Challenges and Oppurtunities for Adult Education in the Digital Era: The Role of Guidance and Counseling

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ABSTRACT

In the history of adult education has gone through various stages of evolution, a long history has brought the understanding that adult learning is not only about the transfer of knowledge but also involves psychological, social and cultural aspects. In the context of adult education, guidance and counseling play an important role in supporting holistic individual development. Guidance and counseling helps adults overcome challenges, set realistic goals, and develop strategies to reach potential. While the digital era presents new challenges and opportunities in the context of adult learning, literacy is not just the ability to use technology but also involves critical and creative skills in understanding and utilizing digital information. There are many positive impacts that can be enjoyed, such as efficiency and ease of access to information. The research method used is a literature review with descriptive qualitative data analysis, which aims to seek a deeper understanding of adult education, as well as digitalization and literacy. It is necessary to pay further attention to how they optimize the potential of technology in everyday life. In this way, the integration between the concepts of andragogy, digitalization, and guidance and counseling offers a holistic and integrated approach in supporting adult learning and development. By utilizing technology wisely and supported by the right guidance, individuals can optimize their potential in various aspects of life, thereby creating a society that is more skilled, competitive and digitally cultured.

Keywords: Literacy, Digital Era, Adult Education, Guidance and Counseling

INTRODUCTION

Education is an element that cannot be separated from human life, plays a central role in the progress of a nation and has a significant influence on the quality of its human resources. Education can occur through various stages, such as in the family, school and community. Education at school is a continuation in the family where at school you will learn what is in your life, in other words, school will reflect a person's life. School is an integral part of life and community needs, and is an obligation. Widiastono describes the characteristics of education in 3 dimensions, namely individual, social and personality. From an individual perspective, education plays a role in helping someone develop thinking abilities, understand science and technology, make decisions, solve problems and develop skills. From a social perspective, education supports strengthening relationships between people, forming cooperation, solidarity and community development. Meanwhile, personality education contributes to forming self-esteem, self-confidence and aspirations for the future (Soegeng, 2016).

In the concept of education, it is found that not only young people are involved in the education process. In the field, many adults take part in the learning process, both formal and non-formal education, such as courses, skills training and other upgrading programs. In this very fast era, the development of information technology has produced a new dimensional space as an artificial and virtual innovation or what we know as cyberspace. The development of information technology is responded quickly by the public so that the number of internet users increases every year. This rapid development has an impact and influence on all sectors of life in society, one of which is education (Naufal, 2021). According to Anugraha, digital literacy is

a life skill that includes reading, writing and arithmetic so that in using technology you need skills in receiving and sharing information, or what could be called digital literacy (Silalahi et al., 2022)

Having good literacy skills certainly has a positive impact on users, such as time efficiency, faster learning processes, cost savings, security, access to the latest information, access to various jobs, and can also influence the world (Sumiati & Wijonarko, 2020). However, for people who are not wise in using digital media in this era of developing information technology, Ngafisi said that technology is able to make humans become a generation that bows down, cannot be let go as if it makes its users submit and are captivated by technology.

In 2021, digital literacy levels in Indonesia will be measured, quoted from KOMINFO, a survey was conducted on 10,000 participants in 514 cities/districts in Indonesia. Respondents ranged in age from 13 to 70 years and they were active users of digital media. In his research, 4 main aspects were used, namely digital skills, digital ethics, digital security and digital culture. The survey conducted resulted in a Digital Literacy Index of 3.49 points on a scale of 1-5. Then in 2022 there will be an increase in the level of digital literacy in Indonesia to 3.54 points on a scale of 1-5, the same as the previous year where this service uses 4 pillars, namely digital skills, digital ethics, digital security and digital culture.

Data from survey results conducted by KOMINFO provides evidence that Indonesian people, including adults, are digitally literate. In an effort to accelerate digital transformation, the President of the Republic of Indonesia Joko Widodo has launched the National Digital Literacy Program, this program aims to develop human resources in the digital field. Then how do adults take advantage of digitalization in the learning context? Has the use of digital media been utilized optimally for their personal development?

From the data presented, we need to know to what extent digital technology is used by adults to support their needs. as an example of field data obtained from Bandung city residents who tend to be active in using digital technology, with the average duration of use per day being as follows: laptop 4.5 hours per day, computer 3.6 hours per day telephone 14 hours per day, mp3/mp4 1 hour per day , iPad or tablet 1 hour per day, television 6 hours per day. The use of these devices can generally be done simultaneously or separately, and these figures reflect the average data sample of Bandung city residents (Sulistyaningtyas et al., 2012).

