

Shattered hierarchy: how the Gaza conflict demolished Maslow's pyramid of needs

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Accepted: 19 February 2024 © The Author(s) 2024

Abstract

Conflicts and wars have a profound impact on human needs, as vividly illustrated by the ongoing crisis in Gaza. This paper aims to systematically examine how these crises affect individuals' ability to meet their basic and higher-order needs, as conceptualized by Maslow's hierarchy. By employing Maslow's framework, this paper seeks to uncover the specific ways in which conflict disrupts the fulfillment of essential human needs and to identify targeted interventions that can mitigate these effects. Through this focused lens, I hope to contribute to a deeper understanding that supports efforts to end the war. In this paper, a methodical approach that integrates a review of online news, media reports, published official reports from international organizations, and academic publications was adopted to identify the current challenges in Gaza impacting the different levels of need. An exploration through the framework of Maslow's hierarchy revealed the extensive humanitarian challenges stemming from the blockade and military actions since 2008. There are significant disruptions across all levels of Maslow's hierarchy. Despite the severe compromise in basic needs like safety and physiological sustenance, there is a notable resilience in the pursuit of transcendence needs among the residents by transcending personal suffering through acts of solidarity, altruism, and community engagement and exhibiting a deeper sense of spirituality and faith that provide solace and a sense of connection to a larger purpose. There is an urgent need to end the conflict, facilitate unrestricted aid, and address the multifaceted needs of Gaza's population. Strategies that support both immediate survival and long-term personal and communal growth in the face of adversity are critically needed. Essential initiatives include establishing community support networks for critical needs like food, shelter, and healthcare, alongside promoting economic stability through livelihood projects. Additionally, the development of online education programs offering vocational training and digital literacy, in partnership with international institutions, is crucial. These initiatives, tailored to Gaza's context and aimed at overcoming siege-related barriers, are vital for empowering residents with the skills for community rebuilding, economic self-sufficiency, and enhanced social cohesion. Such strategies are indispensable for addressing immediate adversities while laying a foundation for sustainable future growth.

Keywords War · Gaza · Maslow's hierarchy · Needs · Conflict

Introduction

Wars and conflicts have a profound impact on the fundamental needs of people, as seen in the experiences of Ukrainians, Syrians and Palestinians (Webster & Neal, 2022). The situation in Gaza, shaped by the extensive blockade imposed by Israel, presents a humanitarian crisis of unprecedented scale. Since 2008, the Gaza Strip has been significantly

affected by a series of conflicts and political developments that have shaped its current humanitarian and socio-political landscape. This period marked the beginning of a stringent blockade imposed by Israel, severely restricting the movement of people and goods in and out of Gaza. The blockade was a response to the takeover of Gaza by Hamas (an acronym of its official name the Islamic Resistance Movement) in 2007, which led to heightened tensions and periodic military confrontations between Israel and Palestinian factions in Gaza (UNICEF Middle East and North Africa, 2022). These conflicts, including major escalations in 2008-2009, 2012, and 2014, have resulted in a tragic toll of human suffering including a staggering number of casualties, with

Published online: 28 February 2024



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thousands of deaths and injuries, extensive displacement of the population, widespread destruction, and a deepening humanitarian crisis. The political isolation of Gaza, coupled with recurrent hostilities, has severely hindered economic development, exacerbated poverty, and limited access to essential services, making the pursuit of normalcy and reconstruction an ongoing challenge for its residents (Hasanovi et al., 2020; ReliefWeb, 2023). The recent conflict that started when Israel declared the war as a response to an unprecedented attack by Hamas on Israel on the morning of October 7th, 2023 has been particularly destructive, inflicting severe harm on Palestinian lives and disproportionately impacting vulnerable groups, notably women and children. Hamas has stated that their attack was in response to the 16-year blockade on Gaza, ongoing Israeli military operations in West Bank cities, increased violence from settlers against Palestinians, and the continued expansion of settlements, which are considered illegal under international law (Al Jazeera, 2023a). Considering the ongoing conflict in Gaza, it's crucial to understand how such crises impact the fundamental human needs of displaced populations, as conceptualized in Maslow's hierarchy.

