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Review Article

## The Future of Economic Education: Trends and Implications for Policy and Practice

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### Abstract

This study aims to systematically review the future of economic education and identify the trends and implications for policy and practice. This study adopted bibliometric analysis using VOSviewer software. The findings indicate that there has been a substantial movement over the last two decades regarding the theme of economic education. The top three countries—United States, Germany, and Indonesia contribute to this theme, whilst Universitas Negeri Malang, the University of Nebraska, and the University of Richmond are the three highest organizations that contributed to this scope during this period. The visualization from VOSviewer illustrates that the theme of economic education is linked with various dimensions. The frequency occurrence of this theme is often associated with financial literacy, pedagogy, pluralism, higher education, active learning, financial education, home economics education, teaching economics, economic literacy, heterodox economics, and entrepreneurship. The findings provide implications for concerning studies in this theme with a focus in shaping graduate students.

**Keywords:** economic education, trends in economic education, bibliometrics analysis

## INTRODUCTION

The academic literature emphasizes the growing attention to economic education, especially in this dynamic and uncertain era (Varum et al., 2014). The role of economic education is prominent to make economics more accessible, relevant, and applicable to students (Asarta & Méndez-Carbajo, 2021; Jüttler & Schumann, 2022). In addition, economic education covers content typically included in economics courses, teaching methods, and assessment of students and educators (Mixon & Cebula, 2014). In higher education, economic education encompasses both microeconomic and macroeconomic competencies, which are essential for students' understanding of economic principles and help them to make rational decisions (Salemi & Siegfried, 1999; Allgood & Bayer, 2016).

Previous studies noted that economic education needs to foster the development of economic theory and practice consistent with a more equitable uncertainty era and sustainable economy (Peterson, 2013; Branco, 2018). The emerging trends in economic education include the need for pluralistic content and pedagogy, historically-based approaches, emphasis on the role of institutions, and technological advancement

(Sharipov et al., 2021). The implications of technological advancements on economic education are reflected in the need to integrate innovation into elementary economic education, particularly through the study of the creative economy and the use of teaching and learning by successive approximations (Pol, 2013).

Economic education is a broad and dynamic theme. Many academic scholars have linked economic education to promote economic literacy (Budiwati et al., 2020; Huzayran, 2023) and financial literacy (Corsini & Giannelli, 2021; Haryono et al., 2022), which in turn can affect economic behavior (Narmaditya et al., 2023). In the Indonesian context, numerous studies noted that economic education had been associated with a focus on economic education in the family instead of in higher education institutions (e.g., Murti et al., 2022; Narmaditya et al., 2023). While other impacts of economic education have been recognized among scholars as the driver of economic growth (Tara & Kumar, 2016; Zimmer, 2023), and environmental initiation (Zhu et al., 2023).

Compared to other fields of education, such as entrepreneurship education and financial education, economic education research is more disintegrated and less organized (Jüttler & Schumann, 2022; Xu & Xu, 2021). For instance, a prior study from Grimes and Mixon (2021) was solely focused on the contributors of the journal of economic education. A prior study by Asarta and Mixon (2019) adopted systematic review to concern on program design, instructional methodology, materials, and students' accomplishment. Similarly, a preliminary paper conducted research using systematic literature review to analyze whether economics students behave in a more self-interested manner than non-economics students (Miragaya-Casillas et al., 2023). The future of economic education also remains unclear since the large studies in this domain deal with financial literacy and financial decisions (e.g., Corsini & Giannelli, 2021; Salas-Velasco et al., 2021). Thus, there is an increasing need for the refinement of themes in economic education. Later, the lack of methodological innovations to integrate with digitalization makes the research among scholars in economic education monotonous (Longva & Foss, 2018).

For this reason, more review studies are prominent to organize the economic education literature and provide the recent trends, which in turn can provide implications for academician and practice. To the best of our knowledge, this is the first review study on economic education that focuses on using bibliometric analysis. Therefore, this study aims to understand the trends in economic education in the last two decades that can provide implications for policy and practice. Understanding trends using bibliometric analysis will provide a comprehensive overview of available evidence and gap on economic education theme, which can be used for decision-makers, intervention researchers, and academicians to focus on the economic education goals.

