


Bibliometric analysis of career decidedness studies using a visual mapping technique

Kariyer kararlılığı çalışmalarının görsel haritalama tekniğiyle bibliyometrik analizi

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Abstract

This study aims to provide an overview of "career decidedness" and identifies related study trends and gaps. Analyzing 104 works published between 1995 and 2024 in the Web of Science (WoS) database using VOSviewer includes 93 journal articles, 12 papers, and two early appearance studies. Most research was in social psychology (88) and management (5). The most cited authors were Lent-Robert (519), Penn, Lee (464), and Ireland Gleen (460), while the most co-cited authors were Lent-Robert (144), Hirschi Andreas (63), and Savickas (63). The USA (1676 citations), Germany (258 citations), and The USA (1676 citations), Germany (258 citations), and Australia (252 citations) were the top cited countries. Leading institutions included the University of Maryland (749 citations), the University of Tennessee (235 citations), and the Leuphana University of Lüneburg (181 citations). Common keywords were career decidedness, self-management model, career decision-making, social career theory, and career development. The top publications were by Duffy (2007), with 203 citations; Lent (2016), with 168 citations; and Lent (2017) with 164 citations.

Keywords: Career, Career Decidedness, Visual Mapping, Bibliometric Analysis, VOSviewer

Jel Codes: M10, M12, O15

Öz

Bu çalışma, "kariyer kararlılığı" kavramına genel bir bakış sunmayı ve ilgili çalışma eğilimlerini ve boşlukları belirlemeyi amaçlamaktadır. 1995 ve 2024 yılları arasında Web of Science (WoS) veritabanında yayınlanan 104 çalışmayı VOSviewer kullanarak analiz eden bu çalışma, 93 dergi makalesi, 12 bildiri ve 2 erken görünüm çalışmasını içermektedir. Araştırmaların çoğu sosyal psikoloji (88) ve yönetim (5) alanlarındadır. En çok atıf alan yazarlar Lent-Robert (519), Penn, Lee (464) ve Ireland Gleen (460) olup, en çok ortak atıf alan yazarlar ise Lent-Robert (144), Hirschi Andreas (63) ve Savickas (63) olarak belirlenmiştir. En çok atıf alan ülkeler ABD (1676 atıf), Almanya (258 atıf) ve Avustralya (252 atıf) olmuştur. Önde gelen kurumlar arasında Maryland Üniversitesi (749 atıf), Tennessee Üniversitesi (235 atıf) ve Leuphana Üniversitesi (181 atıf) yer almaktadır. Yaygın anahtar kelimeler arasında kariyer kararlılığı, kariyer öz-yönetim modeli, kariyer kararı verme, sosyal kariyer teorisi ve kariyer gelişimi bulunmaktadır. En çok atıf alan yayınlar Duffy (2007) 203 atıf, Lent (2016) 168 atıf ve Lent (2017) 164 atıf ile öne çıkmaktadır.

Anahtar Kelimeler: Kariyer, Kariyer Kararlılığı, Görsel Haritalandırma, Bibliyometrik Analiz, VOSviewer

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Introduction

While individuals live their lives within the socio-economic conditions determined by the business world, they are most influenced by the decisions they make regarding their careers. These decisions determine individuals' living standards, social status, and general welfare. Therefore, career decisions are among the critical elements that shape an individual's professional life, personal development, and life satisfaction. The concept of career is of great importance for individuals who are or are likely to be in business life. The career decision-making process is among the issues with the highest potential to affect individuals' lives (Greenhaus, Callanan & Godshalk, 2009: 23).

Making career decisions can be a complex process for individuals. While some individuals make these decisions quickly, others may have difficulties (Gati, Osipow & Givon, 1995: 204). Individuals can be influenced by many factors, such as personal circumstances, family, environment, personality traits, and types of intelligence while making career decisions (Merdan, 2021: 266). Contemporary research has made career decision-making a dynamic and multidimensional concept by identifying various contextual and individual factors that may affect career decision-making. Career decision-making combines with other occupational behaviour constructs to form a holistic framework for developing professional identity, career planning, and development (Abu Hamam et al., 2024: 119; Yazıcı, 2023: 1262).

Individuals should identify available job opportunities and occupations when choosing and deciding on a profession. In addition, it is essential to evaluate whether these professions will meet the expectations of individuals. As a result of this evaluation, they should decide on the most appropriate option (Arslan & Uyar, 2020: 271). Although decision-making is a widespread and well-discussed phenomenon, there is a lack of scientific literature on decidedness and undecidedness. Undecidedness is related to the tendency to experience decision difficulties specific to one's career. It is argued that indecisive individuals worry about many issues even after deciding (Rassin, 2007: 1-3).

An easily analyzable aspect of an individual's career development is career decidedness, which presumably describes how committed the individual feels about their career decision (Stephen, 2010: 11). Career decidedness refers to an individual's commitment to and satisfaction with his/her career decision, which can vary depending on individual and social factors and is shaped by the influence of factors such as personal characteristics, cultural factors, abilities and interests (Miller, 2011: 2). Career decidedness and undecidedness refer specifically to career-related decision problems and can have all kinds of specific causes that are different from the factors that cause ambivalence and yet somehow related to them (Kuga, 2023: 9).