Since 1948, Palestinians have faced multiple waves of displacement. The first of these began in 1948, during the Arab Israeli War, an event Palestinians refer to as the Nakba, or "catastrophe." During this period, an estimated 700,000 to 750,000 Palestinian Arabs fled or were expelled from their homes and displaced to various locations including the West Bank, Gaza Strip, Jordan, Syria, and Lebanon (United Nations Relief and Works Agency for Palestine Refugees in the Near East (UNRWA), n.d.). Since October 7, 2023, over 85% of Gaza Strip's population, amounting to 1.9 million people, have been displaced, with many families displaced multiple times as they seek safety. By January 8, close to 1.4 million internally displaced persons (IDPs) have found refuge in 154 UNRWA facilities spread across the Gaza Strip's five governorates in addition to others in close vicinity of these installations (United Nations Relief and Works Agency for Palestine Refugees in the Near East (UNRWA), 2024).

In the ongoing Gaza conflict, Israel has completely cut off water, and electricity supplies, significantly exacerbating the humanitarian crisis (CNN, 2023). Additionally, phone and internet services have been frequently interrupted, further isolating the region hindering aid organizations and emergency workers in their efforts to coordinate with the local population and amongst themselves and consequently complicating the delivery of essential services and the execution of relief operations which is significantly impacting the effectiveness of humanitarian assistance (The Washington Post, 2024). The blockade has been severely limiting the entry of humanitarian aid, while healthcare facilities have been facing extensive targeting and besieging (World Health Organization Eastern Mediterranean Region, 2023). The

casualty figures are disproportionately high given Gaza's population size, highlighting the severe impact of the conflict on the civilian population.

The recent displacement of 1.9 million people in Gaza, due to insecurity and destruction of civilian infrastructure is the largest displacement since 1948 and has had profound impacts on both physical and mental health (World Health Organization, 2024). Overcrowded shelters, lacking adequate water and sanitation, have heightened the risk of infectious diseases, with significant increases in respiratory infections, diarrhea, skin infections, and outbreaks of jaundice, meningitis, mumps, and chickenpox. The reported cases of diarrheal illnesses in children under five were 25 times higher in the last three months of 2023 compared to the same period in 2022 (World Health Organization, 2024). The health crisis is exacerbated by the inability to implement public health measures due to access constraints and a severe shortage of medical supplies (United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA), 2024). Mental health has also been severely affected, with an estimated 22.1% of the population in Gaza living with mental health disorders, including severe conditions like schizophrenia and severe depression (Charlson et al., 2019). The ongoing conflict, displacements, and the loss of homes and livelihoods have significantly increased mental health risks, yet treatment options are limited as specialized facilities have ceased operations.

Maslow's hierarchy of needs, a well-known psychological motivational theory, presents a five-level model of human necessities (Maslow, 1943). These are typically illustrated as a pyramid with hierarchical levels. To address higherlevel needs, individuals must first fulfill the lower-level needs. Starting from the base of the pyramid, these needs ascend from physiological, to safety, then love and belonging, followed by esteem, and finally, self-actualization. It's significant to acknowledge that the original five-stage model by Maslow, introduced in 1943 and 1954, was later expanded. This expansion included cognitive and aesthetic needs. Furthermore, in a subsequent work, the model was further enriched by adding transcendence needs as shown in Fig. 1 (Mcleod, 2018). The ongoing conflict in Gaza has profoundly affected each of these levels. For this, the paper systematically analyzes the impact of the Gaza conflict across Maslow's hierarchy of needs starting with an overview of biological and physiological impacts, progressing through safety, love and belongingness, esteem, cognitive and aesthetic, to self-actualization and transcendence needs. Each section is dedicated to a specific tier of needs, ultimately leading to a discussion of the potential limitations and critiques associated with applying Maslow's hierarchy to the complexities of a complex geopolitical conflict. Finally, the paper concludes by synthesizing key findings and offering actionable recommendations for further consideration.



