

Mobile Payment Services (MPS) Acceptance by Consumers in Developing Economy: An Empirical Analysis

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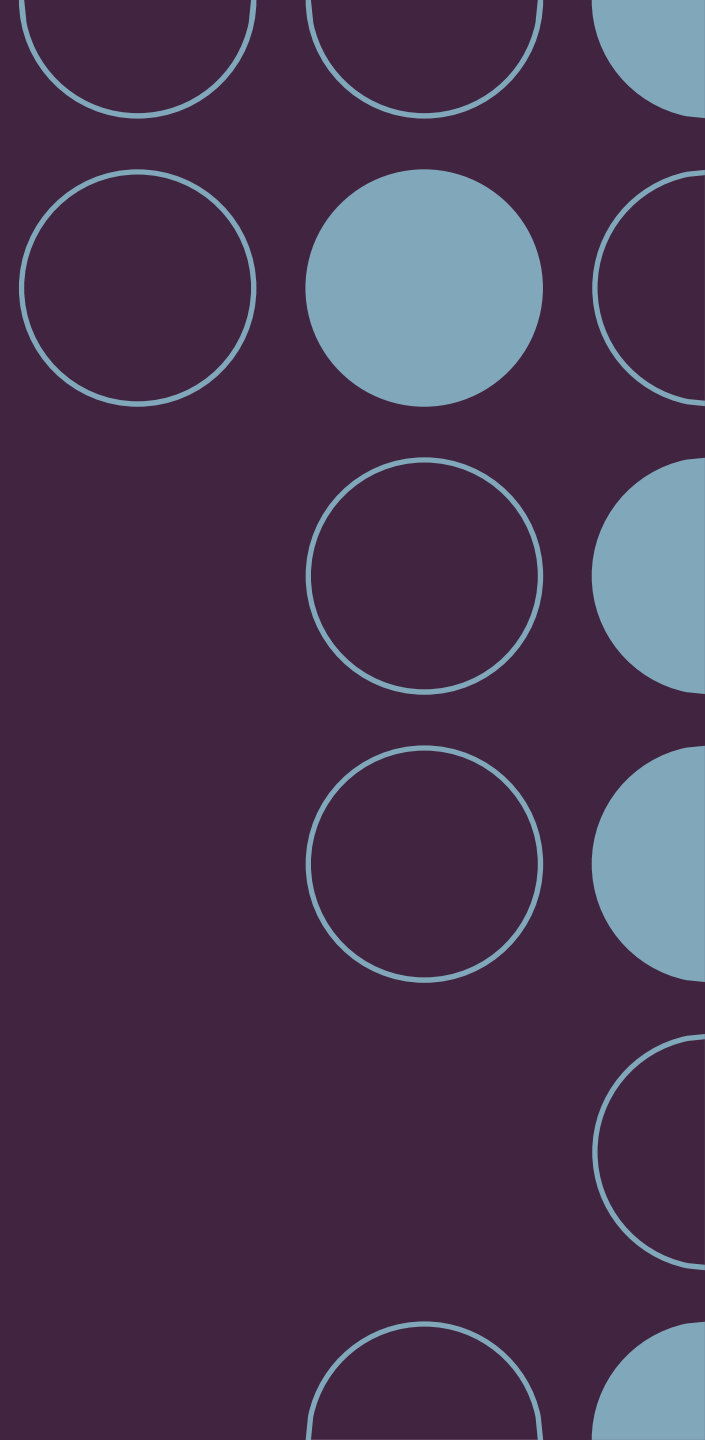
Abstarct

This research examines the challenges in accepting online education and the lack of readiness for online learning among learners and educators. It conducts a bibliometric analysis using Vosviewer and analyzes 1371 publications from 2010 to 2020 from the Scopus database. The study identifies the most relevant subjects in the research and finds that e-learning readiness, ICT education, and Technology Acceptance Model (TAM) are significant areas of concern. Emerging topics include digital learning, online learning environments, and self-directed learning. The research provides a roadmap for potential researchers to focus on critical areas for success in the field of online learning readiness