According to research from the Data.ai research institute, Indonesia occupies the position as the country where the population has the longest duration of smartphone use. In the data, it is stated that in 2019 the time Indonesian people spent using smartphones was 3.9 hours per day, in 2020 it took an average of 5 hours a day and throughout 2021 it spent an average of 5.4 hours. From this data, we know that the duration of Indonesian people's use of smartphones is increasing compared to previous years (CNBC Indonesia). Apart from that, in 2021, research results from the Indonesian Ministry of Communication and Information in collaboration with Katadata Insight showed that as many as 94% of the Indonesian population paid little attention to the security of their personal data and were not fully careful in managing application access which could potentially lead to data theft (Kompas.com). Along with these findings, it is important to respond to changes in people's digital behavior by implementing digital literacy programs.

Findings obtained from research (Silvana & Cecep, 2018) show the importance of digital literacy programs that have a positive impact on knowledge, understanding and skills in using media, especially social media, which is currently used as a source of information by the public. Research states that digital literacy is effective for early to adult learning. Kenton & Blummer's research states that people's ability to utilize technology in various activities can be done as a form of effort to develop professional abilities (Syah et al., 2019). For this reason, as

adults and intelligent citizens, digital literacy skills are one of the abilities that all groups need to have.

Digital technology has opened up the accessibility of education for adults wherever they are. With online platforms, online courses, webinars, and other online learning resources, adults now have greater access to educational opportunities than ever before. However, with so many choices and information available, counseling is needed to help them navigate educational options that suit their needs, interests, and goals. Technology can also create new challenges in maintaining a balance between personal life, work and education for adults. Guidance counseling can help them manage stress, set priorities, and find a healthy balance between their various commitments.

Thus, in the digital era, guidance and counseling has a very important role in supporting the education of adults by helping them overcome challenges, develop necessary skills, and achieve their educational and career goals.

METHOD

The method used in preparing this article uses a literature review research design or literature study, namely a research method in which data collection is carried out by examining theory. This research process was carried out by collecting data from various sources related to the theme raised based on the knowledgeless book entitled The Adult Learner and journal articles, etc. which were accessed from Google Scholar, DOAJ, Science Direct which were used as references in writing. The data analysis used is descriptive qualitative which is used to understand and review the literature read regarding the concept, advantages and uses. The method used.

RESULT AND DISCUSSION
Adult Education Concept

The term andragogy or adult education was proposed by Alexander Kapp. The term andragogy or adult education was proposed in 1833. The term andragogy was used by Kapp to explain the educational theory developed and born by philosophers such as Plato, apart from that the Dutch German Enchevort also made studies on the term andragogy. In 1919 Adam Smith gave his argument about adult education, namely education not only for children but also education for adults, then in 1921 Eugar Rosenstock stated that adult education uses special teachers, special methods and a special philosophy. In the following years, the theory of adult education was further developed, in 1926 The Americans for Adult Education published Adult Education, receiving contributions from Edward L Thorndike, Edward C Lindeman (Kamil, 2013).

In 1928 Edward L Thorndike compiled a book originating from the scientific school entitled "Adult Learning". The following year, in 1929, Lawrence P Jacks wrote the journal Adult of Education and argued that income and life are two things that cannot be separated in human life. The history of andragogy is a long journey in the world of education, and many scientists are interested in dissecting issues regarding adult education. The focus of thinking is aimed at the learning process, learning goals, learning targets as well as the relationship between andragogy and economic, social, cultural and political issues. Where in the following years it remained in 1950 that Malcom Knowles compiled his book on adult education. Theoretically and conceptually, Malcolm Knowles defines "andragogy as the art and science to help adult learners" (Kamil, 2013).

Then (Knowles et al., 2005) has assumptions about adult learning, where we need to understand what is meant by an adult first, there are four things that can define an adult, namely;

(1) biological definition, where becoming an adult is the age at which an individual can reproduce; (2) legal definition, becoming an adult means an individual reaches the age where the law says we can vote, get an ID card, driving license; (3) social definition, when you become an adult you also need to play adult roles such as having a job, a partner, citizenship and so on; (4) psychological definition, where psychologically adults come to the self-concept of being responsible for their own lives.

Lindeman defines adult education as a process in which adult students become aware of meaningful experiences. As individuals mature, the need and capacity for self-direction needs to be present, using their experiences in learning in learning to identify readiness to learn and to organize their learning around life issues and improve their previous lives. Lindeman put forward several basic assumptions about adult learning which form the basis of adult learning theory, including: (1) Adult learning motivation arises because of personal needs and interests; (2) the focus of adult learning is related to their life experiences; (3) Experience is considered the main source of learning for adults; (4) Adults have an intrinsic desire to self-direct their learning; (5) Individual differences based on age, such as in learning style, learning speed and time and place (Knowles et al., 2005).

