



Empowering Afghan women: The Role of the internet in advancing gender equality

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ABSTRACT: This study investigates the influence of internet access and online platforms on Afghan women's empowerment, focusing on educational, economic, and social dimensions. The purpose is to examine perceptions among 120 participants from Zan Online University regarding these influences. The research employs a quantitative approach with a survey method to gather data on perceptions of educational effectiveness, economic opportunities, remote work facilitation, advocacy support, and public discourse participation. Findings reveal a predominantly positive perception of internet tools in enhancing educational opportunities (65.83% effective or very effective), fostering economic empowerment (66.67% very helpful or extremely helpful), and facilitating remote work (54.17% significant or extremely significant contribution). However, opinions vary on the influence of online communities on advocacy efforts (62.50% moderate to very influential) and support networks in public discourse (61.67% agree or strongly agree). These results underscore the internet's potential in empowering Afghan women while highlighting areas needing improvement and further exploration. The conclusion synthesizes these findings, suggesting continued support for internet infrastructure and tailored educational initiatives to maximize benefits for Afghan women's empowerment.

KEYWORDS: Afghan women; Internet access; Online platforms; empowerment; perceptions

Introduction

Globally, women have historically faced systemic challenges that impede their access to education, economic opportunities, and social rights. Despite advancements in gender equality over the past decades, women around the world still encounter significant barriers in achieving parity with men. The advent of the internet and digital technologies has played a transformative role in breaking down some of these barriers, providing women with unprecedented access to

information, education, and economic opportunities (Anitha & Sundharavadivel, 2012). Online platforms have become crucial in fostering women's empowerment by enabling remote learning, digital entrepreneurship, and civic participation (Kadeswaran, Brindha, & Jayaseelan, 2020).

In Afghanistan, the struggle for women's rights is particularly pronounced due to a combination of political instability, cultural norms, and socio-economic constraints. Afghan

women have traditionally been marginalized, with limited access to education and restricted participation in public life. The resurgence of conservative forces has further exacerbated these challenges, leading to an environment where women's rights are often curtailed (Hakimi, Quchi, Hasas, & Fazil, 2024). However, the internet offers a beacon of hope, presenting new avenues for Afghan women to overcome these obstacles and assert their rights (Hakimi, Fazil, Ahmady, Qarizada, & Quraishi, 2024).

The role of the internet in advancing gender equality in Afghanistan is multifaceted. It provides women with access to online education, which is especially significant in a context where physical attendance at educational institutions can be fraught with challenges (Anitha & Sundharavadivel, 2012). Online universities, in particular, have emerged as vital platforms for Afghan women, enabling them to pursue higher education from the safety and convenience of their homes (Hakimi et al., 2024). These digital institutions offer a range of courses and degrees that can empower women with the knowledge and skills necessary to contribute to their communities and the broader economy.

Education is a cornerstone of women's empowerment. In many parts of Afghanistan, traditional barriers and security concerns hinder women's access to physical schools and universities. Online education addresses these barriers by providing a flexible and accessible alternative. Women can enroll in online universities, attend virtual classes, and complete their studies without the need to travel or face social restrictions (Hakimi et al., 2024). This mode of education not only enhances their academic qualifications but also boosts their confidence and independence (Shahbazi, Hakimi, Ulusi, Rahimi, & Quraishi, 2024).

Economic empowerment through digital platforms is another critical benefit of internet access for Afghan women. The internet enables them to engage in remote work, start online businesses, and participate in digital marketplaces (Talib & Yusoff, 2019). These opportunities are essential in a society where women's mobility is often restricted. By

leveraging digital technologies, Afghan women can achieve financial independence and contribute to the economic development of their families and communities (Alam & Zuma, 2023).

