict education reform processes.

Among different social consequences, the lack of education increases child labor and creates a fertile ground for recruiting underage Yemeni children for war purposes. Without proper education, Yemen's new generations will not be able to shoulder the future burden of reconstructing the economy and the state, which are currently being destroyed [31]. However, there is an urgent need to approach this problem in connection with other factors in the Yemeni society wherein external interference, sectarian divisions, tribal differences, and political strife are feeding the conflict. [32] proposed the design of an education system in Yemen that focused on developing the communication channels with tribal peoples, seeking to demarginalize those within them, using economic and humanitarian methods through literacy and digital integration. While the tribal system is one of many factors that make up the complexity of the conflict in Yemen, exploring the effects of war on education in its social or cultural contexts is crucial for developing peaceful dialogues and unified national education plans and curricula.

Further, while the path to peace and stability in society demands practices that allow for gender equality and empowerment, improved water and energy sustainability, economic growth, and reduced inequality within and between nations [33], pedagogical practices at schools lie at the heart of repairing the school education system [34]. Yemen strongly demands the implementation of peace education in schools and media. However, attention toward strengthening historical identities should be approached and conducted with much care since history education may act as a weapon of war [35,36]. As contexts differ, the impacts of the war also vary. While our findings support previous studies, they also contextualize the impacts of the war on education in Yemen, which is an essential and initial step for developing peace-building strategies that are suitable for the country. Following is a discussion of the study design.

2. Research Design

Because the context of this study is Yemen, we adopted the case study design because of its usefulness in studying educational phenomena in their natural settings [37]. In this study, we employed the narrative inquiry approach, which focuses on understanding the real-life experiences of individuals with an attempt to highlight ethical matters and theoretical understandings of their experiences [38]. Further, a narrative inquiry helps to reveal the unheard voices and experiences of marginalized persons in different contexts with a hope for a positive change [39,40]. We triangulated the tools for collecting qualitative data: (1) a structured interview, which was designed to establish an understanding of the impacts of war on education in Yemen, and (2) a semi-structured interview, which we used for a deeper understanding of the war's impacts on education.

At first, we designed the structured interview (Appendix A) in Arabic; it contained 14 general statements that reflected on the most noticeable impacts of war on education. These statements were developed based on our continued experiences in the field and as expert teacher educators in the nation for decades. For reliability, the statements were also revised by one colleague who is versed in Arabic. After taking his feedback into consideration, we employed the structured interview as a guideline for the participants, who were then requested to share their experiences of the negative impacts of the war

on basic education and add any other impacts that were not outlined in the structured interview. The distribution was conducted in person and through email correspondence with 500 school teachers and leaders in the cities of Sana'a, Amran, Hajjah, Dhammar, Ibb, Taiz, and Hodeida. The participants were selected based on regional and gender representation. At first, we shared the consent form with the participants to sign; the consent form ensured that their participation in our study is voluntary and that the data were used only for research purposes. Only one hundred participants agreed to participate in the study. After receiving the signed consent form, we employed the structured interview tool and could collect one hundred narratives.

Reading through the collected data (written narratives) helped with developing a semi-structured interview guideline that focused on collecting more data concerning specific issues that emerged from the data collected through the structured interview. Therefore, we conducted semi-structured interviews through Zoom and Messenger with four females and six males from different cities in the nation. The interviewees were selected based on their long experience in teaching and school leadership. The first interviewee was recruited through a recommendation from one of our colleagues. The first interviewee recommended two participants in two other regions, who also recommended other participants. This strategy of snowball recruitment was the basis for selecting participants for the semi-structured interviews. We assured the participants that their identities were to be kept anonymous. This procedure encouraged the participants to sign the consent form. Each interview took around one hour. Table 1 presents the key information of the interviewees and the key participants whose statements were used as evidence in the Section 3.

Table 1. Key information of the study participants.

Pseudonym	Age	Gender	Degree	Specialty	Work	Province	Teaching and Leadership Experience
Saber	43	Male	BA	Geography	Leader	Marib	15
Hadeel	27	Female	BA	English	Teacher	Hadhramaut	4
Sadeq	55	Male	MA	Educational management	Teacher	Ibb	25
Shugoon	33	Female	BA	Social work	Leader	Taiz	8
Rawan	45	Female	BA	Mathematics	Leader	Abyan	15
Husain	42	Male	MA	Arabic	Teacher	Thamar	14
Salman	30	Male	BA	English	Teacher	Amran	8
Amran	37	Male	BA	Islamic education	Teacher	Sanaa	12
Zaher	58	Male	BA	Science	Teacher	Lahj	29
Nasma	44	Female	BA	Social work	Leader	Aden	15

To analyze and interpret the data, we started profiling all data collected through the structured and semi-structured interviews. We employed the constructivist grounded theory that was practical for coding and categorizing the collected data [41] after profiling the responses with pseudonyms to maintain anonymity. All names used in the findings are pseudonyms. Reading through the collected data in Arabic several times helped with coding, and further readings of the codes led to the emergence of several themes, which were, at later stages, developed into categories [22]. Then, we translated the quotes verbatim into English (used in the Section 3), with one colleague's further critical review of the quotes employed for accuracy. The most significant categories that emerged from the combined analysis of the structured and semi-structured interviews are presented in the following Section 3. The findings are presented under four main categories. The

first category contains three main themes. Each theme describes a specific issue, and all issues relate to one another. The last category is a meta-analysis of all the data, leading to the development of a model that conceptualizes the interaction of the war's impacts on education in the nation.

