



Trends in Career Orientation Research: A Bibliometric Analysis

Vira Afriyati

viraafriyati@upi.edu, Indonesian University of Education, Indonesia.

vira_afriyati@unib.ac.id, Bengkulu University, Indonesia

Uman Suherman

umans@upi.edu, Indonesian University of Education, Indonesia

Anne Hafina Adiwinata

annehafina@upi.edu, Indonesian University of Education, Indonesia,

***Corresponding Author:** *umans@upi.edu*

Abstract. This research explores trends in career orientation research through approach bibliometrics. Using data from the Scopus database, relevant articles were identified and analyzed to reveal pattern publications, collaborations authors, and dominant research themes. Analysis tools VOSviewer used to visualize network collaboration and keywords major in the existing literature. Analysis results show an enhancement significant in the number of publications in the last decade, reflecting increasing attention to the importance of career orientation in the development of individuals. Additionally, this study identified several topic major issues frequently discussed in the literature, including the influence of digital technology on career orientation, approach-based power, and role career orientation in inclusion social. Analysis collaboration shows a network of extensive researchers with several writers the main one who has contributed big in this field. These findings provide important insight for researchers and practitioners about the evolution and future directions of career orientation research, as well as highlight areas that require further exploration.

Keywords: Career orientation, Analysis bibliometrics, VOSviewer, Scopus.

INTRODUCTION

Development technology and globalization have brought change significantly in various aspects of life, including in the world of work. It demands individuals to have better adaptability and career management abilities. Career orientation is key in helping the individual understand and plan their career journey effectively. Consequently, research in the field of career orientation has experienced development rapidly in the last decade.

Career orientation includes various activities and interventions designed to help individuals make the right career decisions and develop the skills necessary to

achieve success professionally. In theory, career construction emphasizes that Career adaptability is very important in facing a changing environment quickly (Savickas, 2013). The ability to navigate and adapt to changes in the world of work is key to achieving a career (Hirschi, 2018).

Research in the field of career orientation has increased in a way significant during the last decade. Data from the Scopus database shows that amount published articles about career orientation has more than doubled from 2014 to 2024. In 2014, there were around 19 articles were published, while in 2024 the total number will be 322 articles. This improvement reflects increasing attention to the importance of career orientation in the context of educational and professional.

Several studies have identified key areas in career orientation research. Technology has played an important role in facilitating career orientation, with the use of digital platforms and tools increasing self-assessment (Hirschi, 2018). Approach-based strengths, which focus on the identification and development of potency individuals, have proven to increase career (Brown & Lent, 2012). A approach holistic in career development, which considers factors personal and contextual influence individual career decisions, also gets attention (Porfeli & Lee, 2012). Effective career orientation can improve student involvement in education and reduce the number of separated school (Solberg et al., 2012). Importance Comprehensive career intervention to help individuals overcome career obstacles and achievements objective of their (Nota & Rossier, 2015).

Analysis bibliometrics is used as an effective method to understand trends in career orientation research. Analysis bibliometrics is a method quantitative used to measure the impact and development of publication scientific. This approach makes it possible to identify pattern publications, collaborations authors, and dominant research themes in existing literature. The Scopus database was selected Because of its broad scope and credibility in providing information of academic quality. VOSviewer is a tool analysis used in this research to visualize network collaboration and identify keywords major in literature. Using VOSviewer possible a more in-depth analysis of how researchers collaborate and theme what is most dominant in this field. For example, visualization networks show that collaboration between researchers often involves some of the world's leading universities, showing the importance of International collaboration in career orientation research.

This research aims to provide a comprehensive overview of trends in career orientation research. By understanding pattern publications, collaborations authors, and the dominant research theme, this research is expected to provide important insight for researchers and practitioners about the Evolution and future directions of career orientation research. Apart from that, it is hoped that these findings will also help identify areas that require further exploration to improve the effectiveness of career orientation programs in various contexts.