Moreover, the internet serves as a powerful tool for civic engagement and social activism. Afghan women can use online platforms to voice their concerns, advocate for their rights, and connect with global movements (Choudhury, 2009). Social media and online forums provide spaces for women to share their experiences, mobilize support, and engage in discussions on gender issues. This connectivity fosters a sense of solidarity and empowerment, encouraging women to challenge oppressive norms and advocate for policy changes that promote gender equality (Shukla, Kushwah, Jain, & Sharma, 2021).

In conclusion, the internet holds substantial promise for advancing gender equality in Afghanistan by providing women with access to education, economic opportunities, and platforms for civic engagement. While significant barriers remain, targeted interventions that enhance digital literacy, improve access to digital devices, and address socio-cultural constraints can unlock the internet's full potential in empowering Afghan women. As Afghanistan continues to navigate its socio-political challenges, leveraging digital technology will be crucial in promoting gender equality and fostering inclusive development.

Problem statement

Despite global advancements in gender equality, Afghan women continue to face severe socio-cultural and economic challenges that limit their access to education, economic opportunities, and civic participation. The pervasive influence of conservative traditions, coupled with ongoing political instability, restricts women's mobility, curtails their rights, and reinforces gender disparities. Traditional educational systems and economic structures often fail to accommodate the specific needs and constraints of Afghan women, further entrenching their marginalization. In this context, the internet emerges as a potentially

transformative tool, offering alternative avenues for education, economic empowerment, and social engagement. However, significant barriers, including limited digital literacy, inadequate access to technology, and restrictive socio-cultural norms, hinder the effective utilization of internet resources by Afghan women. Addressing these barriers is essential to harness the full potential of digital platforms in advancing gender equality and empowering Afghan women to participate more fully in their society's development.

Research objectives

1. To explore the impact of internet access on the educational attainment and digital literacy of Afghan women, focusing on online platforms enhancing learning opportunities and skills development.
2. To examine the role of internet-based resources in fostering economic empowerment among Afghan women, including facilitating entrepreneurship and access to remote work opportunities.
3. To assess the influence of online communities and social media networks on the social and civic engagement of Afghan women, particularly in terms of advocacy, support networks, and participation in public discourse.

Research questions

1. How does internet access impact the educational attainment and digital literacy of Afghan women, particularly through online learning platforms and skills development opportunities?
2. What role do internet-based resources play in fostering economic empowerment among Afghan women, specifically in terms of facilitating entrepreneurship and access to remote work opportunities?
3. In what ways do online communities and social media networks influence the social and civic engagement of Afghan women, especially regarding advocacy,

support networks, and participation in public discourse?

Literature review

The role of the internet in advancing gender equality has been a topic of significant research and discussion. The internet has the potential to empower women by providing access to education, economic opportunities, and social networks (Shukla, Kushwah, Jain, & Sharma, 2021). This literature review explores how internet access influences the empowerment of women globally, with a specific focus on Afghan women.

Globally, the internet has been instrumental in supporting women's entrepreneurship. Digital startups and e-commerce platforms have provided women with the means to start and grow their businesses (Akhila Pai, 2018). This trend is evident in various countries where women have leveraged digital tools to overcome traditional barriers to entrepreneurship (Talib & Yusoff, 2019). In India, for instance, the proliferation of internet-based businesses has enabled women entrepreneurs to reach wider markets and gain financial independence (Akhila Pai, 2018).

In developing countries, information and communication technology (ICT) has played a critical role in women's empowerment. Anitha and Sundharavadivel (2012) highlight how ICT can bridge the gender gap by providing women with access to information, education, and employment opportunities. This is particularly important in contexts where traditional societal norms restrict women's participation in public life. Similarly, Mivehchi (2019) underscores the significance of ICT in facilitating e-retailing, which has become a viable economic activity for many women in Iran.

The influence of the internet on women's empowerment is also evident in their increased participation in social and civic activities. Online platforms and social media have provided women with new avenues to engage in advocacy and public discourse (Melissa, Hamidati, Saraswati, & Flor, 2015). In Indonesia, for example, women entrepreneurs have used social media to promote

their businesses and advocate for gender equality (Melissa et al., 2015).