The adult learning landscape is explained about the role of emotions in learning, about how the body follows learning and about the relationship between spirituality and adult learning. It turns out that each of the points mentioned has the potential to expand understanding of adult learning as a holistic and complex phenomenon. In adult learning, learning is no longer seen as a cognitive process that takes place in the mind of the adult learner, and adult learning is not just about changing the learner's characteristics. Rather learning is something related to a better understanding of the cultural, social, economic and political forces that shape and inform the learning environment (Merriam, 2009, 2017).

The characteristics of mature adult students proposed by Innggalls, Knowles and UNESCO are characterized by responsibility, where adults have the ability to overcome life's challenges and have the capacity to manage themselves. Maturity in adulthood can be reflected in the ability to meet personal needs and utilize experience and identify a willingness to learn and know the purpose of one's life. From these dimensions, adult students actually have many advantages, seen from psychological maturity, self-concept, responsibility, desire and motivation to learn, they can learn something on a broader scale. According to Bash (2003), adult learning also has relevance and is oriented towards the tendency that they must see the reasons for learning something or understand it in the relationship between learning events and aspects of their lives, so that whatever they do has value and provides benefits for themselves (Tannehill, 2009).

The learning system used can also be directed into various forms of learning activities according to needs, for example group discussions, role playing, simulations, training (skill practice sessions). Knowles proposed three main things that are an important part of adult education, namely: (1) changing the vision of adult students, especially in adult education programs; (2) propose the term continuing learning; (3) adult students at the national training laboratory are those who are already working (Kamil, 2013).

The principles of teaching in adult education are an essential part, including: (1) two way communication, adult learning is not the authority of the facilitator so that in the learning process it is hoped that there will be reciprocity between the students and the facilitator; (2) feedback, this principle requires the facilitator to know that students can follow and pay attention to what is being conveyed; (3) Active Learning, a principle that requires students to be active and actively involved in learning or learning by doing; (4) multiple-sense learning,

where learning will be more effective if students use their five senses to learn; (5) exercise, where repeated exercise applies to adult education (Sihombing, 2019).

The concept of andragogy is also known as a method for involving adults in the learning process, and the quality of learning is considered effective when learning methods and techniques actively involve student participation. The active involvement of students is considered the main factor for success in adult learning because in principle adult education activities require a separate approach. Andragogy is an educational approach that focuses on adults where individuals are considered as the main subject in the education system. Adults have the active ability to plan their own learning goals, draw conclusions, determine the most effective learning methods and are able to gain maximum benefit from educational experiences. So the impact of education on adults often goes beyond its acquisition, the knowledge gained through the educational process can function as an impetus for substantial and internal change so that the concept of adult learning can be developed (Budiwan, 2018; Hendri, 2020; Tannehill, 2009).

By applying the principles of andragogy, learning efforts or activities for adults to achieve lifelong education goals can be achieved through the application of theoretical concepts or the responsible use of technology. In line with Stephen Brookfield (2000) that adulthood should not be considered as a separate period of life, but rather a continuation of the previous stage of life. In fact, lifelong living is a goal that can be applied to all educational sectors. In other words, it is impossible for andragogy to develop if it abandons the ideal principles of adults, so it is necessary to consider the characteristics and needs of individual adult students when applying this approach in a specific learning context (Bass, 2012; Yatimah & Sari, 2022).

Digital Literacy

The term digital literacy or digital literacy was popularized by Paul Gilster in 1997. Gilster defined digital literacy as an individual's ability or skills to effectively and efficiently understand and use information from various digital sources in various formats (Wahono et al., 2020). Digital literacy is an important indicator in education and culture to develop students' critical and creative thinking skills. In its use, digital media can be accessed widely and freely, but digital media users are expected to have intelligence in utilizing technology in an educational context. Students need to pay attention to and follow the basic guidelines to ensure that the use of technology is carried out wisely and effectively among: culture, cognitive, constructive, communicative, responsibility, creative, critics and social responsibility (Silalahi et al., 2022).

Digital literacy is knowledge or skills, the ability to use digital resources, communication tools to search for information, use it healthily, wisely, intelligently, carefully and accurately. Apart from that, digital literacy is also the ability to use information technology to convey content or information through cognitive and technical skills. Douglas A J Belshaw stated that there are eight key aspects for developing digital literacy, which include: (1) understanding the culture of sharing in the context of digital media use; (2) cognitive abilities, in assessing and evaluating content; (3) constructive, constructive to create something concrete; (4) communicative understanding of digital networks and communications; (5) responsible self-confidence; (6) creatively doing new things in new ways; (7) critical in evaluating digital content and literacy as a life skill; (8) socially responsible (Silvana & Cecep, 2018).

