



## **The Role of the Internet in Women's Empowerment in Afghanistan: A Case Study of Online Universities**

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### **ABSTRACT**

This study explores the role of online universities in empowering women in Afghanistan, particularly focusing on the challenges and opportunities associated with digital education. Afghanistan, with its unique socio-political landscape, presents significant barriers to women's access to education, making online education a viable alternative. The purpose of this research is to assess the impact of online education on Afghan women's empowerment by examining their access to education, professional development, and digital literacy. A self-administered questionnaire was distributed to 150 female students from four faculties – Computer Science, Education, Economics, and Medicine – at an online university. The data were analyzed to determine the extent of online education's contribution to empowering women in Afghanistan. Results indicate that online education has provided significant opportunities for professional development, though challenges such as limited internet access and digital literacy gaps remain. The study concludes that while online education plays a transformative role in empowering Afghan women, there is a critical need for improved internet infrastructure and digital literacy programs to maximize its impact.

**Keywords:** *Afghan Women; Digital Literacy; Empowerment; Online Education; Higher Education.*

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## INTRODUCTION

The internet has emerged as a powerful tool for women's empowerment globally, and in Afghanistan, it has played a crucial role in overcoming gender-based barriers in education, employment, and social participation. Given the restrictions imposed on Afghan women, particularly after the Taliban's takeover in 2021, online platforms have provided an alternative means for education and professional development (Afif et al., 2024). Online universities have become lifelines for Afghan women, allowing them to pursue education despite restrictions on physical attendance in schools and universities (Colley et al., 2008; De Santis et al., 2010; Quraishi et al., 2024).

Technology has long been recognized as a means of reducing gender disparities in Afghanistan. Digital literacy and ICT tools provide women with opportunities to engage in online learning, employment, and entrepreneurship, enabling them to navigate the constraints imposed by sociopolitical and cultural challenges (Ahmed, Tasmin, & Ibrahim, 2022). In the Afghan context, where restrictions on female mobility and education remain severe, digital platforms have facilitated women's access to academic resources, professional training, and skill-building programs (Golzard, 2020; Ghiyasi et al., 2024). The rapid expansion of e-learning and digital education has helped women overcome traditional barriers and participate in economic and educational activities remotely (Lagan et al., 2011; Nabizada et al., 2024).

A major factor influencing women's online education in Afghanistan is the increasing adoption of e-learning platforms, MOOCs (Massive Open Online Courses), and digital literacy initiatives (Kirschning & von Kardorff, 2008; Hakimi, Shahidzay, & Aslamzai, 2024). Studies indicate that online universities, such as the Women Online University, have played a significant role in helping Afghan women continue their education despite restrictions on physical classroom attendance (Hakimi, et al., 2024). Digital learning tools have also enhanced teaching methodologies by integrating ICT solutions into educational institutions (Glass et al., 2017; Hakimi et al., 2024).

Furthermore, e-learning has transformed Afghan women's role in the workforce by providing access to digital employment opportunities through remote work, freelancing, and e-commerce (Hakimi, Fazil, Ahmady, Qarizada, & Quraishi, 2024). Online businesses and digital entrepreneurship have enabled Afghan women to achieve financial independence, despite restrictions on their participation in the formal workforce (Huberty et al., 2013; Slomian et al., 2017; Hakimi et al., 2024). However, structural challenges such as digital accessibility, affordability, and cybersecurity risks continue to hinder their full participation in the digital economy (Sayakhot & Carolan-Olah, 2016; Hussain, Amin, & Rezaie, 2024).

This study aims to examine the role of the internet in empowering Afghan women through online education by identifying the key benefits, challenges, and potential strategies to enhance digital learning opportunities. Specifically, it seeks to analyze the impact of online universities on Afghan women's access to higher education and professional development. Additionally, the research aims to explore the key challenges faced by women, such as digital literacy gaps, limited internet access, and cybersecurity risks, which hinder their full participation in online education. Furthermore, the study will propose actionable strategies to improve digital learning opportunities, focusing on ensuring greater accessibility, affordability, and overall effectiveness for Afghan women. By addressing these challenges, the study seeks to contribute to the empowerment of Afghan women through enhanced access to

education and professional development in a digitalized world.