Keywords—online learning readiness, online learning adoption, bibliometric analysis

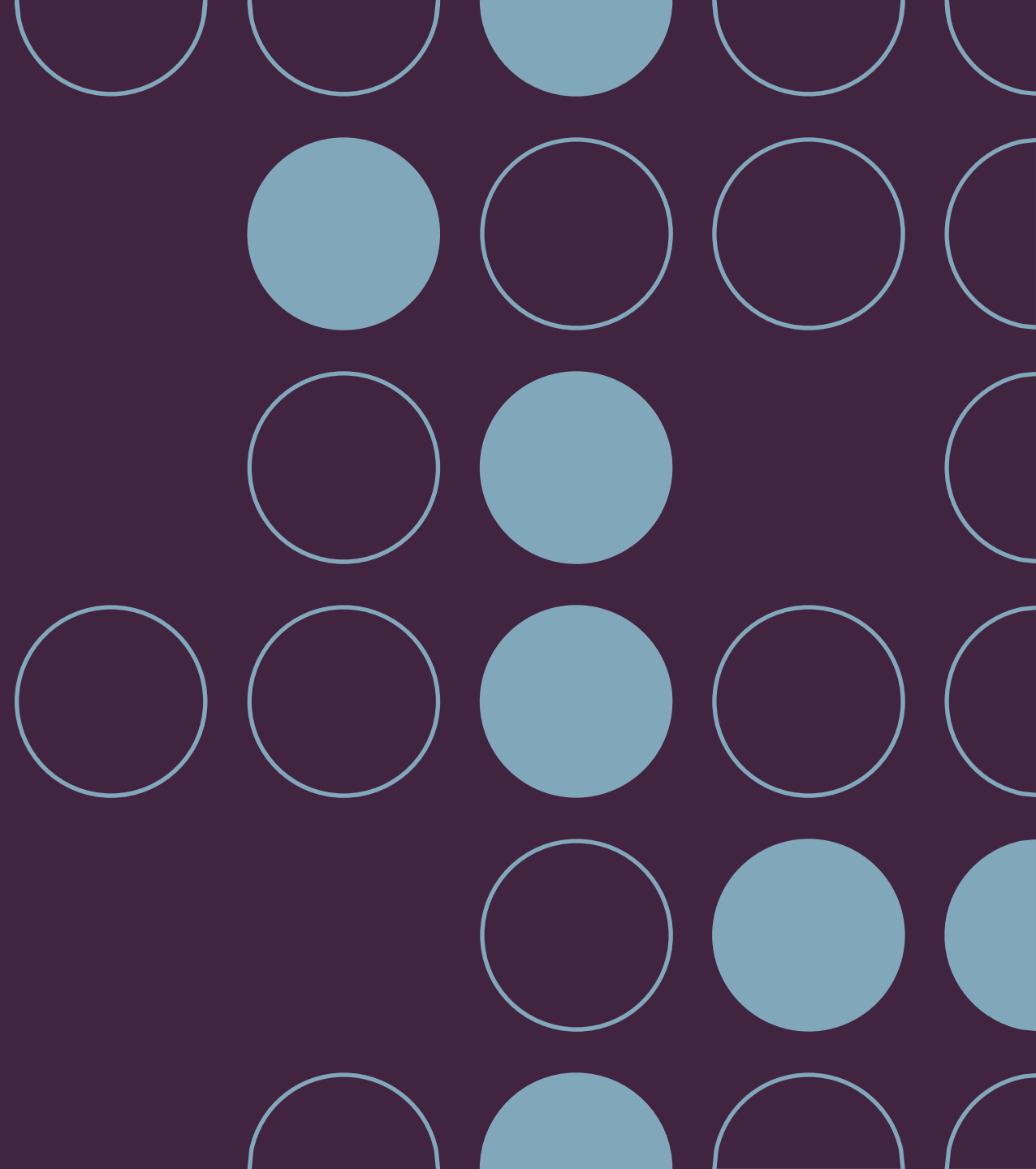
Introduction

- This research studies the learners' readiness for online learning and its impact on their academic achievements. It uses bibliometrics analysis to examine online learning readiness publications from 2010 to 2020. The data is collected from Scopus, a leading database of peer-reviewed research. The research aims to answer questions about the distribution of online learning readiness publications, the most relevant journals and authors, the most productive countries, and the primary research keywords. The results of this study aim to provide a comprehensive understanding of the research landscape of online learning readiness and its evolution over time.
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Materials and methods