The remainder of this review paper is provided as follows. The next section proposes the detail of methodology used for selecting, including, analyzing papers. The result based on the systematic literature review is provided in the next section, followed by a comprehensive discussion. The last section provides the implications for policy and practice as well as limitation and future direction.

## METHOD

### Design

This review paper used a standard procedure of systematic review with bibliometric analysis. The use of bibliometric analysis is beneficial for voluminous datasets to show the network of the area of study. To support this, the authors involved

VOSviewer software to provide great visualization. Furthermore, this software enables for creating maps based on the exploration data and regenerated data based on the occurrence. This study also incorporated the default visualization from Scopus to present demographic of authorship, countries, and organizations. This study followed the procedure of bibliometric analysis from Donthu et al. (2021), consisting of performance analysis and science mapping. Performance analysis deals with retrieval data, exclusion, and inclusion data. Whole science mapping concerns of the focus of trends and future analysis based on keywords networking.

### **Data Collection**

The data were collected from the Elsevier Scopus databases from 2014 to 2024 related to economic education. The retrieval data from Scopus is reasonable since it has been acknowledged as reputable and represent comprehensive views. In this study, we combined two search phrase combinations, including “economics education” or “economic education” from the title, abstract, and keywords that relevant with the theme of economics education.

### **Exclusion and Inclusion**

To retrieve the relevant data, we applied some automation inclusion and exclusion criteria. The detail of inclusion criteria, including (1) academic papers published from 2014 to 2024, (2) having title, abstract, and keyword of economic education or economics education, and (3) academic paper written in English. For the exclusion criteria, we exclude paper with some criteria, including (1) non-English paper, (2) review paper, book chapter, proceeding, and (3) out of the scope of economic education or economics education.

### **Data Analysis**

This study analyzed topic development trends based on the density of keywords co-occurrence networks, including authorships, countries, organizations, and subjects. The entire series of theme analyses can be performed using VOSviewer. For this analysis, this study focused on co-occurrence keywords analysis to understand the network between topic and future gaps of the research. Co-occurrences of keywords and link terms that occurs altogether in the same keyword list, title, or abstract. The greater density shows a closer distance and robust linkage between nodes. This examination helps researchers to build a conceptual structure. Furthermore, the visualization will be descriptively analyzed.

## **RESULT**

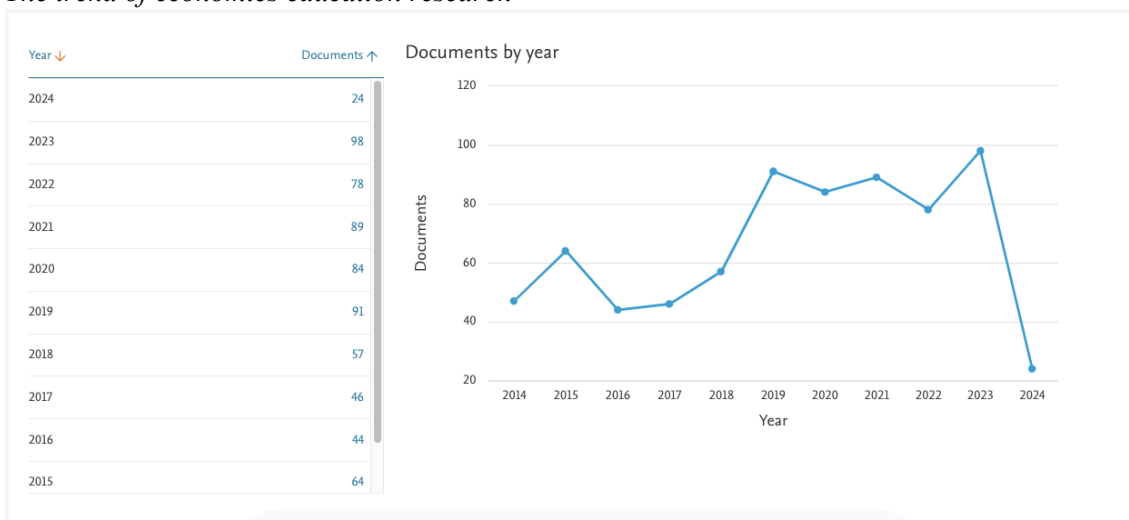
This section provides detailed information on the performed bibliometric analysis output from Scopus visualization and VOSviewer. The screening data from Scopus resulted 267 relevant papers that can used for further analysis. This section deals with the explanation of the trend of studies on the theme of economic education, which consists of annual publication, authorship, countries, organizations, and subjects. In addition, this study provides the visualization for networking keyword occurrence.

