

E-ISSN: 2582-2160 • Website: <u>www.ijfmr.com</u> • Email: editor@ijfmr.com

# **Digital Competencies and Women Empowerment: A Digital Approach**

# Rubina Khatun<sup>1</sup>, Vijaykumar, R<sup>2</sup>

<sup>1</sup>Ph.D. Research Scholar, School of Education, Pondicherry University. <sup>2</sup>Assistant professor, School of Education, Pondicherry University.

## Abstract

The Digital Competency is a new, evolving, and elaborate technology-related skill. It is more than digital skills considering social and emotional parameters for using and understanding digital devices. It covers technical skills and abilities to use the technologies meaningfully for working, studying, and playing, and more than for everyday life in various activities. It requires abilities to critically evaluate digital technologies and motivation to participate in the digital culture. In contrast, women empowerment is the most thinkable issuefrom period to period. There are lots of trial-and-error processes that have been done till the 21<sup>st</sup> century, and still now, we are thinking about the process of empowering women. The cause behind it firstly is that the processes reach some portions do not reach all, and second till now, discrimination between girls and boys exists in our society. Now, it has been considered a global issue. Women empowered through ICT is also the most studied topic. Now, they require more than knowledge and skills; they must be competent in this field. The aim of the study is i). Graphical presentation of the paper published on Women's empowerment in ICT skills in the last six years ii). To determine to what extent women are empowered (Social, Psychological, and Economic) through digital competency. iii). To discover the challenges of women's being digitally competent in India, and lastly, iii). Discussed the Govt. Policies and schemes for making girls/ women digitally competent. This paper is based on Secondary data only. Finally, the author gave some recommendations, and future studies are discussed in this study.

Keywords: Digital Competency, ICT Skills, Women's Empowerment

## 1. Introduction

Women have experienced the most hardship globally, according to history, of all disadvantaged groups. No distinctions based on culture, race, geography, or religion could limit their pain. They have endured all kinds of hardship, including abuse, molestation, violence, rape, poverty, hunger, and inadequate treatment. Women occasionally encounter several issues on the multiethnic, multilingual, multiracial, and multireligious Indian subcontinent. Only the dimension varies from one state, society, and location to another. Even in the twenty-first century, women are still beaten and labelled as witches; they are stoned for engaging in sexual activity; honor killing is still prevalent in many regions of India; and they are tortured and raped while the primary perpetrators go unpunished. In addition, they are forbidden from using cell phones, denied the freedom to choose their own attire or profession, limited in their ability to freely move around their locality, discouraged from engaging in political activity, and many of them continue to go hungry or receive only a portion of the food they need. They live in a world of social taboos that bind them, and they encounter many strange challenges along the way.(Mandel, 2013).



E-ISSN: 2582-2160 • Website: <u>www.ijfmr.com</u> • Email: editor@ijfmr.com

Empowerment is the process of enhancing a person's or a community's spiritual, political, social, or economic strength. Developing self-assurance about one's abilities is frequently a part of empowerment. Five factors make up women's empowerment: women's sense of self-worth, their right to make and decide on choices, their right to access opportunities and resources, their right to have the authority to decide how their lives will be lived, both inside and outside the home; and their capacity to direct social change toward the creation of a more just social and economic order, both nationally and internationally(Hassanzadeh et al., 2020). Women's empowerment is not only necessary but also essential for the overall growth of society and the country. The United Nations, as well as other governmental and non-governmental organizations, have made the subject of "women empowerment" a focal focus of their initiatives and programs.

Technology serves as a catalyst for empowerment by offering a variety of methods for completing activities at any time or location. If necessary, the tasks can be completed totally online without leaving the house. With a multitude of teachers offering video and written instructions in numerous languages, technology also presents chances to improve learning in all conceivable areas (Mandel, 2013).ICT success stories in poor nations demonstrate how ICT may influence women in isolated areas and alter their life by bringing information and job opportunities, empowering women. Cummings and O' Neil's (2015) studied ICT has a positive impact on giving women access to basic resources since it improves their capacity for improved decision-making, learning opportunities, and technical or practical abilities(J. D. Febro et al., 2021). Professionally relevant hardware and software are updated frequently to improve productivity and make work easier. Increased use of digital information and communication technology (ICT) is required to keep up with these advances(Hassanzadeh et al., 2020)

Technologies (ICT) have significantly altered the types of abilities required to successfully engage, communicate, and work in a modern society. Therefore, national policies have been devised in many nations to promote digital competencies in the classroom and the workplace(Gnambs, 2021)Digital competencies are similar to the first core competency, Use tools interactively. It refers to the capacity to utilize technology in collaborative settings with others for communication, work, play, etc., necessitating knowledge of fresh applications for technology in a person's day-to-day activities. A person should be capable of utilizing ICT's potential to change how they work, access information, and communicate with others. It is more than just knowledge and skill. It includes the capacity to manage demanding situations by making use of psychosocial resources, such as abilities and attitudes, in a particular situation. Digital competence includes social and emotional elements of using and understanding digital devices in addition to digital skills.

