The Journal: Utilizing AI for Women's Safety and Empowerment in Urban Areas of Malawi

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Abstract

This paper explores the potential of artificial intelligence (AI) in addressing issues of violence and injustice against women in urban areas of Malawi through the innovative use of an application called "The Journal." The Journal application enables female users to anonymously submit their survival stories, providing a platform for sharing experiences and cultivating an anti-victim blaming environment. The Journal will further provide access to affordable counselling and therapy while raising awareness in relation to women's rights and empowerment. This paper discusses the importance of addressing violence against women, the role of AI in facilitating such efforts, and the benefits of *The Journal* application. Additionally, it highlights potential challenges and ethical considerations associated with leveraging AI for this purpose. The paper concludes by emphasizing the significance of community engagement, policy support, and ongoing research to maximize the impact of AI in combating violence against women.

1 Introduction

1.1 Background

One in five women in Malawi has suffered sexual violence in their lifetime, yet the 2015/16 Malawi Demographic and Health Survey found that only 40% of all women who had ever experienced any type of physical or sexual violence sought help to stop violence (National Statistical Office, 2017); 49% never sought any help or informed anyone about the violence they had experienced. The population of women in Malawi in those years was **8.96 million.** Those are not small numbers.

Close to a decade later, where the female population has increased manifold, the figures have worsened where now, one in three Malawian women have experienced physical violence since age 15. (UNICEF Malawi, 2020; UN Women, 2022; Melnikas, Mulauzi, Mkandawire, & Amin, 2021).

The harmful effects of such violence permeate all aspects of society, hindering progress and perpetuating gender inequality. Addressing this issue requires innovative solutions that leverage the potential of emerging technologies, such as artificial intelligence (AI), to empower women, raise awareness, and facilitate intervention and support mechanisms.

1.2 Research objectives

This paper aims to explore the potential of AI in addressing violence against women in urban areas of Malawi through an application called "The Journal." Specifically, the objectives are to:

i. Highlight the prevalence and impact of violence against women in Malawi's urban areas.
ii. Discuss the role of AI in empowering women and supporting efforts to combat violence.
iii. Introduce The Journal application as a means for women to participate in eradicating the violence against women phenomena
iv. Examine the key features and benefits of The Journal application.
v. Address potential challenges and ethical considerations associated with leveraging AI in this context.
vi. Emphasize the importance of community engagement, policy support, and ongoing research for maximizing the impact of AI in combating violence against women..

2 Violence against women in urban areas of Malawi

2.1 **Prevalence and impact**

Violence against women is still a widespread problem in Malawi's cities, impacting women of all ages and social backgrounds. This violence manifests itself as physical, sexual, and emotional abuse, which is frequently perpetrated by intimate partners, family members, or other members of the community. Women account for two-thirds of MSME owners, a sector with an estimated revenue of USD15.8 billion (FinScope Malawi, 2019), yet violence has a profound impact on women's physical and mental health, education, and economic well-being, hindering their personal development and contributing to a cycle of poverty and inequality.

2.2 **Socio-economic factors and barriers**

A number of socioeconomic variables contribute to the frequency of violence against women in Malawi's metropolitan regions. Gender inequality, restricted access to education and economic opportunities, and cultural norms that perpetuate detrimental gender roles and power imbalances are examples of these. Furthermore, institutional constraints such as weak legal frameworks, restricted access to support services, and cultural stigma make it more difficult for women to seek aid and leave violent circumstances. Furthermore, in a culture where abusers may buy their way out of legal consequences, women are less likely to speak out

2.3 **Importance of addressing violence against women**

Addressing violence against women is crucial for achieving gender equality, promoting social justice, and creating inclusive and safe urban environments. Efforts to combat violence require a comprehensive approach that involves prevention, support for survivors, and legal and policy reforms. AI technologies offer innovative opportunities to enhance these efforts by providing platforms for women's voices to be heard, raising awareness, and facilitating timely intervention and support.

3 Leveraging AI for addressing violence against women.

3.1 **The role of AI in empowering women**

AI technologies have the potential to revolutionize the way violence against women is addressed. They can empower women by providing them with safe spaces to share their experiences, access information and resources, and connect with support networks. AI can also assist in data analysis, identifying patterns and trends to inform prevention strategies and improve the effectiveness of interventions.