In the Afghan context, the internet's potential for empowering women is significant but faces unique challenges. Alam and Zuma (2023) discuss how internet access can influence women's empowerment in Afghanistan by providing educational and economic opportunities. However, cultural and infrastructural barriers often limit the effective use of these digital tools. Despite these challenges, there are success stories where Afghan women have leveraged the internet for educational and entrepreneurial purposes (Hakimi, Fazil, Ahmady, Qarizada, & Quraishi, 2024).

E-learning platforms have emerged as a critical tool for advancing women's education in Afghanistan. Hakimi et al. (2024) explore the challenges and opportunities of e-learning for Afghan women, highlighting how online education can provide flexible and accessible learning opportunities. These platforms help women overcome geographical and societal barriers to education, thus promoting gender equality.

Moreover, the internet's role in economic empowerment is evident in the increasing number of Afghan women engaging in e-commerce. Hakimi, Quchi, Hasas, and Fazil (2024) discuss how e-commerce platforms provide Afghan women with new economic opportunities, enabling them to participate in the global economy. This economic participation is crucial for improving women's social status and financial independence.

Online communities also play a vital role in supporting Afghan women's social and civic engagement. Choudhury (2009) examines how women use the internet to connect with others, share experiences, and mobilize for social causes. These online interactions can help women build support networks and advocate for their rights.

In conclusion, the literature indicates that the internet has a profound impact on women's empowerment by providing access to education, economic opportunities, and social networks.

While there are significant challenges in the Afghan context, the potential benefits of internet access for women's empowerment are substantial.

Research methods

Research design

This study employed a quantitative research approach to investigate the perceptions of 120 participants from Zan Online University regarding the impact of internet access and online platforms on Afghan women's empowerment and participation. The research focused on assessing various dimensions such as educational opportunities, economic empowerment, remote work, advocacy efforts, and public discourse facilitation through structured survey instruments.

Sampling

The sample consisted of 120 participants recruited from four faculties at Zan Online University: Medical, Economics, Education, and Computer Science. Each faculty contributed to the study as follows:

1. Medical: 20 participants
2. Economics: 40 participants
3. Education: 20 participants
4. Computer Science: 40 participants

This stratified sampling approach ensured representation across diverse academic disciplines, providing insights into how perceptions vary based on field of study.

Data collection

Data were collected using a structured questionnaire distributed electronically to participants. The questionnaire included Likert-scale items designed to gauge perceptions on the effectiveness of online platforms in enhancing educational opportunities, improving economic outcomes, facilitating remote work, supporting advocacy efforts, and fostering public discourse for Afghan women.

Data analysis

Quantitative data analysis was conducted using statistical software to calculate descriptive statistics, including frequencies and percentages, for each survey item. This approach

facilitated the systematic examination of participants' responses across different variables, offering a comprehensive view of their perceptions.

Ethical considerations

Ethical guidelines were strictly adhered to throughout the research process. Participants were informed about the purpose of the study, confidentiality of their responses, and their right to withdraw at any stage. Informed consent was obtained from all participants prior to their involvement in the study.

Limitations

Limitations of the study included the potential for response bias inherent in self-reported data and the sample's specificity to Zan Online University, which may limit generalizability to broader populations of Afghan women.

Research findings

The following section presents the findings from the survey conducted among 120 participants at Zan Online University, highlighting perceptions on the impact of internet access and online platforms on Afghan women's empowerment.

Table 1. Demographic Distribution of Women at Zan Online University

Faculty	Number of Women	Age Range
Medical	20	24-25
Economics	40	22-25
Education	20	25-26
Computer Science	40	22-26

The table presents the demographic distribution of women enrolled at Zan Online University across four faculties: Medical, Economics, Education, and Computer Science. The data includes the number of women in each faculty and their corresponding age ranges, providing insights into the composition of the student body within these academic disciplines. This demographic analysis serves to understand the diversity and distribution of female students across different fields of study at the university.

