**Research Article**

# A content analysis study on research articles in the field of lifelong learning

Rümeyda İspir[1]* and Melek Çakmak [2]

*Gazi University, Institute of Educational Sciences, Curriculum and Instruction, Ankara, Türkiye*

| Article Info | Abstract |
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| | This study aimed to determine the topic focus and methodological orientation of research articles published in an international journal on lifelong learning by conducting a content analysis. Within the scope of the study, 72 research articles published in the journal between 2023 and 2024 were analyzed using descriptive and thematic analysis. As a result of the content analysis conducted on the topic focus of the reviewed articles, four distinct themes emerged: "Adult Learning Processes and Experiences," "The Impact of Digitalization and Technology on Adult Education," "Educational Policies and Programs" and "Professional Development and Career-Focused Learning." The results of the methodological analysis conducted on the articles showed that the studies predominantly used qualitative data collection tools, while others employed quantitative, mixed and document-based methods. An examination of the participants in research articles focusing on lifelong learning revealed that the studies included adults of all ages, university and graduate students and individuals with diverse professional backgrounds. Current research findings reveal that studies focused on lifelong learning hold a significant place in the education systems of many countries worldwide and that lifelong learning is being examined from different perspectives. In light of these research findings, it is recommended that individuals' digital competencies and skills be thoroughly examined, as they have become increasingly important in adult learning processes within the context of lifelong learning in recent years. Furthermore, designing new research on a broader range of lifelong learning topics, conducting comparative studies and examining these topics from different perspectives could significantly contribute to the existing literature in this field. |

**To cite this article:**

## Introduction

Lifelong learning is defined as a process that supports individuals in acquiring the knowledge, values, skills and understanding they will need in their lives and encourages them to apply these in all situations. Lifelong learning also includes strategies to create learning opportunities for individuals, aiming to meet both individual and societal needs (Laal & Salamati, 2012). Based on research and related literature, it is seen that the concept of lifelong learning is relevant to many areas, including education (Håkansson Lindqvist et al., 2023; Friedman, 2023; Akın, 2023; Cronholm, 2021; Cendon, 2018) and health (Babenko et al., 2017).

Learning is a process that reflects the philosophy of lifelong learning and has a continuous impact on both individuals and society. This process is not limited to school, age, or an institution; it highlights the concept of "lifelong learning," which plays a critical role and has a significant impact across all stages of life. Today, in many aspects, individuals,

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[1] Corresponding Author: Graduate Student, Gazi University, Institute of Educational Sciences, Curriculum and Instruction, Ankara, Türkiye. Email: rumeydaispir@gmail.com ORCID: 0009-0000-6691-7215

[2] Prof. Dr., Gazi University, Faculty of Education, Department of Educational Sciences, Ankara, Türkiye. E-mail: melek@gazi.edu.tr ORCID: 0000-0002-3371-4937

regardless of age, have the opportunity to develop themselves through lifelong learning. Lifelong learning encompasses all learning activities undertaken by individuals throughout their lives, whether for personal, social, professional, or civic purposes, to develop their knowledge, skills, and competencies (Güleç et al., 2013). This process encompasses formal, non-formal and informal learning. Thus, individuals continue to learn not only in the classroom but also in their professional lives, through social interactions, on digital platforms and so on. According to Babanlı and Akçay (2018), lifelong learning is a multidimensional process that not only supports individuals' personal development but also contributes to social cohesion and economic development. This process is founded on three focal points: Individual benefit, social cohesion and economic contribution. Developing these three focal points in a balanced manner will help individuals assume both personal and professional roles, increasing their opportunities for finding a career and advancing in their careers.

The concept of lifelong learning emphasizes the potential for individuals to continue learning throughout their lives and in various settings, thereby playing a significant role in shaping education policies. As Jakobi (2009) noted, lifelong learning has been a topic studied by international organizations such as UNESCO and the OECD from the past to the present. Furthermore, developments require the continuous development of individuals' existing qualifications, highlighting the need for renewal (Sirem, 2024). In this context, lifelong learning is becoming a global phenomenon.