This study aims to access a large body of literature using the bibliometric analysis method, which has attracted increasing attention, and to provide researchers with more reliable information and visual content by creating a visual map. In the research, studies related to the keyword "career decidedness" were classified and analyzed in different categories such as year, country, institution, and co-author. This study is essential in providing researchers working in career decidedness with the opportunity to evaluate the subject from a broader perspective.

Literature review

Parsons (1909) defines a career as a comprehensive understanding of one's abilities, interests, and goals. It involves recognizing personal needs, being aware of strengths and weaknesses, and making informed decisions based on this information (Mulhall, 2014: 210). A career can be perceived as a professional journey that an individual shapes and develops by dedicating most of their productive years to it, typically starting with education and continuing until the end of their working life. In this context, a career encompasses the job and the education pursued to meet personal expectations, goals, feelings, and aspirations related to the teaching process and the assigned job role. Therefore, a career evolves by accumulating knowledge, skills, abilities, and the desire to work (Leung, Hou, Gati & Li et al., 2011). Career decidedness is a well-researched concept in occupational psychology (Gati et al., 2011) and signifies how prepared an individual is to make a career choice (Hou, 2018: 10). According to Osipow, Carney, Winer, Yanico and Koschier (1976), career decidedness involves the cognitive processes through which an individual integrates personal and professional knowledge to reach a career decision.

The levels of individual development and perception skills over time are essential for career planning before forming career decisions. Individuals decide about their careers over time, first by getting a good education and then by reacting to their environment according to their education. However, the correct evaluation of past education and work experiences is primarily related to the individual's abilities. Therefore, as long as the individual can evaluate the available data correctly, he/she can have a more

stable and more satisfying career, while the opposite situation may lead to constant job changes (Hirschi, 2014: 1497).

Career decidedness refers to individuals' confidence and assurance in committing to a specific career path (Restubog, Florentino & Garcia, 2010: 187). This concept is fundamental in the employment context, especially regarding the prospects of university students (Gordon, 1998; Restubog et al., 2010). Research suggests that individuals who make clear and decisive career choices are more likely to secure long-term employment and meaningful opportunities within their chosen fields (Hirschi, 2011). Several negative factors can hinder career decision-making, such as perfectionism, anxiety, and fear of commitment (Guay, Senécal, Gauthier & Fernet et al., 2003). To improve career decisiveness and satisfaction, practitioners are urged to assist individuals experiencing negative emotions and psychological distress by helping them identify and modify dysfunctional career thoughts. This approach can significantly improve their ability to make effective decisions and address career-related issues (Hou, 2018: 10).

Individuals' ability to make the right decisions about their career development is critical in building a successful life in the future. It is thought that individuals with a high level of career decision-making can make more accurate future decisions and quickly adapt to changes. At the same time, it is understood that these individuals can show stronger resilience even when faced with complex conditions and failures and can cope with stressful situations more effectively by protecting their mental and physical health (Erhan, Karagöz & Uzunbacak, 2021: 184). In addition, career decidedness is associated with higher job satisfaction and psychological wellbeing (Hirschi, 2014; Polat, 2022). It is thought that individuals who perceive positive support from their environment can overcome the stress they experience during the decision-making process and make more accurate career decisions. Research shows that social support positively affects career decision-making processes (Hirschi, 2011). It is stated that individuals who perceive support from their family, friends, or notable people have increased career decisions (Cengiz, 2022: 2526). In addition, individuals' high hopes and determination in their careers result in a significant decrease in career stress (Gültekin, 2022: 94). Individuals who look at the future positively and are optimistic are seen to have higher career decidedness (Cengiz, 2022: 2526).

Individuals with high career decidedness are more successful and happy personally and professionally. These people have a long-term commitment to their chosen profession, catch better career opportunities and experience higher satisfaction in their work life. At the same time, since they act in line with a clear purpose and goal, they are psychologically healthier and happier and have higher academic success. This shows that career decidedness significantly affects the quality of life of individuals (Hirschi, 2011; Koyuncuoğlu, 2021: 127).

Career decidedness is firmly rooted in the Social Cognitive Career Theory (SCCT), which asserts that career decisions are influenced by environmental and individual factors (Lent, Brown & Hackett, 1994). This theory is widely acknowledged as the most effective framework for understanding the process of career decision-making and the formation of career attitudes (Park, Kim, Kwon & Lee, 2018: 2). SCCT integrates cognitive, motivational, and environmental influences that shape individual's career interests, choices, performance, satisfaction, and self-management in their professional lives. One of the significant contributions of SCCT is its detailed explanation of the individual and environmental variables that impact the cognitive-personal components of self-efficacy, outcome expectations, and personal goals (Thompson, Dahling, Chin & Melloy, 2017: 2-3; Koyuncuoğlu, 2021: 128). The theory emphasizes that an individual's experiences throughout their career journey play a crucial role in developing career decisions over time. These experiences influence how individuals perceive their abilities and the outcomes they expect from their career choices.

