



A Study on Digital Competency among Working Women

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Abstract

Digital literacy enhances the quality of life by making it more efficient and more accessible. The idea of becoming digitally literate is more important to women as it will contribute to their becoming more productive, career-oriented, financially independent, being aware of their rights, and understanding the necessity to start their own companies, which will help the national economy. The study aims to examine the extent to which the demographic variables, digital literacy, IT literacy, media literacy, and Internet literacy influence the digital competency of working women. In the study, primary and secondary information were collected. The population comprising the study will be 100 women working in the government, the private and the independent contractors, all operating within the Thrissur District. Chi-square outcome implies that in working women, the relationship between age, occupation, educational background, and digital competency has high values. The digital competency, media literacy, internet literacy, IT literacy and digital literacy are positively correlated with one another as per the correlation research.

Keywords: Digital Competency, Demographic Factors, IT Literacy, Media Literacy, Internet Literacy

Introduction

Digital competence is the capability of using information society technology to communicate, work and play with confidence and critical thinking. Digital skills are required in education, employment and social life. It is the guaranteed and essential use of the whole range of digital technologies in communication, information, and primary problem-solving in every aspect of life. We also should consider the fact that digital competence, being a transversal competence, also allows us to master the other major competencies, i.e. communication, language skills or the basic skills in math and science (Riina Vuorikari, 2015). Digital competency may be broken down into a series of smaller elements and does not merely consist of knowing how to use the Internet. Digital literacy is more relevant in the current society in order to survive both in personal and professional life.

Digital literacy is the skill of finding, creating, evaluating and sharing information through technology. In the modern world, it is necessary to form an identity as well as to enhance productivity. Despite technology being instrumental in achieving gender equality, there are still a

significant number of women who are digitally illiterate and therefore have to depend on males to make online payments or presentations due to low self-esteem affecting their attitude. The particular elements that are especially important are that women have to be digitally competent to become more productive, financially independent, and aware of their rights and commercial opportunities. The reason behind conducting the study is to analyse how the digital competency of working women is determined by demographic factors, digital literacy, IT literacy, media literacy, and internet literacy.

The objectives of the study are to analyse the level of influence of demographic factors, Digital literacy, IT literacy, media literacy and Internet literacy on the digital competency among working women.

Hypothesis

H1: There is a significant association between age and digital competency among working women

H2: There is a significant association between educational qualification and digital competency among working women

H3: There is a significant association between occupation and digital competency among working women

H4: There is a positive relationship between digital literacy, IT literacy, Media Literacy, Internet literacy and digital competency among working women.