### ***Problem Statement***

The internet has become an essential tool for empowering women globally, and in Afghanistan, it offers a unique opportunity to overcome the sociocultural and political barriers to education. Afghan women face significant challenges in accessing traditional education due to strict gender norms, geographical isolation, and socio-political constraints, particularly since the Taliban's resurgence in 2021. Online education, however, offers a lifeline, enabling women to pursue academic and professional development remotely. Despite its potential, there are several obstacles to the full utilization of digital learning platforms, including inadequate internet access, limited digital literacy, and concerns about cybersecurity. Additionally, financial constraints further hinder women's participation in online education. This study aims to investigate the role of online universities in empowering Afghan women by examining the impact of online education on their access to higher education, professional growth, and digital literacy. The research will identify challenges and propose strategies to enhance the accessibility and effectiveness of online education for Afghan women.

## **METHOD**

### ***Research Design***

The research methodology employed in this study was quantitative in nature, utilizing a survey approach to collect data from female students enrolled in an online university in Afghanistan. This approach was selected to evaluate the perceptions and experiences of Afghan women regarding the role of online education in their empowerment.

### ***Population and Sampling***

The study targeted female students from diverse academic disciplines at an online university in Afghanistan. A total of 150 students participated in the study, with a specific focus on those aged 20-24. Participants were selected from the Computer Science (30 students), Education (30 students), Economics (20 students), and Medicine (30 students) faculties, ensuring a well-rounded representation of different fields of study. A convenience sampling method was employed, where the questionnaire was distributed via WhatsApp and email to the students. This was a practical approach considering Afghanistan's geographical challenges and the widespread use of mobile technology among university students for communication.

### ***Research Design***

The research utilized a cross-sectional survey design, collecting data from participants at a single point in time. The primary data collection tool was a self-administered questionnaire, developed by the researcher, consisting of multiple-choice questions based on a Likert scale (1-5). The scale enabled respondents to indicate the degree of agreement or disagreement with statements regarding their experiences with online education, its impact on empowerment, challenges encountered, and overall satisfaction.

The survey was conducted online to provide convenience for participants, allowing them to respond at their own time and location. Ethical considerations were strictly observed, ensuring that participation was voluntary, anonymous, and that participants were fully informed about the study's purpose before they began the survey.

**Data Analysis**

The survey data were analyzed using **descriptive statistics**, including frequencies, means, and percentages, to identify patterns, trends, and key themes related to Afghan women's experiences with online education. The analysis focused on the impact of online learning on women's empowerment and the challenges they face, such as internet accessibility, digital literacy, and cybersecurity concerns. The findings were then interpreted to generate policy recommendations aimed at improving access to and the quality of online education for Afghan women.

**RESULT AND DISCUSSION**

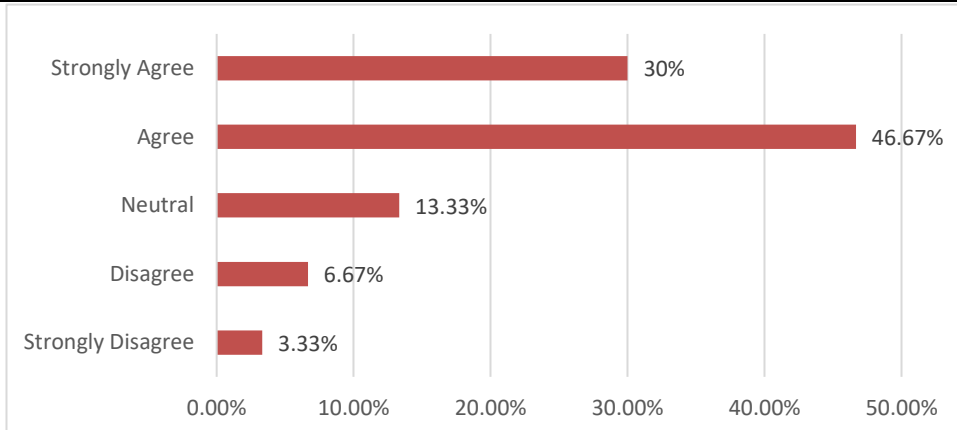
The results of this study are presented below, derived from the survey responses of 150 female students enrolled in various faculties at an online university in Afghanistan. The data collected through self-administered questionnaires, distributed via WhatsApp and email, were analyzed to assess the impact of online education on the empowerment of Afghan women. The findings provide insights into the participants' perceptions of online education, its role in their professional development, the challenges they face, and their overall experiences with digital literacy. Statistical analysis was conducted to identify significant patterns, trends, and correlations between the variables. The following subsections outline the key results obtained from the survey responses.