Figure 1 illustrates the perceived effectiveness of online platforms among 120 participants from Zan Online University regarding their impact on educational opportunities and digital literacy for Afghan women. The data shows a varied response, with 41.67% of respondents rating these platforms as "Effective" and 20.83% as "Very Effective." Conversely, 8.33% found them "Very Ineffective" and 12.50% "Ineffective." A significant portion, 16.67%, remained "Neutral" in their assessment. These findings suggest a generally positive perception of online platforms in enhancing educational opportunities and digital literacy, although a notable minority expresses skepticism or neutrality. This insight underscores the

importance of further improving and promoting these platforms to maximize their impact on women's education in Afghanistan. The above figure 2 summarizes the perceptions of 120 participants from Zan Online University regarding the extent to which internet access has improved learning outcomes and skills development among Afghan women. The responses indicate a positive outlook, with 45.00% agreeing and 23.33% strongly agreeing that internet access has been beneficial. Conversely, 6.67% strongly disagree and 10.00% disagree with this notion, while 15.00% neither agree nor disagree. These findings highlight a predominant belief in the positive impact of internet access on learning and skills development among Afghan women, underscoring its perceived importance in educational advancement and empowerment efforts.

The analysis of Figure 3 reveals a nuanced perspective among Afghan women regarding the effectiveness of internet-based resources in fostering economic opportunities, particularly in entrepreneurship. The distribution of responses indicates a positive trend, with a majority (41.67%) considering these resources "Very Helpful" and another significant portion (25.00%)

rating them as "Extremely Helpful." This suggests a strong perceived impact of internet tools on economic empowerment. However, there is also acknowledgment that a minority (4.17%) found these resources "Not Helpful at All," indicating room for improvement in accessibility or relevance. The varying degrees of helpfulness reported—ranging from "Slightly Helpful" to

"Moderately Helpful"—underscore the diverse experiences and perceptions among respondents. Overall, these findings highlight both the potential and the challenges associated with leveraging internet-based resources for enhancing economic opportunities among Afghan women.