Lifelong learning, which has been on the agenda of educators since the 1970s, today encompasses the knowledge and skills that individuals can acquire in every aspect of life not just those learned in school (Beycioğlu & Konan, 2008). Today, the fundamental need for information societies and the digital age is not limited to traditional literacy, as the constantly evolving and changing perceptions of literacy encompass technological, scientific, financial and data literacy. In this context, it is increasingly necessary and important for individuals to develop skills that enable them to adapt to the changing world order.

From all perspectives, the concept of lifelong learning has been the focus of extensive research, particularly in recent years. For example, a qualitative study conducted by Koç (2024) employed a qualitative research design to investigate teachers' perspectives on lifelong learning. Analysis of data obtained through semi-structured interviews revealed that teachers viewed lifelong learning as a process not limited to schools but also as essential for technological advancement, social change, and a higher quality of life. Teachers also indicated social and cultural changes, that motivation and educational systemsinfluence lifelong learning. Günen and Vural (2023) focused on a different topic, examining the barriers to lifelong learning. The barriers identified in the study as factors affecting individuals' goal achievement vary in type and level of impact.

In sum, as Koç (2024) stated, achieving success in lifelong learning is not possible solely through individual efforts. It is also important to organize social policies that prioritize individuals' well-being and self-actualization in this direction. Studies in this area are also available in the literature. Consequently, based on relevant literature and research, this study aims to determine the general scope and focal dimensions of lifelong learning research, providing a framework for the topical trends.

**Purpose of the Research**

Studies on lifelong education have been published in numerous journals. However, this study, based on a document review, was limited to research articles published in a single journal to narrow the scope. In this context, the study analyzed research articles published in the International Journal of Lifelong Education (IJLE), which addresses lifelong education in a global context and provides a framework for discussions on the theory and practice of lifelong education in various countries and settings. This study aims to analyze research articles published in the selected journal between 2023 and 2024 to describe the general trend in lifelong education studies in terms of subject matter and methodology. For this purpose, a total of 72 articles were analyzed in terms of theme, context, research method, participants, data collection tools and keywords. To this end, the study sought to answer the following questions:

➢ What are the topics examined in the research articles?
➢ What are the keywords identified in the research articles?

➢ What is the distribution of countries where the study was conducted or covered in the reviewed research articles?

➢ What is the distribution of research methods used in the reviewed research articles?

➢ What is the distribution of characteristics of the study population in the reviewed research articles?

➢ What is the distribution of data collection tools used in the reviewed research articles?

## Method

### Research Model

The document analysis method was used in the study. Considered beneficial due to the opportunities provided by access to readily available textual data, document analysis involves analyzing various types of textual documents, such as books, newspaper articles, correspondence, open-ended surveys, quotations, or official reports, including academic journal articles, using quantitative and qualitative methods (Morgan, 2022; Labuschagne, 2003). Document analysis is a systematic procedure for examining or evaluating materials in both print and electronic media (Bowen, 2009).

### Search Strategy and Inclusion Criteria

This study was conducted on research articles published in an international journal on lifelong learning. The selection of this journal was influenced by the presence of research on lifelong learning, as well as research examining the topic from both theoretical and practical perspectives in various countries and settings. This study included research articles published in this journal between 2023 and 2024 that focused on lifelong learning. While the initial plan for the study was to examine articles published in the last five years, the scope of the analysis was subsequently limited to studies published in 2023 and 2024. The primary factor in limiting the analysis to recent years was the study's aim to identify recent trends in lifelong learning research.