3. Findings

3.1. Impact of Conflict on Child Learners

3.1.1. From Displacement to Discrimination

Many participants mentioned “displacement” as one of the main war impacts on education in Yemen. The war affected all regions and infrastructure, including roads, communication, electricity, and water supplies. This has placed a great burden on displaced families. Because of the displacement of millions of people from their homes in Yemen, the displacement has shown a serious issue of discrimination against some displaced persons in many areas. The discrimination mainly affects young learners, women, and members of minority communities. Further, war-displaced people have a deeper problem, especially when they come from areas that are already saturated with conflict factors that fuel discrimination.

Elements of discrimination against Blacks, known as Muhammashin (the marginalized) and locally called Akhdam (slaves), are entrenched in Yemen. Moreover, they face additional discrimination in the refugee camps. Even before the war, the Muhammashin lived in isolated settlements outside of the cities. However, because of the displacement, they found themselves living in camps with other communities. Therefore, some of the children of the Muhammashin became objects of discrimination by other children or by some of the workers in such camps. This made these learners unable to enroll in education. The same was the case with girls because some displaced people fear that girls will be subjected to harassment or discrimination based on gender. Saber described the situation in one of the displacement camps as follows.

Unfortunately, there is a lack of awareness among the people in general, and the awareness of some workers in these camps. There is a discrimination against the marginalized children. They call these children with racist descriptions, and they are also subjected to beatings and insults.

This problem became further complicated in the south wherein the displaced Black community faces serious risk at the camps. Their historical matter interacts with the current escalation because they fled from northern areas, and they are sometimes considered spies. This is what Nasma stressed when describing the status of some displaced camps near Aden:

The war directly affected the escalation of violence on the marginalized group (Muhammashin) . . . When they fled the war to some camps outside the city of Aden, they became threatened, and their children could not get out of their camps because they were described as spies. This increases pressure on this group, and makes teaching their children more difficult.

What this community is exposed to in these camps is an extension of what they are exposed to in schools, villages, and cities. However, the matter becomes more complicated in the displacement camps through the combination of other negative effects of war and displacement, such as the lack of housing and good nutrition, the deprivation of aid, food, and the fear of bombing. Some displaced families are threatened in the southern governorates, such as Aden or Lahj, and racism is practiced against them in other areas, such as Hadramawt and Shabwa.

The impact of discrimination against cleaners in Yemen is public. In displacement contexts, there are negative behaviors, such as discrimination against children and negative treatment towards girls. In the following statement taken from the structured interview, Suad, a female school leader, describes the situation of three girls who left their schools to work as cleaners:

In one of the Sana'a University offices, I found three young sisters who work as cleaners at the university. The eldest one is in the first grade of secondary school. Through my conversation with them, I discovered that they were studying when their father was with them before the war. When the war began, the father disappeared because he was in the military, and now, no one knows anything about him . . . During my conversations with the girls, they showed the extent of their dissatisfaction with the people dealing with them as cleaners, as when they were with their father, they had a comfortable life. Of course, this affected me a lot, and I felt sad about these children and the rest of the Yemeni children.

The above story shows how internal displacement can widen marginalization and discrimination against vulnerable groups of society and how displacement can widen discrimination as well. In these harsh situations, these vulnerable groups, especially children, are at risk of re-formation of identity as discussed in the following theme.

3.1.2. From Child Soldiers to Feeding the Conflict of Identities

In the forgotten conflict in Yemen, the impact mainly affects children who are recruited for participating in the battlefronts. A further danger of this recruitment is the process of the religious preparation given to these recruited children in advance. In other words, children undergo the so-called "cultural courses" in the Houthis-controlled areas. They are religiously mobilized in other areas as well. In general, all the warring parties employ a religious discourse in this conflict, and accordingly, child fighters receive religious justifications that urge them to participate in battles under the pretext of performing a duty that requires self-sacrifice. In this regard, Yasmin, a female teacher of English stated the following in a structured interview:

The lack of awareness among school learners and children greatly contributes to exploiting and influencing them with illusions of victory or martyrdom, and that manhood is to carry weapons. The warring parties fuel sectarian feelings in them for fighting. This deprives them of their basic rights (e.g., the right to live, the right to education, and the right to live a decent life). We see the school learners who are affected by this propaganda wearing the military uniform and carrying weapons instead of wearing the school uniforms and carrying pens. This raises concerns about the future of coexistence between generations because of this conflict at the cultural and the national level.

The above statement shows that the recruitment of children poses a great danger to their lives, and this constitutes a crime against their right to life and education. In addition, this problem threatens the future of children in society in general. Even if the war ends and the peace phase begins, it is difficult to control and rehabilitate children who have been recruited and indoctrinated, which can lead to a deep-rooted societal conflict.