**Table 1.** Demographic Distribution of Study Participants

Faculty	Age Range	Gender	Number of Participants	Highest Education Level	Year of Enrollment
Computer Science	20-24	Female	30	Bachelor's	2023
Education	20-24	Female	30	Bachelor's	2023
Economics	20-24	Female	20	Bachelor's	2023
Medical	20-24	Female	30	Bachelor's	2023

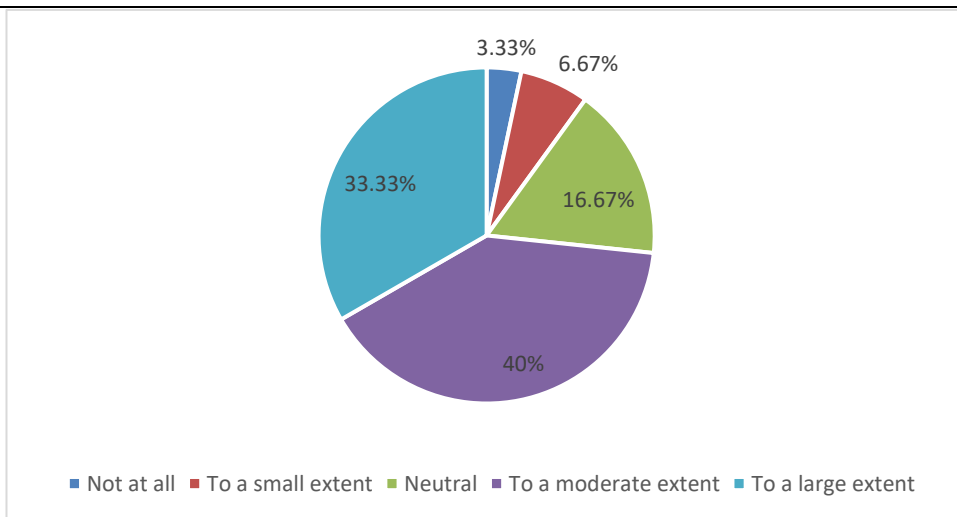
The table provides a breakdown of the participants, who are all female, across four faculties: Computer Science, Education, Economics, and Medical. Each faculty is represented by females aged 20 to 24, with 30 participants from Computer Science, Education, and medical faculties, and 20 from Economics. All participants have completed or are pursuing a bachelor's degree, which indicates a focus on undergraduate education. The uniformity in age range and education level across the sample suggests a relatively homogeneous group, which can minimize biases in terms of prior education experience. The total number of participants is 110, representing a diverse but specific demographic within Afghanistan's educational context. The year of

enrollment across all participants is 2023, indicating the relevance of the findings to recent trends in online education for women in the country.



**Figure 1.** Access to Higher Education Through Online Universities Compared to Traditional Institutions.

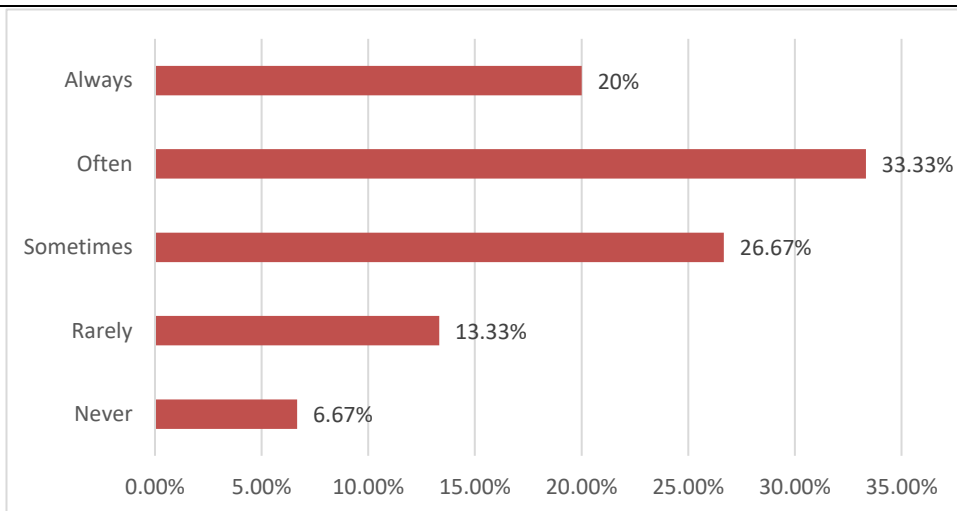
Figure 1 reveals that a substantial number of participants (46.67%) agreed and 30% strongly agreed that online universities provided better access to higher education compared to traditional institutions. Only a small proportion (3.33%) strongly disagreed, and 6.67% disagreed, which suggests that most participants believe online education has improved accessibility. Approximately 13.33% of participants were neutral, indicating that some may have mixed opinions or face challenges that limit their full engagement with online education. Overall, the data highlights the positive impact of online universities on enhancing educational opportunities for Afghan women.