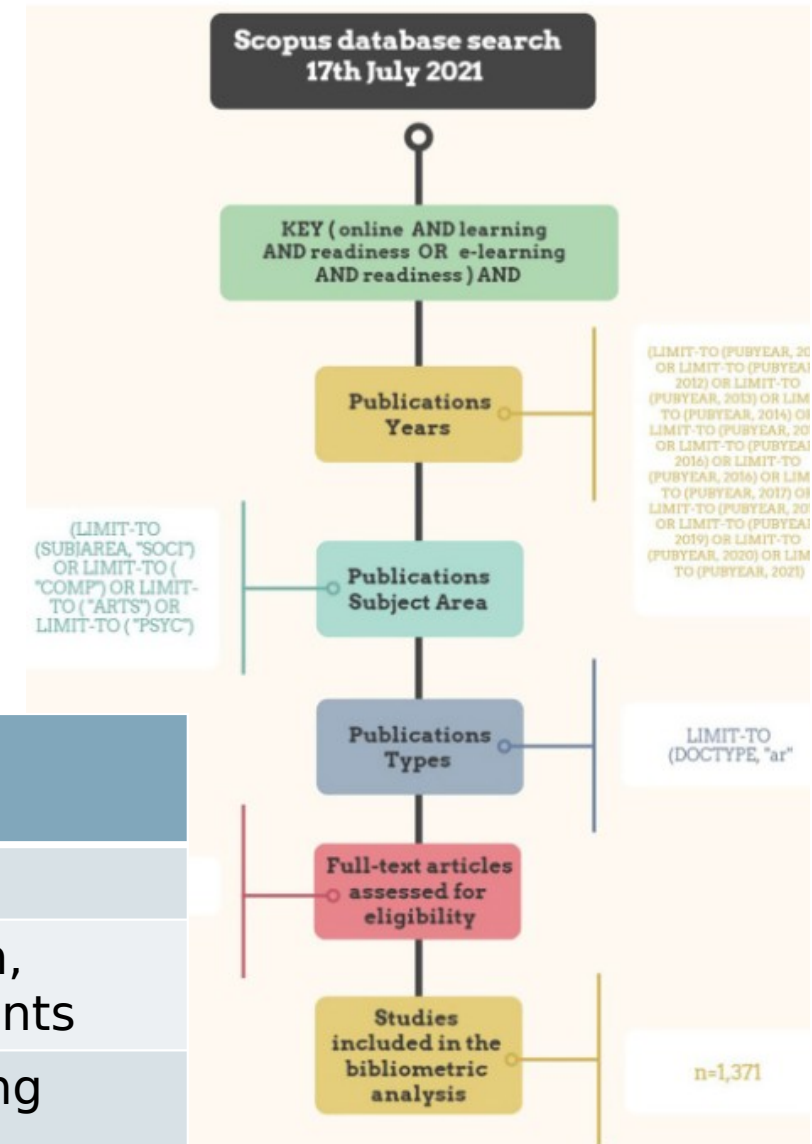
- This study aims to examine the profile of research on online learning readiness over the past decade through bibliometric and visualization methods.
 - The study used the Scopus database, which includes intelligent tools for visualizing and analyzing study output.
 - English, open access articles were selected using keywords "online learning readiness" and "E-learning readiness."
 - A manual screening process was conducted to exclude irrelevant publications, leaving 1371 for analysis.
 - Table 1 shows the exclusion and inclusion criteria, and Figure 1 illustrates the research framework.
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The bibliometric analysis