According to SCCT, career decidedness evolves as individuals reflect on past experiences. This reflection enables them to construct a well-defined and sustainable career plan to achieve future happiness and fulfilment (McClellan, 2010: 3-4). SCCT evaluates individuals' decisions due to the dynamic interaction between external environmental factors, internal subjective factors, and past and present behaviours (Bandura, 1986). These interactions are essential in individuals' career choices and shape their decision-making processes. The theory states that individuals' career choices are based not only on their skills and beliefs but also on environmental conditions, social support, and other influential external factors. SCCT emphasizes that career decisions are shaped by the interaction of individual characteristics and environmental contexts (Restubog et al., 2010: 187). In this context, in addition to personal abilities and self-efficacy beliefs, environmental feedback and social interactions are essential in determining career decisions. While high self-efficacy beliefs enable individuals to show decidedness in achieving their goals and coping with difficulties, low self-efficacy leads them to avoid complex tasks and give up quickly (Bandura, 1986). Therefore, according to the theory, individual and

environmental factors determine career decisions. Although the individual has the power to create and develop his or her career, it is stated that this power is not absolute, and the individual's decisions are affected by environmental factors and the context in which the decision is made (Koyuncuoğlu, 2021: 128).

According to Gordon (1998), career decidedness is handled in three different forms: "very decided", "somewhat decided", and "unstable decided" (Gordon, 1998). Very decided describes self-confident individuals who think they are in control of their lives, determine their future careers with certainty, believe that they can realize these decisions and are satisfied with their decisions. These individuals act in a planned manner to implement their decisions. On the other hand, somewhat decided is a situation in which individuals still have doubts and concerns about their career decisions even though they have made a career-related decision. These individuals often experience indecision due to external factors and question their decisions. An unstable decision refers to a situation in which individuals constantly doubt and experience anxiety despite making a career-related decision. These individuals may need counselling help to improve their decision-making skills, career choices, and performance (Akçakanat & Uzunbacak, 2019: 160).

An individual's career decidedness is the determination and confidence shown in choosing a specific profession and sticking to this choice during the process of personal and professional development. This process is a journey that requires continuous learning and self-improvement, starting from the individual's education life and continuing until the end of his/her working life. In addition to personal factors such as an individual's abilities, values and past experiences, environmental influences also shape career decisions. Theories such as SCCT provide an essential framework for understanding how an individual makes career decisions and how these decisions are shaped. According to this theory, factors such as an individual's self-efficacy, beliefs and expectations for the future significantly affect career decisions.

Method

Data and analysis

This study utilized a bibliometric and descriptive quantitative methodology. Bibliometric analysis involves applying mathematical and statistical techniques to books and scientific communication tools (Cronin, 2001). This approach analyses scientific outputs, processes, and studies, providing concrete data on a specific discipline (İnceoğlu, 2014). The entire body of literature or selected periods within a discipline are examined through bibliometric analysis to reveal concrete data (İnceoğlu, 2014). In this process, scientific and academic publications are collected, and their data are analyzed, classified, and interpreted (Baker, Kumar & Pattnaik, 2021). Key aspects that can be explored include active journals, the total number of publications, authors' affiliations, publication languages, countries where research was conducted, and types of sources included in the study. Additionally, the analysis can encompass networks, citations, and various bibliometric variables (Gurdin, 2020).

Various tools are used in the literature for bibliometric analysis. In this study, version 1.6.20 of the VOSviewer program was utilized. VOSviewer constructs relationship networks through co-authorship, co-occurrence, citation, bibliographic coupling, or co-citation links among scientific publications, journals, researchers, research institutions, countries, keywords, and concepts. Bibliographic data from databases such as Dimensions, Lens, Scopus, and Web of Science, as well as reference management software like EndNote, RefWorks, and RIS, can be used to create a bibliometric map of a particular field (van Eck & Waltman, 2022: 3).

In the current research, on May 27, 2024, content indexed in the Web of Science (WOS) database with the keyword "career decidedness" was selected, yielding 104 research results. The search encompassed "all fields." The WOS, established in 1985, includes prominent indexes such as the Science Citation Index Expanded (SCIE), Social Sciences Citation Index (SSCI), and Arts and Humanities Citation Index (AHCI). Two major strengths of WOS are reference tracking and citation reporting. It allows searches within leading academic journals, books, and citation networks, and it can monitor reference and citation activities to identify outputs and trends within a particular research area (Huang et al., 2022: 2).

This study aims to provide an overview of "career decidedness" and identify research trends and gaps. The study aims to systematically review the existing literature on career decidedness and reveal theoretical and practical deficiencies in this area. Thus, it is aimed to guide researchers and practitioners in the field.

This study's application of bibliometric analysis provided a comprehensive overview of the existing research on career decidedness. The research identified key trends, influential journals, and prominent

researchers in the field. This approach also facilitated mapping research networks and assessing collaboration patterns across institutions and countries. The findings offer valuable insights into the development and current state of research on career decidedness, highlighting areas of significant activity and potential gaps for future exploration. Through such detailed examination, the study contributes to a deeper understanding of how career decidedness has been studied and the impact of various factors on this crucial aspect of occupational psychology.

Findings

Under this heading, published studies on "career decidedness" will be examined in detail under different headings such as author, citation, journal, country, institution and keyword, and the relationships between these studies will be revealed.

Publications on career decidedness in international literature

The development of career decidedness literature over the years is shown in Figure 1. According to the results, the first study on career decidedness was published in 1995. Between 2007-2011, 4 studies were conducted every year. After 2014, the number of studies in this field started to fluctuate. While eight studies were published in 2021, 9 were published in 2023, reaching the highest number.