Methods and Materials

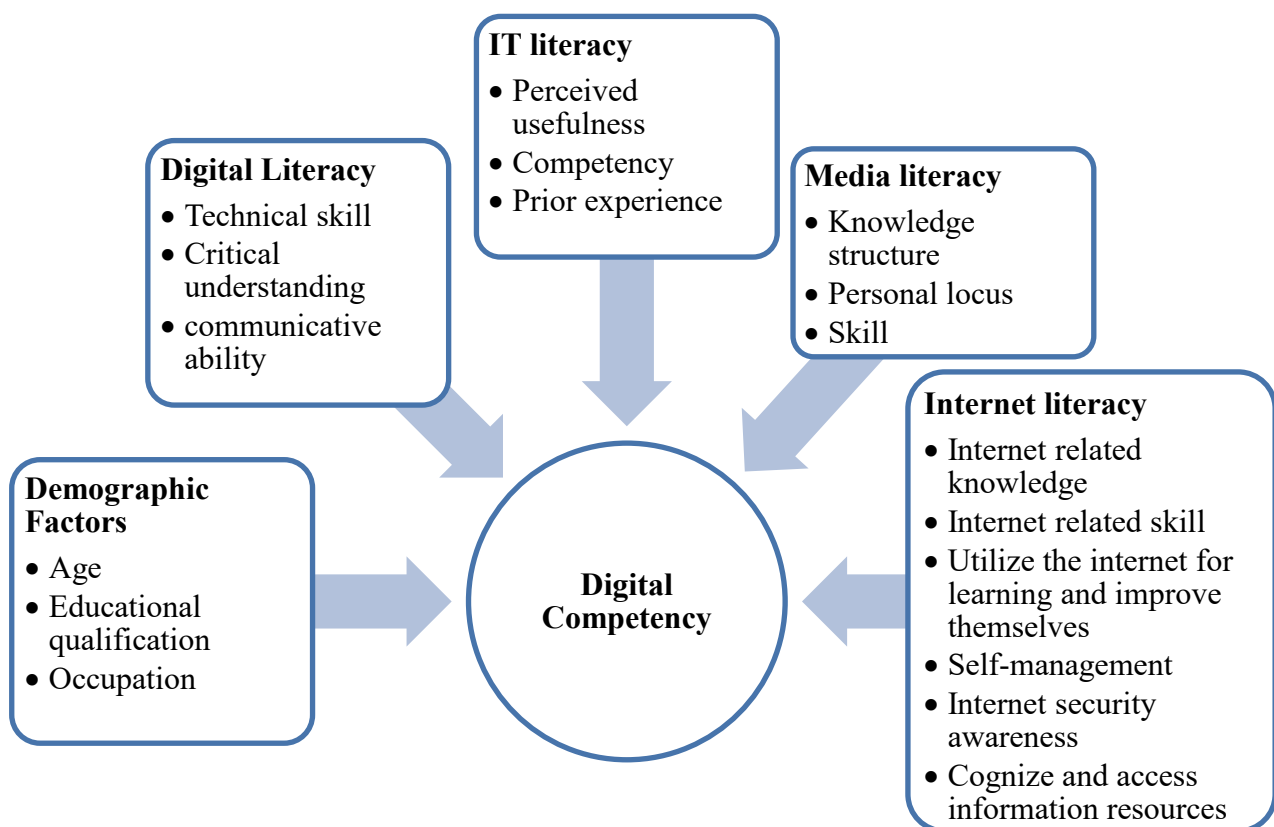


Figure 1 – The Conceptual Model

The research is primarily and secondarily based and descriptive as well as explanatory in nature. The research population will be comprised of working women in the Thrissur District who will be working in the government, the private sector, and as independent contractors. A practical sample method was used to give the primary data required in the study involving 100 respondents. Well well-structured questionnaire was developed in order to collect primary data.

The collected data were tabulated and analysed with the help of SPSS 21.0. Two statistical tests are the chi-square test and correlation, which are used in the analysis. The scale was found to be valid since the Alpha coefficient of Cronbach, which was used to determine the reliability of the scale of measurement, was greater than the acceptable minimum coefficient of the study, which stood at 0.7. The only aspect of digital competency that is analysed is that of working women because of the time limitations. It is necessary to add that since the study is largely based on how the participants feel about the issues, there is always a chance that the participants will respond to the questions in a biased manner; however, every effort has been made to interpret and analyse the data and, therefore, reach a reasonable and rational conclusion.

Geeta Rani and Anju Gandhi (2022) highlighted the impact of the COVID-19 pandemic on education in India, emphasising the need for digital competence among teachers to effectively use digital tools and prepare students for the future. They argued that teachers with strong digital skills are crucial in supporting students' growth in the digital age. Nikola Vukčević, Nikola Abramović, and Nataša Perović (2021) explored the development of digital competencies among students at the University of "Adriatic" Bar in Montenegro, focusing on how students' skills align with EU standards for digital competence. Their research showed gaps in digital competency development and suggested ways to improve higher education practices. Yu Zhao, Ana María Pinto Llorente, and María Cruz Sánchez Gómez (2021) conducted a systematic review of research on digital competence in higher education, finding that most university students and faculty have basic digital skills but require more structured development programs. Alberto D. Yazon, Karen Ang-Manaig, Chester Alexis C. Buama, and John Frederick B. Tesoro (2019) examined the relationship between digital literacy, competence, and research productivity, discovering that digital competence positively impacts educators' research productivity. Mala Mathew (2018) argued that India's higher secondary and secondary curricula are outdated and fail to address the digital and media literacy needs of today's students, emphasising the importance of integrating 21st-century competencies into education.

Results and Discussions

The Cronbach's Alpha (α) of each of the five variables and the whole set was also determined to determine the reliability of the instrument used. The test result is presented in Table 1.

