Review Article

Empowering women through information literacy: The role of public libraries in enhancing digital and health literacy

Anita Singh[1]*, RP Bajpai[1]

[1]Dept. of Library and Information Science, Mahatma Gandhi Chitrakoot Gramoday University Chitrakoot, Satna, Madhya Pradesh, India.

Abstract

Research investigated how specialized information literacy curriculum enables public libraries to enable women. The research design adopted allowed investigators to study how these programs affect women's capabilities in health and digital literacy and their economic development along with societal engagement. This research demonstrates women have significant advancements in digital platform understanding and healthcare knowledge as well as educated women continue to instruct information capabilities to both their families and their community. The computer programs achieved beneficial results but their users continue to face problems with connection availability and unaddressed demands for personalized information. The research presents strategic suggestions to create better accessible information literacy programs through local-specific implementation which addresses gender-dependent needs. Research shows libraries continue to serve as outstanding educational centers for social integration and gender equality while needing superior assistance for their strategic advancement. Student performance and interest levels grow when educational laboratories and libraries provide technological resources for their use. Public libraries should advance their democratic mission within the information society through creating robust citizenship and inclusiveness networks for youth communities.

Keywords: Public Libraries, Information Literacy, Women's Empowerment, Digital Literacy, Health Literacy, Gender Equality, Community Engagement, Accessibility, Inclusivity

1. Introduction

Public libraries stand as vital elements of democratic foundations because they offer free information accessibility along with perpetual learning possibilities for every member within the community. These entities work as connectors which close knowledge gaps most prominently among disadvantaged groups through their digital inclusion related services and information literacy development programs (Aqili & Isfandyari-Moghaddam, 2008).[1] The combination of social interaction with cultural advancement and civic engagement at public libraries creates a complete societal development for the community. The rapid advancements in technology and expanding digital environment establish information literacy development through public libraries as a critical functional necessity for present times. The replacement of physical materials by digital resources has improved students' ability to reach scientific information which leads them to excel in science performance and show increased interest (Aqili & Isfandyari-Moghaddam, 2008).[2] Libraries create purpose-built instruction programs that help users learn digital platforms as well as information evaluation practices and these two categories together enable users to enhance their technological competencies for personal progress and educational achievement and career advancement. The accessibility of empowerment through this opportunity stands most beneficial toward women because they encounter numerous system-related obstacles during their pursuit of information technology access and use. Students benefit from both physical collections of library resources and digital databases which let them execute successful research projects for science studies. As Aqili and Isfandyari-Moghaddam (2008) explain public libraries serve

*Corresponding author: Anita Singh
Email: annusingh1248@gmail.com

as basic components to create knowledge-based societies and sustainable development.

Information literacy skills help men and women perform effective source evaluation and data utilization (Fitzgibbons 2000).5 Multiple life domains like education and work so forth require these abilities which help people generate better decisions through critical thinking and solve problems effectively to advance in areas such as employment and healthcare. Self-care rights defense and gender bias elimination and institutional barrier surmounting become possible for women through their acquisition of information skills. The instruction available at public libraries teaches women digital competencies to search educational material and enter online learning opportunities and acquire qualifications that accelerate career advancement. The availability of information literacy enables women to select health-related choices that lead to better care and empowerment of reproductive rights. Public libraries enable women to access health and wellness support through digital learning services and technology facilities in addition to their health materials collection. Public libraries serve students by providing information access support which helps them meet social inclusion needs for achieving gender equality standards.

The modern world depends on public libraries because these institutions form democratic foundations for communities (Okojie & Okiy, 2017). The provision of digital integration programs with literacy skills development stands as a primary function of these institutions to bridge information gaps which mostly affect disadvantaged communities (Fitzgibbons 2000). Public libraries function as social community centers where people can interact with each other while developing cultural arts and civic participation which leads to societal development (Okojie & Okiy, 2017).[14]

Modern public libraries play essential roles in information literacy because of technological advancement combined with the increasing digital world (Aabo, 2005).[1] The contemporary library functions as a flexible digital center which demonstrates its transformation capability into digital service facilities that educate essential skills in response to evolving member needs (Eyenaka & Umoren, 2024).[4] Under digital format transformation students acquire scientific materials more easily to boost their academic performance along with their motivation to study (Eyenaka & Umoren, 2024).

The programming at libraries aids users in understanding digital complexity in addition to helping them perform critical evaluations of source material and effectively leveraging technology for various life purposes. This empowerment program provides exceptional importance to women due to their frequent institutional barriers when they try to access information technology. (Aabo, 2005). The women's progress in their lives depends on public libraries

which provide access to technology combined with learning resources and health solutions that enhance their fitness.