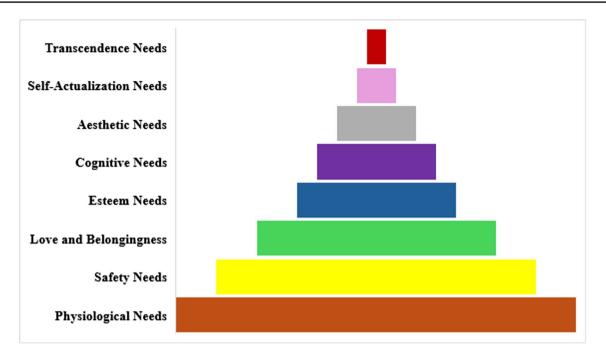


Fig. 1 The Extended model of Maslow's hierarchy of needs

- 1. Biological and physiological needs: In Gaza, the most basic human necessities - air, food, drink, shelter, warmth, and sleep - are severely compromised. Continuous conflict leads to the destruction of homes and infrastructure, disrupting access to clean water, adequate food, and safe living conditions. The continuous bombardment and the relentless sounds of missiles and explosions instill pervasive fear among the residents and severely disrupt their sleep, contributing to the overall deterioration of health and well-being in Gaza. The scarcity of aid and assistance has drastically limited access to food, and the widespread destruction of homes, coupled with forced displacements, has left many without shelter. Additionally, the use of prohibited weapons, such as white phosphorous, has led to significant air and water pollution, further exacerbating the dire living conditions in the region (Kallab et al., 2023). When white phosphorous burns, it produces phosphorus pentoxide, a substance that can cause air pollution and adversely impact health (Yong et al., 2015). This compound reacts with water vapor in the air to form phosphoric acid, which is harmful to inhale and can contribute to air pollution (Kallab et al., 2023). Moreover, it irritates the eyes and the respiratory tract's mucous membranes and the systemic absorption, whether through skin contact or inhalation, leads to the destruction of red blood cells and results in multiorgan damage and central nervous system dysfunction (Yong et al., 2015). Phosphorous weapons can result in severe painful full thickness burns that
- are difficult to manage and treat (Yong et al., 2015). In water, white phosphorous is also hazardous. It is highly soluble in water and can contaminate water sources. When phosphorous compounds enter water bodies, they can cause a range of environmental problems, including eutrophication, which leads to excessive growth of algae and other aquatic plants, disrupting the balance of aquatic ecosystems and harming water quality (US Environmental Protection Agency, 2023). Furthermore, the acute scarcity of clean water has forced many to resort to drinking seawater, a desperate measure that reflects the severity of the humanitarian crisis in the region (Al Jazeera, 2023b).
- 2. Safety Needs: In Gaza, the ongoing conflict has profoundly compromised the safety needs of its residents, as defined in Maslow's hierarchy. The relentless violence and bombings have compromised physical safety and resulted in thousands of injuries and casualties, adding to the atmosphere of constant danger. This situation is further aggravated by the disruption of medical services and supplies, which jeopardizes the health and wellbeing of the population. Additionally, the widespread destruction of homes and infrastructure due to the conflict leaves many without adequate shelter, exposing them to additional risks. The mental health of residents is severely affected by forced displacement and the continuous stress and trauma of living in a war zone, depriving them of psychological security. (El-Khodary et al., 2020).



The unpredictability and instability brought about by the conflict make it challenging for individuals to plan for their future, impacting their sense of stability (Sagbakken et al., 2020). Furthermore, the conflict has had a devastating impact on financial security as many have lost their main sources of income and livelihood, which exacerbated the challenges of daily survival and contributed to a heightened sense of insecurity (Ziadni et al., 2011). The breakdown of social structures and community networks due to the conflict also leads to a loss of social stability, intensifying the sense of insecurity among the population (Ziadni et al., 2011).