The following sub-competencies are divided into the key competence:

- 1. Interact with literature, language, and symbols: the successful use of linguistic abilities—spoken and written—as well as mathematics and computing abilities—in various contexts.
- 2. Use knowledge and information interactively by recognizing what is unknown, determining what is not known, identifying, locating, and accessing reliable sources of information, assessing the accuracy, usefulness, and value of that information, as well as its sources, and organizing knowledge and information.
- 3. To use technology interactively, one must be aware of the new ways that people might use it in their daily lives. ICT has the potential to revolutionize how people collaborate, access information, and connect with one another. We need to have more technological knowledge than just what is required to use the Internet, send emails, and other fundamental functions.



### 1.1. Gigler's (2014) Dimensions of Empowerment Theory -a conceptual framework.

Gigler (2004), "improved access to information and ICT skills similar to the enhancement of a person's writings and reading skills, can enhance poor people's capabilities to make strategic life choices and to achieve the lifestyle they value" (p.1). Gigler claimed that the six dimensions of the indicator for individual empowerment—informational, psychological, social, economic, political, and cultural—support the development of the individual's human potential in a variety of ways. (Alao et al., 2022; J. D. Febro et al., 2021)The researcher has used only the three dimensions i.e., social, economic, and psychological in analysing the outcomes related to the digital competency of women for empowerment purposes from that theory.

Dimension	Objective		<b>Outcome Indicator</b>		
Informational	To improve access to		improved capacity to use different forms of ICTs		
	information and		enhanced information literacy		
			enhanced capacity to produce and		
	informational		publish local content		
			improved ability to communicate with		
	capabilities		family members and friends abroad		
Psychological	To support a process of		strengthened self-esteem		
	10 0 1 1 1 1		improved ability to analyze own		
	self-reflection (critical		situation and solve problems		
	conscientization) and		strengthened ability to influence		
	conscientization) and	-	strategic life choices		
	problem-solving		sense of inclusion in the modern world		
	capacity				
Social (Human	To strengthen people's		enhanced ICT literacy and technology skills (i.e. repair computers)		
Capital)	human capital (skills,		enhanced leadership skills		
			improved program management skills		
	knowledge, ability to				
	work and good health)				
Economic	To enhance people's		improved access to markets		
			enhanced entrepreneurial skills		
Psychological Social (Human Capital) Economic Political	capacity to interact with		alternative sources of income		
	the market		productive assets strengthened		
	the market		improved employment opportunities		
			improved income through a) lower		
			transaction costs (less time constraints); b) reduced transport needs; and c)		
			increased timeliness of sales		
Political	To improve people's		improved access to government		
			information/services (e-government)		
	participation in decision-		improved awareness about political issues		
	making processes at the		improved capabilities to interact with local governments		

# Table 1: ICT-based indicators of personal empowerment: Enhanced human capabilities(J. D.Febro et al., 2021)

### **1.2.** Objectives of the study:

1.2.1. To find articles published on women empowerment and ICT skills worldwide in 2018-2023.

1.2.2. To find out what extent Women and girls are empowered (Economic, Social, and Psychological) through digital competency.

1.2.3. To find out the challenges the women faced in being competent digitally.



1.2.4. To find out the govt. policies and schemes to make digitally competent to the women in Digital India.

### 2. Methodology:

To generate this review, the researcher adhered to the Parsif.et. al guidelines. To ensure the quality of the revision process and its reproducibility, Parsif et al. present a standard peer methodology that uses a guideline checklist. A review protocol was created, outlining the criteria for selecting articles, the search approach, the methods for data extraction, and the methods for data analysis.

### 2.1. Data Sources and Search Strategies

We systematically searched two electronic databases (Scopus and Science Direct) between 2018 and 2023. The researcher identified peer-reviewed studies with articles written in English only. Databases were searched separately by the researcher. To identify as many eligible studies to be included, the Researcher broadened search terms and strategies. Search terms were modified together with informatics and Boolean operators as follows. The terms "Digital Competencies," OR " ICT skills," OR " Digital literacy," AND " Women Empowerment" OR "Girls" as keywords for the topic, article title, abstract, and keywords.

### 2.2. Selection of Studies

The researcher evaluated publication titles and abstracts in accordance with the aforementioned criteria to decide whether or not they were appropriate for inclusion in the study. Studies' whole texts that might be pertinent were examined for inclusion.

### 2.3. Data Extraction Process and Quality Assessment

Parsif et al. carried out the data extraction and evaluation of the article's quality. Each study's data were recorded in an evidence table.

### 2.4. Eligibility Criteria

sTwo rounds were used to choose the items to evaluate. Title and abstract screening comprised the first round of analysis. According to the study question and the other set of criteria, the selection criteria were created. In the second phase of analysis, the complete articles were examined, and the findings were arranged in a table.

