digital participation. For instance, a study by Liu et al. (2020) highlighted that rural women in Bangladesh, despite having access to mobile phones, are constrained by a lack of digital literacy and societal norms that discourage their engagement with technology. Similarly, in Sub-Saharan Africa, digital literacy rates among women remain significantly lower than their male counterparts, reflecting broader gender inequalities in access to education and technology (Chaudhary et al., 2023).

In many countries within the Global South, infrastructure issues such as limited internet access, poor connectivity, and high data costs further exacerbate the digital divide. The urban-rural divide remains a major challenge, with urban centers benefiting from better access to digital technologies and rural areas lagging behind (Reddy et al., 2022). Inadequate power supply and the high cost of ICT devices make it particularly difficult for individuals in lower-income areas to access digital education, despite mobile phone usage rising globally.

Understanding the digital literacy gap in the Global South requires not only addressing these infrastructural and socio-economic barriers but also recognizing the importance of culture, education policies, and government initiatives. Several governments in the Global South have launched ICT integration programs in schools, aiming to increase digital literacy, but the impact has been mixed, with many programs struggling to reach rural areas or provide adequate training for teachers. However, community-driven initiatives, such as partnerships between local NGOs and technology companies, have shown potential to bridge the digital divide by tailoring digital literacy programs to local needs and contexts (Reddy et al., 2023).

In addition to addressing these inequalities, digital literacy plays a critical role in achieving broader developmental goals, such as the United Nations' Sustainable Development Goals (SDGs). Digital literacy is considered essential for achieving SDG 4 (Quality Education) and SDG 10 (Reduced Inequalities), as it empowers individuals to access educational resources, participate in the digital economy, and advocate for social change (Radovanović et al., 2020). Bridging the digital divide is not only a matter of technological access but also about fostering inclusive economic growth, improving education, and ensuring social participation in the digital age.

This review seeks to provide a comprehensive analysis of the factors influencing digital literacy in the Global South. It examines the key demographic, socioeconomic, and infrastructural challenges, as well as the effectiveness of interventions aimed at addressing these issues. Through synthesizing the existing literature, the review highlights the urgent need for targeted, inclusive policies and innovative solutions to promote digital literacy and bridge the digital divide. By understanding the existing gaps in research and practice, this review aims to contribute to the development of effective strategies that can empower individuals in the Global South to fully participate in the digital world.

2. Literature Review

Digital literacy is a critical skill for socio-economic advancement in the modern world, yet substantial gaps in digital literacy persist, particularly in the Global South. The Global South, comprising regions such as Sub-Saharan Africa, Latin America, South Asia, and Oceania, faces unique challenges in improving digital literacy rates due to factors such as limited access to technology, socioeconomic disparities, and infrastructural challenges. This section reviews various studies on digital literacy in these regions, summarizing key findings and identifying persistent gaps in research.

Several studies highlight the role of socioeconomic factors in digital literacy development in the Global South. A prominent theme in the literature is the relationship between income inequality and access to digital tools. Chaudhary, Reddy, and Sharma (2023) argue that limited financial resources are a significant barrier to accessing digital devices and reliable internet, which in turn hinders digital literacy acquisition. For instance, in rural areas, where internet connectivity is often poor, digital literacy rates tend to be lower due to inadequate infrastructure. This finding resonates with Reddy et al. (2022), who observed that in the South Pacific, digital literacy gaps are closely tied to economic status and the availability of digital tools in households.

Education level is another important determinant of digital literacy. Liu et al. (2020) found that higher educational attainment correlates strongly with digital literacy skills, particularly in urban centers. This is consistent with the work of Jaffer, Ng'ambi, and Czerniewicz (2007), who noted that students in higher education institutions in South Africa tend to have better access to digital tools and training compared to those in lower educational levels or rural areas. This suggests that a concerted focus on integrating digital literacy into educational curricula at all levels may help bridge the gap.

Gender disparities in digital literacy are another significant challenge in the Global South. Studies have consistently shown that women, particularly in rural areas, face additional barriers to accessing ICT resources. For example, Saha et al. (2022) found that women in Bangladesh, despite policy initiatives such as "Digital Bangladesh," still face social and economic barriers that prevent them from fully benefiting from ICT advancements. These barriers include limited access to education, lack of technical skills, and cultural norms that restrict women's participation in technology-related activities. The work of Radovanović et al. (2020) on key performance indicators for digital literacy also highlighted that gender equality initiatives in ICT education are crucial for addressing these disparities.