**Figure 2.** Contribution of Online Education to Professional Development Compared to Conventional Learning Methods.

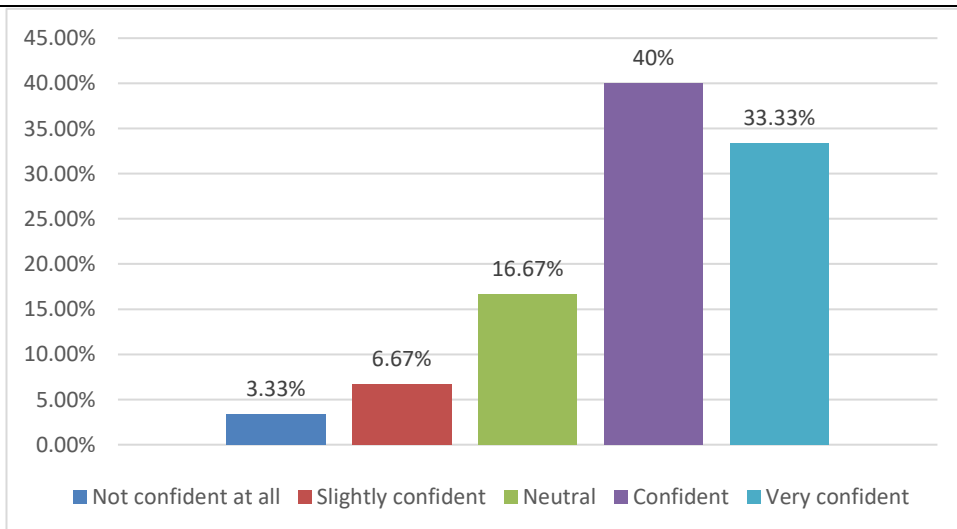
Figure 2 demonstrates that a significant portion of participants (40%) believe that online education has contributed to their professional development to a moderate extent, while 33.33% feel that it has largely contributed. Only 3.33% of participants felt that online education has contributed "not at all," and 6.67% viewed its contribution as minimal. The 16.67% neutral responses suggest that while many participants see value

in online learning, some may still perceive it as less effective for professional growth compared to traditional methods. Overall, the data indicates that online education plays a meaningful role in professional development for Afghan women, with many experiencing moderate to substantial benefits.



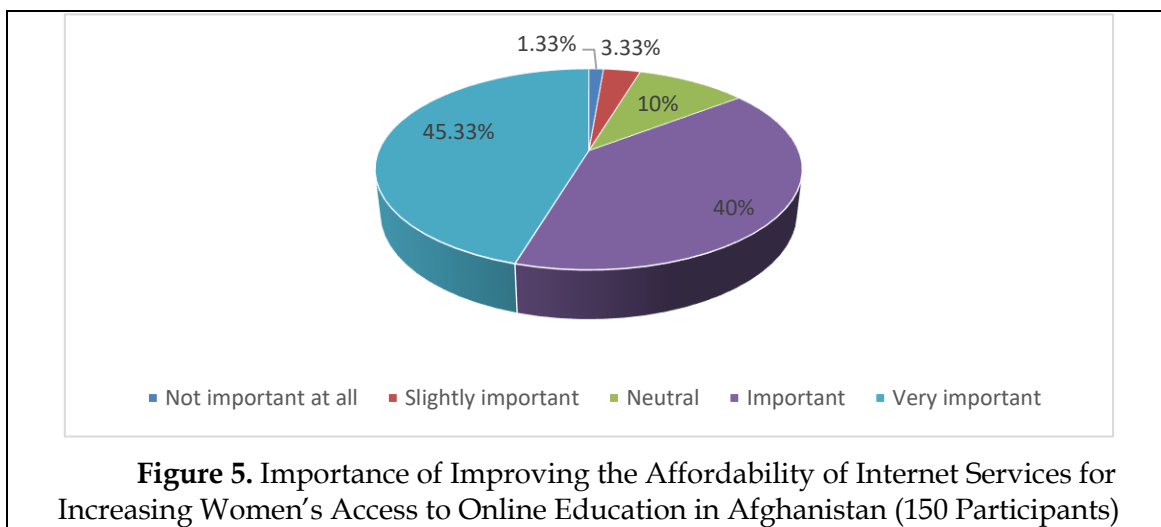
**Figure 3.** Challenges Related to Internet Accessibility While Participating in Online University Courses (150 Participants).