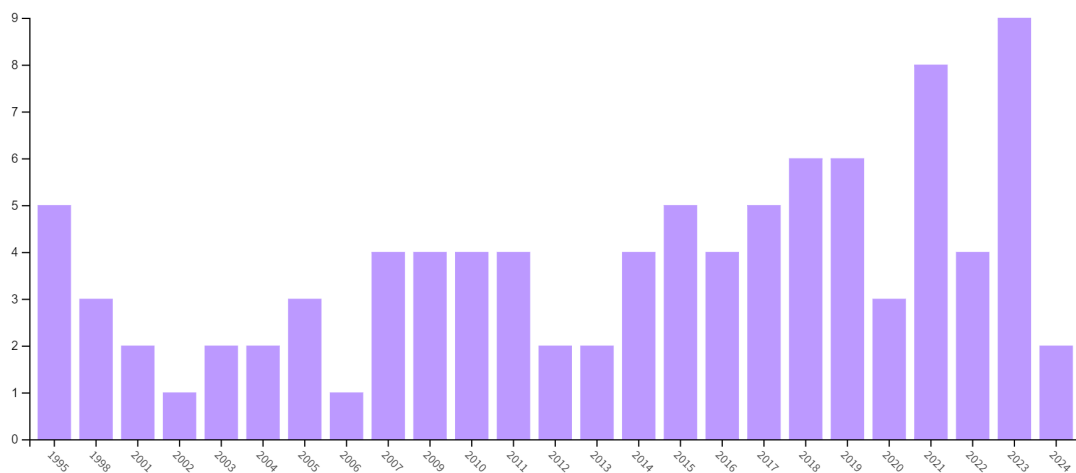


Figure 1: Distribution Publications by Years

Publication types

The distribution of career decidedness literature according to document types is shown in Figure 2. The results found 93 journal articles, 12 papers, two early view studies, two review articles, and one meeting abstract.

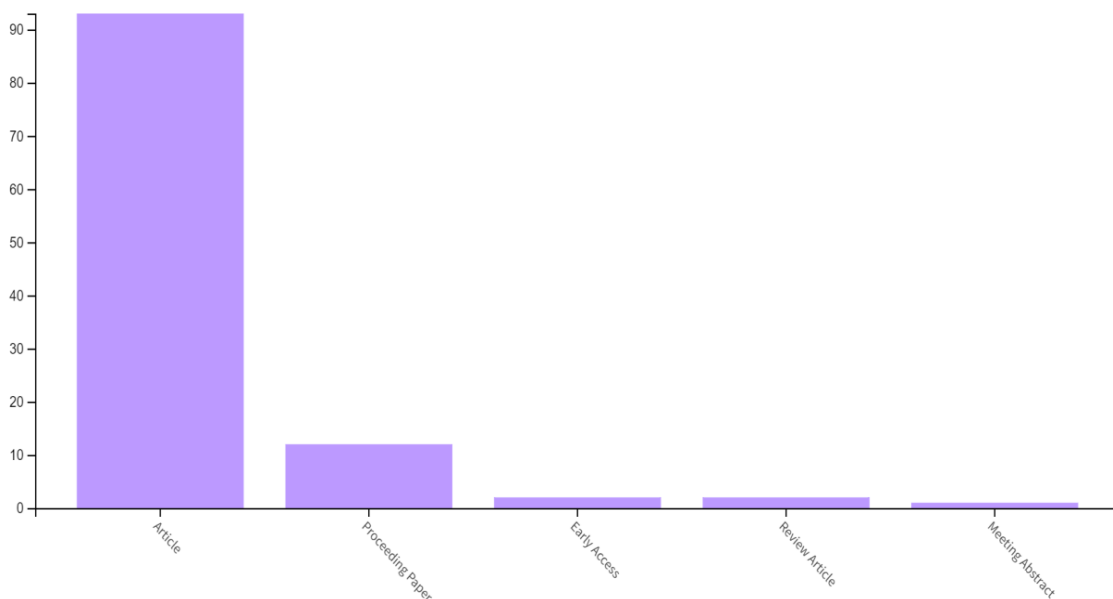


Figure 2: Publication Types

Web of science categories of publications

The disciplinary distribution of the career decidedness literature is shown in Figure 3. In terms of disciplines, the majority of the studies belong to the fields of social psychology (88), education and educational research (6), management (5), design and manufacturing (1), psychiatry-psychology (1) and political philosophy (1).