- 3. Love and Belongingness Needs: Displacement and conflict fracture communities, separating families and friends. The ongoing conflict in Gaza has also severely impacted the love and belongingness needs of its residents, particularly those who are internally displaced. These individuals often find themselves unable to reunite with their family members, a situation exacerbated even during truce times due to military constraints and restrictions. UNICEF reports that the ongoing conflict in the Gaza Strip, resulted in 17,000 children being either unaccompanied or separated from their families (UNICEF, 2024). Moreover, it resulted in over 10,000 deaths among children and the number is expected to rise (ReliefWeb, 2024a). The enforced separation from loved ones deeply affects their emotional and psychological well-being, as the human need for intimacy, trust, and acceptance within the family unit and larger community networks is disrupted. The inability to maintain these vital connections not only heightens feelings of isolation and loneliness but also erodes the fundamental sense of belonging and emotional support that is crucial for overall mental health and stability (Lavalekar, 2015). With thousands of deaths reported in Gaza, the profound loss of beloved family members and friends has a significant impact on the fundamental human need for close, trusting relationships. The grief and trauma that accompany such losses can deeply disrupt the essential desire for connection and belonging.
- 4. Esteem Needs: Esteem needs, as identified by Maslow, are categorized into two distinct types: self-esteem, which encompasses dignity, achievement, mastery, and independence, and the esteem one receives from others, such as status and recognition (Mcleod, 2018). In Gaza, these needs have been deeply impacted not only by the ongoing conflict but also by the prolonged siege and the pervasive feeling among residents of being invisible and disrespected as human beings. The continuous struggle for survival and the lack of control over their environment have led to a significant erosion of personal dignity and self-respect. Moreover, Israeli forces have been arresting Palestinians men and women in Gaza,

- subjecting them to mistreatment and humiliation undermining their dignity. Opportunities for personal achievement and mastery are severely limited due to the disruption of educational and professional avenues, fostering a sense of stagnation and frustration. The dependency on external aid for basic needs diminishes feelings of independence and self-sufficiency, challenging those who value autonomy. Furthermore, in a situation where survival is a daily challenge, the pursuit of recognition and status becomes secondary, and the breakdown of social structures further limits opportunities for gaining respect within the community. The residents of Gaza also grapple with the feeling that they are overlooked by the international community, adding to the sense of being undervalued and disrespected. This long-standing situation, extending far beyond the current conflict, has led to a profound impact on the esteem needs of the people in Gaza, affecting their sense of worth, their ability to achieve personal goals, and their place within the social fabric of their community.
- 5. Cognitive Needs: During the ongoing conflict in Gaza, the cognitive needs of the population, which include the desire for knowledge, understanding, and intellectual development, have been severely impacted. A significant factor contributing to this is the targeting and bombing of educational institutions and main universities in the region. Such destruction not only disrupts the immediate educational process but also has long-term repercussions on the cognitive development of students and educators alike. The loss of these educational facilities means a loss of opportunities for learning, exploration, and intellectual growth. Students are deprived of their right to education, a key component in cognitive development and critical thinking. The bombing of universities, a hub for higher learning and research, not only halts academic progress but also diminishes the intellectual capital of the region.

Furthermore, the trauma and stress associated with conflict can have profound effects on cognitive functions, such as memory, attention, and problem-solving skills (Robinson et al., 2013). The psychological impact of living in a war zone can impede the ability to focus on educational pursuits and intellectual growth.

In the aftermath of the war, the challenge of rebuilding these institutions and restoring educational systems will be crucial in addressing the cognitive needs of the population. The long-term impact of this disruption on the intellectual development of a generation in Gaza is a significant concern, highlighting the need for substantial support and investment in the region's educational infrastructure and resources.