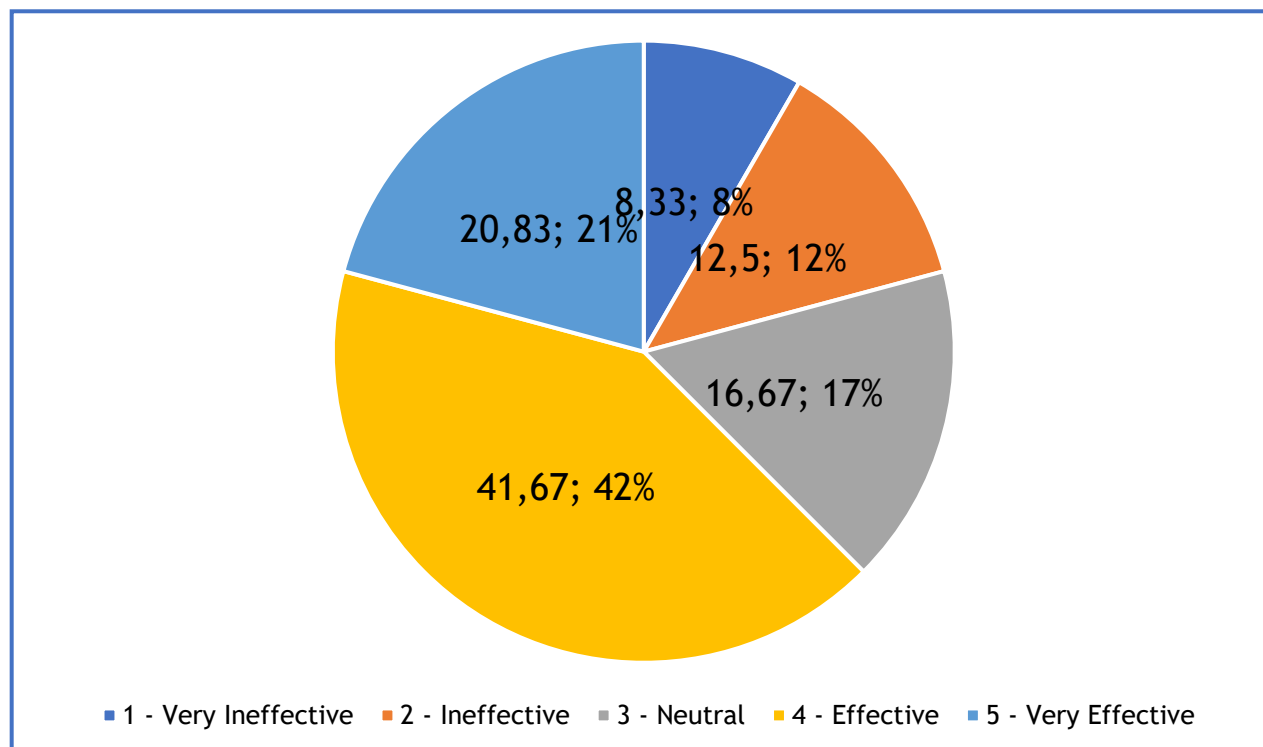


Figure 1. Perceived Effectiveness of Online Platforms in Enhancing Educational Opportunities and Digital Literacy for Afghan Women

This above figure 4 illustrates the varying perceptions among 120 respondents regarding the extent to which internet access has facilitated remote work opportunities for Afghan women. It shows that a significant portion of respondents (37.50%) believe that internet access has contributed significantly to improving access to remote work opportunities. Additionally, 25.00% of respondents perceive a moderate contribution, while 16.67% believe the contribution is extremely significant. On the other hand, 8.33% of respondents feel that internet access has not contributed at all to enhancing remote work opportunities, and 12.50% perceive only minimal contribution. Overall, these findings underscore the mixed perceptions among Afghan women regarding the impact of internet access on facilitating remote

work opportunities, highlighting the need for further exploration and support in this area.

This above figure 5 presents the percentage distribution of responses from 120 participants regarding the perceived influence of online communities and social media networks on advocacy efforts for Afghan women. Responses range from "Not Influential at All" to "Extremely Influential." The data reveals that 8.33% of respondents considered these platforms not influential at all, while 16.67% found them slightly influential. A significant portion, 29.17%, viewed them as moderately influential, and 33.33% rated them as very influential. Only 12.50% of participants believed these platforms to be extremely influential in supporting advocacy efforts. These findings indicate a varied perception of the impact of online platforms on

advocacy for Afghan women, with a substantial number recognizing their role as influential tools,

though opinions differ regarding the extent of this influence.

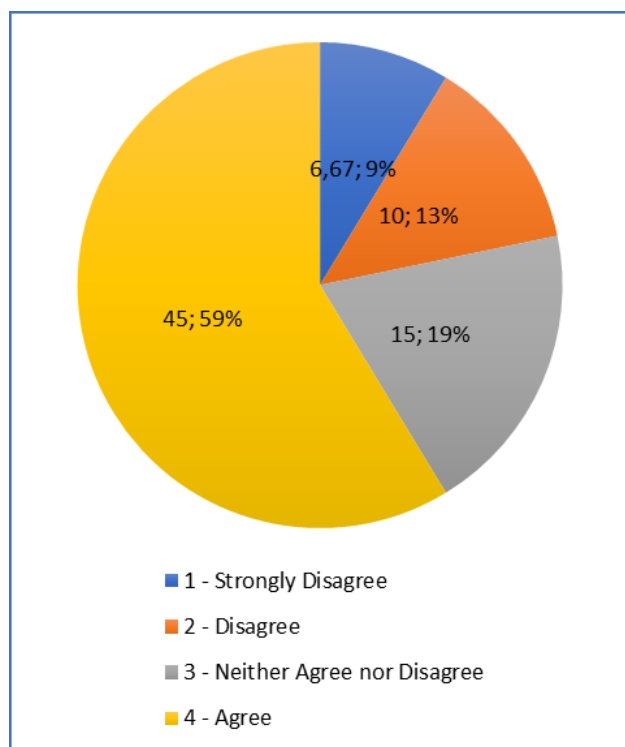


Figure 2. Perception of Internet Access in Improving Learning Outcomes and Skills Development Among Afghan Women