By using the extensive resources together with digital information collections which libraries offer users can achieve superior research outcomes for scientific success (Eyenaka & Umoren, 2024). Modern information systems grant students access to available scientific resources that help them track current developments and research methods for professional and educational development. Professional execution of primary activities by public libraries ensures the achievement of both knowledge-based society goals and sustainable development.

Public library accessibility grows when institutions create localized services to support diverse gender requirements. Public libraries must develop traveling information literacy programs together with community events to establish binding alliances with local organizations that will deliver cultural information literacy training for the community members. Modern public libraries need to develop updated digital technology fundaments while forming alliances with academic institutions to achieve transformation effectiveness according to Tait et al. (2016).[19] Community-based information literacy programs receive better results when women play an active role in developing such initiatives and putting them into practice with their actual life experiences. Public libraries need to provide multilingual and childcare services to make various ethnic backgrounds of women feel comfortable while using library resources. Library services which extend openness to all users enable both women empowerment and societal equality among every person. The digital era needs librarians and information professionals to depend on electronic library awareness and perception surveys as fundamental instruments which maintain their relevance according to Towolawi (2018).[20] Public libraries should build social inclusion by enhancing their democratic activities across the information society (Aabø, 2005). Public libraries during the digital era need to reshape their operations into digital technology support systems which defend social justice principles.

2. Information Literacy and Public Libraries

Public libraries serve as essential educational supports because information literacy skills enable women to develop self-empowerment which drives their progress in social settings and economic development together with enhanced personal fulfillment. These institutions provide information literacy courses which teach women how to identify and judge information for better life decision-making across all aspects of their existence.

Educational materials that combine with online educational opportunities and career development knowledge and skills guide women toward future professional success. When women acquire information literacy capabilities they

get stronger ability to choose healthcare intelligently and to access healthcare services as well as to fight for their reproductive choices. Public libraries help link women to technology through their educational training programs that give computer access to health and well-being knowledge.

Women become active participants in civic and political life when they possess information literacy since this creates societal change. The support received from society delivers lasting worth to the entire community during its educational stages (Fitzgibbons 2000). Libraries today operate as guidance systems which help people trace dependable digital content (Towolawi, 2018).

Through public library services women acquire critical thinking abilities for complete participation as social justice advocates and community leaders. Different women have specialized requirements which need locally designed gender-conscious approaches built specifically to address rural region challenges and underpopulated areas for effective execution. Community outreach programs together with mobile libraries collaborate with local organizations to provide suitable training for cultural content education and information literacy learning of women (Towolawi, 2018; Eyenaka & Umoren, 2024). The essential function of libraries together with their personnel consists of leading users towards wise choices among freely accessible published materials.

3. The Impact of Information Literacy on Women

3.1. Digital literacy

Public library information literacy programs have made women more digitally competent through their educational programs. Women who join such programs gain improved abilities to use technology which help them advance their careers and personal life. The enhanced digital resource utilization of these individuals enables them to enroll in online programs for learning and research activities and e-commerce applications and digital tasks. Public libraries enable female users to achieve digital inclusion by providing computer systems along with Internet connectivity and digital literacy training programs (Eyenaka & Umoren, 2024). Students now use digital technology in research because modern libraries have upgraded their processes for scientific information discovery. Digital libraries together with online databases let users obtain easy access to modern research content and educational materials and journals from anywhere through physical location (Eyenaka & Umoren, 2024). Digital libraries have the ability to remove time-space limits from physical libraries because they establish multiple social advantages for mobile and digital learning environments (Sun & Yuan, 2012).18 Libraries provide training which allows women to enhance their digital skills by using digital resources alongside modern digital equipment knowledge.

3.2. Health literacy

Public libraries through their healthcare education programs have successfully increased the health knowledge of female patients. Reliable information programs available at public libraries build women's understanding of their health condition which leads them to make better healthcare decisions. Women can now administer their medical requirements and search for proper healthcare solutions while safeguarding their reproductive autonomy to benefit both their personal lives and their family structure.

Public libraries offer workshops alongside seminars as well as digital resources to present members with fundamental health information about nutrition and prevention and mental health practices. The healthcare system of institutions connects women with medical providers who jointly create supportive community services to ensure comprehensive health care for women.

3.3. Socio-economic mobility

Public libraries host information literacy programs which economically benefit women as they provide advantages extending past digital literacy and health literacy knowledge. These educational programming structures provide women resources for education side by side with employment preparation services along with career assistance to help improve their work readiness and their financial circumstances. The participation of women in information literacy services helps them attain better incomes and establish their own businesses along with securing financial independence. Through information literacy women acquire complete control of their finances while making wise investment decisions and securing social benefits which enables them to become economically independent. Eyenaka and Umoren (2024) and Sun and Yuan (2012) along with Campanozzi et al. (2023).3 The institutions need to transform themselves into community knowledge centers to make meaningful contributions to rural development. Modern public libraries serve as essential lifelong learning centers and information access points because they offer various resources to support economic progress and educational advancement and social development in the current century.