### Data Analysis

Two fundamental dimensions were identified in the analysis of data from the research articles included in the study: (1) topic-based analysis and (2) methodological analysis. Accordingly, the units of analysis in this study were the country(s) mentioned in the article, the year the article was published, the article's subject, keywords, method, study group (or target audience) and the data collection tools used. A form was prepared by the researchers of this study to facilitate the analysis (see Table 1). Data for each article were processed on the computer using this form and systematically recorded in a Microsoft Word document. Thus, the data for each article were created to facilitate comparative analysis in terms of both content and methodological details. The analysis process began with a descriptive context and continued with a thematic analysis to analyze the articles in terms of their subject matter.

**Table 1**. Data entry form for article information for analysis

| Article cod | Article citation | Year | Topic/ Purpose | Keywords | Context | Method | Study group/ Population/ Sample/ Participants | Number of Participants | Data collection tools |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | |
| ... | | | | | | | | | |
| 72 | | | | | | | | | |

As presented in Table 1, during the article review, the research articles in each issue of the journal were coded and book reviews were excluded from this study. Each article was assigned a code number. In the next step, a descriptive analysis was conducted based on the review subheadings identified in the study. Thematic analysis, as proposed by Braun and Clarke (2006), was employed in the thematic analysis of the articles reviewed in this study. Thematic analysis is considered a frequently preferred method in research due to its flexible nature and adaptability to theoretical approaches in analyzing qualitative data (Braun & Clarke, 2019). The primary role of the researcher in this analysis process is to reduce the obtained data to a meaningful structure and present this structure in a way that is beneficial to relevant

groups, such as practitioners, policymakers or researchers (Loeb et al., 2017, p. 39). The stages followed in the thematic analysis conducted in the context of the topic in this study are shown in Figure 1:
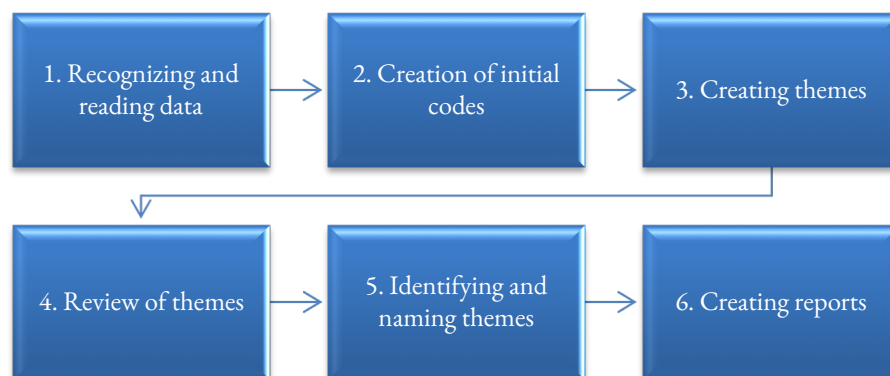


**Figure 1**. The process followed in the study based on thematic analysis stages of Braun and Clarke (2006)

As shown in Figure 1, in the first phase, a data file created in Microsoft Word by the two researchers who designed and conducted this study was used as the unit of analysis and the data set was read. In this phase and subsequent phases, the researchers focused on the process separately. In the second phase, initial codes were identified in the data set and the coding process was conducted. In the third phase, themes that emerged from the codes were identified and in the fourth phase, the identified themes were reviewed. In the fifth phase, the emerging themes were named and the final phase was reporting. This process was applied to the question prepared to determine trends in the context of the study. Descriptive analysis was applied to the other questions sought to be answered in the study. The numerical results obtained at this point were determined by comparing the results of both researchers and reaching a conclusion.

**Validity and Reliability Process**

The analysis phase of the study involved steps related to validity and reliability. Initially, the data set creation and data analysis processes were conducted jointly by two researchers. During the data analysis process, each article was reviewed separately by two experts and transferred to a Microsoft Word file. Any disagreements that arose from the comparative review of the two experts were discussed together and a consensus was reached. A thematic analysis process was employed to analyze the research articles. At this point, the team-based open coding approach recommended by Cascio et al. (2019) was employed to generate codes and assess intercoder agreement. Within this approach, the researchers reviewed the codes together and reached a consensus on the emerging themes and their naming. This method was effective in finalizing the themes and contributed to increased consistency and accuracy throughout the data analysis process. Finally, the same process was followed for the validity and reliability of the quantitative data obtained during the analysis phase. The results calculated independently by the two researchers were compared and a consensus was reached.

