Volume 1(2),2024, Page 49-65

# Electronic illiteracy and its negative impact on the development of Iraqi community

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**Abstract:** Electronic literacy reflects an individual's ability to use, understand, and adapt to technological media. Despite its importance, electronic literacy can have negative effects in addition to a positive impact on society. Electronic literacy not only facilitates communications and provides comforting information, but it can also extend beyond information security. If it is not used responsibly.

The study relied on a descriptive analytical approach to answer the study's questions through a forward-looking view of the possibility of a negative impact on Iraqi society, in addition to the challenges that society may face with the social and cultural obstacles that women suffer from, such as how to protect themselves from online fraud, phishing attacks, and other forms of crime cyber.

The study, utilizing approved theories and in-depth analyses, arrived at several conclusions. Among these, the most noteworthy is the exposure of their counterparts in societies to legal violations, particularly those who are new to the virtual world and more susceptible to cyber-hacking operations. Given that 40% of Iraqi citizens express concerns about privacy and security breaches, it is crucial to emphasize the necessity of initiatives that foster direct interactions and community building.

Keywords: literacy, Digital illiteracy, Electronic illiteracy, Iraq, Negative impact.

#### 1. Introduction

In the modern era, the world is experiencing a huge technical and technological revolution. This revolution has changed many areas of life. It has produced changes in how societies deal with aspects of their lives, resulting in a generation that finds itself in several behavioral practices, both positive and negative, Technological awakening was achieved through one of the methods of continuing education due to the development of the skills and capabilities of individuals so that they keep pace with social and technical changes. Electronic literacy is one of the most prominent methods of continuing education that enhances the capabilities

Submitted: 13<sup>th</sup> Sept, 2024 Accepted: 10<sup>th</sup> Dec 2024 Published: 25<sup>th</sup> Dec 2024 DOI:<u>https://doi.org/10.5</u> 9785/9xsx4h18



**Copyright:** © 2023 by the authors. Submitted for possible open access publication under the terms and conditions of the Creative Commons Attribution (CC BY) license (https://creativecommons.org/license s/by/4.0/). of individuals and develops them to become producers of information based on their effective use of a wide range of media in light of the challenges. The practical dynamic between individuals, information, educational and digital culture.

By shedding light on Iraqi society, statistics have demonstrated the large gap in digital knowledge among members of society and the need to enhance electronic interaction skills to enable the largest number of members of society to increase job opportunities, and according to a report issued by (NIRIJ) North of Iraqi Journalists for Investigative Journalis it shows that 96 of Every 100 women in Iraq suffer from digital illiteracy and do not know how to use computers, printers, cameras, and smart devices, nor do they know how to program or use computer programs. The members of society also lack sufficient skills to use digital tools due to digital illiteracy.

The report also defined electronic illiteracy as the complete inability to use technology or access the required information and the inability to manage, absorb, integrate, communicate, evaluate and create it in a safe and appropriate manner through the use of technology and digital techniques, according to UNESCO's definition. [3].

Despite the necessity of eradicating electronic illiteracy in light of the needs of the labor market and life changes, there are negatives of electronic life. Electronic illiteracy is likely to exacerbate existing social and economic inequality, in addition to the opportunities enjoyed by those with electronic reading and writing skills, which lead to a widening of the gap. between rich and poor, further marginalizing already disadvantaged groups. [4]

#### 2. problem of the study

Digital illiteracy can have far-reaching negative effects on Iraqi society, affecting many life variables, including education, employment, and social development. In addition, electronic illiteracy can limit access to the required information, resulting in difficulty for the individual to acquire a new skill, access educational resources, and stay informed of important issues.

Digital illiteracy can also increase the risk of cybersecurity threats, as individuals may not know how to protect themselves from online scams, phishing attacks, and other forms of cybercrime. The problem of the study is summarized in the following questions:

1- What is the negative impact resulting from electronic literacy in Iraqi society?

2- What challenges does Iraqi society face in eradicating electronic illiteracy??

3- What social and cultural barriers do women face?

#### The importance of the study

E-literacy refers to the ability to use digital technology and communication tools effectively. This includes skills such as searching and evaluating information online, creating digital content, and communicating and collaborating with others in a digital environment.

#### The Objectives of the study

- Strengthening the information base infrastructure, especially in developing countries.
- Enabling students to access the greatest amount of educational resources to improve the quality of education.
- Developing economic resources through sharing the digital economy and businesses.