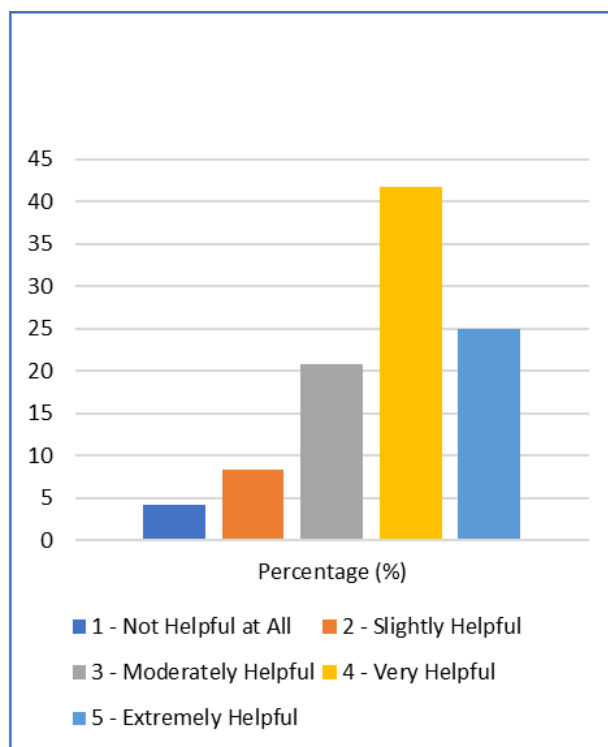


Figure 3. Perception of Internet-based Resources in Fostering Economic Opportunities for Afghan Women

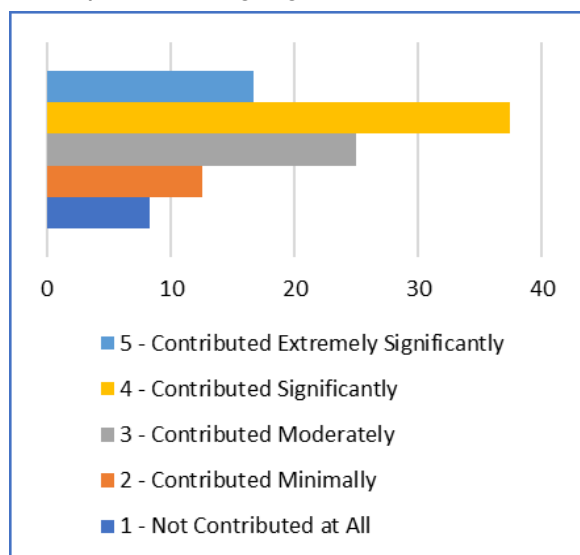


Figure 4. Perception of Internet Contribution to Remote Work Opportunities for Afghan Women

The above figure presents data collected from 120 respondents regarding their perceptions of how online support networks facilitate Afghan