There is a deep concern for the future, as child soldiers will not only be a source of danger to themselves but also to society. Peace education programs can be useful in this regard. However, it seems that not all parties care about education. Rather, they are interested in fighting and continuing the discourse of war. With the continued deterioration of education on the one hand and the deterioration of the values of coexistence on the other, any efforts toward the discourse of peace seem to be hampered.

It is not acceptable to justify the involvement of children in battles. However, it is possible for such fighters to be reintegrated into society after the war ends because they were forced to fight for economic reasons. However, this is challenging for ideologically driven children. Sadeq described this problem as follows:

The danger is also from children who are ideologically involved in the war. It is difficult for us to rehabilitate them afterwards, while it can be done with children who go to war to get money.

Recruiting children harms both the children and society. Further, recruiting children by using ideological discourse will create other obstacles to having sustainable peace in the future. This is simply because these child fighters have no education except for the ideological thoughts on how to fight and show loyalty to a single entity that does not

accept differences in society. This leads to another interrelated problem that concerns feeding the conflict of identities among children regardless of whether it is for fighting or educational purposes.

In the ongoing war, the political, religious, and cultural factors turned out to be a conflict of identities. In other words, the discourses of the conflicting parties embrace different identities, and this is reflected and even practiced in the media and press, and mosques. However, the most dangerous matter is that this has begun to show a direct impact on education. This manifests through the redesigning of the school content curriculum in a way that can be used to effectively disseminate the ideological visions of the dominant party. This has happened particularly in the northern part, as well as in other regions of Yemen. Children are mobilized with political slogans in schools that represent the discourse of the dominant political party in such areas. Regarding this concern, Rawan said the following:

We are seeing what is circulated about the attempts of the Houthis-ruled party in the north to make deep changes in the curricula. The Houthis are working to change their culture by presenting a narrative based on religious mobilization, and the introduction of sectarian concepts that will negatively affect the future. We are very worried about our future, and we do not know what will happen in the light of this struggle that uses religious mobilization to gain political interests.

As the above statement reads, it seems that the warring parties are seeking to gain more followers by employing all means, including the educational system, and mobilization is carried out using the media and ideology, causing deep societal changes with ideologically and politically contradictory identities.

3.1.3. Societal Rejection and the Destruction of Mental Health

Because of the collapse of the health system and the lack of any efforts toward improvement, the country has become a suitable environment for the spread of epidemics. Accordingly, child learners are the weakest group that is directly affected by health concerns. Therefore, child learners suffering from malnutrition and epidemics find it challenging to engage in educational programs. Likewise, war affects the psychological well-being of children, leading to the presence of profound psychological disorders, such as post-traumatic stress, depression, suicidal thoughts, and somatic and behavioral problems. At the same time, Yemen (even before the war) lacked a health system that dealt with psychiatry. Further, the presence of a cultural misunderstanding concerning the recognition of psychiatry also showed that the community considered people who visited a psychiatrist as mad. All these factors complicate the issue of confronting the psychological conditions of people in general and of child learners in particular. The study participants provided stories that highlighted this phenomenon, and we can provide an example from Amran below:

There is a large group of children suffering from psychological problems and behavioral disorders, especially those who live in the bombed areas. Our neighbor used to live in one of the conflict zones, but he along with his children was displaced to our neighborhood. Two of his children could not go to school because of fear and anxiety, and there are no psychiatrists to deal with these cases. And even if psychiatrists exist, not many people will go to them because of fear of social stigma.

The above example reflects the lack of psychological care units/centers and the presence of psychological disorders among children in Yemen. Further, a common fear in Yemeni society relates to the fear of visiting psychiatrists. As a result, parents tend to keep their children suffering from psychological disorders at home rather than seek help from psychiatrists. Changing such a societal rejection, teaching about the importance of psychiatry, and encouraging people to benefit from psychological treatment are measures that are urgently required to allow affected children to receive an education that is essential for peacebuilding during and after the war.

3.2. Exploiting Education for Profit and the Normalization of Negativity

Even before the war, many of those with a good source of income preferred to enroll their children in private schools. These days, the deterioration of education quality in public schools has multiplied, leading to a huge increase in private schools that invest to increase financial benefits rather than improve education. This also relates to the education sector officials who receive their shares of such financial benefits. In other words, education has, unfortunately, turned into an industry for earning money rather than for providing content that helps learners to gain the required knowledge, skills, and competencies. Husain highlighted this issue in the following statement:

The war has contributed to creating an environment capable of transforming education into a negative investment, so private schools increased significantly. Compared to the absence of salaries in the state schools, teachers go to the private schools in search of what would meet their material needs. The matter was negatively reflected on the education process itself and on the economic side as well. There is no mentorship on schools' work or their content. They only care about money.