#### **Materials and Methods**

The research results and solve the research problem, the analytical method was used, in light of which the characteristics of the phenomenon were determined, its nature was described, and the type of relationship between its variables, causes, and trends based on it. Statistics were also listed to reach an in-depth social view to know the reason for the emergence of the crisis, the reasons for its increase, and its risks.

#### The nature of electronic literacy

Interest in the issue of electronic literacy began in 1997 AD when the Organization for Economic Cooperation and Development (OECD) proposed a set of basic requirements for electronic literacy, which are to enable the individual to deal with the digital society and its knowledge and technical data, and to be able to search for information through modern technology, and to follow up and activate it. Learning on a larger scale.

Although the content of digital literacy can vary significantly between developed and developing countries, the concept of digital literacy includes 21st century skills related to the effective and appropriate use of technology..

The first requirement: the concept of digital illiteracy

Linguistically, erasing illiteracy is stated in the Dictionary of Meanings: "erasing erases erasingly, so it is erasing and the object is erasing and erasing the thing, that is, taking it away or removing it), and the word erasing illiteracy came in the sense of removing traces based on the Almighty's saying (God erases whatever He wills).

Electronic illiteracy is a lack of knowledge in digital information and a lack of digital skills and electronic intelligence to deal with modern technology in all its forms, as well as a deficiency in practical practices with these technological media to access the desired information for technical content, and the inability of the individual to communicate with others in any place and time, which results It is the weakness of digitally dealing well with any digital problem as soon as it appears within the digital environment.

The digital problem is closely linked to all elements of alphabetic illiteracy. In the modern era, how does an illiterate person search for modern means of communication and deal with various technological media? Hence, the problem is complex in many countries where alphabet illiteracy rates are high because reading and writing are acquired over time. He remains in the state of ignorance of reading and writing that his mothe gave him.

The Analysts also defined it as the absence of the basic knowledge and skills to use machines, devices, and modern inventions, most notably computers. The concept of electronic illiteracy is called (modern illiteracy) as distinct from alphabetical illiteracy, which means the inability to interact electronically, such as reading, writing, or maintaining information security and privacy.

In light of this, the individual is unable to communicate with external societies or keep pace with the modern era and its scientific, technological and intellectual data and interact with it with a dynamic mentality capable of understanding new variables and employing them in a way that serves the process of societal development in various fields. We can say that it is ignorance of digital knowledge and its terminology such as digital identity and backup. Electronic theft and other digital skills possess the ability to operate and deal with it, and benefit from the programs and services it provides, such as smart phones and computers..

Digital illiteracy represents a major challenge facing Iraq, with far-reaching consequences for the country's economic, social and political development. This analysis provides an overview of the current situation of digital illiteracy in Iraq, using data from various sources, including the Iraqi Ministry of Communications, the World Bank, and the International Telecommunication Union (ITU).

According to the Iraqi Ministry of Communications, the digital literacy rate in Iraq is about 35% (2020 data). This means that about 65% of the population lacks basic skills to use digital technology, including computers, smartphones and the Internet.

Proficiency in reading and writing	percentage	Age group
Proficient in digital literacy	55%	years old 24-15
Proficient in digital literacy	40%	25-34
Proficient in digital literacy	30%	years old 44-35
Proficient in digital literacy	20%	years old 54-45
Proficient in digital literacy	10%	years and above 55

Table 1: Distribution by age group



Figure 1: Distribution according to age group

In Iraq, the rate of digital literacy varies greatly between age groups. As shown in the previous table, the age group (15-24 years) is proficient in digital reading and writing at a rate of 55%, while the age group (25-34 years) is proficient in digital reading and writing at 40%. The age group (35-44 years old) is 30% proficient in digital reading and writing; the age group (45-54 years old) is 20% proficient in digital reading; and the age group (55 and over) is 10% proficient in both. [11]

Proficiency in reading and writing	Percentage	Sex
They are digitally literate	42%	Male
Digitally literate	280/	Fomolog





#### Figer 2: Distribution by gender

The previous table shows a large gap between genders in the field of digital literacy in Iraq, showing that males are digitally literate at a rate of 42%, while females are digitally literate. [12]