6. **Aesthetic Needs**: In Maslow's hierarchy of needs, aesthetic needs refer to the human desire for beauty, bal-



- ance, and form in both one's environment and personal experiences (Mcleod, 2018). However, in conflict zones like Gaza, the reality of fulfilling these needs is starkly different. The severe injuries sustained by residents, such as amputations and severe burns, especially those resulting from the use of prohibited weapons, have a profound impact on their ability to meet these aesthetic needs. During the ongoing conflict in Gaza, over 63,000 people were injured with many suffering life-changing injuries such as loss of limbs (ReliefWeb, 2024b). The number of child amputees exceeded 1000 during the first two months of this war and many were done without anesthesia according to UNICEF (Reuters, 2024). These injuries can drastically alter an individual's self-image and perception of their body, leading to a diminished sense of personal beauty and harmony (Cleary et al., 2020). The psychological distress accompanying these physical changes further hinders the ability to engage with or appreciate aesthetic experiences. Additionally, the stigma and altered social perception associated with visible injuries and disabilities can influence how individuals view themselves and their capacity to fulfill aesthetic needs (Sarwer et al., 2022). Moreover, the widespread destruction of cultural and historical sites in Gaza adds to the bleakness of the environment, further hindering the ability to seek and appreciate aesthetic experiences. The contrast between the pre-conflict beauty of one's surroundings and the post-conflict devastation is stark, deeply affecting the residents' ability to find and appreciate beauty in their environment.
- Self-Actualization Needs: Self-actualization, a concept in Maslow's hierarchy of needs, involves realizing personal potential, seeking personal growth, and pursuing peak experiences (Maslow, 1943). However, in Gaza, the ability to fulfill these self-actualization needs has been severely compromised for years due to the ongoing siege, and the situation is further exacerbated by the current conflict. The relentless focus on mere survival in the face of constant threat overshadows any opportunity for self-fulfillment or the pursuit of peak experiences. In such an environment, where safety and basic needs are a daily struggle, the luxury of realizing personal potential becomes nearly impossible. The expected long-term impact of the conflict, caused by the massive destruction and the disruption of normal life, will further impede any chances for personal development after war given that educational and professional opportunities, essential for personal growth, are significantly impacted by the conflict. The psychological toll of living under such stress, trauma, and grief also hinders individuals' ability to focus on self-improvement and the pursuit of their passions and interests. In summary, the siege and ongoing conflict in Gaza have created an environment where

- self-actualization is not just a challenge but often an unattainable goal, deeply affecting the long-term prospects for personal and community development.
- Transcendence Needs: Transcendence needs, as defined in Maslow's revised hierarchy, involve connecting with something larger than oneself, including spiritual experiences, deep connections with others, and contributions to the broader society (Mcleod, 2018). In the challenging context of Gaza, amidst ongoing conflict and siege, achieving transcendence is notably difficult, yet it manifests itself in unique and meaningful ways. Despite the limitations in aid and resources, many people in Gaza have started to help each other, fostering a strong sense of community and solidarity. This mutual assistance not only addresses immediate needs but also serves as a powerful form of transcendence, allowing individuals to connect with and contribute to something greater than themselves. Additionally, religion and faith play a crucial role in transcendence for many in Gaza. In the face of adversity, a deeper sense of spirituality and faith provides solace and a sense of connection to a larger purpose. Artistic expressions, too, have become vital outlets for many. Through art, music, literature, and other cultural forms, people express their resistance to the occupier and their deep connection to their land. These artistic activities are not just creative pursuits; they are acts of transcendence, offering a way for individuals to rise above their circumstances and affirm their identity and values. In this challenging environment, such acts of altruism, artistic expression, and spiritual resilience become crucial pathways to transcendence, providing a sense of hope, meaning, and connection in the face of adversity.