## Results

This section of the study presents the findings in the context and order of the research subproblems. Accordingly, the first question sought to be answered in the study was, " What are the topics examined in the research articles?" The results of the thematic analysis conducted on the data set for this question are presented in Table 2.

**Table 2.** Findings based on thematic analysis of the reviewed articles in terms of subject matter

| Theme | Theme scope | Main concepts | Article code | Examples of research |
|---|---|---|---|---|
| Adult Learning Processes and Experiences (f:33) | Experiences of adult individuals in various learning environments: age, experience, learning motivation and psychological factors. | Adult learning psychology, learning environments, individual and psychosocial learning beliefs and dynamics, self-efficacy | 1,3,6,7,8,11,12,14,24, 28,29,30,33,35,36,38, 39,40,41,42,44,45,47, 49,51,54,55, 58,60,64,67,69,72 | Pervin & Mokhtar, 2023; Broek et al., 2024; Grotlüschen et al., 2024. |
| The Impact of Digitalization and Technology on Adult Education (f:23) | Covers the role, advantages, and limitations of technologies, including digital tools, online platforms and artificial intelligence, in adult learning. | Digital literacy, use of artificial intelligence, online learning | 2,11,16,18,19,20,21,2 2,23,24,25,26,27,29,3 1,38,39,42,49,50,53,5 4,55 | Abdon et al., 2023; Eliüşük Bülbül & Yalçınkaya, 2024; Hautopp & Ørngreen, 2024; Noprival, 2024. |
| Educational Policies and Programs (f:17) | The policies guiding adult education cover different program types, program designs and the role of informal learning environments. Digital literacy, use of artificial intelligence, and online learning. | Education policies, curriculum evaluation, and informal education. | 4,5,11,17,27,32,34,46, 48,52,53,56,57,62,63, 68,70 | Cuming et al., 2023; Yılmaz et al., 2023; Hayman et al., 2024; Naz & Beighton, 2024. |
| Professional Development and Career-Focused Learning (f:16) | It covers how individuals develop their professional competencies and evaluate lifelong learning opportunities throughout their careers. | Professional competencies, career planning, and job satisfaction | 9,10,13,15,19,22,31,3 7,43,51,59,61,65,66,7 0,71 | Geerts et al., 2023; Ogbuanya & Salawu, 2024. |

An examination of Table 2 reveals a broad thematic overview of adult education literature across the articles included in the review. The highest-frequency themes include "Adult Learning Processes and Experiences" (f: 33) and "The Impact of Digitalization and Technology on Adult Education" (f: 23), reflecting the growing interest in and importance of adults' learning motivations and psychosocial dynamics, as well as the use of digital tools. On the other hand, the themes "Educational Policies and Programs" (f:17) and "Professional Development and Career-Focused Learning" (f:16) highlight the relationship between adult education, policy, program design and individual career development. These findings suggest that adult education research primarily focuses on adult learning, while also focusing on digitalization and individual learning experiences. This may be due to the changing needs of adult education in response to technological advancements and the demands of today's era. The findings also indicate that educational policies, various training programs and practices and a focus on professional development remain on the agenda in adult education.

Another question addressed in this research was, "What are the keywords identified in the research articles?" The results of the dataset analysis conducted to address this question are presented in Figure 2.