Selection Criteria

### **Inclusion Criteria:**

- Type of literature- original and grey
- Type of sources articles
- access- open access only
- language english
- period- 2018-2023
- relevance to research question only
- Exclusion Criteria:
- before 2018 and after 2023
- language other than English
- not relevance to the research question
- other access
- type of source book, conference proceeding



## **2.5.** Arrangement of the Corpus of Analysis

A total of articles was found after the search using the inclusion criteria. The researcher restricted this selection to a total of papers relevant to the current investigation after applying exclusion criteria (figure 1). Articles were removed (n=17) because they did not directly address our study topics.

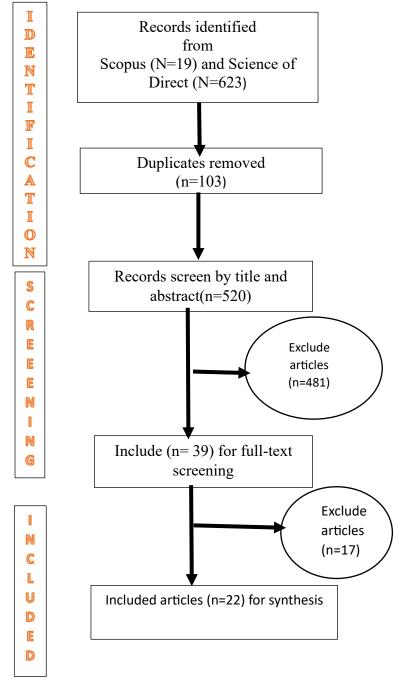


Figure 1- Flow Chart of the final Inclusion of the Articles

## 3. Findings

RQ 1: To find articles published on women empowerment and ICT skills worldwide in 2018-2023.

From 2018 to 2023, the researcher got 22 articles on women's empowerment and ICT (shown in Fig: 1. Analysis showed that the highest number of articles published in 2020 in comparison to 2021 yielded the lowest number of articles.



E-ISSN: 2582-2160 • Website: <u>www.ijfmr.com</u> • Email: editor@ijfmr.com

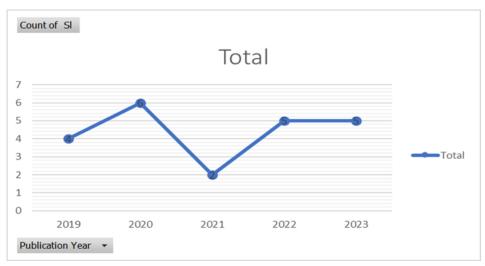


Figure 1: Year-wise article analysis from (2018-2023)

Figure 2 shows what researchers have done on Women's studies and ICT skills in different countries. The researcher analyzed 22 articles, from which it has shown that in the area of that field, the US is the leading Country, followed by South Africa, Pakistan, Germany, and India.

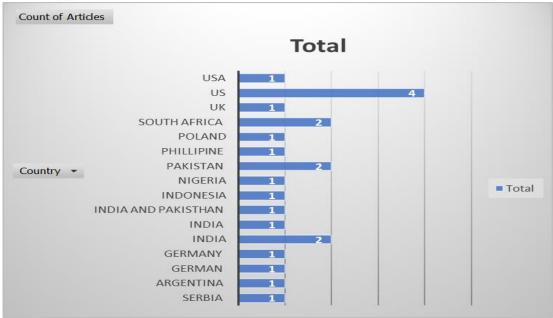


Figure 2: Country-wise analysis of published Articles from 2018-2023

Figure 3 depicts the articles on Women empowerment and ICT skills produced by the different Journals. The analysis showed that the Journal of International Women Studies and Computer and Composition published most articles.



E-ISSN: 2582-2160 • Website: <u>www.ijfmr.com</u> • Email: editor@ijfmr.com

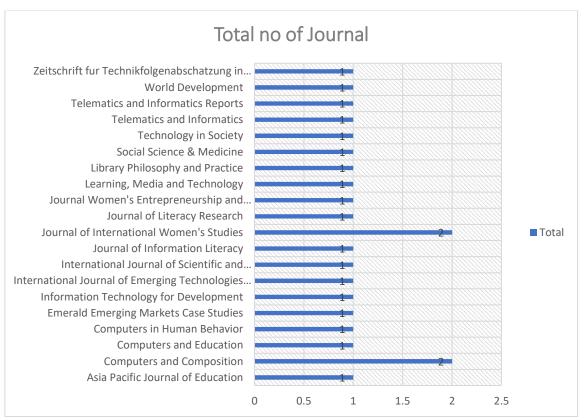


Figure 3: Journal -Wise Analysis of Published Articles (2018-2023)

Through Keyword analysis it provides a broad overview. Table 4 shows the keywords used in 22 articles. Analysis showed that a total of 86 items had been found, and among them, 31 clusters were found in which nine items are linked in Cluster 1, following Clusters 2, 3, and 4 were linked five items, Clusters 5, 6, 7, 8, 9 were linked four items whereas clusters 10 to 31 were linked two or one items. Nodes represent the connection between the studies.