The challenges of displacement and the financial conditions of learners and their families lead to the spread of negative behaviors and crimes, with the administration being unable to rectify such behaviors. It appears that the war has caused disruptions to administrative and even social systems that have remained entrenched over the years. Negative behaviors, such as theft, are prohibited by law and are socially rejected; however, because of the war, this behavior turns into a normal phenomenon, especially among learners and young people.

These behaviors might extend from young people to the rest of society, creating a major imbalance in social values. Killing among civilians has also increased. With many people feeling that crime has become a common practice, especially in the absence of a legal or security system that is capable of protecting people from gangs and outlaws, the crimes might continue and increase in quantity, taking away the freedoms and peace of the people. Regarding this concern, Hadeel, a female teacher, stated the following in her structured narrative:

Almost in every area, urban and rural, some phenomena that we did not know have appeared. Some people try to impose their views on others by force, and injustice prevails over justice. Children are brought up under conditions that present crime as the norm while the right has become an exception.

The greatest danger is that this normalization of unaccepted behaviors compounds with the effects of the continuation of the war, and the weakness of the institutions responsible for protecting citizens on the one hand, or those responsible for raising people's awareness on the other hand. At the same time, education, which is supposed to raise awareness among children and youth, has become weaker, and these negative behaviors are accrued within the educational system.

3.3. Cutting the Salary and Destroying the Teachers' Dignity

The war in Yemen affects teachers via interruptions or irregularities in receiving their salaries. The teachers have not been receiving their salaries for around 40 months, leading to the lowering of education quality, the emergence of psychological disorders among some teachers, the displacement to look for jobs, and the recruitment of unqualified individuals as alternatives to teachers who have stopped teaching. In this respect, Maryam, a school leader, stated the following in a structured interview:

The war destroyed everything in our lives... The teachers see directly what they did not imagine would happen one day... Whoever imagines that the teachers will work without a financial or moral return; financially to help them support those under their responsibility (a wife and children), and morally as they receive no appreciation or thanks. Some teachers continue to teach for fear of losing their job, and some others see that it is

their duty toward the future of their learners. However, teaching will not be professionally conducted since teachers' thinking is occupied, and their psyche is broken.

The interruption of teachers' salaries leads to severe consequences for education quality since many teachers stop performing their teaching duties to search for other sources of income, move to work in remote areas, or teach only irregularly because of allocating part of their time to other positions. Many teachers feel frustrated and that there is less appreciation from society toward their profession. As a result, there is a deep psychological impact on the souls of teachers, as many were unable to adapt to the dilemma of the interruption of salaries and the search for an alternative source of income. Many teachers felt that their dignity was no longer preserved. Almost all the structured and semi-structured interviews highlighted this profound change in teachers' psyche. Teachers face the dilemma of continuing to teach without a salary or stopping teaching and then searching for other jobs. Other jobs are often not commensurate with their social positions, especially when there is a special classification of jobs in the Yemeni society and the level of their social acceptance. Therefore, when a teacher turns to work in a profession that is not socially acceptable, they feel that their dignity has been broken but continues because there is no alternative except starvation. This is highlighted through the structured interview with Saeed, a male teacher, who said the following.

The old folk Yemeni proverb says: "Throat-cutting is better than salary-cutting." Within three years, I find our schools almost empty of the teachers and the learners due to the interruption of salaries, which represents the lifeline of the teachers. There are many tragic human situations we live in and see with our eyes [that many people] suffering from incurable diseases, and unable to buy medicine until they die simply because modesty and self-dignity prevented them from seeking help. There is a teacher in one of the . . . schools who fell on the ground in the school queue between the feet of his learners. He had been exhausted by cancer that has spread in his body six months ago and died without his colleagues' knowledge of his suffering. There is nothing to say but "there is neither power nor might except with/by God".

This statement reinforces our personal observations about the situation of teachers in Yemen. Some teachers turned to look for jobs as porters, others as cleaners, yet their income is not enough for their daily expenses. We are witnessing a community reaction that sympathizes with the situation of teachers in this case, but there do not seem to be any practical solutions to address the teachers' psychological and financial situation. Therefore, the attempt to rehabilitate these teachers needs to work at different levels. The first is related to paying their salaries, and the second is to rehabilitate their dignity and social status within society through establishing psychological and social programs that accommodate this imbalance in their lives.

3.4. A Model of the Interaction of War's Impacts on Education

Our findings showed the direct and indirect impacts of the war, along with the interaction between the impact factors on one hand and the cultural and social contexts on the other, making these impacts more dangerous on education and the future of the country. These impacts and the impact factors need to be considered in the reconstruction process and in reforming the education system. In Figure 1, we demonstrate a simple model we developed that clarifies the complex interaction of several factors. The war directly impacted the creation of displacement, recruiting children for military and militias, adapting education into a war economy, destroying mental health, and cutting teachers' salaries. Negative impacts also emerged because of the interaction of these factors or with cultural and social factors in the context of Yemeni society. Displacement interacted with some negative cultural contexts to reinforce discrimination against some vulnerable groups in society. Furthermore, child recruitment revealed interactions with components of sectarian identities that could foster future conflict. In addition, adapting education for profit led to the destruction of some of the values of society that rejected negative

phenomena, and thus, worked to normalize society to accept these negative phenomena. Furthermore, the problem of mental health became a real obstacle considering the presence of cultural factors that do not favor dealing with psychiatry. Finally, the interaction of salary cuts and some cultural patterns led teachers to feeling deprived of their dignity. This model shows how the war interacted with the cultural and social factors, as well as the emergence of specific problems in the Yemeni context, which we argue is of central importance that should be dealt with seriously in the future.