**Figure 2**. Keywords used in the reviewed articles

The analysis results showed that the most frequently used keyword or concept in the research articles examined was "lifelong learning." This was followed by "adult education and learning." Other frequently used keywords in the articles were "digital competencies, digital literacy, digital transformation, artificial intelligence and online learning." This result also aligns with the findings of the thematic analysis conducted for the research topics. Furthermore, various words/concepts such as "STEM," "pandemic," "math anxiety" and "museums" reveal the interdisciplinary nature of the field and offer examples of original studies.

Another question sought to be answered in this research was, "What is the distribution of countries where the study was conducted or covered in the reviewed research articles?" The results of the analysis conducted on the dataset for this question are presented in Figure 3.



**Figure 3**. Countries included in the study contexts of articles focused on lifelong learning

A general examination of Figure 3 reveals that the articles examined in this study draw on participant opinions or data sources from multiple countries within the scope of the topics examined. As can be seen in the figure, studies conducted in Germany (f: 9) and the UK (f: 8) dominate the reviewed studies, followed by studies conducted in Australia (f: 5), Sweden (f: 4) and the US (f: 4). The graph also includes studies conducted or data collected from Türkiye, Canada, Japan, Finland; Mexico, Denmark, South Korea, Nigeria, Puerto Rico, France, the Czech Republic, Thailand, India, Indonesia, Uganda, Belgium, Switzerland, Lebanon, Portugal, Papua New Guinea, Tanzania, South Africa, Western Kenya, Ethiopia, Vietnam, Nepal, and Bangladesh. It was also observed that some research articles

provided data from multiple countries. As shown in the graph, this distribution indicates that lifelong learning research focuses on various issues in many countries.

The findings that follow reflect the results of the methodological analysis conducted on the research articles. Table 3 presents the results of the analysis of the research methods of the examined research articles.

**Table 3.** Findings based on analysis of the research methods in the reviewed research articles

| Category | Methods used | Article codes | Examples of research |
|---|---|---|---|
| Qualitative methods (f:28) | Qualitative research design, case study, multiple case design, a qualitative approach that recognizes nested actions, participant-driven study, content analysis, thematic analysis, phenomenology, interview, discourse analysis, relational pedagogy. | 3,4,5,7,11,14,16,18, 27,29,30,31,32,36, 37,38,45,46,49,50,51, 56,57,58,60,69,70,72 | Çoban, 2023; Zolkwer et al., 2023; Ade-Ojo & Duckworth, 2024; Nophrival, 2024. |
| Literature and document review (f:14) | Literature, thematic literature review, analysis of document-based data, conceptual article, determining the scope and presenting a sociological perspective. | 2,12,17,28,34,40,43, 48,53,64,65,67,68,71 | Patino & Naffi, 2023; Bonnes, 2024; Keates, 2024; Viking & Hylin, 2024. |
| Quantitative methods (f:11) | Quasi-experimental, cross-sectional survey, relational survey, experimental, pre- and post-test research, survey research, quantitative study based on statistics on quasi-document. | 8,9,13,15,26,33,35, 42,44,47,59 | Barefield, 2023; Clover & Sanford, 2024; Karger et al., 2024; Sato et al., 2024. |
| Mixed methods (f:10) | A mixed-methods case study using a quasi-experimental design, sequential mixed, critical research methodologies with multiple data collection methods, convergent parallel mixed design, exploratory sequential mixed methods design. | 1,6,19,22,23,25,41,54, 61,66 | Grummell, 2023; Van Nieuwenhove & De Wever, 2023; Geerts et al., 2023; Baker et al., 2024. |
| Others (f:9) | Network analysis, Delphi, Computer-assisted web interviewing, program analysis, curriculum design study for textbooks, critical political sociology tradition, etc. | 10,20,21,24,39,52, 55,62,63 | Friedman, 2023; Papadopoulos, 2023; Pervin & Mokhtar, 2023; Sörman et al., 2024; Grotlüschen et al., 2024; Fujioka et al., 2024. |

As seen in Table 3, the majority of research articles employed qualitative methods (f: 28), followed by literature and document review methods (f: 14), quantitative studies (f: 11) and mixed methods studies (f: 10). Nine studies employed methods other than those mentioned. This finding suggests that a wide range of research methods is employed in studies focused on lifelong learning and adult education and that various topics are examined using these diverse methods. The analysis results regarding the study group/target audience of the articles reviewed in this study are shown in Table 4.