### Annual Trends in Publications

The line graph in Figure 1 shows the trend of research in the theme of economics education from 2014 to 2024. It is evident that there has been a substantial movement over the last two decades in the theme of economic education during the period of observation. In 2014, the growth commenced at more than 40 documents and increased rapidly to reach 64 documents in 2015. However, over the next year, the number of documents declined to 46 before starting to rise in the following years and reaching a peak in 2023. However, from 2019 to 2023, the trend of this study experienced a fluctuation in the range of more than 75 to 100 documents. In 2022, the study in this theme declined to less than 80 documents but it bounces back to reach highest document in the next year. It is important to note that only data from January to March 2024 was performed, implicating that there are only few documents on the theme of economic education in the last year of observation to reach under 20 documents.

**Figure 1**

*The trend of economics education research*

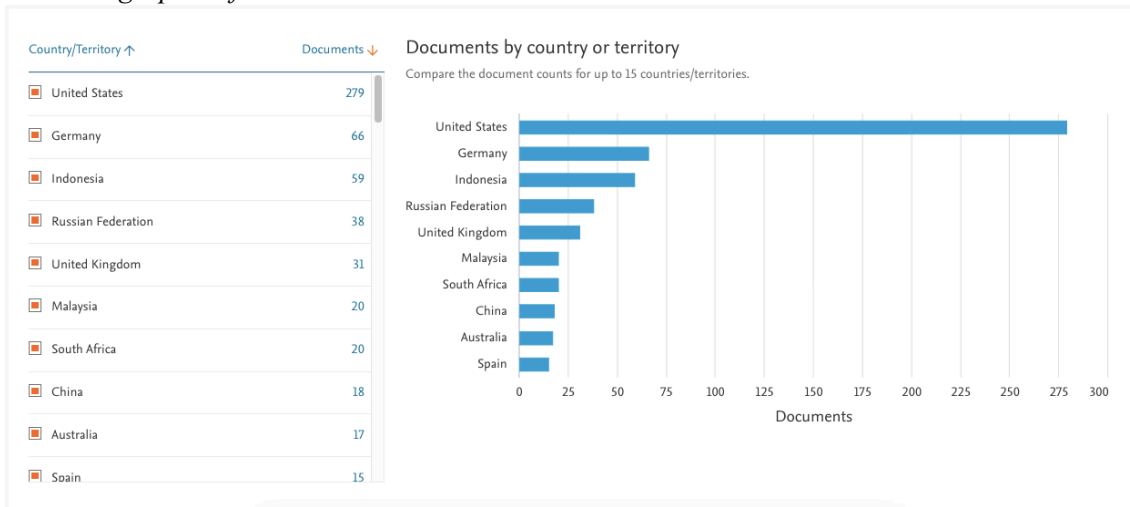


*Note.* the visualization was retrieved from Scopus using phrase combination of strings and filters  
**Source:** Scopus (2024)

### Distribution of Countries

Figure 2 illustrates the trend of research in economics education from the category of countries. As shown in the bar chart, the United States contributed the highest number of documents in Scopus during the period of study, followed by Germany and Indonesia, which contributed 66 and 59 documents, respectively. In addition, the figure also shows that the United Kingdom contributes to more than 30 documents on the theme of economics education. Among Asian countries, Malaysia also contributed research on this theme for 20 documents. Similarly, South Africa also provided same contributions in this field to publish 20 documents, while China contributed slightly than Malaysia and South Africa during this period. To sum up, the theme of economic education has been a concern among scholars in various continents in the sphere.