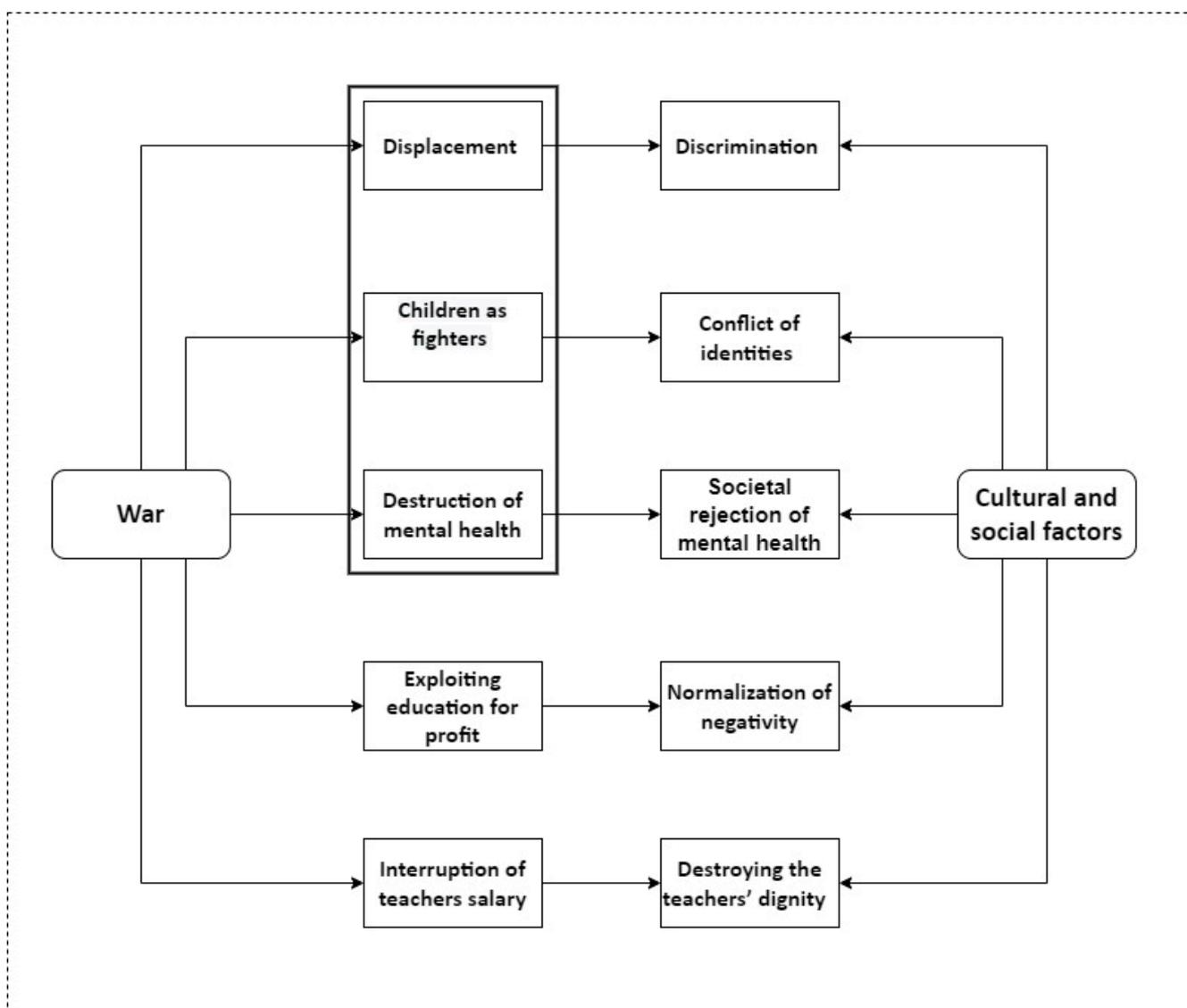


Figure 1. Interactions between war's impacts on education.

4. Discussion and Conclusions

With a central attempt toward building peace in the future, the results of our analyses demonstrated the direct impacts of war on education, and the direct interaction of the cultural, social, and political contexts within the country, along with those of the religions, tribes, and other ideologies. While previous studies and peacebuilding approaches highlighted the importance of reliance on context when attempting to apply other models related to peacebuilding through education [42–44], peacebuilding is a complex phase, especially in contexts that are characterized by ideological and religious mobilizations, where curricula based on sectarian and intolerant foundations are designed. In such a case, importing approaches that have limited capacity and understanding of local contexts is

unlikely to succeed [45]. Accordingly, our findings clearly highlighted the negative impacts of the war on education in Yemen, and any future treatments dealing with peacebuilding in Yemen need to consider these findings in advance. We further discuss these findings below.