In Sub-Saharan Africa, women’s low participation in the digital economy is linked to gender-based violence, limited mobility, and lack of family support (Chaudhary et al., 2023). Efforts to improve digital literacy among women have focused on creating women-centric training programs, but much work remains to ensure that women have equal access to the tools and skills necessary for digital participation.

One of the most persistent challenges to digital literacy in the Global South is inadequate infrastructure and limited internet connectivity. As noted by Radovanović et al. (2020), urban-rural divides are particularly stark in countries like India and Kenya, where urban centers tend to have far superior digital infrastructure compared to rural areas. In rural India, for

example, access to high-speed internet remains limited, making it difficult for people to participate in online learning, work remotely, or access government services. These infrastructural challenges are compounded by the high costs of mobile data and electricity, which further inhibit the spread of digital literacy in marginalized regions.

Studies by Van Dijk (2020) suggest that improving digital infrastructure, such as providing low-cost internet and enhancing mobile connectivity, could help close the digital literacy gap in these areas. Partnerships between governments, NGOs, and private sectors are seen as crucial in overcoming these barriers. For example, community-driven solutions, such as local internet hubs and mobile technology programs, have been proposed as potential interventions to enhance access to ICT resources.

Government-led initiatives and community partnerships have been shown to be effective in bridging digital literacy gaps in the Global South. A key strategy has been the integration of ICT training programs into formal and informal education systems. In Bangladesh, the government's "Digital Bangladesh" initiative aims to provide citizens with ICT skills through educational reforms and community-based digital literacy programs (Saha et al., 2022). Similarly, in South Africa, ICT training programs in schools have been shown to improve digital literacy among students, particularly when these programs are contextualized to local needs (Jaffer et al., 2007).

In addition to governmental programs, partnerships between NGOs and local communities have been successful in addressing digital literacy gaps. NGOs often focus on providing training to underserved populations, such as women, rural dwellers, and older adults. These initiatives focus not only on technical skills but also on fostering attitudes and behaviors that promote the use of technology for personal and professional development. For instance, community-run workshops and mobile-based training programs have proven effective in providing digital literacy to people who otherwise have limited access to formal education (Liu et al., 2020).

The literature also emphasizes the role of digital literacy in achieving broader developmental goals, including sustainable development. According to Radovanović et al. (2020), digital literacy is a critical skill for advancing education, healthcare, and economic development in the Global South. Digital skills are linked to better employment opportunities, increased productivity, and enhanced access to social services. Moreover, digital literacy is essential for achieving the United Nations' Sustainable Development Goals (SDGs), particularly Goal 4 (Quality Education), Goal 5 (Gender Equality), and Goal 9 (Industry, Innovation, and Infrastructure).

As the digital economy continues to grow, countries in the Global South face the challenge of preparing their populations for participation in this new economy. To this end, digital literacy must be seen not only as a set of technical skills but as a cornerstone of social inclusion and economic empowerment.

3. Methodology

This section outlines the methodology used for conducting the systematic literature review on digital literacy rates in the Global South. The goal of the review is to synthesize the existing body of research, identify key trends, and highlight gaps in knowledge regarding the factors influencing digital literacy in the regions of Africa, Latin America, Asia, and Oceania. The methodology is structured around clearly defined research questions, inclusion and exclusion criteria, and data extraction techniques.

3.1 Research Questions

The systematic review is guided by the following primary research questions:

1. **What are the primary factors influencing digital literacy rates in the Global South?**
    - This question seeks to identify the demographic, socioeconomic, infrastructural, and cultural factors contributing to disparities in digital literacy levels across the Global South.
2. **How do demographic, socioeconomic, and infrastructural variables impact digital literacy rates?**
    - This question explores how variables such as gender, education, income, and access to technology shape digital literacy outcomes in the regions of interest.
3. **What interventions and strategies have been most effective in improving digital literacy in the Global South?**
    - This question focuses on identifying successful programs, policies, and initiatives that have contributed to improving digital literacy rates in the Global South.

3.2 Inclusion and Exclusion Criteria

To ensure that the review includes only relevant studies, specific inclusion and exclusion criteria were established.