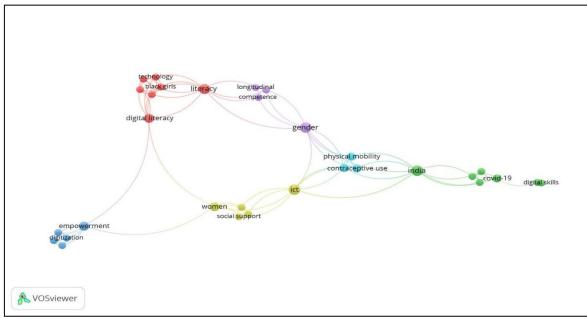
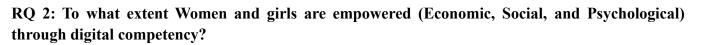
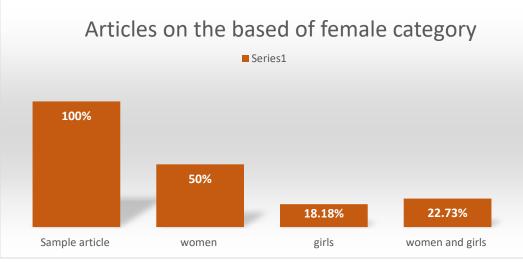


Figure 4: Keyword Analysis (Analysis through VOS Viewer)



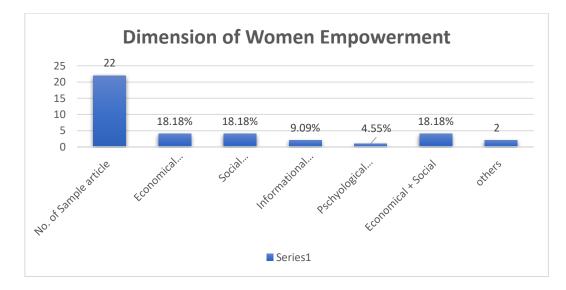




To find out the research question, the researcher got eleven articles on Women (50%), four articles on girls (18.18%), and Five articles (22.73%) on Women and girls(both) out of 22 articles and articles discussing the dimension of Women Empowerment i.e., Economic, Social, Informational, and Psychological are 18.18%, 18.18%, and 9.09%, accordingly. 18.18 % of articles covered Economic and Social dimensions, and 9.09% discussed other dimensions of Women Empowerment.

Sample article	women	girls	women and girls
22	11	4	5
	50.00%	18.18%	22.73%

No. of the Sample	Economic	Social	Psychological	Economical +	othe
article	Empowerment	Empowerment	Empowerment	Social	rs
22	4	4	1	4	2
	18.18%	18.18%	4.55%	18.18%	9.09
					%





Impacts on Economic Empowerment –Out of 22 articles, the researcher found only four articles (18.18%) based on Economic Empowerment, and four (18.18%) covered the economic and social dimensions. Based on these Articles, the results showed that the knowledge and skills of ICT and digital devices would boost in four aspects: I) to improve their business skills, II). Cost saving III). Job opportunity IV). Use of social media.

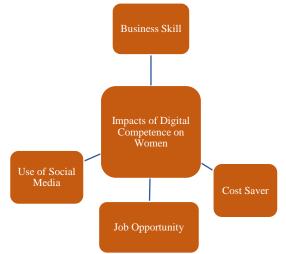


Figure – Impacts of Digital competence on Economic Empowerment

To improve their business skills- A study conducted in South Africa (2022) showed that 30 (77%) participated women had improved their economic standards by using telecentres. They could know the market price of their goods, increase their business skills, and obtain information regarding personal loans from the Government for start-ups to small-scale businesses.(Alao et al., 2022). Irfan and Salam (2020) showed that after training 80 rural women entrepreneurs on digital devices, they could efficiently upload product information and images and manage the order-delivery process through the smartphone on the website. They earned a good amount of money by selling their products. Further, they argued that the online platforms and apps help them to search for information on the latest fashion trends, update with the upcoming exhibitions and microfinance companies, and contact vendors, sellers, and buyers.(Irfan & Salam, 2020)

**Cost Saving** - Studies found that Women benefitted from digital techniques and online job and transactions in terms of saving money on transport and time. (Alao et al., 2022)

**Job Opportunity-** The Study showed that using telecentres improved job opportunities for women in South Africa. They were continually updated with Govt. Vacancies, and after being competent in ICT skills, they applied for jobs within their communities and neighboring areas. The study reported that 77 % of rural women got jobs and were conducting personal online transactions. (Alao et al., 2022).1.6 M job vacancies related to technology wer in the IT Sector in the year 2020. Digitally competent women and girls participated in the IT sector. (Martinez Demarco & Demarco, 2019). Women and girls were attended both online and offline job.Online jobs also created due to outsourcing business activity in IT sectors , that were occupied by the Women. In many institutions of India , the rate of engagement by women has increased. However, new platforms are opening up employment prospects for Indian women, and the shared economy enables them to overcome physical mobility constraints and strike a balance between work and family responsibilities. There is no social discrimination in the employment opportunities created by this economy. It can be applied to both advancing women and balancing the national economy(Dhanamalar et al., 2020). In terms of Indonesia, Internet availability significantly improve women and girls labor market outcome that's are they are able to work from home , part-time internet based work , higher flexibility of internet based work