3.4. Community engagement

The strategic initiatives from libraries assist women to enhance their participation in their communities through the development of information literacy and knowledge acquisition. Through these programs females learn critical thinking abilities and gain tools to participate in civic life while gaining opportunities to discuss important matters which result in their community involvement (Jones, 2009) (Okojie & Okiy, 2017).6 The community hub function of public libraries allows women to maintain relationships and share concepts and develop shared objectives that benefit their local areas (Okojie & Okiy, 2017) (Jones, 2009). The collection facilities create social cohesion by establishing

areas where people from different communities can interact while sharing information as well as joining forces on municipal programs. Librarians create social empowerment by distributing information and managing community interspace resources which enables citizens to join active social life and drive democratic growth and support social equality.

Public libraries enhance lives and social evolution through their distribution of information to entire community membership (Okojie & Okiy, 2017). Community libraries facilitate women's ability to achieve social engagement equality through their development programs by staffing members who focus on community needs and acquire relevant resources and comprehend local needs as well as women's aspirations (Jones, 2009).

Smart community development strongly relies on the successful endeavors of public libraries as reported by Mersand et al.[11] (2018). Library service quality enhancement demands policymakers to establish access to personnel dedicated to community welfare and backing their essential core activities.   Jones (2009) and Okojie and Okiy (2017) explain that public libraries reinforce information society democracy by encouraging inclusivity and citizenship development (Aabø, 2005).

4. Empowering Women through Public Libraries

Public libraries give women empowerment through their information literacy programs which operate as important access points. The programs equip women with vital information abilities to locate and evaluate data before making life choices. The public library system teaches female users how to gain digital expertise and health awareness in addition to socioeconomic progress thereby promoting vital social change in their communities. Libraries serve as permanent learning institutions which lead women to full inclusion through gender equality by modifying their personal life trajectories and promoting equal opportunities for women.

Public libraries successfully teach resource-access skills and effective information retrieval to students according to Fitzgibbons (2000). People can perform their research effectively utilizing the entire collection and digital resources that these facilities offer (Eyenaka & Umoren, 2024). Every sector of the community benefits from information dissemination which enables public libraries to generate transformative positive life changes for both social development and community advancement (Okojie and Okiy, 2017). Modern society depends on both knowledge and information for its essential productivity factor (Okojie & Okiy, 2017).

Women can access better financial opportunities following public library information literacy programs because these programs make them more skillful in their search. The programs provide women with the means to secure steady employment that pays well and allows them to establish self-employed ventures independently. The current governmental mandate requires information systems to identify the behavior patterns and objectives of women who utilize technology both at home and for personal reasons (Mackey & Petrucka, 2021).[8]

Producing efficient literacy services requires understanding of what women truly want and staff members who understand local needs to make proper acquisitions (Jones, 2009). The combination of personal development with literacy education through information literacy programs enables women to develop abilities which make them active community members (Jones, 2009). Social and economic progress with political ascension for women depends exclusively on literacy because it functions as their main empowering tool (Oyitso & Olomukoro, 2014).[15]

Socioeconomic improvement together with poverty reduction can be achieved by providing information resources and services through libraries. The specialized programs executed by public libraries act as development pioneers by providing programs that unite community demands with access to information and crucial resources and services. The library functions as a driving force behind improved community results through its ability to engage citizens in public life as well as support endless education and economic development (Okojie & Okiy, 2017) (Okafor, 2020).[13]

The implementation of present-day digital technologies and systems in libraries provides better means for people to access scientific information because it enhances access to new scholarly research documents (Eyenaka & Umoren, 2024). The access methods for scientific information by students have undergone a fundamental transformation because of digital technology systems integrated into libraries (Eyenaka & Umoren, 2024). Students gain access to modern research papers and educational materials such as journals via their Internet connection through combined digital library and online database systems (Eyenaka & Umoren, 2024). Towolawi (2018) states that digital technology processes enhance Internet connectivity but knowledge acquisition remains an independent operational area. Technological procedures that digitize documents and texts and sounds and images enable information distribution through connected Internet devices (Patrick, 2015).[16]

5. Barriers and Challenges

Advancing women through information literacy programs in public libraries faces various challenges and obstacles that prevent complete achievement. Women encountering obstacles in accessing library resources encounter limitations in transportation services as well as restricted library operational hours and barriers presented by technology which especially affect rural women and women with poor access

to service. Certain cultural barriers, alongside gender expectations within some population centers, impede women from participating in library programs. Programming for marginalized women should include customized content; otherwise, the information gap and illiteracy problems become more severe for groups such as ethnic minorities and those from low-income backgrounds.