**Table 4.** Findings regarding the characteristics of the study population

| Participants of the research | f | Examples of research |
|---|---|---|
| Older adults, female adults, young adults, adult students, adult employees, adult managers, adults with special needs, other adults. | 29 | Brewster & Miller, 2023; Bonnes, 2024; Korpela et al., 2024; Lyndgaard et al., 2024; Petridou & Lao, 2024. |
| Website, literature, academic books and articles, course programs, education centers, museums. | 20 | Aarsand & Jarvis, 2023; Cossa, 2023; Hainzer et al., 2023; Håkansson Lindqvist et al., 2023; Griffith & Pamphilon, 2024; Scheidig, 2024. |
| Website, literature, academic books and articles, course programs, education centers, museums | 14 | Geerts et al., 2023; Hainzer et al., 2023; Yılmaz et al., 2023; Weßner et al., 2024. |
| University students, graduate students. | 9 | Lan Nguyen & Zarra-Nezhad, 2023; Baker et al., 2024; Eliüşük Bülbül & Yalçınkaya, 2024; Hayman et al., 2024. |

When evaluated in terms of participant characteristics, the largest group in research articles on lifelong learning is adults (f:29). This is expected, given the nature of the lifelong learning field. Therefore, the extensive inclusion of older adults, young people, women, adults with special needs, working and student individuals in the studies highlights both the inclusive nature of the concept and the diversity of the target audience. In addition, groups consisting of trainees,

experts, farmers and policymakers (f:14) higher education students (f:9) are also important participant groups included in the studies Additionally, some studies collect data not directly from individuals but from content-based sources such as websites, museums, program content and academic publications (f:20). In this context, content-based analyses make a significant contribution by shedding light on the quality of current practices and resources in the field of lifelong learning.

Finally, when the data collection tools used in the articles examined in this study are examined, the distribution is shown in Figure 4:
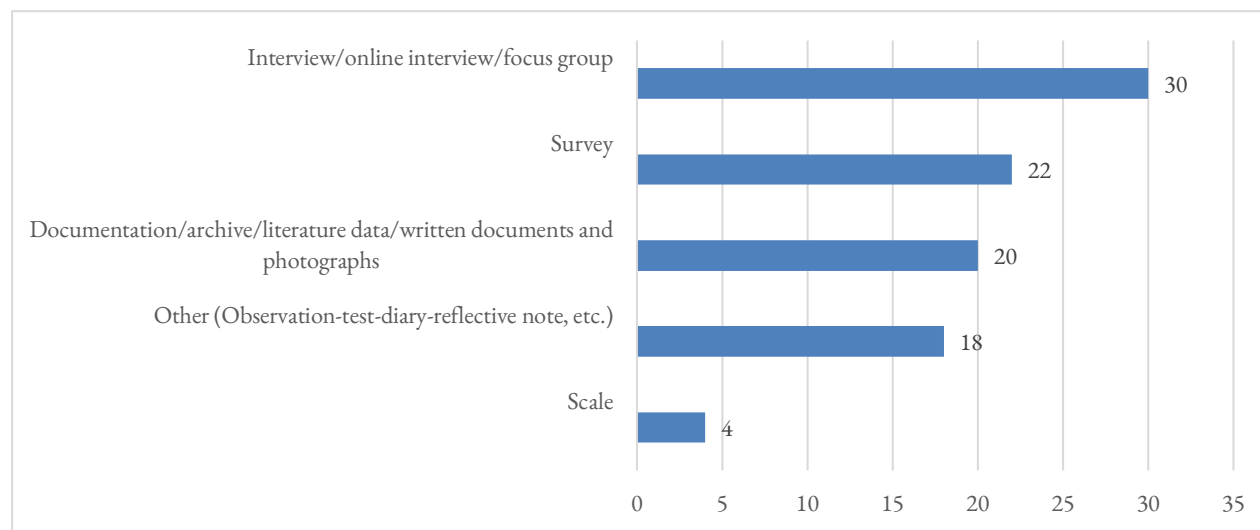


(*Since some articles used more than one data collection tool, the frequency in this table was calculated based on the frequency of use of each data collection tool.)