**Figure 2**  
*The demographic of countries*

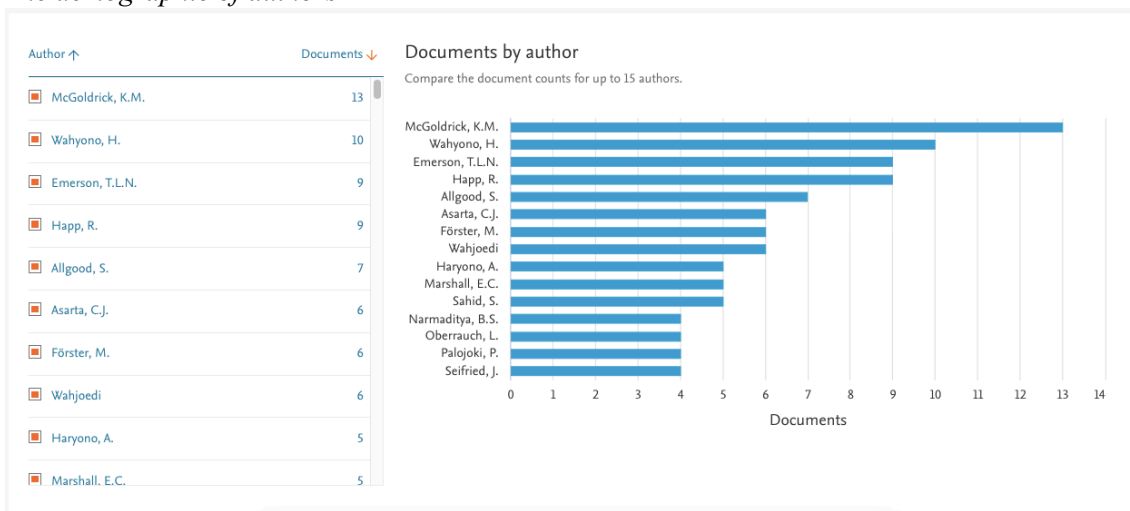


*Note.* the visualization was retrieved from Scopus using phrase combination of strings and filters  
**Source:** Scopus (2024)

### Distribution of Authorship

In addition to providing information regarding the countries for contributing to economics education, this study also informs the detail of authorship in this theme. As illustrated in Figure 3, the author who contributed the most to this theme is KimMarie McGoldrick, a professor of economics from the University of Richmond. The second highest contributor to this theme is Hari Wahyono—is a professor of economics education from Universitas Negeri Malang, Indonesia. In addition, Tisha Lin Nakao Emerson—is a professor of economics form East California University. From the bar chart, it also indicates some authors from Indonesia also concerned with economics education, such as Wahjoedi, Agung Haryono, and Bagus Shandy Narmaditya.