Solutions to these barriers require diverse methods of implementation. Public libraries require additional funding to strengthen their outreach activities and expand their services, which will benefit women from all communities, especially those in less advantaged areas. Strategic outreach initiatives that promote available resources will enhance awareness levels among women and lead them to participate in library activities. Library services must advance through the creation of responsive programs that develop specialized content suited to the different needs of marginalized women. A coordinated initiative to reduce inequalities among marginalized women who belong to ethnic minorities and low-income groups will result in a better realization of public library transformative benefits and build a more equitable and informed community.

According to Eyenaka and Umoren (2024), the shift of libraries toward digital content has enhanced students'scientific performance and interest levels. Public libraries will achieve better transformative outcomes and serve society better if they focus on removing these barriers. Women belonging to low socioeconomic groups face multiple hindrances when attempting to employ development information because of their challenged economic environment and cultural limitations as well as their social lack of power and limited information skills (Mchombu 1999).[10] Research that blocks such populations from participation prevents scientists from accurately measuring the effects of ICT on empowerment while also reducing the applicability of the findings (Mackey & Petrucka, 2021).

The goal of designing information centers that target women demands an understanding of their particular information requirements and behavior in information search. All women must have equal access to public libraries to create an environment of gender equality and enable their full participation in society. Boys and men in developing countries enjoy greater access along with better technical know-how for ICT resources, so they acquire more advantages throughout the information age compared to women (Singh, 2017).[17] The current situation demonstrates that women in diverse locations require tailored, gender-focused services to access proper support.

6. Recommendations for Enhancing Inclusivity and Accessibility

Recommendations to Enhance Inclusivity and Accessibility of Public Library Information Literacy Programs. The following main recommendations develop a focused approach to improve public library information literacy program accessibility and inclusivity.

1. Public libraries require extra funds to develop their outreach programs and expand their services by creating customized content that meets distinct needs of women particularly women who belong to vulnerable groups.

2. Directed outreach efforts will help women in rural regions together with disadvantaged communities discover library resources.

3. Library staff members should build extensive service offerings which specifically meet minority, low-income and ethnic groups of women.

4. Public libraries must leverage digital technology by creating remote information access mechanisms which allow women to access resources along with various alternative service options.

5. Implementations should collaborate with community organizations and non-governmental organizations for expanded outreach purposes as well as improved identification of exclusive information needs faced by diverse female groups.

Public library implementations of these recommendations create expanded access to various women groups who will consequently experience full benefits from information literacy programs and develop equal knowledge foundations for society. School virtual laboratories connected to essential technologies, internet access create equal learning environments which surpass gender differences and academic motivation (SHEHU et al., 2024). A community library successfully helps women develop their literacy abilities for complete equality in society by putting women's needs first and considering local conditions and obtaining resources while employing staff who understand community needs (Jones, 2009). The development of participatory library services happens through deploying Web 2.0 and social media technologies (Zou et al., 2020).[21] The Digital Skills and Inclusion through Libraries in Uganda project allows female demographics and jobless youth to master digital knowledge for free access to online education resources (Lipeikaiteite et al., 2022).[7] The Kiriiri Women University for Science and Technology together with equivalent facilities stimulates science and technology education for women which strengthens their expertise in these fields (Mochama et al., 2020) (Lipeikaite et al., 2022).[12] Through Information and Communication Technologies women gain empowerment since these technologies enable knowledge acquisition and bring economic independence and social inclusion benefits according to Mahadi et al., 2017 (Mackey & Petrucka, 2021).[9]

7. Conclusion

Public libraries maintain crucial status as providers of women empowerment through their information literacy programs. The programs deliver significant impacts because they train women how to use information properly for accessing and assessing and utilizing it.

Research findings reveal that public libraries function as social facilitators which drive sociological change after women learn gender equality and achieve broader societal development. Different ongoing problems prevent marginalized women from securing equality by restricting their access to services and maintaining restrictive cultural practices that reduce their opportunities and failing to provide specialized content for their specific requirements. Additional financial support and distinct outreach activities should enable public libraries to create accessible technology-based inclusive solutions which work jointly with community partners.

Through multiple guidelines public libraries can enhance their service to various female audiences to help women develop essential skills for complete involvement with societal equality. These findings show that libraries are essential in the mission of gender equality as they establish an equitable society for every population. Aqili and Isfandyari-Moghaddam (2008) advise librarians to redesign their services through digital divide reflection that will improve patron service. The research concluded by Mochama et al. (2020) and Lipeikaite et al. (2022) shows that gender-responsive virtual laboratories provide equal educational possibilities and training environments to trainees. Public libraries serve as community centers which maintain a unique capability to eliminate information gaps between men and women thus allowing women to gain informed knowledge about health.

8. Source of Funding

None.

9. Conflict of Interest

None.

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