Table 1: Test of Reliability

Sl. No.	Variables	No of items	Cronbach's Alpha (α)
1	Demographic factors	3	0.870
2	Digital literacy	3	0.847

3	IT literacy	3	0.791
4	Media Literacy	3	0.867
5	Internet Literacy	6	0.903
6	Total	23	0.952

H1: There is a significant association between age and Digital competency among working women.

Table 2 - test result

	value	df	Asymp.Sig (2-sided)
Pearson Chi-Square	75.504	10	0.000

Chi-square

The Chi-Square result shows the association between age and Digital competency among working women. From the result, it is seen that the Pearson Chi-Square value is 60.609, p-value = 0.000 i.e. the chi-square test result is less than the alpha level of significance of 0.05. This tells that there is a statistically association between age and Digital competency among working women. Hence, the hypothesis there is a significant association between age and Digital competency among working women is accepted.

H2: There is a significant association between Educational qualification and Digital competency among working women.

Table 3 -

	value	df	Asymp.Sig (2-sided)
Pearson Chi-Square	60.609	10	0.000

working

Chi-square

test result

The Chi-Square result shows the association between age and Digital competency among working women. From the result, it is seen that the Pearson Chi-Square value is 70.631, p-value = 0.000 i.e. the chi-square test result is less than the alpha level of significance of 0.05. This tells that there is a statistically association between age and Digital competency among working women. Hence, the hypothesis there is a significant association between educational qualification and Digital competency among working women is accepted.

H3: There is association

	value	df	Asymp.Sig (2-sided)
Pearson Chi-Square	70.631	20	0.000

a significant between

Occupation and Digital competency among working women.

Table 4 - Chi-square test result

The Chi-Square result shows the association between age and Digital competency among working women. From the result, it is seen that the Pearson Chi-Square value is 75.504, p-value = 0.000 i.e the chi-square test result is less than the alpha level of significance of 0.05. This tells that there is a statistically association between age and Digital competency among working women. Hence, the hypothesis there is a significant association between occupation and Digital competency among working women is accepted.

Table 5 - Correlation between Digital literacy, IT literacy, Media literacy, Internet literacy and Digital Competency

Independent variables	Dependent Variable	Pearson Correlation	Sig. (2-tailed)	N
Digital Literacy	Digital Competency	.601**	.000	100
IT Literacy		.671**	.000	100
Media Literacy		.532**	.000	100
Internet Literacy		.644**	.000	100

****.** Correlation is significant at the 0.01 level (2-tailed).

From the above statistical results, it is inferred that Digital Literacy (.601**), IT Literacy (.671**), Media Literacy (.532**), Internet Literacy (.644**) and Digital Competency are positively correlated with each other. It demonstrates the level of linear relationship between two variables. The probability value of the correlation is not less than 0.01. It indicates that, of the working women, digital competency, media literacy, IT literacy and Internet literacy are positively correlated. Consequently, the hypothesis of the study is accepted.

Findings

- The Chi-Square result shows the association between age and Digital competency among working women (p-value = 0.000).
- The Chi-Square result shows the association between educational qualification and Digital competency among working women (p-value = 0.000).
- The Chi-Square result shows the association between occupation and Digital competency among working women (p-value = 0.000).
- The correlation analysis shows that digital literacy (.601**), IT literacy (.671**), Media literacy (.532**), Internet literacy (.644**) and Digital competency have positively correlated each other.

Conclusion

Digital technologies have limitless potential in assisting women in their growth because they provide new social, political, and economic opportunities. Women face more challenges as regards to first access, the affordability of digital services, and ICT adoption. Specifically, the levels of confidence and technical and digital literacy skills influence the access to and use of ICT by women. As a rule, a greater number of women than men say that they have difficulty with the use of the Internet or mobile phones. Women accord more priority to becoming digitally literate as it will make them more productive, career-oriented, financially self-sufficient, more aware of their rights, and more conscious of establishing their own businesses to boost the national economy. The given research will estimate the extent to which the digital competency of working women is influenced

by demographic factors, digital literacy, IT literacy, media literacy, and Internet literacy. The study indicates that all digital literacy, IT literacy, media literacy, Internet literacy, and digital competency have been positively related to each other, and that there is a strong relationship between age, occupation, education background, and digital competency amongst working women.

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