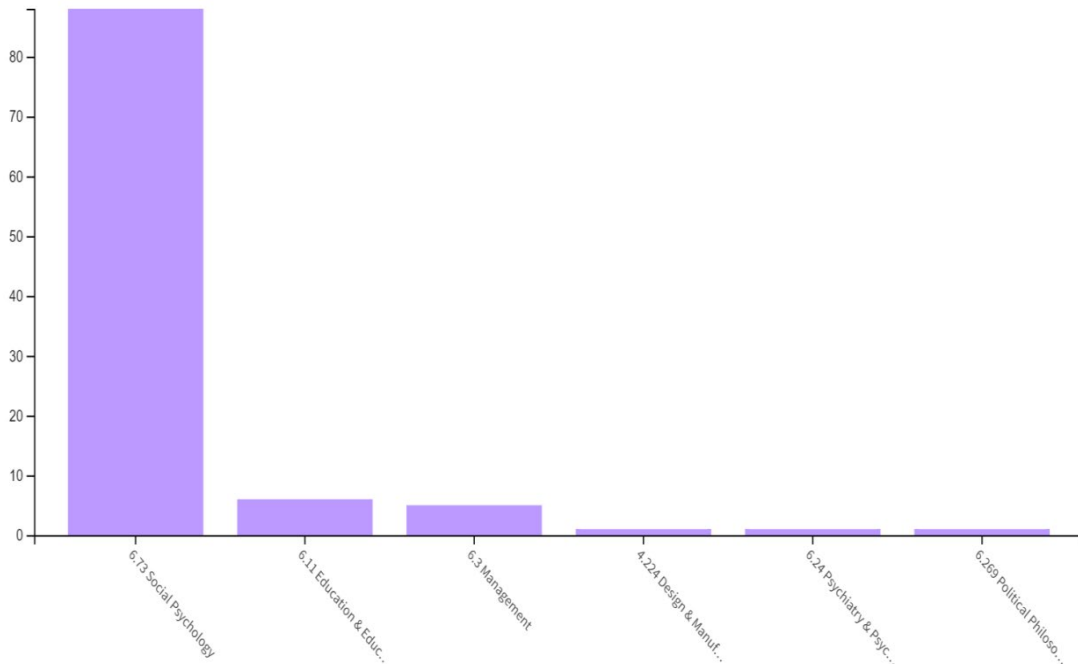


Figure 3: Web of Science Categories of Publications

Table 1: Most Cited Top Ten

Journal	Author	University	Country
Journal of Vocational Behaviour (1620)	Lent, Robert (552)	University Maryland (785)	USA (1737)
Journal of Career Assessment (276)	Peen, Lee (495)	University of Tennessee (239)	Germany (269)
Career Development Quarterly (125)	Ireland, Gleen (492)	Leuphana University of Lüneburg (186)	Australia (260)
Journal of Counseling Psychology (104)	Hirschi, Andreas 371)	University News Wales (143)	Switzerland (164)
Journal of Career Development (23)	Morris, Taylor (257)	Universtey Padua (128)	China (140)
Studies in Higher Education (110)	Duffy, Ryan (233)	Universty Padue (109)	Italy (128)
International Journal for Educational (47)	Sedlacek, William (206)	Universty Penn State (90)	England (103)
Computers in Human Behaviour (45)	Ezeofor, Ijeoma (180)	Hebrew University Jerusalem (88)	Israel (90)
Higher Education (29)	Morrison, Ashley (180)	University Griffith (87)	Canada (67)
Vocational Guidance Quarterly (16)	Sappington, Ryan (177)	University Bern (35)	Netherland 62)

Note: Citation numbers are given in parentheses.

The most frequently cited journals are Journal of Vocational Behaviour (1620 citations), Journal of Career Assessment (276 citations), Career Development Quarterly (125 citations), Studies in Higher Education (110 citations), Journal of Counseling Psychology (104 citations), International Journal for Educational (47 citations), Computers in Human Behaviour (45 citations), Higher Education (29 citations), Journal of Career Development (23 citations) and Vocational Guidance Quarterly (16 citations). Other researchers in the field frequently reference articles in these journals.

The most frequently cited authors are Lent, Robert; Peen, Lee; Ireland, Glen; Hirschi, Andreas; Morris, Taylor; Duffy, Ryan; Sedlacek, William; Ezeofor, Ijeoma; Morrison, Ashley; and Sappington, Ryan. This ranking shows that these authors have made significant contributions to the research on career decision-making and development processes and that their work has dramatically impacted the literature. In particular, Lent, Robert, Peen, and Lee have played a central role in the career literature and contributed to developing the main theoretical frameworks in the field.

The most frequently cited universities are the University of Maryland, University of Tennessee, Leuphana University of Lüneburg, University of New South Wales, University of Padua, Penn State University, Hebrew University of Jerusalem, Griffith University, and University of Bern. These universities have significantly impacted the academic literature and have made substantial research contributions, especially in career development, vocational behaviour, and higher education. It can be said that the number of citations reveals the research power of these universities and how influential they are in the international arena.

The most frequently cited countries are the USA, Germany, Australia, Switzerland, China, Italy, England, Israel, Canada and the Netherlands. This ranking shows that the USA and European countries are particularly prominent in career development and professional behaviour. The USA, in particular, is the country that contributes the most to research in this field, being far ahead in the number of citations. Germany, Australia, and Switzerland have also received significant citations, showing that the academic impact in this field is widespread globally.

Citation of authors

Based on author citation analysis with a minimum of one publication and one citation, the network map of citation networks was constructed over 20 interconnected units (Figure 4). This analysis revealed 10 clusters, 47 links, and a total link strength of 131. The most frequently cited authors were Lent-Robert with 519 citations, Penn Lee with 464 citations, and Ireland Gleen with 460 citations. These authors also ranked highest in total link strength, indicating their significant influence and interconnectedness within the citation network. This comprehensive analysis highlights vital contributors and their impact on the field, providing valuable insights into the research landscape and citation dynamics.