Figure 3 illustrates the frequency of internet accessibility challenges encountered by participants while engaging in online university courses. A significant 33.33% of participants reported facing challenges "often," while 20% indicated they "always" face such difficulties, highlighting that internet connectivity is a common issue. On the other hand, 26.67% of participants faced these challenges "sometimes," and 13.33% faced them "rarely," suggesting that internet issues are a frequent but not universal barrier. Only 6.67% of participants indicated they never face any internet accessibility challenges, pointing to the potential impact of infrastructure limitations on online education in Afghanistan.



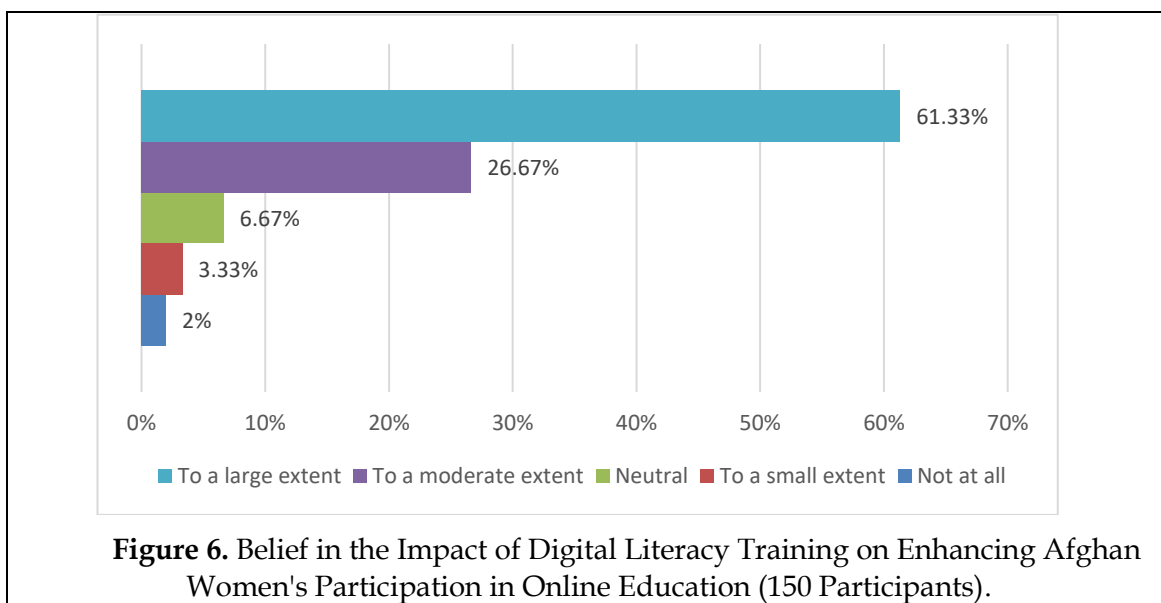
**Figure 4.** Confidence in Digital Literacy Skills When Using Online Education Platforms (150 Participants).

Figure 4 presents the confidence levels of participants regarding their digital literacy skills while using online education platforms. A substantial 40% of participants expressed confidence in their skills, and 33.33% felt very confident, suggesting that a majority are comfortable navigating these platforms. However, 16.67% remained neutral, possibly indicating uncertainty or variation in digital literacy levels. A smaller proportion, 6.67%, reported being slightly confident, and only 3.33% felt not confident at all, showing that while most participants are relatively confident, there is still room for improvement in digital literacy across the population.