METHOD

This research uses analysis bibliometrics to explore trends in career orientation research. Analysis bibliometrics is a method quantitative used to measure the impact and development of publication scientific. This method makes it possible to identify pattern publications, collaborations with authors, and dominant research themes in existing literature. This section will explain data sources, procedures for data collection, and techniques analysis used in this research (Chen, 2006; Moed, 2006; N. J. Van Eck & Waltman, 2014).

The main data source for this research is the Scopus database, which is known widely Because comprehensive coverage and credibility in providing information of academic quality tall (Burnham, 2006). Scopus covers various scientific journals, books, and relevant conferences in various disciplines of science, including career orientation. Data is collected using keywords related to career orientation, such as " *career AND orientation* "A search is carried out on the title, abstract, and keywords article to be sure that all relevant publications are included. Range time search limited from 2014 to 2024 to catch Recent trends in career orientation research. To process this data, we utilize device soft VOSviewer to help visualization and identification trend (Salmi et al., 2017).

This research uses technique analysis bibliometrics, including analysis publications, analysis citations, and analysis network collaboration. For data visualization and analysis, it is used tool analysis VOSviewer. VOSviewer is a popular tool for creating a mapped network from bibliometric data, which is a possible visualization of relationships between publication, author, and keywords (N. Van Eck & Waltman, 2010). **Analysis Publications:** This analysis includes amount publications per year, distribution geographic, and primary journal sources. By understanding

distribution publications from time to time, we can identify trend growth in career orientation research. **Citation Analysis:** This analysis focuses on the number of citations received by publications and authors majoring in this field. Analysis citations help identify the most influential work and the most frequently cited author in a career (Moed, 2006). **Analysis Network Collaboration:** This analysis is exploratory pattern collaboration between authors, institutions, and countries. By using VOSviewer, network collaboration can be visualized to see how researchers Work the same and how knowledge is disseminated within the community academic (N. J. Van Eck & Waltman, 2014). **Keyword Analysis:** Keywords that appear frequently analyzed to identify dominant research themes. This technique helps identify topics' main and main areas developing in a career (Zupic & Čater, 2015).

Analysis method The bibliometrics used in this study provide a deep understanding of trends and developments in career orientation research. By utilizing data from the Scopus database and tools analysis VOSviewer, this research not only identifies pattern publications and collaborations but also reveals dominant research themes in this field. It is hoped that these findings will provide an outlook valuable for researchers and practitioners in understanding the Evolution and future directions of career orientation research. Apart from that, VOSviewer also facilitates the evaluation of various network data type bibliometrics, including identifying interrelationships publications or journals via the use of quotes, a collaboration between academics, and interrelationships in matters emergency together in the literature scientific (Kousha & Thelwall, 2018; Strozzi et al., 2017).

Application This method is expected to provide a deep understanding of the evolution of literature related to art creative in career counseling, and offers valuable insight into the latest research trends in this domain. Furthermore, this will also be the case to assist in identifying relevant focus areas for development knowledge in the future.