E-ISSN: 2582-2160 • Website: <u>www.ijfmr.com</u> • Email: editor@ijfmr.com

allowing to take up extra work to supplementary of their income , Work hours and improved the type of jobs they held and also aid them to search their appropriate jobs as per their levels.(Kusumawardhani et al., 2023)

**Use of social media**: A Study conducted in India, explored women entrepreneurs who started their business through social media such entrepreneurs are Aditi Gupta (Menstrupedia), Richa singh (Your Dost: Online Counselling & Emotional wellness Coach), Richa Karis (Zivame), Shradha Sharma (your story), Radhika Ghai (Shopclues), Shabina chopra (Yatra.com), Hema Subramaniam(blogger, author and food consultant), all of them are co-fonder and managing director of their corresponds company. Besides ,according to a report on the women's channel Shethepeople from September 2019, YouTube, a website for sharing videos, has reported that India has 120 female YouTube stars with more than one million members. In India, there was just one female YouTuber in 2016 with over a million subscribers, and by 2017, there were three female YouTubers actively producing material. The top female YouTube channel and have million of subscribers. The study opined the ability to connect and communicate directly with customers and consumers makes social media one of the most effective tools for women entrepreneurs. Social media marketing is a very affordable and straightforward option for female business owners. Through social networking, business owners may quickly and directly engage with customers and solicit feedback about their online goods and services.(Kumari, 2020).

**2. Impacts on Social Empowerment:** Researcher found 4 (18.18%) articles on Social Empowerment and 4 articles (18.18%) on Social and Economic Empowerment. Result showed that computer skill training improved women communicate skills. Using Social platform like Facebook, Instragram, Twitter and other social networking sites , Women and girls increase their knowledge and computer and social skill and relation , could develop a new social circle and could make a virtual communities and followed the rules and norms in online spaces . Member within these communities provide emotional and social support to each other and easily accessed information in sitting at (Garcia et al., 2020; Rajkhowa & Qaim, 2022; Saeed, 2023)

Besides that, hashtag campaigns to stop gender-based violence and discrimination and established social identity, and for Social change, Social media is a powerful forum for debating and exchanging ideas, as well as for channelling hashtag movements to end sexual assault and gender discrimination. Organizing a campaign or demonstration for women's rights activists to stand up and fight for gender equality is a new frontier. Women all across the world are connected and supporting one another through social media, including lawmakers, politicians, and business owners who are working for gender equality in their countries and around the world. The movements of the following hashtags across the globe. (Garcia et al., 2020; Gnambs, 2021; Kumari, 2020)(Kelly, 2020)(Silva & Scott, 2023)

**3. Impacts of Psychological Empowerment** – 4.55% articles showed that Social media offers a digital platform for communication, sharing, and disseminating emotions, knowledge, and experiences, and it connects individuals online all over the world. It offers the chance to socialise, which may help one feel a part of the community. Women can maintain long-distance friendships and family ties. Through writing blogs, creating videos for YouTube, sharing stories on Facebook or Instagram, and other outlets, they can develop both their professional and artistic talents (Kumari,2020) Additionally, improved information availability and regular communication with family and friends may help to increase women's self-confidence and intra-household bargaining power. (Rajkhowa & Qaim, 2022). A study claimed that the women who had participated in the telecentre gained more knowledge and self-confidence thus increases self-esteem also. (Alao et al., 2022). The study's findings reveal that technology camp for girls and women



had statistically significant positive effects on girls' attitudes toward technology as well as their confidence in their technological abilities, it strengthens a person's sense of self, which raises girls' self-esteem. It also encourages women to have development mindsets, openly discusses gendered stereotypes, developed leadership skills and acts as a mentor and role model for young girls.(Almjeld, 2019; Denton-Calabrese et al., 2021; Grant, 2023)



**Fig: Impacts of Digital competency** 

**RQ3-** What are the challenges the women faced in being competent digitally?

The study's outcome found that Women faced several challenges in being digitally competent -

- 1. Lack of knowledge- In addition, some women were discouraged from using the telecentre's services because they were unaware of them.((Alao et al., 2022)
- 2. Lack of Digital infrastructure- due to space restrictions, a lack of appropriate computer availability, and the minimal amount of time given to users, there was no suitable platform for them to practise what they had learned during the training session. (Alao et al., 2022; Demarco et al., 2019; Jevtić et al., 2023)
- 3. Availability of Network Poor network issued remained a challenge.((Irfan & Salam, 2020)
- 4. Myths of using technology Mind sets and attitude is using technology could achieve the goal. (Alao et al., 2022; Rajkhowa & Qaim, 2022)
- 5. Hindrance from their family Women and girls faced the most this type of issues that sometimes husband and father or brother did not allowed them to use mobile phone. (Alao et al., 2022; Irfan & Salam, 2020)
- 6. Lack of basic knowledge of digital devices-a little knowledge of digital device, technology uptake was little difficult from them. (Alao et al., 2022; Irfan & Salam, 2020 and Dhanamalar et al., 2020)
- 7. Laguage Most of training session was conducted in English where as women and girls confident in using their local language . (Alao et al., 2022 and Dhanamalar et al., 2020)
- 8. Education- Female got less opportunity for schooling because of full devotion of their family household chores and managing their family thus they often suffered low self -confidence of handling digital devices. (Alao et al., 2022;Irfan & Salam, 2020 and Ganeshan, 2021)
- 9. Black side of Social media Cybercrime, sexting, trolling, online harassment and embracement, fraud, cyberbullying, loss of privacy, Facebook depression, aggressive behaviour, occasionally not being able to distinguish between online friends and real friends, and online frauds involving cash



transactions are the most common issues faced by girls and women (Kumari, 2020 and Tomczyk, 2019)