**Figure 4.** Findings regarding the data collection tools

As seen in Figure 4, interviews (including focus group discussions, etc.) Were the most frequently used technique in the reviewed articles (f: 30). This was followed by surveys (f: 22), documentation and archive-based data collection tools (f: 20). In this context, it is observed that participants' views on various educational programs in lifelong learning-focused studies are described in detail using the aforementioned data collection tools. Similarly, participant views were also revealed through surveys, scales and inventories. Furthermore, it is observed that a significant portion of the reviewed studies utilize document-based analyses and present descriptive information.

**Conclusion and Discussion**

This study examined 72 research articles published in a lifelong learning-themed journal between 2023 -2024 and shared the results. A detailed analysis was conducted in terms of topic focus and methodology, based on the countries mentioned in the articles, research methods, study group, data collection tools used and topics and keywords. Thematic analysis was used for thematic analysis of the dataset, while descriptive analysis was used for methodological analysis.

A thematic analysis of the reviewed articles revealed that the topics were primarily clustered under two themes: "Adult Learning Processes and Experiences" and "Digitalization and the Impact of Technology on Adult Education." However, significant studies have also been conducted within the framework of the themes of "Educational Policies and Programs" and "Professional Development and Career-Focused Learning." According to this result, in recent years, research in the field of adult education has focused significantly on individuals' learning experiences and the impact of digital transformation on these experiences. This result is closely related to the transformation of adults' educational needs in the digital age. Indeed, the Programme for the International Assessment of Adult Competencies (PIAAC) assesses three core skills needed for adults to participate effectively in knowledge-based economies and societies. These are literacy, numeracy and problem-solving in technology-rich environments (OECD, 2013). In a similar study, Özüdoğru et al. (2020) conducted a bibliographic review of research in the field of lifelong learning and identified digital technologies, professional development of professional groups and in-service training as prominent topics in Türkiye. This thematic density can be attributed to the increasing importance of vocational and technical education within

lifelong learning activities amidst rapid technological change and global digital transformation (Mollaibrahimoğlu, 2016; Urhan, 2020). A study by Håkansson Lindqvist et al. (2023) also highlighted the relationship between digitalization and lifelong learning. From an educational perspective, the study emphasized that digitalization has altered the conditions of teaching, learning, and communication among people, thereby highlighting the importance of creating innovative and transformative opportunities.

As a result, it is understood that lifelong learning is not merely a process based on the transfer of knowledge; it also involves functions such as adapting to the digital age and professional development. The analysis of the frequently used keywords in the research articles examined within the scope of this study is consistent with the results of the analysis made in terms of the subject. "Lifelong learning" and "adult education and learning" were observed as the most frequently used keywords or concepts in many articles. In addition, the frequent repetition of the themes "online learning" and "digitalization" suggests that new forms of literacy required by the digital age (e.g., digital literacy, online learning and interaction with artificial intelligence) are beginning to be addressed in the context of adult learning. In this context, it is evident that current studies aim not only to address individual learning needs but also to respond to the structural changes brought about by digital transformation. These results are consistent with those of previous studies in the literature. For example, in the study conducted by Thwe and Kálmán (2023), the term "adult education" appears prominently in the word cloud, while in the research conducted by Korkmaz et al. (2023), the concepts of "lifelong learning" and "adult education" were identified as frequently used keywords. This harmony demonstrates the consistency of the basic conceptual focuses in the field of lifelong learning.