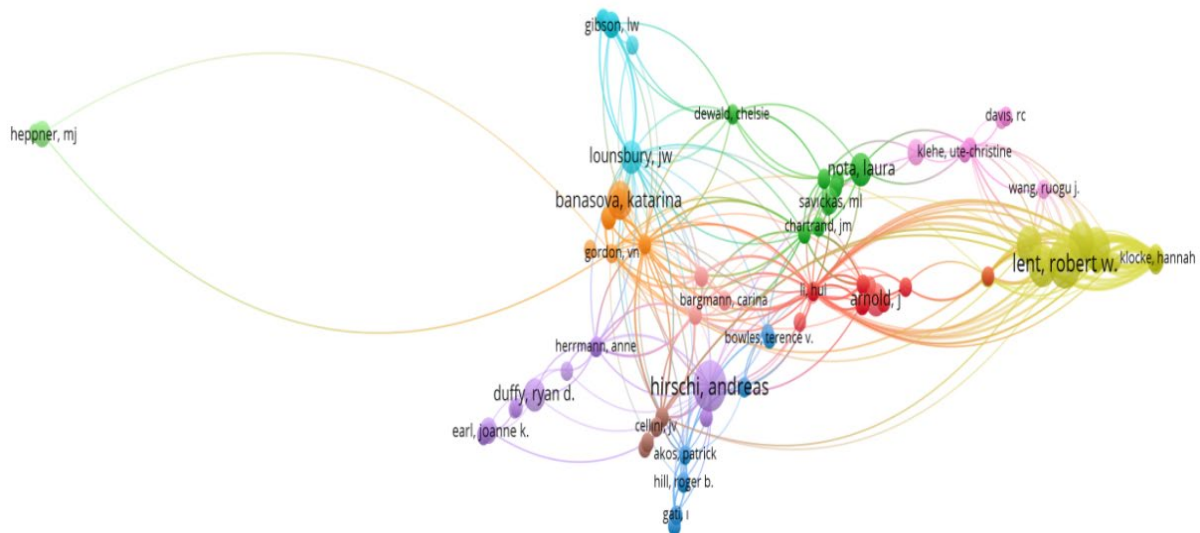


Figure 4: Authors' Citation Links

The citation network map based on journal citation analysis was constructed using ten interconnected units (Table 2). This analysis revealed 5 clusters, 15 connections, and a total connection strength of 61. The most frequently cited journals were: Journal of Vocational Behaviour (1620 citations), Journal of Career Assessment (276 citations), Career Development Quarterly (125 citations), Studies in Higher Education (110 citations), Journal of Counseling Psychology (104 citations), International Journal for Educational (47 citations), Computers in Human Behaviour (45 citations), Higher Education (29 citations), Journal of Career Development (23 citations), and Vocational Guidance Quarterly (16 citations). This ranking shows the order of importance and academic impact of the journals according to the number of citations.

Table 2: Journal Citation Analysis

Journals	Number of Document	Number of Citation
Journal of Vocational Behaviour	28	1620
Journal of Career Assessment	12	276
Career Development Quarterly	8	125
Journal of Counseling Psychology	4	104
Journal of Career Development	4	23
Studies in Higher Education	3	110
International Journal for Educational	2	47
Computers in Human Behaviour	2	45
Higher Education	2	29
Vocational Guidance Quarterly	2	16

Citation analysis of countries

For the analysis, a network map of the citations received by publications according to their country of origin was created over 80 observation units. This analysis examined the relationships between the countries where at least one work was published and received at least one citation. Nine clusters, 308 links and 333 total link strengths were identified. The most cited countries were the USA (1676 citations), Germany (258 citations) and Australia (252 citations). These countries are in the top three in terms of total link strength. In terms of number of publications, the ranking is as follows: USA (46 publications), Australia (9 publications) and Germany (8 publications) (Figure 5).