# RQ4. What are govt. policies and schemes to make digitally competent to the women in Digital India?

The Union government's flagship initiative, Digital India, aims to make India "a digitally empowered society and knowledge economy" (Jayanthi, 2020). By 2020, India was to have high-speed nationwide internet connectivity and to have achieved universal digital literacy, according to Prime Minister Narendra Modi's Digital India Campaign, which was started in July 2015. (Mohanta, Debasisih, & Nanda, 2017). In India, some of the Digital India Initiatives for Women's Empowerment are:

### 1. MCTS, or Mother and Child Tracking System

The Ministry of Health and Family Welfare launched this program as part of Digital India. This effort makes use of information technology to guarantee that pregnant women and children under the age of five receive a full range of healthcare and immunization services. The National Informatics Centre was the developer of this application. It facilitates communication between service providers and beneficiaries. Auxiliary nurses and midwives can create their work plans using this program. Alerts on the deadlines for services should be sent to both recipients and service providers. In order to guarantee the delivery of high-quality services, this initiative also supplied a dash board with information for health administrators at all levels. This strategy is also beneficial for microbirth and universal vaccination. (Jayanthi, 2020)

### 2. Mahila E-Haat

There are two languages on this portal. The project began in 2016. The Ministry of Women and Child Development launched this direct online marketing tool to assist female entrepreneurs, Self Help Groups (SHGs), and Non-Governmental Organizations (NGOs). This website is helpful for exhibiting the goods made by women and the services they provide. This gateway makes it easier for buyers and sellers to communicate directly. More than 2000 products have been displayed to date by women business owners from 24 states. There is a provision for 18 different product categories. They consist of apparel, bags, home furnishings, carpets, rugs, foot mats, jewellery, decorative and gift goods, baskets, boxes, pottery, groceries, cushion covers, staples, organic, natural products, file folders, soft toys, industrial products, educational aids, and a variety of things. More than three lakh individuals will benefit from this, both directly and indirectly. On www.mahilaehaatrmk.gov.in, women can register and use technology to showcase their work to a larger audience.(Jayanthi, 2020)

### 3. Mahila Digital Saksharta Abhiyan

This initiative was designed to provide information technology training to 52,500,000 women, including Anganwadi and ASHA workers in various states across the nation.(Jayanthi, 2020)

**4.** This program's **Pradhan Mantri Gramin Digital Saksharta Abhiyan (PMGDISHA) initiative**, which uses private partnerships to provide digital literacy to rural households, served as its main organising principle. Local residents were given computer skills training up to the level of a certificate in training centres and schools(. Febro et al., 2020)

### 5. Internet Saathi:

Ratan Tata, Chairman Emeritus of Tata Sons, started a pilot project named "Internet Saathi" in 2015 as part of his long-term goal. This programme teaches women how to use the internet so they can then instruct other women in their community and other communities. To enable widespread internet access for women in rural India, Ratan Tata has partnered with Google and Intel. Rural women can only be educated and prepared for the future with the help of the internet. It appears that this campaign will help women who haven't been able to get a job yet further their careers. In India's cities, more women than males use the internet, but in the country's rural areas, few people have access to it. 15 million rural Indian women now have more influence thanks to Internet Saathi, which has helped



E-ISSN: 2582-2160 • Website: <u>www.ijfmr.com</u> • Email: editor@ijfmr.com

close the gender gap in the digital sphere. It has grown to be a significant force for change in rural India, motivating millions of women and their families to embrace the modern world and benefit from the Internet. In order to provide villagers with a completely new internet experience for a period of four to six months, the three-way initiative Internet Saathi will distribute 1000 specially built bicycles with linked gadgets. Within the following 18 months, 4,500 villages in the states of Gujarat, Rajasthan, and Jharkhand will participate in the initiative's start. Approximately 'Internet Saathi program is projected to reach about five lakh women resides from the rural areas. (Jayanthi, 2020)

### 6. Arogya Sakhi

In order to provide healthcare in the rural area, Arogya Sakhi's program assists rural women in developing their own personalities. Using a mobile application, it enables rural women entrepreneurs to provide preventative healthcare right at their clients' doorsteps. Women who are armed with tablets and portable medical equipment, such as blood pressure monitors and glucometers, visit houses and gather information from the village women. Doctors from any location with access to this data might treat the patients remotely. In a similar vein, various apps have been released to help farmers obtain accurate and fast information about their crops, market pricing, and analytics to increase their production and profitability. (Jayanthi, 2020)