Discussion

Maslow's motivational theory postulates that basic needs must be satisfied (at least partially) before pursuing higherlevel needs in the pyramid (Mcleod, 2018). However, the ongoing conflict in Gaza presents a somewhat paradoxical situation that seemingly contradicts this theory. Despite the significant compromise that sometimes reach to no fulfillment at all in meeting basic lower-level needs, such as safety, physiological, and love/belongingness needs, the people of Gaza have shown a remarkable resilience in fulfilling their transcendence needs. This resilience is somewhat unexpected, considering the severe challenges they face in satisfying more fundamental needs. The continued pursuit of transcendence in Gaza, amidst extreme adversity, suggests a complex interplay of human needs where, even in the absence of fulfilled basic needs, individuals still strive for and often achieve a sense of connection with something



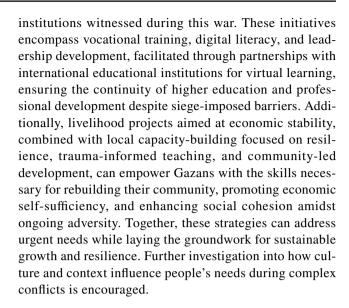
greater than themselves. This phenomenon in Gaza highlights the human capacity to seek meaning, purpose, and a sense of greater connection, even in the most difficult circumstances, challenging the traditional understanding of Maslow's hierarchy.

This paradoxical scenario in Gaza necessitates a detailed evaluation of Maslow's hierarchy's applicability in complex geopolitical conflicts. While Maslow's model provides a structured framework for understanding human motivation, its linear progression and individual-centric perspective may not fully capture the intricate dynamics of needs within such contexts, where cultural and contextual factors significantly shape human experiences (Tay & Diener, 2011). The assumption that needs are met in a sequential order overlooks the simultaneity and interdependence of needs experienced during crises and the unique cultural norms and values that influence individuals' priorities. Moreover, the model's Western-centric origins may not adequately reflect the collective experiences of trauma and resilience that significantly influence societal dynamics in regions like Gaza, where cultural heritage plays a pivotal role in shaping communal responses to adversity (Desmet & Fokkinga, 2020). Despite these limitations, Maslow's hierarchy remains a valuable starting point for analyzing the psychological and social impacts of conflicts. It highlights the need for a more context-sensitive approach that adapts the model to acknowledge the complexity of human needs in conflict zones, integrating cultural and political dimensions that influence behavior.

Conclusion

In conclusion, it is imperative to recognize the urgent need to end the conflict in Gaza and facilitate the unimpeded flow of humanitarian aid. Only through the cessation of hostilities and the provision of essential support can the deeply affected people of Gaza begin to rebuild their lives and fulfill their fundamental human needs. The international community must prioritize and take decisive action to ensure that the residents of Gaza are not only relieved from the immediate distress but are also provided with the necessary resources and opportunities to meet their diverse needs, from the basic physiological requirements to the higher pursuit of self-actualization.

Strategies that support both immediate survival and long-term personal and communal growth in the face of adversity are of utmost importance. Alongside robust community support networks providing immediate relief, including food, shelter, and healthcare, incorporating accessible online education and capacity-building programs tailored to the unique context of Gaza is critical considering the massive destruction of educational



Acknowledgements Qatar National Library funded the publication of this article.

Funding Open Access funding provided by the Qatar National Library.

Data availability NA.

Declarations

Ethical considerations NA.

Conflict of interest The author has no proprietary interests or conflicts of interest related to this submission.