3.2 **Introduction to “The Journal” application**

The Journal application is an innovative AI-based platform designed to address violence against women in urban areas of Malawi. It provides a safe and anonymous space for women to share their

survival stories, experiences, and insights. Through this platform, women can find solace, support, and inspiration while contributing to raising awareness about the issue.

3.3 Key features and benefits

The Journal application offers several key features that make it a valuable tool in combating violence against women. Firstly, it ensures anonymity and confidentiality, allowing women to share their stories without fear of retribution or judgment. Secondly, it provides a supportive community where women can connect with others who have had similar experiences, fostering a sense of solidarity and empowerment. To further encourage a spirit of sharing, the application will offer AI Chatbot-support groups, where users can connect with fellow users in their demographic based on age and experience. Thirdly, the application utilizes AI algorithms to identify patterns and trends in the submitted stories, generating valuable insights for policymakers, organizations, and researchers.

3.4 Anonymity and confidentiality

Maintaining anonymity and confidentiality is crucial in ensuring the safety and trust of users within The Journal application. Robust security measures must be implemented to protect the privacy of users, including encryption of data, secure storage practices, and strict access controls. Transparent and comprehensive privacy policies should be established to inform users about the handling of their data, and consent should be obtained before any personal information is used for research or policy purposes.

4 Potential challenges and ethical considerations

4.1 Ensuring data privacy and security

Collecting and storing personal stories within the Journal application necessitates stringent measures to protect data privacy and security. Safeguarding against unauthorized access, data breaches, and potential misuse of personal information is crucial to maintaining the trust of users. Regular audits and assessments should be conducted to ensure compliance with data protection regulations and ethical standards.

4.2 Mitigating bias and discrimination

AI algorithms used within the Journal application must be designed and trained to mitigate biases and discrimination. Ensuring diverse and representative datasets during algorithm development can help prevent the perpetuation of existing biases. Regular monitoring and auditing of algorithms are necessary to detect and address any biases that may arise. Ethical guidelines should be established to promote fairness and inclusivity in the application's operations.

4.3 Safeguarding against misuse

The Journal application must incorporate measures to prevent the misuse of information shared by users. Strict guidelines should be established to prevent harassment, cyberbullying, or any form of harm to users within the platform. Reporting mechanisms and support services should be readily available to address any concerns or incidents of misuse promptly.

4.4 Engaging with stakeholders and communities

The success of the Journal application relies on community engagement and collaboration with relevant stakeholders. Close partnerships with local organizations, support services, and policymakers are crucial for creating a safe and effective environment for women whilst providing access to adequate psycho-social care. Culturally sensitive approaches should be adopted, taking into account the unique needs, perspectives, and experiences of women in urban areas of Malawi.

5 Conclusion

5.1 The promise of AI in combating violence against women

AI technologies, when ethically and responsibly applied, offer significant potential in addressing various social issues. The Journal application, in particular, provides a platform for women to anonymously share their survival stories, contributing to awareness raising, solidarity, and empowerment. The application aims to shed light on GBV and its effects whilst providing a solace and a hope for a better future for the survivors.

5.2 The Journal Application: Empowering women's voices

The Journal application serves as a safe space for women, facilitating the sharing of experiences and providing a supportive community. Its AI-powered capabilities enable the identification of trends and patterns, generating valuable insights for interventions, policy formulation, and research. On the other hand, it being drawn from the concept of physical journaling will provide a sense of familiarity.

5.3 Recommendations for future research and development

Further research and development are necessary to maximize the impact of AI technologies in addressing violence against women. Future studies should focus on evaluating the effectiveness of the Journal application in empowering women, measuring its impact on awareness and support networks, and exploring opportunities to integrate additional features such as access to resources and real-time support services.

In conclusion, the Journal application exemplifies the potential of AI in addressing violence against women in urban areas of Malawi. By providing a safe and anonymous platform for women to share their survival stories, the application promotes awareness, empowerment, and solidarity. However, it is crucial to address potential challenges related to data privacy, bias mitigation, and community engagement to ensure the ethical and effective use of AI in combating violence against women. Through continued research, policy support, and community collaboration, AI technologies can play a vital role in creating safer and more inclusive urban environments for women in Malawi

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