In addition to supporting previous studies concerning the direct impacts of war on education, such as destroying schools, using schools as shelters for displaced people, killing and threatening learners and educators, the prevalence of disease, and psychological problems [1–5], our findings also revealed the indirect effects of the war in the Yemeni context wherein the presence of cultural and social factors, such as the class system, sectarian influences, and inherited traditions and customs, led to the emergence of negative effects, such as the discrimination against girls and Blacks, the conflict of child identities through the presence of profound changes in school curricula, the normalization of negativity in the society, the spread of psychological conditions with the society's rejection of psychological treatments, and the destruction of teachers' dignity.

The forced displacement due to the war is a major challenge to education. This direct impact causes children to lose many years of schooling and girls may drop out of school because of the families' difficult financial conditions or psychological pressures. The displacement phenomenon has led to the presence of discrimination. While previous studies reported on discrimination against vulnerable groups during displacement, especially children and women [46,47], our findings also showed the direct impact of the inherited cultural contexts that reinforced and compounded discrimination with further dominance on children of different colors. The discrimination issue is also related to gender and region, making it hard to unify efforts toward a peaceful society. Further, recruiting child learners for armed groups with a focus on changing their identities is a dangerous impact of the war on education in the nation. This makes it challenging when it comes to the development of post-conflict education, which may have negative or positive consequences [13]. Our findings also point to how the recruitment of children can be a complex problem in the future. In other words, raising children to commit violence and excluding them from education are problems that overlap with another more serious issue concerning the nature of the content that they receive before or during sending them to the battles. This problem necessitates a focus on dismantling the ideological content and creating a trend toward characterizing neutral content on national grounds that transcend religious, ethnic, and sectarian differences.

Our findings also show how the war led to psychological disorders that affected children's psychological well-being and created a need for comprehensive psychiatric care in the country. Nevertheless, such a matter must overcome society's large-scale refusal to deal with psychological treatment. This calls for developing effective policies that change people's perception of mental health and its importance for change in the post-conflict era, especially regarding children. Meanwhile, the findings showed how the conflict led to the normalization of negative behaviors among school children. This was also directly related to the schools' inability to deal with many problems at once. There has, of course, been a failure of planning education during such conflicting times. Officials in the education sector care most about how to earn financial benefits, for example, by giving a chance for the privatization of schools without proper guidance or evaluation of these schools' practices. Additionally, our findings point out that the lack of providing teachers' salaries is also a direct impact of the war on education, making teachers continue to suffer searching for food and water. Because of these impacts, the dignity of teachers is not maintained. Teachers in Yemen are going through psychological and financial challenges. It is imperative for the ruling parties in Yemen to pay the salaries and establish psychological and social programs that care for the teachers' and learners' mental health.

In conclusion, every child deserves a good education, not only mastering reading, writing, and arithmetic skills but also acquiring life skills and developing their capacity for independent opinion and critical and ethical thinking. These skills are not only needed for their future careers but also for the wider society to prevent violence and terrorism and build peace. An appropriate reform of the education system can foster the appreciation

of cultural and religious differences and fight against ignorance, hatred, and disputes, leading to stability and prosperity. We can prepare active citizens that are characterized by values of tolerance and respect for diversity, justice, and equality, who can build a better society. Nevertheless, educating the poorest and the most marginalized children requires bold political leadership and an increase in the financial commitment to schools. Policies, educational programs, curricula, and other educational materials should contribute to enhancing understanding, solidarity, and tolerance between individuals in the quest for social cohesion. This cannot happen unless the warring parties cease the conflict and start planning how to support education, provide teachers' salaries, care for children suffering from psychological disorders, and build a new Yemen. Meanwhile, initiating and implementing collaboration between the community members and international organizations, providing peace education as a taught subject, and establishing social action fundraising to support teachers will have a potential impact on Yemen.

Author Contributions: Conceptualization, validation, formal analysis, investigation, writing—original draft preparation, A.M., M.A. and A.H.; methodology, A.M., M.A. and A.H.; writing—review and editing, A.M. and M.A.; visualization, M.A.; supervision, A.M. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

Data Availability Statement: Written informed consent has been obtained from the participants to publish this paper.

Conflicts of Interest: The authors declare no conflict of interest.

Appendix A

The structured interview

Dear participant,

War is the enemy of development and the killer of humans' hopes. In this structured interview, we are interested in exploring your experiences regarding the impact of war on in-service teacher education in Yemen. We appreciate your collaboration by narrating your experiences on the negative sides of the war on in-service teacher education. We have listed some general negative sides for your guidance; however, feel free to reflect upon any other ones that are not mentioned here.