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References

- Al Jazeera (2023a). Fears of a ground invasion of Gaza grow as Israel vows 'mighty vengeance'. https://www.aljazeera.com/news/2023/10/7/world-is-watching-fears-grow-of-a-massive-gaza-invasion-by-israel. Accessed 2 Feb 2024.
- Al Jazeera (2023b). Diseases spread in Gaza amid water and sewage crisis, cholera feared. https://www.aljazeera.com/news/2023/11/ 19/diseases-spread-in-gaza-amid-water-and-sewage-crisis-chole ra-feared. Accessed 5 Dec 2023.
- Charlson, F., van Ommeren, M., Flaxman, A., Cornett, J., Whiteford, H., & Saxena, S. (2019). New WHO prevalence estimates of mental disorders in conflict settings: A systematic review and



- meta-analysis. *The Lancet*, 394(10194), 240–248. https://doi.org/10.1016/S0140-6736(19)30934-1
- Cleary, M., Kornhaber, R., Thapa, D. K., West, S., & Visentin, D. (2020). A quantitative systematic review assessing the impact of burn injuries on body image. *Body Image*, 33, 47–65. https://doi. org/10.1016/J.BODYIM.2020.02.008
- CNN (2023). Israel cut off electricity, food, water and fuel supplies to Gaza. Here's how it looks. https://edition.cnn.com/middleeast/live-news/israel-news-hamas-war-10-13-23/h_7853a23dcfe0d12 c37ff45032b59ea21. Accessed 4 Feb 2024.
- Desmet, P., & Fokkinga, S. (2020). Beyond Maslow's pyramid: Introducing a typology of thirteen fundamental needs for human-centered design. *Multimodal Technologies and Interaction*, 4(3), 38. https://doi.org/10.3390/MTI4030038
- El-Khodary, B., Samara, M., & Askew, C. (2020). Traumatic events and PTSD among Palestinian children and adolescents: The effect of demographic and socioeconomic factors. *Frontiers in Psychiatry*, 11, 485884. https://doi.org/10.3389/FPSYT.2020.00004/BIBTEX
- Hasanovi, M., Šmigalovi, D., & Fazlovi, M. (2020). Migration and acculturation: What we can expect in the future. *Psychiatria Dan-ubina*, 32, 386–395. https://pubmed.ncbi.nlm.nih.gov/33030459/. Accessed 20 Nov 2023.
- Kallab, A., Rossa Mouawad, L., & Bustan, A. (2023). The socio-environmental impact of white phosphorous ammunition in South Lebanon analysis and risk mitigation strategies. https://www.aub.edu.lb/natureconservation/Documents/Brief%20WP%20English.pdf. Accessed 5 Dec 2023.
- Lavalekar, A. L. (2015). Enhancing Relationships for Positive Mental Health (ERPMH). *Indian Journal of Positive Psychology*. https://www.i-scholar.in/index.php/ijpp/article/view/127190. Accessed 5 Dec 2023
- Maslow, A. H. (1943). A theory of human motivation. *Psychological Review*, *50*(4), 370–396. https://doi.org/10.1037/H0054346
- Mcleod, S. (2018). Maslow's hierarchy of needs. https://canadacollege.edu/dreamers/docs/Maslows-Hierarchy-of-Needs.pdf. Accessed 5 Dec 2023.
- ReliefWeb (2023). War on Gaza: An unprecedented and devastating impact. https://reliefweb.int/report/occupied-palestinian-territory/war-gaza-unprecedented-and-devastating-impact-enar. Accessed 20 Nov 2023.
- ReliefWeb (2024a). Gaza: 10,000 children killed in nearly 100 days of war. https://reliefweb.int/report/occupied-palestinian-territory/ gaza-10000-children-killed-nearly-100-days-war. Accessed 4 Feb 2024.
- ReliefWeb (2024b). 1 in 25 people in Gaza are now injured or killed. https://reliefweb.int/report/occupied-palestinian-territory/1-25-people-gaza-are-now-injured-or-killed. Accessed 4 Feb 2024.
- Reuters (2024). Gaza's child amputees face further risks without expert care. https://www.reuters.com/world/middle-east/gazas-child-amputees-face-further-risks-without-expert-care-2024-01-04/. Accessed 4 Feb 2024.
- Robinson, O. J., Vytal, K., Cornwell, B. R., & Grillon, C. (2013). The impact of anxiety upon cognition: Perspectives from human threat of shock studies. *Frontiers in Human Neuroscience*, 7. https://doi. org/10.3389/FNHUM.2013.00203
- Sagbakken, M., Bregård, I. M., & Varvin, S. (2020). The past, the present, and the future: A qualitative study exploring how refugees' experience of time influences their mental health and well-being. Frontiers in Sociology, 5, 528662. https://doi.org/10.3389/FSOC. 2020.00046/BIBTEX