### 7. Women for Empowerment and Entrepreneurship (W2E2).

W2E2, or Women for Empowerment and Entrepreneurship, provides rural women with digital tools, elearning, and internet access. In areas like sustainable agriculture and rural health, women frequently use the Internet for their own projects. Some are opening their own kiosks and stores to offer online services to the neighbourhood, while others have started working as digital literacy instructors in their own neighbourhoods. (Jha & Bajaj,2017)

### 8. National e-Governance Plan

Rural business owners are given the opportunity to offer services that are cantered on the needs of the citizens, such as online access to land records and utility bill payment. They may follow up on rural business initiatives with the support of this strategy, which also encourages community involvement, allows individuals to make educated decisions, and serves as a single-window interface to cut down on corruption. The only requirement is that candidates must be women who are computer literate. Students typically pay more for gear like laptops, printers, and internet connections. Women can become more empowered thanks to the current Digital India Initiative. They are as follows: Access to public internet, mobile connectivity for everyone, and broadband highways. (Jha & Bajaj,2017)

### Discussion

From 2018-2023, the researcher have found a total of 22 articles in which Six articles was published in the year of 2020 followed by the 2022 and 2023 and four articles only found in the year of 2021. Country wise research yield that US is published highest number of articles followed by South Africa . Pakistan and India. Journal of International Women Studies and Computer and Composition published most articles. that a total of 86 items had been found, and among them, 31 clusters were found. Using Gigler's (2014) Dimension of Empowerment Theory, the researcher explained women being digital competent can empowered economically, socially and psychologically. The shows that previous research did on this dimension 18.18%, 18.18% and 4.55% accordingly. It revealed that digital competence impacted on economic condition through improving business skills and increase the chances of getting Jobs, saves the transportation cost and also women entrepreneurs through social media. The study also explained how the Social Media acts as a Social Empowerment of Women. Hashtag moment is the most popular and



E-ISSN: 2582-2160 • Website: <u>www.ijfmr.com</u> • Email: editor@ijfmr.com

convenience medium for protesting and to recover self -identity. The study finding showed that Psychological Empowerment occurs through the social media, women can connect with their family and friends and being digital competent their self -worthiness has increased. Whereas the study found that several challenges faced by the women in being digitally competent like network issues, basic knowledge of digital devices, lack of infrastructure and language, burden from their family and myth of technology uses etc. The Researcher found eight Government Schemes and Policies advocated for empowering Women in digital India in which three (Mahila Digital Saksharta Abhiyan, Pradhan Mantri Gramin Digital Saksharta Abhiyan (PMGDISHA), Internet Saathi) schemes for training of Digital skills and three for economic improvement (Mahila E-Haat, Women for Empowerment and Entrepreneurship (W2E2), National e-Governance Plan) and rest three schemes of health improvement of women has implemented.

### Conclusion

The capacity to use digital tools, technology, and resources effectively and critically for various means of life is referred to as digital competence. This includes knowledge of how to use digital media and the ability to navigate the internet and computer programs. The term "digital competency" refers to a broad range of abilities and knowledge, including the capacity to perceive and comprehend educational demands as well as conceptually solve technological challenges. Digital literacy is essential in today's culture since it enables people to participate fully in a variety of activities, such as communication, job, and education. Digital competence has substantial and varied effects on women's empowerment. This paper explored the research trends on Women Empowerment through ICT last six years and the several impacts of digital competency on Women Empowerment through economic, social and psychological. Digital literacy is essential for closing the gender pay gap and advancing gender equality. Women may access a variety of previously unavailable opportunities and services by improving their digital literacy. They are able to participate in numerous digital platforms including social media, online communities, and e-commerce as well as gain knowledge, skills, and information through online platforms. They can also interact with people from all over the world. By enabling them to express their thoughts, share their ideas, and take part in decision-making processes, this increased access to digital tools and resources empowers women. Additionally, women have more economic prospects because to their digital fluency. They can pursue an Internet business, remote employment, and digital skills-based, which enable them to go across conventional constraints of space and time. Women who are digitally proficient may promote their goods and services, produce and distribute information, and connect with a worldwide audience. Additionally, women may take charge of their reproductive and personal health thanks to digital competency.

### **Bibliography**

- 1. Alao, A., Chigona, W., & Brink, R. (2022). Telecentres' contribution to women's empowerment in rural areas of South Africa. *Information Technology for Development*, 28(4), 747–776. https://doi.org/10.1080/02681102.2021.1991871
- Almjeld, J. (2019). Not Your Mother's Tech Camp: Rebooting Girls' Technology Camps to Equip the Next Generation of Technofeminists. *Computers and Composition*, 51, 55–67. https://doi.org/10.1016/j.compcom.2018.11.003
- 3. Demarco, S. M., Martinez Demarco, S., & Demarco, S. M. (2019). Empowering women through digital skills in Argentina. *TATuP Zeitschrift Für Technikfolgenabschätzung in Theorie Und Praxis*, 28(2), 23–28. https://doi.org/10.14512/tatup.28.2.s23