1. Forcing thousands of families to flee to safer areas.
2. Separating families in quest for income.
3. Forcing children to drop out of schools and/or receiving low quality education.
4. Overcrowding classrooms with the displaced in safer areas, affecting their learning.
5. Dispersing peers, making the adaptation of the displaced students more difficult.
6. Affecting children's psychology and their academic achievement.
7. Recruiting many children for military purposes, putting children's lives at risk.
8. Spreading malnutrition, diseases among the displaced, affecting their capacities.
9. Keeping female children at home and sending only males to schools.
10. Increasing child labor due to families' financial challenges.
11. Destroying schools and/or using them for military purposes.
12. Killing, injuring, or assaulting students, teachers, and educators.
13. Declining the education quality.
14. Depriving employees of their salaries.

Thank you very much for your collaboration.

References

- O'Malley, B. *Education under Attack, 2010: A Global Study on Targeted Political and Military Violence against Education Staff, Students, Teachers, Union and Government Officials, Aid Workers and Institutions*; UNESCO: Paris, France, 2010.
- Ali, F.Q. Study of the impact of socio-political conflicts on Libyan children and their education system. *Int. J. Engl. Lang. Transl. Stud.* **2021**, *9*, 50–58.
- Dar, A.A.; Deb, S. Mental Health in the Face of Armed Conflict: Experience from Young Adults of Kashmir. *J. Loss Trauma Int. Perspect. Stress Coping* **2020**, *26*, 287–297. [[CrossRef](#)]
- Sharifian, M.S.; Kennedy, P. Teachers in war zone education: Literature review and implications. *Int. J. Whole Child* **2019**, *4*, 9–26.
- Poirier, T. The effects of armed conflict on schooling in Sub-Saharan Africa. *Int. J. Educ. Dev.* **2012**, *32*, 341–351. [[CrossRef](#)]
- UNICEF. *Syria Education Sector Analysis: The Effects of the Crisis on Education in Areas Controlled by the Government of Syria, 2010–2015*; UNICEF: New York, NY, USA, 2015.
- Al-Bazzaz, S.M.J. The Social and Psychological Effects of the Iraqi-American War on Children in Iraqi Society. Unpublished. Master Thesis, College of Arts, Baghdad University, Baghdad, Iraq, 2005.
- Rahima, N.S. The impact of armed conflicts on the education quality in Iraq. *J. Cent. Arab. Int. Stud. Al-Mustansiriya Univ.* **2017**, *14*, 220–255.
- Ministry of Education. *Periodic Statistics*; Ministry of Education: Sana'a, Yemen, 2016.
- Studies and Educational Media Center. *Outside the School Walls: Implications of the War and Its Implications for Education in Yemen*; Studies and Educational Media Center: Sana'a, Yemen, 2015.
- Ministry of Education. *Education in Yemen: Five Years of Withstanding Aggression*; Ministry of Education: Sana'a, Yemen, 2020.
- Dunlop, E.; King, E. Education at the intersection of conflict and peace: The inclusion and framing of education provisions in African peace agreements from 1975–2017. *Comp. A J. Comp. Int. Educ.* **2019**, *51*, 375–395. [[CrossRef](#)]
- Bush, K.D.; Saltarelli, D. *The Two Faces of Education in Ethnic Conflict: Towards a Peacebuilding Education for Children*; UNICEF Innocent Research Centre: Florence, Italy, 2000.
- Baron, A. Foreign and Domestic Influences in the War in Yemen. In *The Proxy Wars Project; PWP Conflict Studies*; Virginia Tech Publishing: Blacksburg, VA, USA.
- Hasanović, M. Psychological consequences of war-traumatized children and adolescents in Bosnia and Herzegovina. *Acta Medica Acad.* **2011**, *40*, 45–66. [[CrossRef](#)]
- Wang, Y.; Feng, Y.; Han, Q.; Zuo, J.; Rameezdeen, R. Perceived discrimination of displaced people in development-induced displacement and resettlement: The role of integration. *Cities* **2020**, *101*, 102692. [[CrossRef](#)]
- Almahfali, M. Anti-Black Racism in Yemen: Manifestations and Responses. Arab Reform Initiative. 2021. Available online: <https://www.arab-reform.net/publication/anti-black-racism-in-yemen> (accessed on 5 February 2022).
- Muthanna, A. Exploring the Beliefs of Teacher Educators, Students, and Administrators: A Case Study of the English Language Teacher Education Program in Yemen. Master's Thesis, METU: Middle East Technical University, Ankara, Turkey, 2011.
- UNICEF. *Yemen: Country Report on Out-of-School Children*; UNICEF: New York, NY, USA, 2014.
- Muthanna, A.; Sang, G. Brain drain in higher education: Critical voices on teacher education in Yemen. *Lond. Rev. Educ.* **2018**, *16*, 296–307. [[CrossRef](#)]
- Keiichi, O. Achieving education for all in Yemen: Assessment and current status. *J. Int. Coop. Stud.* **2004**, *12*, 69–89.
- Ghundol, B.; Muthanna, A. Conflict and international education: Experiences of Yemeni international students. *Comp. A J. Comp. Int. Educ.* **2022**, *52*, 933–948. [[CrossRef](#)]
- Muthanna, A.; Sang, G. State of University Library: Challenges and Solutions for Yemen. *J. Acad. Libr.* **2019**, *45*, 119–125. [[CrossRef](#)]
- UNICEF. *Education Disrupted: Impact of the Conflict on Children's Education in Yemen*; UNICEF: New York, NY, USA, 2021.
- Mwatana. War of Ignorance: Field Study on the Impact of the Armed Conflict on Access to Education in Yemen. 2021. Available online: <https://mwatana.org/wp-content/uploads/2021/01/Executive-summary-of-education-study-FINAL-Jan-28-21-1.pdf> (accessed on 5 March 2022).
- Moyi, P. Who goes to school? School enrollment patterns in Somalia. *Int. J. Educ. Dev.* **2012**, *32*, 163–171. [[CrossRef](#)]
- World Bank. *Somalia Economic Update: Building Education to Boost Human Capital*, 4th ed.; World Bank: Washington, DC, USA, 2019.
- Bekalo, S.A.; Brophy, M.; Welford, A.G. The development of education in post-conflict 'Somaliland'. *Int. J. Educ. Dev.* **2003**, *23*, 459–475. [[CrossRef](#)]
- Lauritzen, S.M. Building peace through education in a post-conflict environment: A case study exploring perceptions of best practices. *Int. J. Educ. Dev.* **2016**, *51*, 77–83. [[CrossRef](#)]
- Blattman, C.; Fiala, N.; Martinez, S. Generating Skilled Self-Employment in Developing Countries: Experimental Evidence from Uganda. *Q. J. Econ.* **2013**, *129*, 697–752. [[CrossRef](#)]
- Transfeld, M.; Heinze, M.C. *Understanding Peace Requirements in Yemen*; Carpo: Bonn, Germany, 2019.
- Webb, C. Yemen and education: Shaping bottom-up emergent responses around tribal values and customary law. *Int. J. Comp. Educ. Dev.* **2018**, *20*, 148–164. [[CrossRef](#)]
- Griffiths, T.G. Education to transform the world: Limits and possibilities in and against the SDGs and ESD. *Int. Stud. Sociol. Educ.* **2020**, *30*, 73–92. [[CrossRef](#)]