This study used bibliometric analysis and visualization to examine the profile of studies on online learning readiness over the last decade. The study analyzed 1371 relevant publications found in the Scopus database using keywords "Online learning readiness" and "E-learning readiness." The VOSViewer software was used for network visualization. The study aimed to

| | |
|--------------------|---|
| Inclusion criteria | Online learning readiness, online learning platforms, online learning environments |
| | Technology adoption, ICT adoption |
| | Students' readiness, student's satisfaction, student's autonomy, students' achievements |
| Exclusion criteria | Online learning in (medical and engineering fields) |
| | Conference papers, proceedings papers, nonindexed publications |



Finding

- The study aims to reveal the studies' profile for online learning readiness for the last decade. The findings of this review were discussed based on the research questions



Research question 1

In the last decade, the majority of online learning readiness publications were published in the past couple of years with 330 published in 2020, 297 in 2021, and 209 in 2019. The other years had a smaller number of publications distributed as shown in Figure 2.

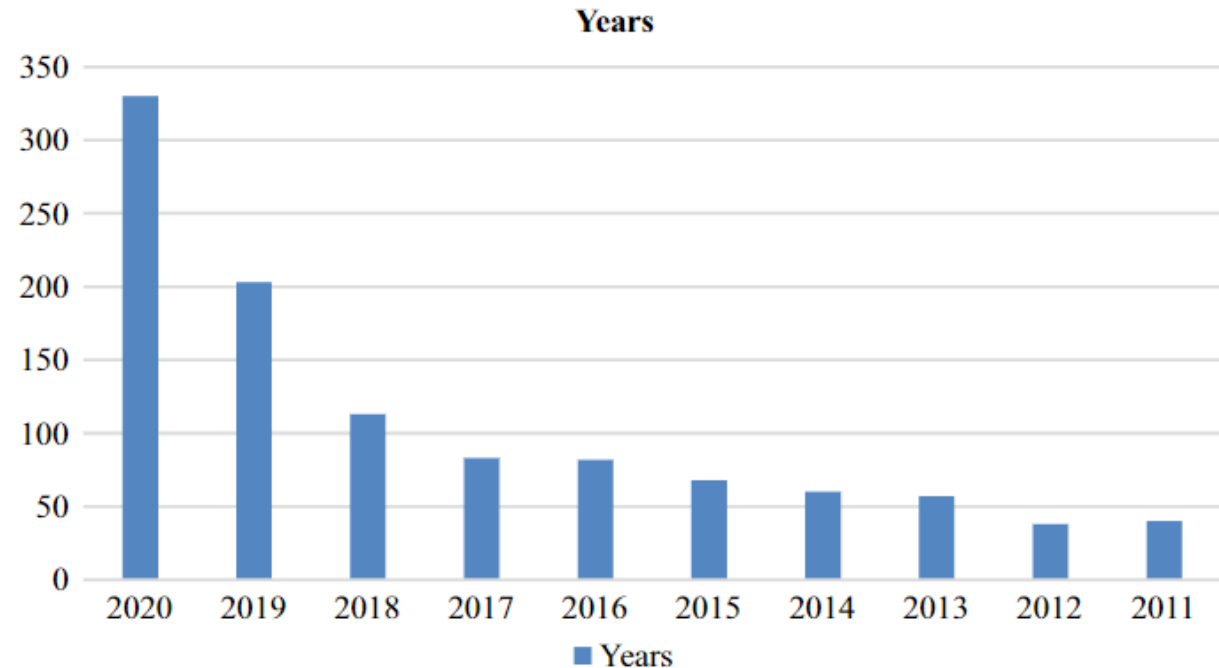


Fig. 2. Distribution of publications by years (2011–2020)