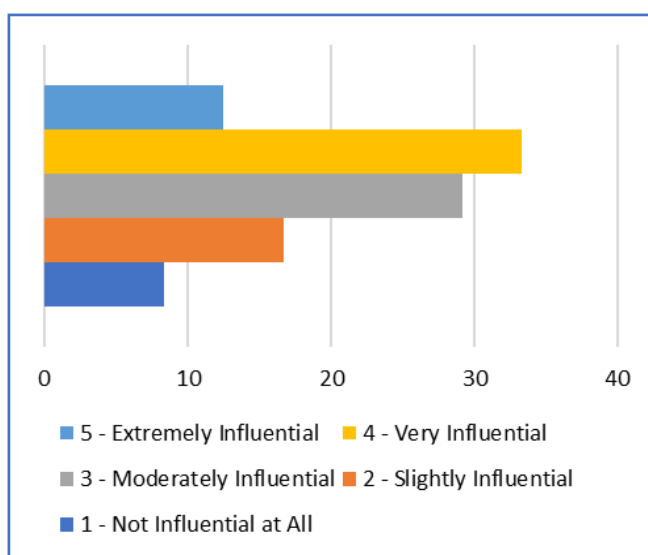


Figure 5 . Influence of Online Communities and Social Media on Advocacy Efforts for Afghan Women

women's participation in public discourse. A significant portion, 41.67%, agreed that these networks are effective (rated as 'Agree' or

'Strongly Agree'), highlighting their perceived role in enhancing public engagement. Conversely, 20.83% expressed neutrality ('Neither Agree nor Disagree'), suggesting varied opinions on the influence of online support networks. A smaller proportion, 20%, indicated disagreement ('Disagree' or 'Strongly Disagree'), indicating skepticism or perceived ineffectiveness. This distribution underscores the mixed perceptions among respondents regarding the impact of online support networks on facilitating Afghan women's participation in public discourse, reflecting the complex dynamics at play in digital advocacy platforms.

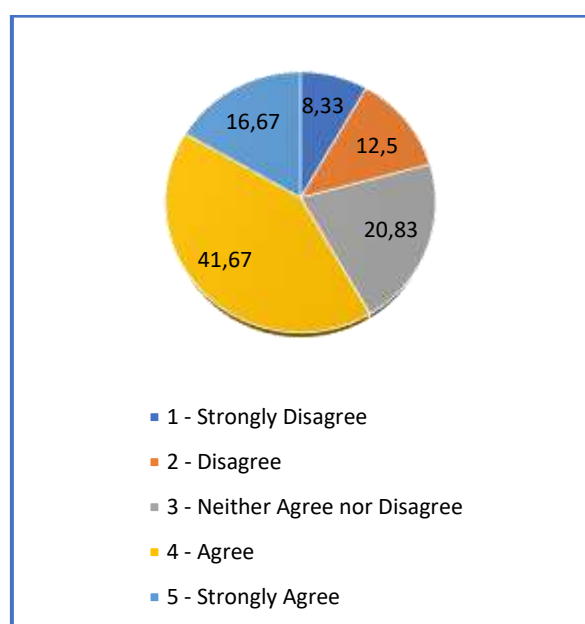


Figure 6. Responses on the Influence of Online Support Networks on Afghan Women's Participation in Public Discourse

Discussion

The findings from this study underscore the significant role of the internet in advancing gender equality and empowering Afghan women across various domains. The literature review highlighted the global impact of internet access on education, economic opportunities, and social engagement for women. Similar to global trends, Afghan women have increasingly leveraged digital tools to overcome traditional barriers and enhance their participation in socio-economic spheres.

In terms of educational empowerment, Figure 1 demonstrates a generally positive

perception among respondents regarding the effectiveness of online platforms in enhancing educational opportunities and digital literacy. This aligns with studies that emphasize how e-learning platforms provide flexible and accessible learning environments, crucial for Afghan women facing geographical and societal constraints (Hakimi et al., 2024). These platforms not only bridge educational gaps but also contribute to broader empowerment efforts by equipping women with necessary skills and knowledge.

Moreover, Figure 2 highlights the perceived benefits of internet access in improving learning outcomes and skills development among Afghan women. The majority of respondents agreed that internet access has positively influenced these aspects, aligning with global research on ICT's role in enhancing educational outcomes (Anitha & Sundharavadivel, 2012).

Economically, Figure 3 illustrates Afghan women's positive perception of internet-based resources in fostering economic opportunities, particularly in entrepreneurship. This finding resonates with studies from India and Iran, where digital platforms have enabled women entrepreneurs to expand their businesses and gain financial independence (Akhila Pai, 2018; Mivehchi, 2019). However, it also reveals some disparities in perceived helpfulness, suggesting areas where further support and development are needed to maximize economic benefits.