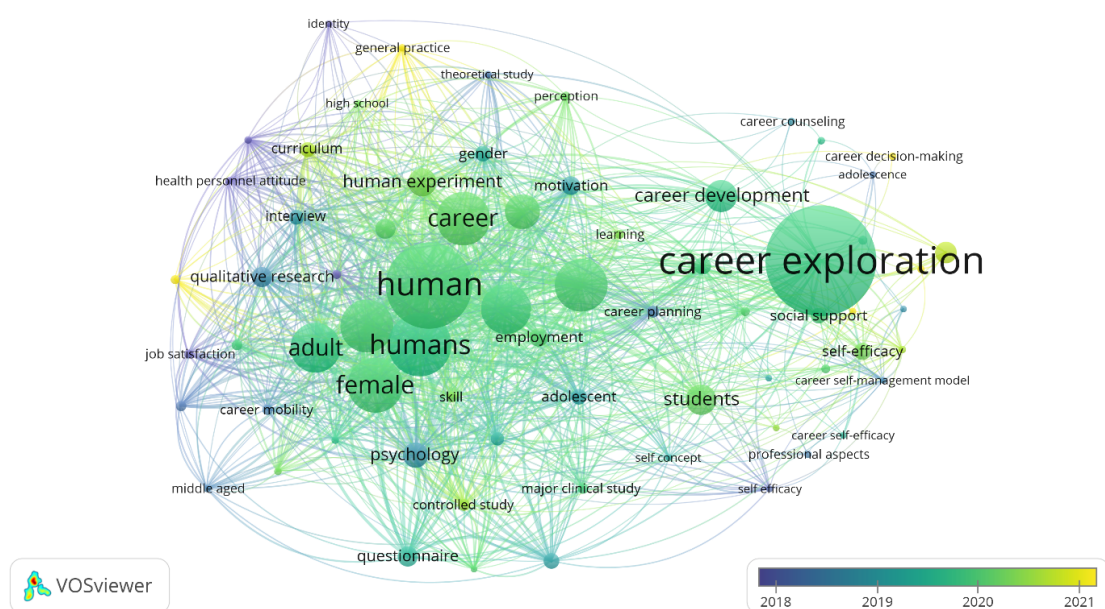
RESULTS AND DISCUSSION

Topic area visualization uses VOSviewer

The number of connections to terms in the use of VOSviewer is set to as many as 2 terms. After analyzing with VOSviewer, there are 4 clusters (red, green, blue, and yellow) that show the relationship between one topic with another topic. VOSviewer

Clusters	Color	Items	Total
1	blue	Adult, article, attitude of health personnel, career mobility, employment, female, genetic transcription, health personnel attitude, human, humans, interview, job satisfaction, male, middle-aged, organization and management, psychology, qualitative analysis, qualitative research, semi-structured interviews, thematic analysis, and workforce	21
2	red	career adaptability, career counseling, career decidedness, career decision-making, career decision-making self-efficacy, career development, career exploration, career indecision, career planning, china, decision making, exploration,	20

		motivation, proactive personality, professional aspects, self-efficacy, social cognitive career theory, social support, student, and students	
3	green	Career, career choice, clinical article, controlled study, curriculum, education, education, medical undergraduate, gender, general practice, learning, medical education, medical school, medical student, perception, skill, and students, medical	16
4	Yellow	Adolescent, human experiment, major clinical study, questionnaires, surveys and questionnaires, and young adult	4
Total			63



Next, Figure 2 shows research trends from year to year which means that the color yellow constitutes the newest research trends, the older they get the color increases over the years of research done.

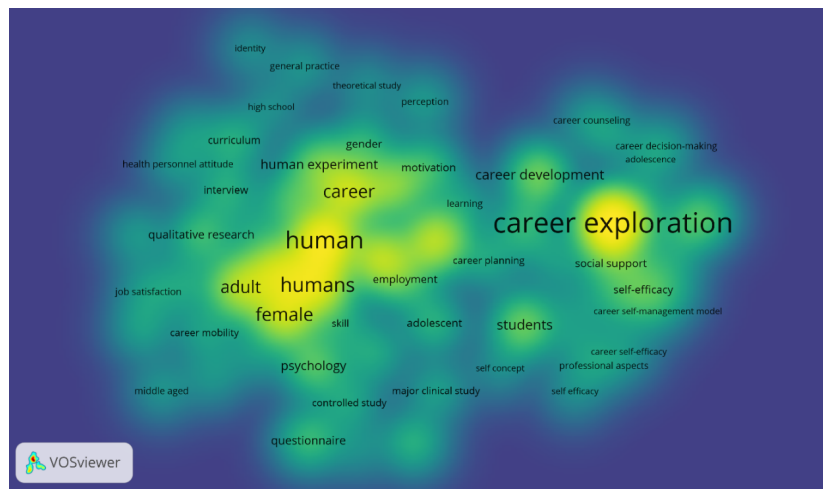
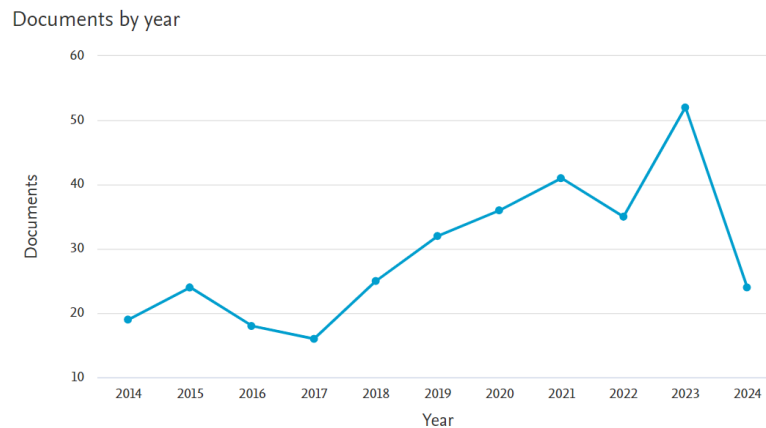