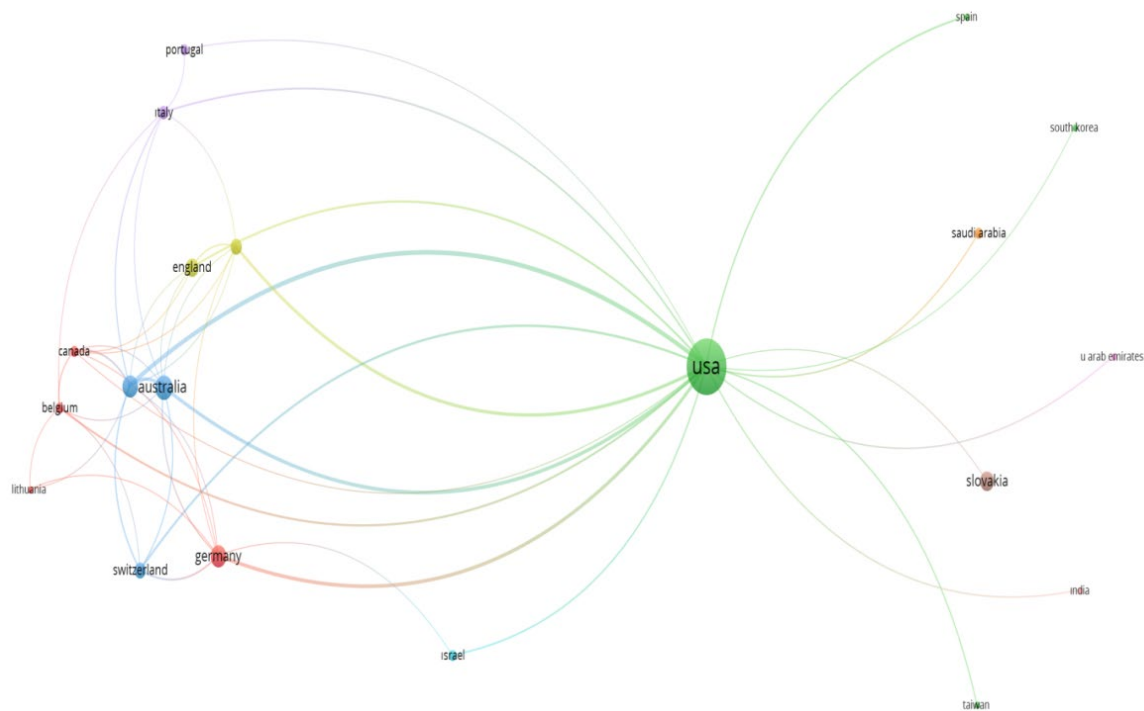


Figure 5: Citation Links of Countries

Citation analysis of institutions

A network map was created based on inter-institutional citations, and the relationships between the institutions where at least one work was published and received at least one citation were analyzed. The analysis was conducted on ten observation units. University of Maryland (10 works), University of Tennessee (2 works), and New South Wales University (2 works) were represented by the University of Maryland (749 citations), University of Tennessee (235 citations), and Leuphana University of Lüneburg (181 citations). There are 3 clusters, 45 links, and a total link strength of 2063 (Figure 6).

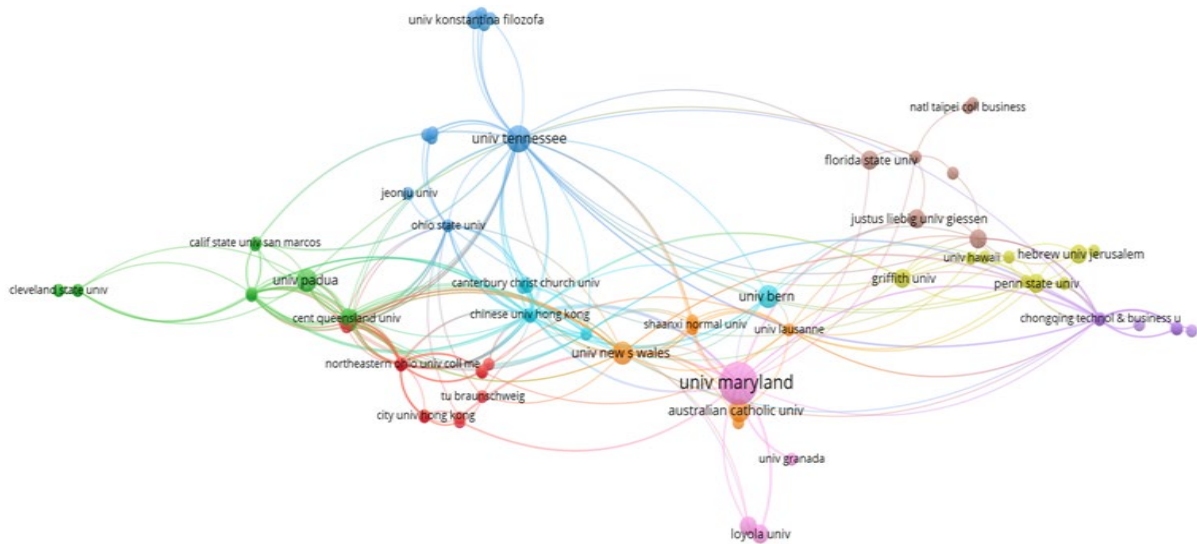


Figure 6: Citation Links of Institutions

Co-occurrence of all keywords

When the most frequently used keywords in publications on career decidedness are examined, it is seen that career decidedness is used 159 times, career self-management model 44 times, career decision-making 42 times, social career cognitive theory 38 times, and career development 36 times. As a result of the analysis conducted on a total of 228 observation units, it was determined that the most vital statements were career decidedness, career self-management model, and career decision-making. A total of 23 clusters and 815 links were identified in the analysis, and the total link strength of these links was determined as 882 (Figure 7).