Research question 2

- The most relevant journals and authors in online learning readiness research were determined through a content analysis of the most cited journals. Criteria used in the analysis included "Total Publication," "Total Citation," "Cite Score of the journal," "The most cited article," "Times cited," and "Publisher" as presented in Table 2.
- Table 2 shows the most productive journals on online learning readiness. "Education and Information Technologies" is the most productive with 3478 publications and 720 citations. "International Review of Research in Open and Distance Learning" comes in second with 1035 publications and 234 citations. "Turkish Online Journal of Distance Education" has 208 publications and 380 citations. Table 3 presents the most prolific authors in the online learning readiness research area based on criteria such as author, total publications, h-index, total citations, current affiliation, and country

Table 2. The top 7 highly productive journals on online learning readiness in the years (2011–2021)

| Journal | Tp | TC | Cite score(2020) | The Most Cited Article (Reference) | Times Cited | Publisher |
|--|------|------|------------------|--|-------------|--|
| Education and Information Technologies | 3478 | 720 | 5.4 | The paper examines the challenges and factors affecting the use of E-learning systems during the COVID-19 pandemic. | 65 | Springer Nature |
| International Review of Research in Open and Distance Learning | 1035 | 234 | 5.8 | Designing a community of inquiry in online courses | 10 | Athabasca University |
| Turkish Online Journal of Distance Education | 208 | 380 | 2.2 | Investigating Student Satisfaction in Online Learning: The Role of Student Interaction and Engagement in Distance Learning University | 5 | Anadolu University |
| British Journal of Educational Technology | 462 | 3247 | 7.6 | Gamification of in-class activities in flipped classroom lectures | 6 | Wiley-Blackwell |
| Educational Technology Research and Development | 402 | 1549 | 5.0 | Shifting digital, shifting context: (re)considering teacher professional development for online and blended learning in the COVID-19 era | 5 | Springer Nature |
| Australasian Journal of Educational Technology | 195 | 882 | 5.5 | University students' digital competence in three areas of the DigCom 2.1 model: A comparative study at three European universities | 14 | Australasian Society |
| Distance Education | 114 | 509 | 4.7 | Online learning performance and satisfaction: do perceptions and readiness matter? | 26 | Taylor & Francis |
| Journal of Computing in Higher Education | 99 | 447 | 6.7 | Blockchain-based approach to creating a model of trust in open and ubiquitous higher education | 39 | Springer Nature |
| Education Science | 1166 | 2662 | 2.1 | E-learning critical success factors during the covid-19 pandemic: A comprehensive analysis of e-learning managerial perspectives | 32 | MDPI(Multidisciplinary Digital Publishing Institute) |
| International Journal of Instruction | | | | EECN: Analysis, potency, a benefit for student's knowledge and attitude to conserve mangroves and coral reefs | 12 | Gate Association for Teaching and Education |

Table 3: List of the 15 most prolific authors in the online learning readiness research area