Figure 3 shows the depth of the research means that it becomes more concentrated the color appears then more and more amount research, and vice versa.



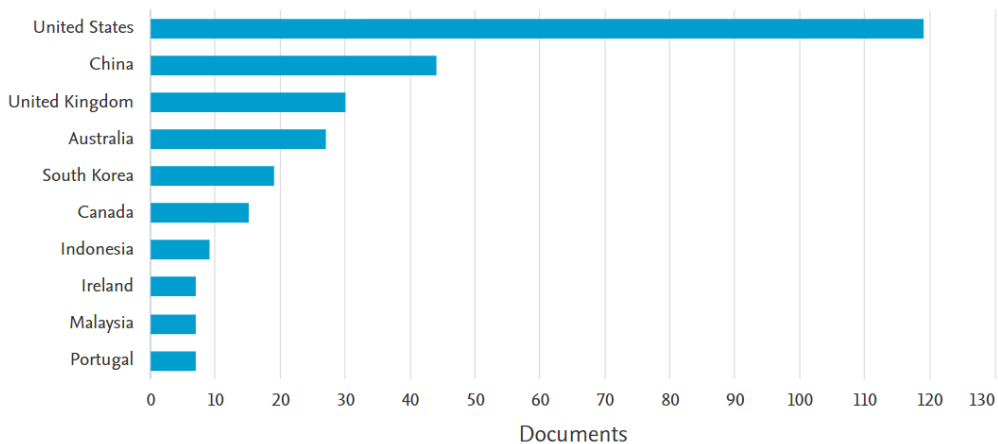
Data from the Scopus database shows that amount published articles about career orientation has more than doubled from 2014 to 2024. In 2014, there were about 19 articles published, In 2015, there were around 24 articles published, In 2016, there

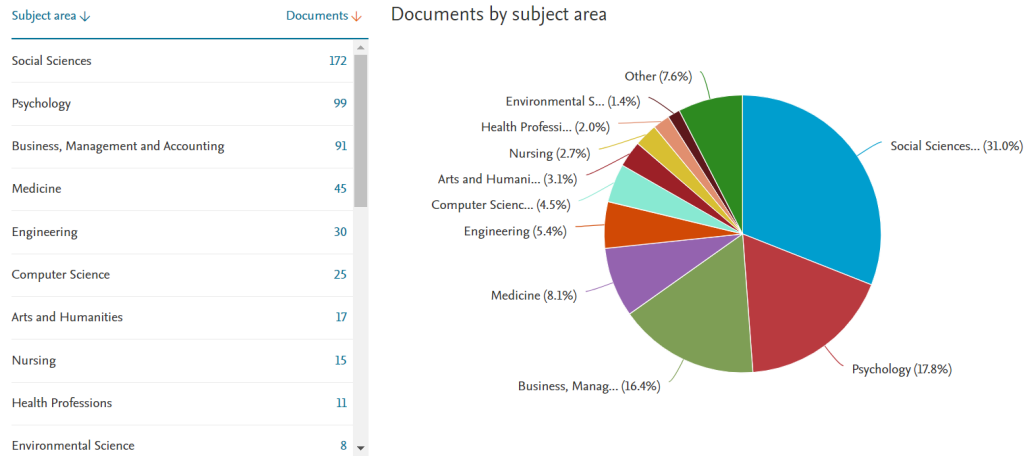
were around 18 articles published, In 2017, there were around 16 articles published, In 2018, there were around 25 articles published in 2019, there are around 32 articles published, In 2020, there are around 36 articles published, In 2021, there are about 41 articles published, In 2022, there are about 35 articles published, In 2023, there are about 52 articles published, By 2024, there are around 24 articles were published so that in 2024 the total number will be 322 articles. This improvement reflects increasing attention to the importance of career orientation.