Digital literacy is described as a form of way of thinking (multi-construct hypothesis) in learning. Primamukti & Farozin further stated that the use of information and communication technology in learning can increase effectiveness in carrying out the learning process, improve learning outcomes, motivation, interest in learning, learning achievement and individual quality

in terms of utilization (Karmila et al., 2023). Applicable to adult individuals, having good digital literacy skills has a good impact on life and, literacy skills are very important in helping someone successfully overcome various aspects of life. Literacy not only involves the acquisition of knowledge, but also involves the ability to document personal experiences for guidance in the future. Literacy culture can improve brain performance, expand knowledge and information, understand meaning and develop verbal abilities (Fitriani & Nugroho, 2022).

Apart from having a good impact on human life, digitalization also turns out to have a negative impact, quoted from Media Indonesia, a number of negative impacts from the lack of digital literacy skills arise, such as the spread of fake news (hoaxes), online fraud, cyber bullying, hate speech and radicalism. It is known that there are several factors that influence digital abilities, for example the role of family. Blummer explained that the role of the family can have an influence, although not directly, but the family plays a role in character formation in introducing a reading culture, because current developments that have given rise to a reading culture are said to have an influence. Overall, both direct and indirect impacts have an influence on digital skills. Liu conceptualizes learning as a mental activity that involves active participation. In his view, reading has an important role in developing basic skills, including digital literacy skills. The level of activeness in reading also has an impact on practical digital literacy skills, considering that digital literacy basically involves skills in using digital media to make various tasks easier (Syah et al., 2019).

As an illustration that can be observed, there is a concrete example in the education domain, namely the core skills that academics/lecturers must have in an effort to support digital literacy. These include (1) Reskilling Minded Lectures, which means having the willingness and awareness to update and upgrade the ability to manage and carry out mastery in digital devices, its function is to balance the role of social media which continues to emerge. In this case, the role of social media must be understood as facilitating collaboration to make it easier for teaching not to be bound by space and time constraints; (2) andragogy learning technology support, where the ability to teach adults with the help of technology to achieve the expected goals; (3) interoperability skills, which are defined as the ability to get information from each other, exchange it quickly through certain systems, either individually with individuals or individually with systems or system with system. Open connectivity will support each other in campus development so that it will expand the reach of cooperation.

The Role of Guidance and Counseling in the Use of Technology

Communication experts generally agree that the modern era is characterized by the dominance of information, prediction and analysis. Alvin Toffler (1980) stated that human development can be divided into three crucial periods, namely: the agricultural era, the industrial era and the information era (Wuryanta, 2015). The emergence of information and communication technology provides benefits and positive aspects derived from various available sources. Many things that were previously impossible to do due to limitations with the presence of technology can color human life. The existence of technology needs to be interpreted as an effort to increase the effectiveness and efficiency of adults in solving their problems. Technology that utilizes education does not only contain knowledge but is also a source of information and learning resources that suit the needs of students so that the learning process can be facilitated (Salsabila & Agustian, 2021).

Technology is an interesting issue to discuss in adult education, especially in technological innovation which is becoming more and more sophisticated day by day. Technology can function as a means of providing content for life, because internet-based training allows access to classrooms for all individuals and can be accessed by anyone. just.

There are many perspectives on adult learning technology. Ginsburg proposed how to integrate technology into adult learning by proposing four basic approaches, namely technology as curriculum, delivery mechanism, instructional complement and instructional tool (Ngamkajonviwat et al., 2015) :

1. Technology as a curriculum: adults not only create content through technology, adults can also learn about technology itself
2. Technology as a delivery mechanism: an approach to integrating technology into adult learning by using technology as a means for transmitting information or delivering instructions.
3. Technology as a complement to instruction: technology is often used to complement instruction and expand adult learning.
4. Technology as an instructional tool: when technology is used to integrate into instructional activities for adult learning

This increasingly advanced and digital era encourages adults to adapt to developments in science and technology in order to adapt to their needs. Glisters said that mastering digital literacy is useful in all aspects of life, generally the ability to use technology and information from digital devices helps work to be effective and efficient. This applies in various life contexts such as academics, careers and everyday life. Digital media can also be simplified as a form of information in the form of sound, writing or images (Naufal, 2021).