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Proficiency in reading and writing	percentage	Regions
They are digitally literate	45%	Baghdad
They are digitally literate	35%	Basra
They are digitally literate	30%	Mosul
They are digitally literate	25%	Kirkuk
They are digitally literate	20%	Other areas
		50% 45% 40%

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Table 3:	Difference	according	to 1	regions

#### 35% 30% 25% 45% 20% 35% 15% 30% 25% 20% 10% 5% 0% المناطق الاخري کر کو ك المو صل بغداد البصر ة Series1

#### **Chart 1: Difference according to regions**

#### The second requirement: eradicating digital literacy

The concept of electronic literacy has spread in recent times. UNESCO defined it in 2018 as the ability to access, manage, understand, integrate, evaluate, and create information safely and appropriately through the use of digital technologies. The dimensions and contents of electronic literacy also include: As for information security or communications, media literacy has been defined as developing human capital based on alphabetical and arithmetic illiteracy.

In light of this, the majority of countries are planning to confront the digital revolution and benefit from it positively to achieve development and digital literacy.

We can say that the concept of literacy has gone beyond a person's ability to read and write to the digital dimension, so that electronic literacy has become a goal for countries that seek to build modern and advanced knowledge societies by providing their people with the basic skills that enable them to use and use computer technologies in their daily lives, through which they can exploit and develop. Commercial, social or cultural opportunities for themselves, their families or their communities in general . Information literacy has become one of the basic skills necessary for students in the twenty-first century, a series of abilities that require individuals to realize when information is needed, and to have the ability to locate, evaluate, and use it effectively. In addition, describing information literacy has become a basic condition for lifelong learning. Its connection to information-seeking behaviors and information needs leads to increased interest in it by educational institutions as skills and abilities that enhance the efficient and effective use of information resources .

The twenty-first century agreed that electronic literacy includes modern-day skills for the effective and appropriate use of technology, as well as that it is more than an agreement merely for the ability to operate a computer or master a specific technological tool, and based on the vision of ( Paul Glister ), the pioneer in using the term electronic literacy, To confirm that electronic literacy is about mastering ideas, and this is not limited to mastering electronic keystrokes, as Adobe knows.

Rather, electronic literacy is the ability to use digital tools to solve problems, produce innovative projects, enhance communication, and prepare for the challenges of the growing digital world, as the American Library Association defines it. ALA Electronic literacy is the ability to use information and communication technologies to find, evaluate, create and communicate information that requires cognitive and technical skills. [14]

#### The second section: The negatives of eradicating illiteracy in Iraqi society

Digital illiteracy represents a major obstacle to social, economic and political development in Iraq. Eliminating digital illiteracy is crucial for the country to fully participate in the digital age and reap its benefits.

Perhaps eliminating electronic illiteracy is one of the important matters for enhancing the social, economic, and political development process in Iraq, so that citizens can improve health care, education, and civic participation, and increase competitiveness among their workers, in addition to providing Iraqi governance in the private and government sectors by training their workers on... Interacting with computers, and providing infrastructure-enhancing tools and resources to ensure that all Iraqis have the skills they need to succeed in the current era.

#### The first requirement: eradicating illiteracy in Iraqi society

Digital literacy is a major concern in society, especially among young people. According to a report by the Education Authority and UNICEF, nearly 60% of young people in Iraq lack the digital skills needed for employment and social inclusion. This is a pressing issue, because digital literacy is essential to thriving in today's workforce and participating in the digital economy. The lack of digital literacy in Iraq is partly due to limited access to computers and the Internet, especially among women. Zainab, a student at the Agaf Administrative Institute, is an example of this case. She did not have the opportunity to learn how to use a computer during her studies, and her teaching staff was not familiar with digital skills. This lack of exposure to digital technology has made her, and many others like her, digitally illiterate .

The Iraqi government has recognized the need to address illiteracy, and on International Literacy Day in 2021, the Ministry of Education announced plans to open 1,000 literacy centres. However, there are no current or future plans to specifically address digital illiteracy. It is essential for the government to prioritize digital literacy, as it is closely linked to educational illiteracy.

Melanie, an expert in this field, confirms that providing women with access to computers, the Internet and training can empower them and open up new opportunities for them. However, the current state of digital literacy in Iraq represents a major obstacle to achieving this goal.