| | Author | Year of 1st Publication | TP | H-Index | TC | Current Affiliation | Country |
|----|------------------------|--------------------------------|-----------|----------------|-----------|---|----------------|
| 1 | Horzum, Mehmet Bar | 2008 | 37 | 14 | 556 | Sakarya Üniversitesi, Sakarya, Turkey | Turkey |
| 2 | Almaiah, Mohammed Amin | 2014 | 40 | 13 | 500 | King Faisal University, Saudi Arabia | Saudi Arabia |
| 3 | Downing, Jillian J | 2012 | 17 | 6 | 138 | University of Tasmania, Tasmania | Australia |
| 4 | E. Dymont, Janet | 2002 | 55 | 19 | 1096 | Acadia University, Wolfville, Canada | Canada |
| 5 | Stone, Cathy | 2008 | 28 | 10 | 338 | The Faculty of Business and Law, Perth, Australia | Australia |
| 6 | Bonk, Curtis Jay | 1990 | 94 | 24 | 2250 | Indiana University Bloomington, Bloomington, United State | United States |
| 7 | Downing, Jillian J | 2012 | 17 | 6 | 138 | University of Tasmania, Tasmania | Australia |
| 8 | E. Dymont, Jane | 2002 | 55 | 19 | 1096 | Acadia University, Wolfville, Canada | Canada |
| 9 | Liang, Jyhchong | 1999 | 148 | 29 | 3284 | National Taiwan Normal University, Taipei, Taiwan | Taiwan |
| 10 | Sharma, Bibhya Nand | 2003 | 82 | 14 | 484 | University of the South Pacific, Suva, Fiji | Fiji |
| 11 | Thang, Siewming | 1997 | 49 | 11 | 328 | HELP University, Kuala Lumpur, Malaysia | Malaysia |
| 12 | Tsai, Chin Chung | 1998 | 419 | 67 | 16660 | National Taiwan Normal University, Taipei, Taiwan | Taiwan |
| 13 | Yunus, M. M | 2007 | 186 | 16 | 1209 | Universiti Kebangsaan Malaysia, Bangi, Malaysia | Malaysia |
| 14 | Adams, Donnie | 2014 | 26 | 9 | 167 | Universiti Malaya, Kuala Lumpur, Malaysia | Malaysia |
| 15 | Ankrah, Ebenezer | 2016 | 6 | 13 | 2 | University of Ghana, Accra, Ghana | Ghana |

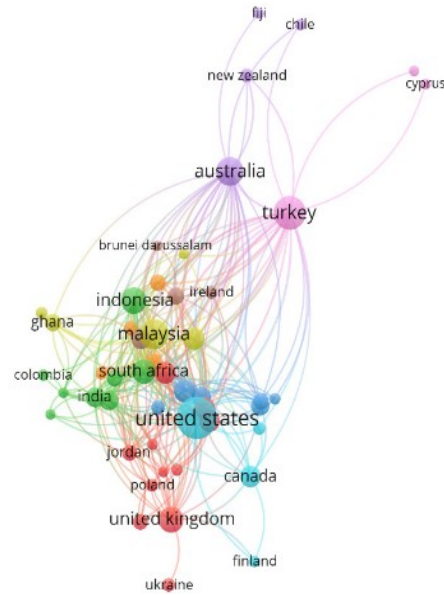
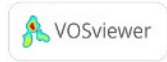
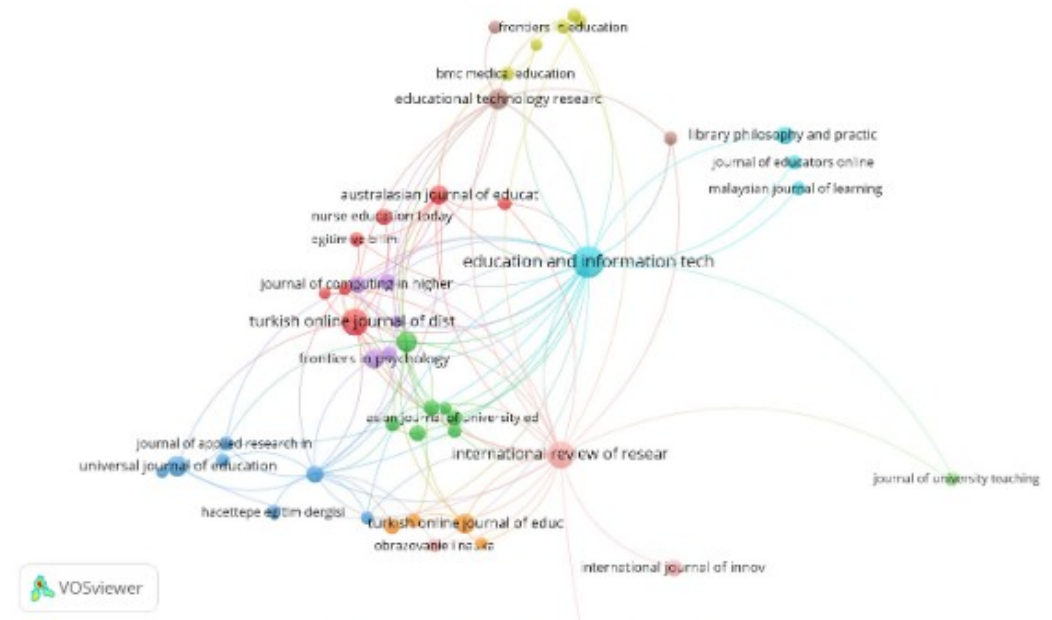
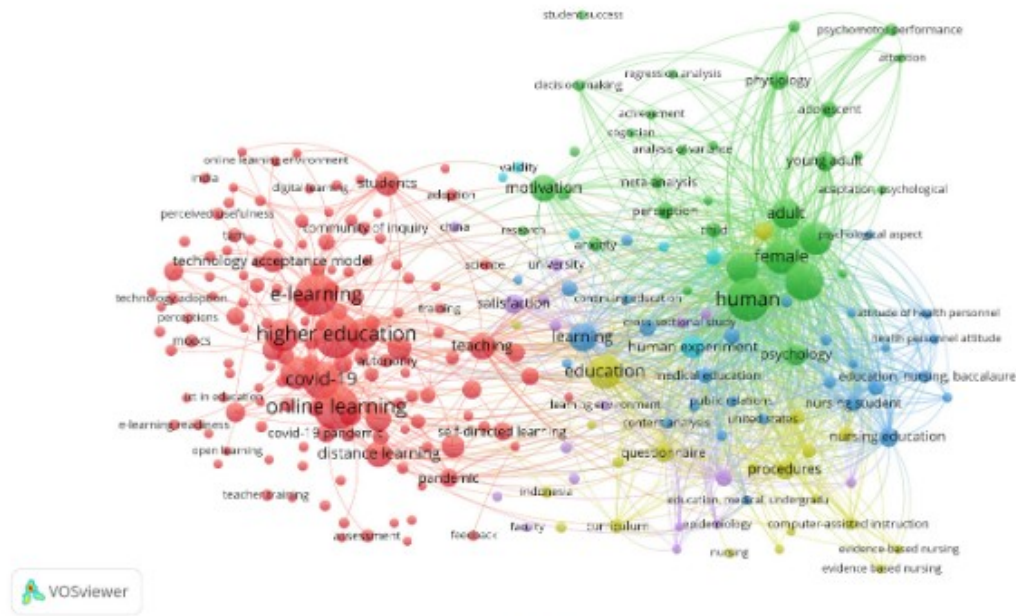