Inclusion Criteria:

- **Peer-reviewed journal articles** published between 2015 and 2025.
- Studies focused on **digital literacy** in countries classified as part of the **Global South**, including Sub-Saharan Africa, South Asia, Latin America, and Oceania.
- Articles are written in **English** and accessible in **full text**.
- Studies that provide empirical evidence, theoretical analysis, or policy insights related to the factors influencing digital literacy rates or the effectiveness of interventions in the Global South.

Exclusion Criteria:

- **Non-academic** or opinion-based articles (e.g., blogs, news articles).
- Studies that do not focus on **digital literacy** or are not specific to the **Global South**.
- Articles that are **not available in full text** or those that lack sufficient methodological detail for critical analysis.
- Duplicate records across databases were removed to ensure only unique studies were considered.

3.3 Data Sources and Search Strategy

The literature search was conducted using the Google Scholar database.

Search terms included combinations of keywords such as: "digital literacy," "Global South," "ICT education," "digital divide," "Sub-Saharan Africa," "South Asia," "Latin America,", “Bangladesh”, “Factors in Digital Literacy”. Boolean operators (AND, OR) were used to refine search results and ensure that the articles were relevant to the research questions.

3.4 Data Extraction and Analysis

A standardized data extraction template was developed to ensure consistency in extracting key information from each selected study. The following details were extracted from each study:

- **Author(s)**
- **Publication year**
- **Geographic focus** (region or country)
- **Methodology** (e.g., survey, case study, interviews, mixed-methods)
- **Key findings and themes** related to digital literacy
- **Interventions or strategies** discussed (if applicable)
- **Recommendations for future research** (if applicable)

The extracted data was compiled into a spreadsheet for analysis. Studies were then grouped according to key themes and subthemes such as socio-economic factors, gender disparities, infrastructural challenges, and interventions aimed at improving digital literacy.

3.5 Quality Assessment

To ensure the reliability and validity of the selected studies, a quality assessment was conducted based on the methodological rigor of each study. Criteria for assessing study quality included:

- **Sample size and representativeness**: Studies with larger sample sizes or more representative populations were prioritized.
- **Methodological transparency**: Studies that clearly described their methodology, data collection, and analysis methods were deemed higher quality.

- **Relevance to the research questions**: Studies that directly addressed one or more of the research questions were considered more valuable for inclusion in the review.
- **Impact and citations**: Studies that have had a significant impact in the field (as evidenced by citations) were prioritized to ensure the inclusion of influential works.

4. Findings

This section presents the key findings from the systematic review of the literature on digital literacy rates in the Global South. The studies reviewed indicate a complex interplay of demographic, socioeconomic, infrastructural, and policy-related factors that influence digital literacy in these regions. The findings are categorized into three main themes: demographic and socioeconomic factors, infrastructure and access, and effective interventions.

4.1 Demographic and Socioeconomic Factors

Digital literacy in the Global South is heavily influenced by various demographic and socioeconomic factors. Several studies highlighted the following key determinants:

- **Gender Disparities**: One of the most significant barriers to digital literacy is gender inequality. Women, particularly in rural and marginalized areas, face considerable challenges in accessing digital technologies and acquiring digital skills (Saha et al., 2022; Liu et al., 2020). For instance, in Sub-Saharan Africa, gendered access to ICT tools limits women's participation in digital literacy programs, exacerbating gender gaps in digital skills (Reddy et al., 2022). Initiatives that target women's digital empowerment have been shown to have a positive impact, but such programs are often limited and localized.
- **Education and Literacy Levels**: A strong correlation between educational attainment and digital literacy skills was found across multiple studies. Higher levels of formal education generally result in greater digital literacy (Reddy, Sharma, & Chaudhary, 2022). In many parts of the Global South, educational systems lack comprehensive ICT integration, and digital literacy is often not taught as part of the curriculum, particularly in lower-income or rural areas (Jaffer et al., 2007). As a result, those with lower educational attainment are often left behind in the digital divide.
- **Income Inequality**: Economic constraints play a crucial role in limiting access to digital tools and the internet. Studies in South Asia and Sub-Saharan Africa have shown that individuals in lower-income households are less likely to own personal devices such as smartphones or computers, and more likely to face challenges accessing reliable internet connections (Saha et al., 2022). In addition, higher costs of internet services and digital tools further exacerbate these disparities, limiting opportunities for digital skill development.

4.2 Infrastructure and Access