- Sarwer, D. B., Siminoff, L. A., Gardiner, H. M., & Spitzer, J. C. (2022). The psychosocial burden of visible disfigurement following traumatic injury. *Frontiers in Psychology*, 13. https://doi.org/10.3389/FPSYG.2022.979574
- Tay, L., & Diener, E. (2011). Needs and subjective well-being around the world. *Journal of Personality and Social Psychology*, 101(2), 354–365. https://doi.org/10.1037/A0023779
- The Washington Post (2024). Why Gaza keeps losing communications. https://www.washingtonpost.com/world/2024/01/16/gaza-cellphone-communications-blackout/. Accessed 4 Feb 2024.
- UNICEF (2024). Stories of loss and grief: At least 17,000 children are estimated to be unaccompanied or separated from their parents in the Gaza Strip. https://www.unicef.org/press-releases/stories-lossand-grief-least-17000-children-are-estimated-be-unaccompaniedor. Accessed 4 Feb 2024.
- UNICEF Middle East and North Africa (2022). The Gaza strip: The humanitarian impact of 15 years of blockade. https://www.unicef.org/mena/documents/gaza-strip-humanitarian-impact-15-years-blockade-june-2022. Accessed 2 Feb 2024.
- United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA). (2024). Hostilities in the Gaza strip and Israel flash update #88. https://www.ochaopt.org/content/hostilities-gazastrip-and-israel-flash-update-88. Accessed 2 Feb 2024.
- United Nations Relief and Works Agency for Palestine Refugees in the Near East (UNRWA) (2024). UNRWA situation report #63 on the situation in the Gaza strip and the West Bank, including East Jerusalem. https://www.unrwa.org/resources/reports/unrwa-situation-report-63-situation-gaza-strip-and-west-bank-including-east-0. Accessed 2 Feb 2024.
- United Nations Relief and Works Agency for Palestine Refugees in the Near East (UNRWA). (n.d.). Palestine refugees. https://www.unrwa.org/palestine-refugees. Accessed 4 Feb 2024.
- US Environmental Protection Agency (2023). National aquatic resource surveys. Indicators: Phosphorus. https://www.epa.gov/nationalaquatic-resource-surveys/indicators-phosphorus. Accessed 5 Dec 2023.
- Webster, P., & Neal, K. (2022). War and public health. *Journal of Public Health*, 44(2), 215–216. https://doi.org/10.1093/PUB-MED/FDAC060
- World Health Organization (2024). Health conditions in the occupied Palestinian territory, including east Jerusalem Report by the Director-General. https://www.ochaopt.org/page/gaza-strip-critical-. Accessed 2 Feb 2024.
- World Health Organization Eastern Mediterranean Region (2023).
 Attacks on health care in Gaza strip unacceptable, says WHO.
 https://www.emro.who.int/media/news/attacks-on-health-care-in-gaza-strip-unacceptable-says-who.html. Accessed 8 Dec 2023.
- Yong, N., Ng, B., Abdullah, A., & Milner, S. M. (2015). A phosphorus burn. Eplasty, 15, ic15. https://www.ncbi.nlm.nih.gov/pmc/artic les/PMC4364261/. Accessed 4 Feb 2024.
- Ziadni, M., Hammoudeh, W., Abu Rmeileh, N. M. E., Hogan, D., Shannon, H., & Giacaman, R. (2011). Sources of human insecurity in post-war situations: The case of Gaza. *Journal of Human Security*, 7(3), 23–36. https://doi.org/10.3316/JHS0703023

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