If counted Based on country, for the keyword "*career orientation*", there are 15 countries that have it publication about career orientation. The 10 highest countries are the United States, China, United Kingdom, Australia, South Korea, Canada, Indonesia, Ireland, Malaysia and Portugal. The United States is the country with the most published articles discussing career orientation (119 documents). And for this keyword, Indonesia only found 9 studies regarding this matter. This opportunity is related to research on career orientation.

Documents by country or territory

Compare the document counts for up to 15 countries/territories.





Research on career orientation appears to be the most dominant in the Social Sciences subject area with total articles a total of 172 articles, all articles related to this, then related to Psychology there are 99 articles, business, management, and accounting there are 91 articles, medicine 45, engineering 30, computer sciences 25, arts and humanities 17, nursing 15, health professions 11, environmental science 8, this is the 10 highest subject areas found.

The results of the research "Trends in Career Orientation Research: A Bibliometric Analysis" have impact significant in various aspects relevant to academics, practitioners, and policymakers. This research provides an outlook deep about evolution topics in the field of career orientation, which has developed from a focus beginning on "career choice" and "job satisfaction" towards topics such as "career adaptability" and "work-life balance." Enhancement attention to "career adaptability" reflects the response to change dynamic in the environment work caused by globalization and technology, while the emphasis on "work-life balance" shows a shift in values of social priority and well-being of individuals. This insight is important for researchers to understand the direction of new developments and focuses that need to be explored further. The findings also provide a guide strategic for policymakers in designing career and educational development programs. For example, the increasing need would "digital career literacy" indicates the necessity of integrating digital literacy into the curriculum of vocational education and training programs. Policymakers can use this

data to develop more adaptive and responsive policies to changes in the job market, so they can prepare power more to face work future challenges.

For practitioners and career counselors, the results of this research are very useful in developing more relevant and effective training and guidance programs. Practitioners can benefit outlook on trend career adaptability and balance life work to improve development programs for employees, who in turn can improve retention and satisfaction employee. Career counselors can use these findings to provide more appropriate advice targets, and help individuals better plan their careers based on labor market trends and needs At the moment.

This research also identifies gaps in the literature current and delivers directions for future research. For example, the need for more research in areas such as the “gig economy” and “digital career literacy” demonstrated exists opportunity great for further exploration. Researchers can focus on these topics to produce results of deeper and more relevant insights, which can enrich literature and provide a guide practical for various holder interests.

In addition, this research highlights the importance of Global collaboration in career orientation research. Network collaboration between writers from various countries, such as the United States, United Kingdom, and Australia, reflects the global nature of this research and helps build a more comprehensive and inclusive perspective on cross-career development culture. This collaboration is important to understand different dynamics in various contexts culture and economy, as well as to develop a more holistic approach to career development. Findings from analysis These bibliometrics are also important for the validation and replication of previous research. By knowing emerging trends and patterns, researchers can verify the consistency of their results with other findings or identify areas of need for further investigation. This validation helps ensure the reliability and credibility of research in the field of career orientation.

Overall, the results of the study "Trends in Career Orientation Research: A Bibliometric Analysis" provide a solid foundation for development theory, practice, and policy in the field of career orientation. These findings are helpful to various holder interests, including academics, practitioners, and policymakers, to better understand and respond to change dynamics in the environment of work and education. Thus, this

research contributes in a way significant to the development of field career orientation and gives clear directions for future research and practice.

CONCLUSION AND RECOMMENDATION

This study reveals significant evolution in research on career orientation, highlighting a shift in focus from topic traditional such as "career choice" heading more complex issues such as "career adaptability" and "work-life balance." Identify journals and conferences main, author, as well as institution leading, giving a clear view of the research landscape in this field, allowing researchers to navigate their efforts more effectively. In context policy development, the results of this analysis offer valuable insight for policymakers in designing responsive education and career development programs to current and future needs.