Regarding employment, Figure 4 indicates mixed perceptions on the contribution of internet access to remote work opportunities for Afghan women. While a significant proportion acknowledges its role in facilitating remote work, there remains skepticism among some respondents about its effectiveness. This highlights the need for targeted interventions to enhance digital infrastructure and skills training tailored to remote work environments in Afghanistan.

Socially and civically, Figure 5 demonstrates varying opinions on the influence of online communities and social media networks in supporting advocacy efforts for Afghan women. While a substantial number view these platforms

as influential, opinions differ regarding the extent of their impact. This underscores the complex nature of digital advocacy and the need for strategic approaches to leverage these platforms effectively (Choudhury, 2009).

Lastly, Figure 6 examines the role of online support networks in fostering Afghan women's participation in public discourse. The mixed perceptions suggest both opportunities and challenges in leveraging these networks to enhance public engagement. Cultural and infrastructural barriers, as highlighted in the literature (Alam & Zuma, 2023; Hakimi et al., 2024), continue to shape women's experiences with digital empowerment initiatives in Afghanistan.

In conclusion, while the internet offers substantial opportunities for Afghan women's empowerment in education, economy, and social engagement, there are inherent challenges that need to be addressed. Enhancing digital literacy, improving access to reliable internet infrastructure, and fostering supportive policy frameworks are essential steps towards realizing the full potential of digital technologies for gender equality in Afghanistan (Hakimi et al., 2024). Future research should continue to explore these dynamics and advocate for inclusive digital strategies that empower Afghan women effectively.

Conclusion

In conclusion, the exploration of internet access and its impact on Afghan women's empowerment reveals a landscape rich with potential yet fraught with challenges. The literature review highlighted how digital tools, including e-learning platforms and e-commerce, can significantly enhance women's educational attainment, economic participation, and social engagement. These platforms offer critical avenues for overcoming traditional barriers and fostering gender equality by providing access to education, economic opportunities, and support networks.

The study's findings underscored varying perceptions among Afghan women regarding the effectiveness of internet-based resources. While many view these resources positively for

fostering economic opportunities and educational advancement, there remains a notable minority that perceives them as less effective or inaccessible. This disparity suggests the need for targeted interventions to enhance digital literacy and infrastructure, ensuring that all women can benefit equitably from online platforms.

Moreover, the role of online communities and social media in advocacy and public discourse for Afghan women reflects both promise and complexity. While these platforms have enabled women to amplify their voices and advocate for their rights, challenges such as cultural norms and digital divides persist, influencing their effectiveness.

The discussion on remote work opportunities further highlights the mixed perceptions among respondents, indicating both opportunities and barriers associated with internet access. While significant proportions acknowledge its role in expanding job opportunities, concerns about accessibility and relevance in remote work environments remain.

In addressing these complexities, future initiatives should prioritize improving digital access and literacy, fostering supportive policy frameworks, and empowering Afghan women to leverage digital platforms effectively. By doing so, stakeholders can maximize the transformative potential of the internet in advancing gender equality and promoting women's empowerment in Afghanistan and beyond.

Recommendations and future research

Efforts should focus on enhancing digital literacy programs tailored to Afghan women's needs, ensuring they can effectively utilize internet resources for education, entrepreneurship, and advocacy. Policymakers and stakeholders should collaborate to improve internet infrastructure and affordability, addressing barriers that hinder equitable access.

Future research

Future studies could explore longitudinal impacts of internet access on Afghan women's socio-economic outcomes, including educational

attainment, career advancement, and community engagement. Additionally, examining the intersection of cultural factors and digital empowerment strategies would provide insights into effective interventions for enhancing women's participation in the digital economy and public life.

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Disclosure statement

The authors declare no conflict of interest.

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