**Figure 3**  
*The demographic of authors*

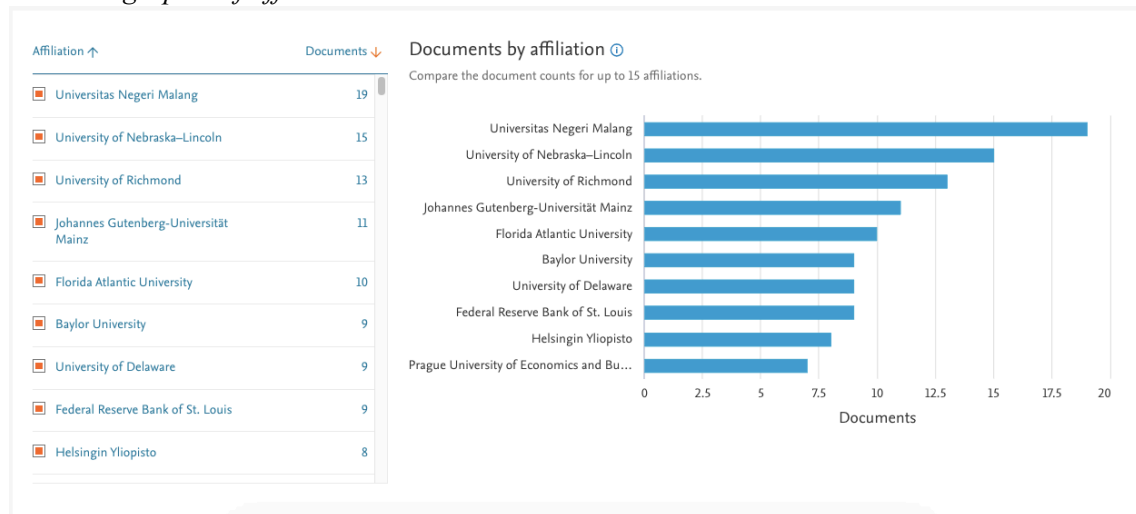


*Note.* the visualization was retrieved from Scopus using phrase combination of strings and filters  
**Source:** Scopus (2024)

### Demographic of Organization

Drawing from the faculties that contribute to economics education research, Universitas Negeri Malang contributed the most to reaching 19 documents from 2014 to 2024. The second highest contributor came from the University of Nebraska—Lincoln to provide 15 documents, and followed by the University of Richmond with 13 documents. From the bar chart, it is known that other universities, some universities (e.g., Baylor University, University of Delaware, and Federal Reserve Bank of St. Louis), contribute the same number of papers on the theme of economics education published in Scopus-indexed journals.

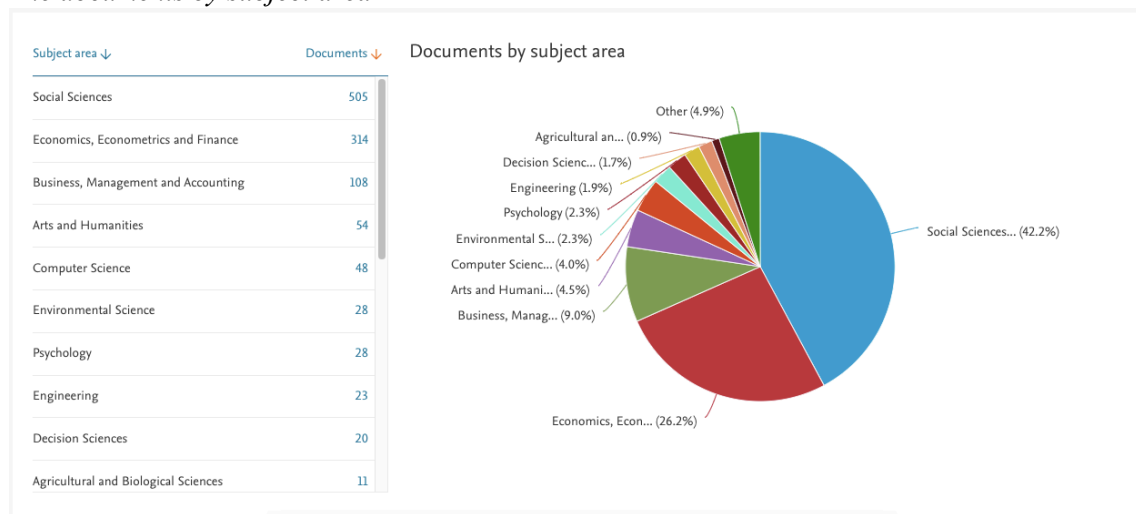
**Figure 4**  
*The demographic of affiliation*



*Note.* the visualization was retrieved from Scopus using phrase combination of strings and filters  
**Source:** Scopus (2024)

### Distribution of Subject Area

**Figure 5**  
*The documents by subject area*



*Note.* the visualization was retrieved Scopus using phrase combination of search strings and filter  
**Source:** Scopus (2024)