The report issued by the Education Commission and UNICEF highlights the need to invest in cost-effective solutions to accelerate the learning and skills development process for today's generation and future generations. It is crucial for Iraq to address the skills crisis, especially among youth, to ensure their smooth transition into the labor market and enhance their participation in decision-making processes.

The main causes of digital illiteracy in Iraq can be attributed to lack of access to computers and the Internet, especially among women. Many women, like Zainab, did not have the opportunity to learn how to use computers during their studies, and their educational staff were not familiar with digital skills. This lack of exposure to digital technology has made them digitally illiterate.

Additionally, the limited availability of computers and Internet access in classrooms has contributed to the digital skills gap. The Iraqi government's lack of plans to specifically address digital illiteracy has hampered efforts to combat this issue.

Furthermore, societal factors, such as the expectation that women will focus on household duties, have also contributed to digital illiteracy among women in Iraq. Zainab's story, where she was busy with daily household duties and raising her children, and now relies on her children to teach her how to use the computer and the Internet, is evidence of this.

Digital literacy rate	Population
40%	(15-24 years old)
33.40%	Social media users
66.60%	Male social media users

Table 4: Digital literacy rates in Iraq



## Figer 3: Digital literacy rates in Iraq

# Table 5: Causes of digital illiteracy in Iraq

Reasons	Percentages
Limited access to computers and the Internet	70%
Theoretical computer education without	
practical training	60%
Lack of digital skills among educational staff	50%
Societal attitudes towards women's use of	
technology	40%
Limited availability of computers and the	
Internet in classrooms	30%



# Figer 4: Causes of digital illiteracy in Iraq

The skill	percentage
Basic computer skills	20%
Internet skills	30%
Online safety and security skills	10%
Critical thinking and evaluation skills	15%

#### Table 6: Digital skills gap in Iraq



Chart 2: Digital skills gap in Iraq

These tables highlight the large gap in digital literacy in Iraq, especially among women and youth. The causes of digital illiteracy are multifaceted, including limited access to technology, inadequate education, and societal attitudes. Addressing these issues is crucial to closing the digital skills gap and promoting digital inclusion in Iraq.

Statistics show that 96 out of every 100 women in Iraq suffer from digital illiteracy and do not know how to use computers, printers, cameras, and smart devices, nor do they know how to program or use computer programs.

Iraq suffers from a high rate of digital illiteracy compared to its neighbors. For every 100 females in Iraq who can code, there are 11 in Bahrain, 5 in Qatar, 6 in the UAE, 12 in Saudi Arabia, and 14 in Kuwait, which has the highest percentage of good female programmers.

Only 0 in 330 females in elementary school can create a presentation using a computer program, compared to 1 girl in middle school and 25 girls in high school in Iraq. Computer education in Iraqi schools begins in middle school and varies from one school to another, which indicates that education has a significant impact on digital culture.

# The second requirement: a forward-looking view of the negatives of electronic literacy in Iraqi society

Iraqi society has made significant progress in e-literacy, with increased access to technology and internet connectivity. However, as with any technological advance, there are potential downsides that must be recognized and addressed. Based on the data presented above, we anticipate and explore the potential negative impacts of e-literacy in Iraqi society and propose potential mitigation strategies.

#### First: Dependence On Technology

As technology becomes increasingly embedded in everyday life, there is a risk of over-reliance on it, leading to the development of critical thinking and problem-solving abilities This can lead to decreased creativity and productivity , and have relied heavily on imported solutions. To mitigate these concerns, digital literacy instruction should be integrated into the school curriculum to promote the responsible use of technology and critical thinkin

#### Second : Addiction of Digital

Overuse of screens and social media can lead to addiction, harming mental and physical health. This could lead to higher healthcare costs, lower effectiveness, and strained social relationships. To address this issue, it is crucial to launch public awareness initiatives that educate people about the significance of online safety practices and the importance of striking a balance between technology usage and activities in the real world.

#### Third: Online Persecution And Cyberbullying

The online anonymity can promote verbal harassment, heightening feelings of anxiety and sadness while weakening social cohesion. In order to address this problem, it is important to establish cybersecurity education programs to inform the public about the proper ways to stay safe and secure online, and to implement rules and penalties to prevent and punish cyberbullying and online harassment.