E-ISSN: 2582-2160 • Website: <u>www.ijfmr.com</u> • Email: editor@ijfmr.com

- 4. Denton-Calabrese, T., Mustain, P., Geniets, A., Hakimi, L., & Winters, N. (2021). Empowerment beyond skills: Computing and the enhancement of self-concept in the go\_girl code+create program. *Computers and Education*, *175*. https://doi.org/10.1016/j.compedu.2021.104321
- 5. Febro, J. D., Catindig, M. A. C., & Caparida, L. T. (2021). ICT Literacy for Marginalized Girls and Women's Empowerment. *Asian Women*, *37*(1), 51–91. https://doi.org/10.14431/aw.2021.3.37.1.51
- Febro, J. D. J. D. J. D., Catindig, M. A. C. M. A. C. M. A. C., & Caparida, L. T. L. T. L. T. (2020). Development of e-learning module for ICT skills of marginalized women and girls for ICT4D. *International Journal of Emerging Technologies in Learning*, 15(16), 94–105. https://doi.org/10.3991/ijet.v15i16.14929
- 7. Ganeshan, M. K. (2021). Digital Skills to Enhance Womens Empowerment in India Digital Skills to Enhance Womens Empowerment in India. January.
- 8. Garcia, P., Fernández, C., & Okonkwo, H. (2020). Leveraging technology: how Black girls enact critical digital literacies for social change. *Learning, Media and Technology*, 45(4), 345–362. https://doi.org/10.1080/17439884.2020.1773851
- 9. Gnambs, T. (2021). The development of gender differences in information and communication technology (ICT) literacy in middle adolescence. *Computers in Human Behavior*, *114*, 106533. https://doi.org/10.1016/j.chb.2020.106533
- 10. Grant, C. (2023). Building girls' confidence in digital literacies at tech camp. *Computers and Composition*, 68. https://doi.org/10.1016/j.compcom.2023.102773
- Hassanzadeh, M., Ilomäki, L., Kantosalo, A., Lakkala, M., Oberländer, M., Beinicke, A., & Bipp, T. (2020). Digital competencies: A review of the literature and applications in the workplace. *Computers* & *Education*, 146(1), 103752. https://doi.org/10.17485/ijst/2018/v11i23/120774
- 12. Ilomäki, L., Kantosalo, A., & Lakkala, M. (2011). *What is digital competence ? 2 . Digital competence is an evolving concept. 2008*, 1–11. https://core.ac.uk/download/pdf/33734457.pdf
- Irfan, T., & Salam, M. T. (2020). Kaarvan Crafts Foundation: embracing digital literacy for women empowerment. *Emerald Emerging Markets Case Studies*, 10(4), 1–34. https://doi.org/10.1108/EEMCS-06-2020-0215
- 14. Jayanthi, R. (2020). Women empowerment. In T. Rahman (Ed.), *Empyreal publishing house* (IV). https://doi.org/10.53983/ijmds.cpi2023.01.003
- Jevtić, B., Vucekovic, M., & Tasić, S. (2023). The Effects of Digitalization and Skills on Women's Labor Market Inclusion- Serbian Gap Study. *Journal Women's Entrepreneurship and Education*, 2023, 58–75. https://doi.org/10.28934/jwee23.pp58-75
- Kelly, L. L. (2020). Exploring Black Girls' Subversive Literacies as Acts of Freedom. Journal of Literacy Research, 52(4), 456–481. https://doi.org/10.1177/1086296X20966367
- 17. Kumari, M. (2020). Social Media And Women Empowerment. *International Journal of Scientific and Technology Research*, 9(3), 626–629. www.ijstr.org
- Kusumawardhani, N., Pramana, R., Saputri, N. S., & Suryadarma, D. (2023). Heterogeneous impact of internet availability on female labor market outcomes in an emerging economy: Evidence from Indonesia. World Development, 164. https://doi.org/10.1016/j.worlddev.2022.106182
- 19. Mandel, K. C. (2013). Concept and types of women empowerment. *International Forum of Teaching and Studies*, 9(2), 17–30. http://www.joe.org/joe/1999october/comm1.php
- 20. Rajkhowa, P., & Qaim, M. (2022). Mobile phones, women's physical mobility, and contraceptive useinIndia.SocialScienceandMedicine,305(January),115074.



https://doi.org/10.1016/j.socscimed.2022.115074

- 21. Saeed, R. (2023). Twitter and Development of Social Capital: A Gender Perspective. *Telematics and Informatics Reports*, *9*, 100037. https://doi.org/10.1016/j.teler.2022.100037
- 22. Silva, E., & Scott, K. L. (2023). Developing Black feminist researcher identities: A youth-engaged Wikipedia case study in information activism. *Journal of Information Literacy*, *17*(1), 224–258. https://doi.org/10.11645/17.1.3359
- 23. Tomczyk, Ł. (2019). The Practice of Downloading copyrighted files among adolescents in Poland: Correlations between piracy and other risky and protective behaviours online and offline. *Technology in Society*, 58. https://doi.org/10.1016/j.techsoc.2019.05.001