Another notable finding within the scope of the research was the identification of studies on lifelong learning conducted in numerous countries worldwide, yielding interesting results. Among the research articles reviewed within this study, it was found that the highest number of studies were conducted in Germany, the UK, Australia, Sweden and the US. A country-by-country distribution reveals that the research is largely concentrated in European countries. This situation aligns with the European Union's expansion of lifelong learning education policies and its various programs, plans and systematic support for this field. Indeed, Akbaş and Özdemir (2002) note that decisions regarding lifelong learning in the EU are constantly being monitored and developed with an institutional structure has been established to demonstrate this. In addition to these countries, three studies were also conducted in Türkiye. This supports the findings of Korkmaz et al. (2023) that academic interest in lifelong learning in Türkiye has increased in recent years.

Another finding of the study was that the most frequently used research methods in the articles focused on lifelong learning examined within the scope of the study were qualitative research and literature-based research methods. The most frequently used data collection tools in the studies were interviews, surveys and literature/document reviews, respectively. This result indicates that the studies were largely based on the participants' lives and experiences, as well as official documents. Furthermore, the predominance of qualitative research methodologies in the reviewed studies emphasizes the aspect of lifelong learning based on individual experiences and social contexts. On the other hand, some document review studies examining lifelong learning studies in Türkiye (e.g., Korkmaz et al., 2023; Sirem, 2024; Özüdoğru et al., 2020) have determined that, unlike this study, the studies mostly used quantitative methods.
Another striking point in the data obtained is the frequent inclusion of adults in study groups in research articles focusing on lifelong learning. On the other hand, Yenil and Şahan (2024) examined research on lifelong learning conducted in Türkiye and noted that the sample groups in these studies predominantly consisted of undergraduate students.

The findings of this study, in terms of the topics and themes they focus on, the countries covered by the studies, the characteristics of the participants, the research methods used and the data collection tools, demonstrate that studies conducted in the field of lifelong learning have made significant contributions to the literature on this subject. Studies conducted with adults, higher education students and participants from various professions will contribute to future research on lifelong learning and provide important insights for designing effective lifelong education programs. In sum, these findings provide a valuable reference for evaluating current practices and developing a more comprehensive framework for future programs.

## Recommendations

Based on the results of the study, the following recommendations are presented:

➢ Emphasizing mixed methods in new studies designed for lifelong education can contribute to the emergence of more comprehensive and generalizable results in the field.

➢ The effects of digitalization, which has become a necessity for individuals of all ages today, on adult learning processes can be examined in greater depth and in different contexts through new studies.

➢ Research findings can be effectively utilized to update professional and career development training and increasing learning opportunities in line with lifelong learning.

## Biodata of the Authors

**Rümeyda İspir** graduated from the Department of Elementary Mathematics Education at Yozgat Bozok University in 2022. Since 2024, she has been pursuing his master's degree in Curriculum and Instruction at Gazi University. She conducts research in the fields of mathematics education, curriculum, student achievement and instructional design. **Affiliation**: Graduate Student, Gazi University, Institute of Educational Sciences, Curriculum and Instruction, Ankara, Türkiye. **E-mail**: rumeydaispir@gmail.com **ORCID**: 0009-0000-6691-7215

**Prof. Dr. Melek Çakmak** graduated from the Department of Educational Sciences at Gazi University's Faculty of Education in 1990. She completed her master's degree in the Department of Educational Programs and Instruction at Ankara University's Institute of Social Sciences in 1995, and her doctoral degree in education at the University of Leicester in the United Kingdom. Her specialization is in the field of Curriculum Development and Instruction, and her research interest topics include effective teaching, effective teacher, and teaching practicum. **Affiliation**: Gazi University, Ankara, Türkiye. **E-mail**: melek@gazi.edu.tr **ORCID**: 0000-0002-3371-4937

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