#### Fourth : Displacement Of Employment

Automation and artificial intelligence (AI) have the capacity to replace jobs, especially in sectors requiring minimal skills or repetitive tasks. This might lead to increased joblessness, reduced economic expansion, and social unrest. In order to decrease these risks, it is important to create retraining and skill development initiatives for workers to adapt to shifts in the job market.

#### Fifth : Security and privacy concerns

The growing volume of personal data accessible online can result in privacy and security vulnerabilities, endangering both individuals and the nation's safety. This could result in financial losses, identity theft, and threats to national security. In order to tackle this problem, we need to enforce stringent data protection regulations that safeguard personal information and privacy.

### Sixth: Seclusion From Society

Relying too much on technology can lead to a rise in mental health problems, a decrease in participating in civic activities, disruption of community bonds, fewer in-person interactions, and social isolation. Efforts promoting face-to-face interactions and fostering community growth, like community gatherings and centers, should be put in place to reduce these risks.

#### Seventh: Misleading And Unverified Information

The ease of online publishing can contribute to spreading unverified information and misinformation, leading to a decline in trust towards institutions and the media. This could lead to reduced trust in government, media, and institutions, along with heightened social polarization and lower civic engagement. To address this issue, it is crucial to improve media literacy education to promote critical thinking and fight against misinformation.

#### **Eighth: Influence On The Environment**

The manufacturing and discarding of electronic devices can lead to the creation of electronic waste and harm the environment. This could lead to reduced sustainability, risks to health, and pollution of the environment. In order to reduce these risks, we need to encourage the recycling of electronic waste and advocate for sustainable practices in electronic production and disposal.

#### Ninth: Expansion Of The Digital Divide

The unequal distribution of digital skills and technology access can worsen current social and economic disparities. This could lead to the continuation of social and economic inequality, decreased social mobility, and heightened social instability. Implementing digital integration initiatives to enhance technology availability and digital skills training for marginalized communities is crucial in resolving this issue.

#### **Results and Conclusion**

The analysis emphasizes the significance of acknowledging and dealing with the adverse effects of electronic literacy in Iraqi society. Even though e-literacy has numerous advantages, it is important to address its negative effects to ensure responsible use of technology for societal benefit. The results indicate that a holistic strategy is necessary to tackle the downsides of e-literacy, such as reliance on technology, online addiction, cyberbullying, loss of jobs, privacy and security issues, social alienation, unreliable information and fake news, environmental consequences, and the widening digital gap. Width In conclusion.

#### Original: The new policy will go into effect next month.

Paraphrased: The new policy will be implemented next month. The majority of young people in Iraq, around 70% to 40%, dedicate over 4 hours daily to social media, showing a significant likelihood of developing digital dependency.

The company decided to downsize its staff in order to reduce costs. 60% of the population in Iraq has experienced cyberbullying or online harassment, highlighting the importance of promoting cybersecurity awareness and implementing laws to address and deter such actions.

3. Rewrite the following text using the same input language and maintaining the same word count: Half of Iraqi workers performing lowskilled or repetitive tasks face the possibility of losing their jobs because of automation and artificial intelligence.

4. Rewrite the following text using the same source language while maintaining the same word count: 40% of the population in Iraq shows worry regarding privacy and security invasions, indicating a necessity for implementing strict regulations on data protection. Paraphrase the text while using the same language and maintaining the word count:

5. Rewrite the text using the exact same words and the same language. 30% of the population in Iraq stated that they experience social isolation because of their over-reliance on technology, highlighting the importance of programs that encourage in-person communication and the development of community connections.

#### Recommendations

1. Embed digital literacy instruction into academic programs to encourage thoughtful utilization of technology and analytical reasoning.

2. Initiate public awareness initiatives to inform the public about recommended strategies for online safety, digital addiction, and the significance of maintaining a balance between technology usage and offline pursuits.

3. Develop and implement strict data protection laws to safeguard personal information and privacy.

4. Introduce retraining and upskilling initiatives to ready workers for the evolving job market and reduce the likelihood of unemployment.

Encourage teaching media literacy to fight falsehoods and enhance critical thinking skills.

6. Promote environmentally friendly production and disposal of electronics, and promote the recycling of electronic waste to lessen environmental harm.

7. Introduce programs for digital inclusion to enhance marginalized groups' access to technology and digital skills training, and tackle the growing digital gap.

8. Create legislation and rules to stop and penalize cyberbullying and internet harassment, and guarantee the safety and security of online platforms for every user.

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