In addition, this research reveals that analysis using tools such as Scopus, Publish or Perish, and VOSviewer can provide valuable insights into understanding and development career counseling field. Using this analysis provides an approach scientific and measurable in identifying trends, research contributions, and work the same in the career counseling community. The results of this research show the importance of career orientation in optimizing career counseling intervention. Use tool sophisticated analysis such as Scopus, Publish or Perish, and VOSviewer to open opportunities to measure the impact of research and identify areas of need further attention. However, to maximize the benefit from this approach, works The same between career counseling professionals, artists, and experts Data analysis is key in developing a more innovative and relevant career counseling approach in this information age

Recommendations for the results of this research are First, necessary to strengthen digital literacy in education and training to prepare power Work faces challenges and opportunities in today's digital era. Second, practitioners need to develop more adaptive career development programs by considering aspects such as "career adaptability" and "work-life balance" as the focus main. By applying these recommendations, we can be better prepared to face future challenges and opportunities in individual career development and management source Power Man in a way effective.

ACKNOWLEDGEMENTS

I would like to express my deepest gratitude to the Indonesian Education Scholarship for their extraordinary financial support while I was conducting this research. Without the assistance and opportunities provided by the Indonesian Education Scholarship, this achievement would not have been possible. I would also like to thank all our lecturers, researchers, and colleagues who have shared their valuable knowledge, insights, and suggestions during this research journey. Their guidance has contributed greatly to the success of this research.

REFERENCES

- Brown, S. D., & Lent, R. W. (2012). *Career development and counseling: Putting theory and research to work*. John Wiley & Sons.
- Burnham, J. F. (2006). Scopus database: a review. *Biomedical Digital Libraries*, 3, 1–8.
- Chen, C. (2006). CiteSpace II: Detecting and visualizing emerging trends and transient patterns in scientific literature. *Journal of the American Society for Information Science and Technology*, 57(3), 359–377.
- Hirschi, A. (2018). The fourth industrial revolution: Issues and implications for career research and practice. *The Career Development Quarterly*, 66(3), 192–204.
- Kousha, K., & Thelwall, M. (2018). Can Microsoft Academic help to assess the citation impact of academic books? *Journal of Informetrics*, 12(3), 972–984.
- Moed, H. F. (2006). *Citation analysis in research evaluation* (Vol. 9). Springer Science & Business Media.
- Nota, L., & Rossier, J. (2015). *Handbook of life design: From practice to theory and from theory to practice*. Hogrefe Publishing GmbH.
- Porfeli, E. J., & Lee, B. (2012). Career development during childhood and adolescence. *New Directions for Youth Development*, 2012(134), 11–22.
- Salmi, H., Thuneberg, H., & Vainikainen, M.-P. (2017). Making the invisible observable by Augmented Reality in informal science education context. *International Journal of Science Education, Part B*, 7(3), 253–268.
- Savickas, M. L. (2013). Career construction theory and practice. *Career Development and Counseling: Putting Theory and Research to Work*, 2, 144–180.
- Solberg, V. S., Phelps, L. A., Haakenson, K. A., Durham, J. F., & Timmons, J. (2012). The nature and use of individualized learning plans as a promising career intervention strategy. *Journal of Career Development*, 39(6), 500–514.

- Strozzi, F., Colicchia, C., Creazza, A., & Noè, C. (2017). Literature review on the 'Smart concept using bibliometric tools. *International Journal of Production Research*, 55(22), 6572–6591.
- Van Eck, N. J., & Waltman, L. (2014). Visualizing bibliometric networks. In *Measuring scholarly impact: Methods and practice* (pp. 285–320). Springer.
- Van Eck, N., & Waltman, L. (2010). Software survey: VOSviewer, a computer program for bibliometric mapping. *Scientometrics*, 84(2), 523–538.
- Zupic, I., & Čater, T. (2015). Bibliometric methods in management and organization. *Organizational Research Methods*, 18(3), 429–472.

Open Access This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