Fig. 3. Analysis results of productive countries in online learning readiness research

| Rank | Country | TP | Most Productrive Academic Institution |
|------|--------------------|-----|---|
| 1 | USA | 311 | University of Virginia |
| 2 | Turkey | 152 | Inönü University |
| 3 | Malaysia | 109 | Universiti Teknologi MARA UiTM |
| 4 | Australia | 93 | University of Western Australia |
| 5 | Indonesia | 75 | Sebelas Maret University |
| 6 | United kingdom | 64 | University College London, University of Exeter, University of Sussex |
| 7 | South Africa | 58 | Cape Peninsula University of Technology |
| 8 | China | 48 | Hebei Finance University |
| 9 | Spain | 44 | IESE Business School |
| 10 | Suadi Arabia | 41 | King Faisal University |
| 11 | Iran | 38 | Islamic Azad University |
| 12 | Canada | 37 | University of Toronto |
| 13 | Russian Federatian | 37 | National Research University |
| 14 | Hong Kong | 32 | The Education University of Hong Kong |
| 15 | South Korea | 32 | KyungHee Cyber University |

Table 4. List of the 15 most productive countries in the online learning readiness research area

Research question 2



Analysis Results

Discussion

- The research review analyzes the trend of online learning readiness using content analysis and bibliometrics. It shows an increasing interest in the field, mainly among interdisciplinary fields that examine the relationship between technology and education. The USA contributes 30% of the analyzed literature, with Virginia University as the most productive institution. Scientific cooperation analysis suggests that countries/regions with higher interest in global cooperation (e.g. USA, Turkey, Malaysia, and Australia) will evolve faster and collaboration is stronger among the same institutions or regions. The study identifies online learning environments, ICT adoption, and technology utilization in education as the most relevant topics in online learning and readiness between technology and education