Without realizing it, the development of communication technology influences the way a person communicates, because technology is like two sides of the same coin. Where one side can have a positive impact and the other side can have a negative impact. According to Kurnia, digital media is a means of communication that functions as a place to seek information and obtain information, where its use requires skills and proficiency in digital literacy. Alkali identified five types of skills included in the concept of digital literacy (Silvana & Cecep, 2018), the five types of skills in question include: (1) photo – visual literacy, namely skills in reading and summarizing visual information; (2) reproductive literacy, namely the ability to use digital technology to create new works; (3) branching literacy, namely the skill of navigating non-linear media from the digital space; (4) information literacy, involving the ability to search, find, assess and evaluate information critically; (5) socio-emotional literacy, refers to the social and emotional aspects of online existence, for example – whether individuals via digital media may socialize or even collaborate or simply consume content. We need to have these skills by individuals in various circles, especially adults. Where adult students can take advantage of digitalization as a medium to broaden their insight, upgrade their knowledge, hone their skills and so on.

In implementing the learning process in the current era, understanding digital literacy has become an essential need, where digital literacy is of course as important as understanding other sciences. Individuals who have unhindered access to digital media and technology tend to have a different mindset compared to those who are passive users. So, the statement that technology has had an influence and changed the lifestyle of adults is an accurate statement. Therefore, someone who is considered less skilled in using technology will experience delays in accessing information and will be left behind in opportunities for progress and development. Information today has a very important central role in the era of the information society or knowledge society. For this reason, they have the digital literacy skills needed to balance the information they obtain for self-development (Restianty, 2018).

Guidance and counseling provides important psychological support for adults in educational contexts. Adults often face a variety of emotional and psychological challenges, such as job stress, concerns about work-life balance, or motivation problems. Guidance and

counseling can help them overcome these problems so they can focus on learning. Guidance and counseling helps adults identify and solve problems that can hinder the learning process. These can include personal problems, such as lack of self-confidence or anxiety, or practical problems, such as managing time effectively or balancing family commitments with education.

Guidance and counseling have objectives consisting of general and specific objectives. The general aim of guidance and counseling is to help individuals achieve optimal development in accordance with their talents, abilities, interests and values, as well as the separation of problems faced by clients. Including the specific aim of guidance and counseling is to help individuals to be independent with the characteristics of being able to understand and accept themselves and their environment, make realistic decisions and plans, direct themselves with their decisions and plans and ultimately realize themselves (Putri, 2019).

Independent learning is becoming more important in adult education in the digital era. Guidance counseling can help adults to develop independence in learning, including time management skills, motivation, and effective learning strategies in a digital environment. This also involves helping them overcome barriers they may face in online learning, such as a lack of discipline or digital distractions

Discussion

The discussion in this article highlights two main aspects related to adult education and digital literacy. Firstly, regarding the concept of adult education, it provides a comprehensive picture of the evolution of the concept from time to time so that adult education is defined as a process that allows adult individuals to learn and develop themselves with various aspects including motivation, experience and personal responsibility. This can point to its relevance to adult education in the modern context, where factors such as technology and social change can influence the way adults learn and develop.

Second, namely the view regarding the importance of understanding and using digital technology effectively in everyday life, not only important in academic and professional contexts, but also in facing the challenges and opportunities in the current information era. In addition, it broadens insight into how digital literacy influences the way adults obtain and manage information, as well as its impact on personal and professional development.

This involves understanding how technology can be used as a tool to support adult learning as well as the importance of developing digital literacy skills as an integral part of adult education. Apart from combining these two aspects, this article discusses how guidance and counseling can play a supporting role in adult education in increasing digital literacy. technology can be used as a tool to support adult learning, while guidance and counseling assist in achieving optimal self-development, according to talents, interests, abilities and values.

CONCLUSION

In the era of digitalization and literacy, adult education plays a key role in developing individuals to face the demands of modern society. The adult education strategy in this era of digitalization is at the center of educational transformation where digitalization provides access to knowledge and skills that enable anyone to be involved in lifelong learning. The importance of digital literacy is also emphasized on the ability to manage, assess and use digital information effectively. Digital literacy is a skill in dealing with developments in information technology and its impact on society, especially in the context of adult education. Overall, it underlines that adults need to develop digital literacy to maximize the use of information technology in everyday life and apply it widely in various sectors to get optimal benefits. For this reason, adult education is the key to continuing to develop and contribute to an increasingly digital

society. However, in the process of developing digital literacy, the role of guidance and counseling should not be ignored. Guidance and counseling have a vital role in supporting individuals in overcoming challenges and developing the necessary skills. In the context of digital literacy, guidance and counseling can help adults to identify their needs, develop effective learning strategies, and overcome obstacles that may arise during the learning process

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