**Figure 5.** Importance of Improving the Affordability of Internet Services for Increasing Women’s Access to Online Education in Afghanistan (150 Participants)

Figure 5 highlights the participants' perception of the importance of improving internet affordability for enhancing women’s access to online education in Afghanistan. A significant 45.33% of participants believe it is "very important," while 40% consider it "important," indicating that the majority see internet affordability as a critical factor in improving educational access for women. Only a small fraction (1.33%) felt that it was "not important at all," and 3.33% viewed it as "slightly important." The remaining 10% were neutral, suggesting a widespread acknowledgment of the importance of affordable internet for fostering women’s educational opportunities in Afghanistan.



**Figure 6.** Belief in the Impact of Digital Literacy Training on Enhancing Afghan Women's Participation in Online Education (150 Participants).

Figure 6 indicates that most participants, 61.33%, believe that providing digital literacy training would have a significant positive impact on Afghan women's participation in online education. Additionally, 26.67% think it would help to a moderate extent, further emphasizing the strong belief in the value of digital literacy. Only 6.67% were neutral on the matter, and a small percentage, 3.33%, considered it to be of little impact. This data highlights the consensus among participants that improving digital literacy is crucial for increasing Afghan women's engagement with online education, providing them with greater access to learning opportunities.

## DISCUSSION

The role of online education in empowering Afghan women is increasingly evident in the context of both gender equality and professional development. The internet has served as a catalyst for advancing women's participation in education, especially in environments where traditional educational avenues may not be as accessible due to socio-political constraints (Afif et al., 2024). Online universities have emerged as a significant alternative, providing Afghan women with the opportunity to gain education in a flexible and more inclusive environment. However, the degree to which the internet enhances educational outcomes for women in Afghanistan varies, particularly in relation to challenges such as internet accessibility and digital literacy (Quraishi et al., 2024; Hakimi et al., 2024).

One of the major findings in the literature is the significant role that digital literacy plays in increasing women's participation in online education. Studies show that enhancing digital literacy is critical for empowering Afghan women, as it directly influences their ability to engage with online educational platforms (Nabizada et al., 2024). Moreover, digital literacy also facilitates access to broader online tools that can aid in personal and professional development, especially in the fields of e-commerce and ICT (Hakimi et al., 2024). Without a strong foundation in digital literacy, Afghan women may face difficulties in leveraging the opportunities provided by online education, potentially exacerbating existing gender inequalities (Sengupta et al., 2007).

Affordability of internet services also emerges as a critical factor in determining the level of access Afghan women have to online education. According to research by Hussain et al. (2024), the high cost of internet access, particularly in rural and remote areas, acts as a barrier to entry for many women who might otherwise benefit from online learning platforms. As noted by Ahmed et al. (2022), improving the affordability and accessibility of internet services is essential for broadening the scope of online education for Afghan women, as this would allow them to overcome socio-economic and logistical barriers to education.

Moreover, e-commerce presents an exciting opportunity for Afghan women, with the potential to not only enhance their skills but also provide a source of income and independence. Ghiyasi et al. (2024) underscore the transformative potential of e-commerce platforms in empowering Afghan women by offering them a chance to participate in the global economy from home, thus further breaking down the traditional barriers that limit women's economic opportunities. Similarly, the integration of ICT into higher education curricula has been shown to have a profound impact on empowering women in Afghanistan, providing them with the necessary tools to succeed in the modern workforce (Hakimi et al., 2024).



## CONCLUSION

Online education has proven to be a significant catalyst in empowering Afghan women, offering them unprecedented access to higher education and professional development. However, the full potential of this empowerment is contingent on addressing the infrastructural and socio-cultural barriers that still impede widespread access to digital learning. While online education offers immense promise, continued improvements in internet accessibility, digital literacy, and affordability are essential for maximizing its effectiveness.

Looking ahead, policy reforms are needed to ensure that online education can be equitably accessed by Afghan women, particularly in rural and marginalized areas. Governments, alongside NGOs and educational institutions, should prioritize the development of affordable internet services, support digital literacy programs, and create a conducive online learning environment. Additionally, the creation of culturally sensitive curricula and financial support mechanisms will be crucial in fostering increased engagement and retention among Afghan women.

Moreover, future research could explore the long-term impact of online education on Afghan women's career trajectories, economic independence, and societal participation. Unanswered questions remain regarding the effectiveness of community-based support systems and local mentorship in enhancing online learning experiences for women in Afghanistan.

Addressing these questions will provide a more holistic understanding of how digital education can transform women's roles in Afghan society, contributing not only to their personal empowerment but also to the broader socio-economic development of the country.

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