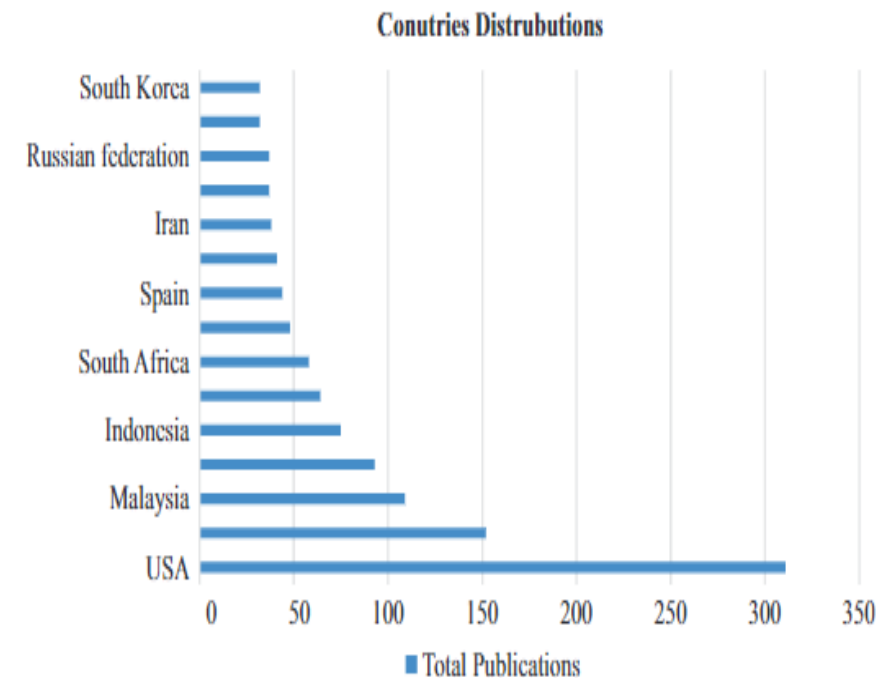


Fig. 6. Country distribution and total publications

Conclusion and implications

The world is transitioning higher education from traditional methods to online learning. This paper analyzes 1732 online learning readiness publications through bibliometrics and content analysis to identify research topics and dynamics in the field. The increasing number of publications reflects the growing interest in online learning readiness, pointing to a promising future trend. Interdisciplinary journals focusing on the relationship between education and technology are involved in this research. Virginia University was the most productive institution for online learning readiness research. International collaboration can lead to better scientific performance. Common phrases in online learning readiness publications include "online learning readiness," "technology adoption," "ICT adoption," "online learning environments," and "e-learning platforms." Predominant research topics include technology integration, blended learning, and educational technology research. There is a growing focus among scholars on online education, blended learning, student achievement, satisfaction, autonomy, and technology in education.

There are limitations to this research. Initially, the Scopus database only has been used for data collection. Thus, it does not cover all academic journals. Consequently, journals from another database, for example, the WoS, may not have been included in this analysis. Moreover, the most recent publications for 2021 in Scopus were disre-garded. Nonetheless, such limitations are not likely to impact the trends and patterns identified in this research. Additionally, only “online* learning*” and “E-Learning* readiness*” as search terms have been used in retrieving data. Though using precise search terms can result in a narrower data set. All future technologies which can be used for accomplishing online learning were considered, including “online* learning*,” “blinded* classroom*,” “learning analytics,” “educational technology*,” “education settings,” and “online education.” Consequently, using more precise search terms were used in this analysis (i.e., “online* learning*” and “E-learning* readiness*”), concentrating on the realization of online learning readiness instead of the prospective methods that could be involved

Limitation