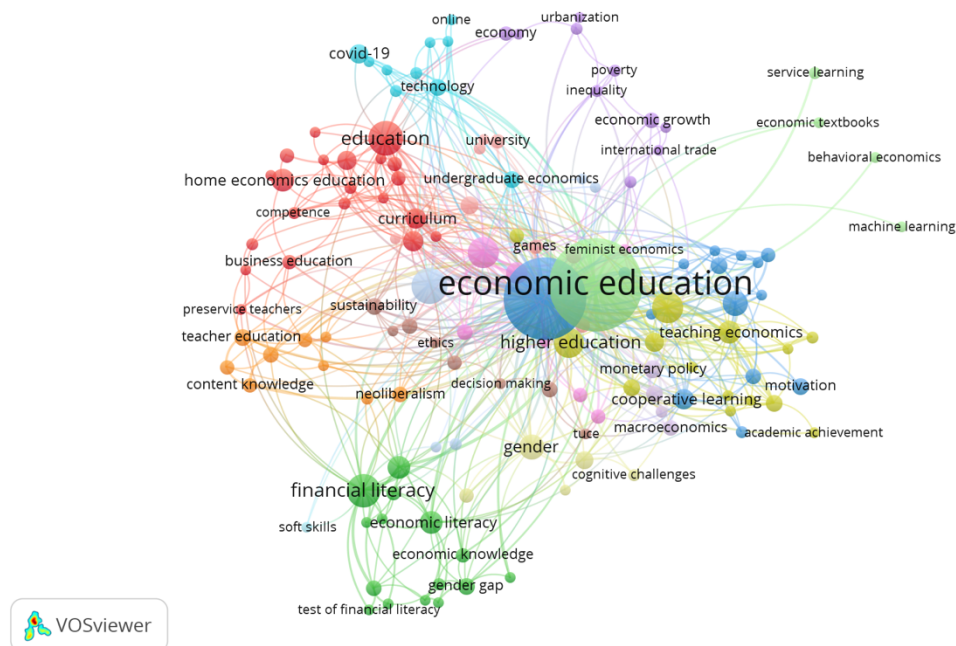
This study also provides information about the distribution based on the subject areas. Figure 5 explains the document published in Scopus-indexed journals by subject area from 2014 to 2024. As illustrated in the pie chart, the most significant subject area for economics education is social sciences, while a small percentage of papers are published in the area of agriculture. In addition, the second largest group of papers on this theme is published in the areas of economics, business, and finance, with a percentage of 26.2 percent, followed by business, management, and accounting, with a percentage of 9 percent. In sum, the theme of economics education is broad and often connected with other field of studies, such as art and humanities, psychology, and decision sciences.

### Network Co-occurrence Analysis

The analysis of co-occurrence network in Figure 6 indicated that the theme of economic education is linked with various constructs. The frequency occurrence of this theme is often associated with financial literacy (26), pedagogy (24), pluralism (23), higher education (22), gender differences (16), active learning (16), financial education (13), home economics education (13), teaching economics (12), economic literacy (12), heterodox economics (12), entrepreneurship (10), cooperative learning (10), curriculum development (10), flipped learning (7), assessment (7), critical thinking (7), neoclassical economics (6), team-based learning (6), business education (5). While some others topics and keywords linked with economics education include pedagogical content knowledge, entrepreneurial intention, e-learning, attitudes, preservice teachers, family economic education, and behavioral economics. As illustrated in the figure, the distance between points represents the strength of the connection. The shorter distance indicates greater strength.

**Figure 6**

*Network visualization of economics education*



*Note.* the visualization was VOSviewer using data from Scopus

## DISCUSSION

The theme of economics education has shown an increasing trend in the last 20 years. There has been a significant upsurge in the economics of education, which is driven by factors such as the impact of education on economic outcomes, methodological innovations, access to rich new data sources, and increased demand for evidence-based education policy (Machin, 2014). The increased volume of research in economic education is not a transitory blip but an area producing work often of high relevance to education policy, likely to be sustained for some time to come (Machin, 2014). The role of economic research in making education policy has increased over time, playing a significant part in the use of evidence-based policy in various areas of education (Bayer & Wilcox, 2022).