34. Higgins, S. Culturally responsive peacebuilding pedagogy: A case study of Fambul Tok Peace Clubs in conflict-affected Sierra Leone. *Int. Stud. Sociol. Educ.* **2019**, *28*, 127–145. [[CrossRef](#)]
35. Baranović, B. History Textbooks in Post-war Bosnia and Herzegovina. *Intercult. Educ.* **2001**, *12*, 13–26. [[CrossRef](#)]
36. Ommering, E.V. Formal history education in Lebanon: Crossroads of past conflicts and prospects for peace. *Int. J. Educ. Dev.* **2015**, *41*, 200–207. [[CrossRef](#)]
37. Yin, R.K. *Case Study Research: Design and Methods*, 4th ed.; Sage Publications: Washington, DC, USA, 2009.
38. Clandinin, D.J.; Huber, J. Narrative inquiry. In *International Encyclopedia of Education*, 3rd ed.; Peterson, P., Baker, E., McGaw, B., Eds.; Elsevier: New York, NY, USA, 2010; pp. 436–441.
39. Denzin, N.K.; Lincoln, Y.S. Introduction: Critical methodologies and indigenous inquiry. In *Critical and Indigenous Methodologies*; Denzin, N.K., Lincoln, Y.S., Eds.; Sage: Thousand Oaks, CA, USA, 2008.
40. Flick, U. *Introducing Research Methodology*; Sage: London, UK, 2011.
41. Charmaz, K. The Power of Constructivist Grounded Theory for Critical Inquiry. *Qual. Inq.* **2016**, *23*, 34–45. [[CrossRef](#)]
42. De Coning, C. Understanding peacebuilding: Consolidating the peace process. *Confl. Trends* **2008**, *4*, 45–51.
43. Milton, S.; Barakat, S. Higher education as the catalyst of recovery in conflict-affected societies. *Glob. Soc. Educ.* **2016**, *14*, 403–421. [[CrossRef](#)]
44. UNICEF. *Conflict Sensitivity and Peacebuilding: Programming Guide*; UNICEF: New York, NY, USA, 2016.
45. Lewis, A. The need for contextualisation in the analysis of curriculum content in conflict. In *Education and Conflict Review: Theories and Conceptual Frameworks in Education, Conflict and Peacebuilding*; Pherali, T., Magee, A., Eds.; Centre for Education and International Development (CEID): London, UK, 2019; pp. 28–32.
46. Menier, C.; Forget, R.; Lambert, J. Evaluation of two-point discrimination in children: Reliability, effects of passive displacement and voluntary movement. *Dev. Med. Child Neurol.* **1996**, *38*, 523–537. [[CrossRef](#)] [[PubMed](#)]
47. Stark, L.; Roberts, L.; Wheaton, W.; Acham, A.; Boothby, N.; Ager, A. Measuring violence against women amidst war and displacement in northern Uganda using the “neighbourhood method”. *J. Epidemiol. Community Health* **2009**, *64*, 1056–1061. [[CrossRef](#)]