Economics education is a global concern, and research have been concerned in various countries. The United States is by far a leading country that deals with economic education and provides economic literacy and enhancement for this theme. The findings indicate that there is a need for criticism of traditional economics education for articulating reforms that can foster the development of economic theory consistent with a more equitable and sustainable economy. To improve undergraduate economic education, structural constraints need to be identified and addressed, and curricular and pedagogic recommendations should be explored.

The investigation also indicates that some topics linked with economic education have been examined by scholars during the period. However, some others can potentially be explored, such as behavioral economics, education distribution, caring economics, teaching with economic values, gender, integrating culture, local wisdom, altruism, and economic morality based on values. There is an unequal distribution of economic education among undergraduates, with women and underrepresented minority students majoring in economics at a much lower rate compared to whites (Ghilarducci et al., 2023). In addition, weakness in heterodox economic theory, neoclassical hegemony, and rigidity of pedagogy and training in economics are suggested as reasons for the adoption of behavioral economics in plural settings (Allais & Shalem, 2021). It drives into potential research in the future regarding economic education.

To deal with behavioral economics, a previous study remarked that behavioral economics offers an opportunity to introduce economic thinking without emphasizing economic models or theories, focusing instead on critical thinking, social and economic issues, and ideologies, which has been found to increase the probability that a student will choose to major in economics (Swinton et al., 2024). In addition, the incorporation of behavioral economics into traditional economic education can make the experience more enjoyable for students by emphasizing the fascinating and rewarding aspects of the discipline and catering to non-majors in introductory economic courses. Understanding these trends is crucial for evidence-based policy-making in education and has implications for curriculum development, particularly in modernizing economic education through the incorporation of emerging technologies and interdisciplinary discourse.

## CONCLUSION

This review paper adopted bibliometrics to capture trends and implications for policy and practice. The investigation indicates that there has been a growing trend of this theme in

the last 20 years. The United States, Germany, and Indonesia are top contributors to this theme, while Universitas Negeri Malang, the University of Nebraska, and the University of Richmond are the three highest organizations that contributed to this scope during this period. The study also recognizes some topics linked with economic education and provides some opportunities to deal with some issues, such as pedagogical content knowledge, entrepreneurial intention, e-learning, attitudes, preservice teachers, family economic education, and behavioral economics.

### **Implication**

Understanding the research trends in economic education resulted several topics that have identified and overlooked by scholars. Thus, there is a need to facilitate greater economies of scope in economics research and undergraduate teaching, emphasizing the importance of involving undergraduates in research programs and incentivizing faculty participation in undergraduate research initiative. In addition, the increased volume of research has led to a greater interest in evidence-based policy in education that showed the impact of research trends on policy development. Therefore, it is necessary to map economic learning needs in accordance with the changes in circumstances. To present, the topics presented in the curriculum revolve around basic concepts and economic problems, while it can be expanded using behavioral perspectives to reach a better understanding of economic welfare.

These trends also have implications for practice, particularly in the adoption of new approaches in economic education. A broad insight also needs to be instilled in students regarding the diverse conditions of economic life in a truly diverse society, various economic policies, and their impact on the economic life of citizens. With broad and varied insights at the level of schools and theories as well as the conditions of economic life in society, students will have a high awareness of the differences in various aspects of economic theory and economic life, and with awareness of the differences, appreciation, and empathy for differences will grow, and ultimately wisely foster and practice rational, moral and altruistic economic behavior.

### **Limitation and Future Direction**

Despite this paper providing valuable insights into the literature, this review notes two main limitations that can be considered for future studies. This study only involved datasets from Scopus with a particular time frame of study. In addition, this study only involved a data search to March 2024 that impacted a downtrend in the last period of observation. Thus, future scholars are expected to deal with other databases such as Web of Science and Ebsco. In addition, future studies can deeply analyze each cluster in this study, which can further be investigated using a systematic literature review with PRISMA to reach the link between clusters.

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