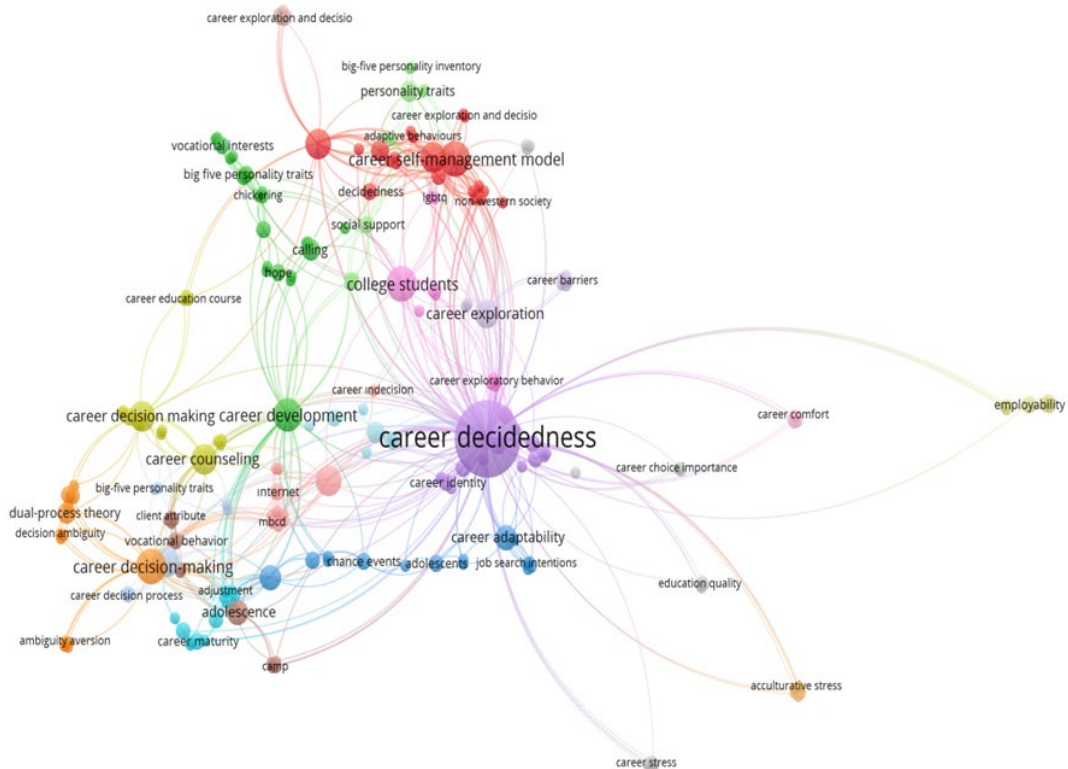


Figure 7: Most Frequently Used Keyword Links

Bibliographic coupling of documents

As a result of the analysis conducted on 228 units of works selected with the criterion of having at least 1 citation and having links between them, 23 clusters, 815 links, and 882 total link strengths were obtained about the concept of bibliographic matching (Figure 8). Among the publications with the highest number of bibliographic matches, Duffy (2007) has 203 citations, Lent (2016) has 168 citations,

and Lent (2017) has 164 citations. The works with the highest total link strength are Lent (2016), Kleine (2021) and Lent (2019a).

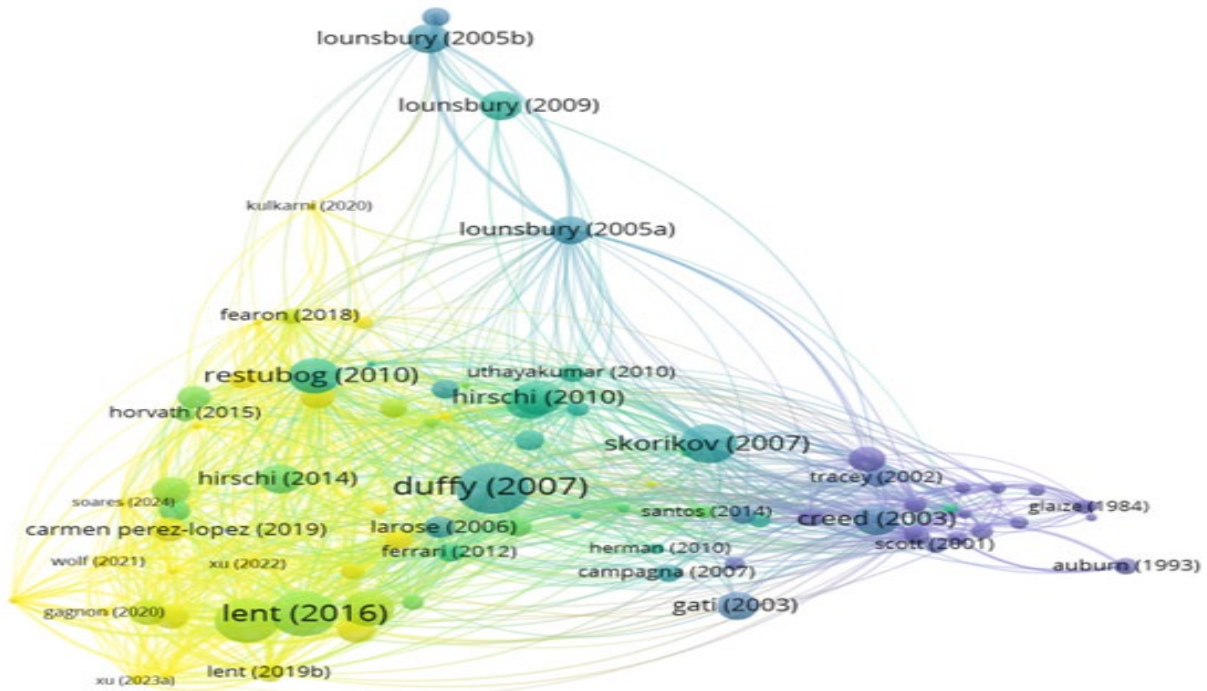


Figure 8: Bibliographic Match Links of the Works

Bibliographic coupling of authors

According to the analysis conducted with 89 units selected with the criterion of having published at least one work and received 1 citation, 5 clusters, 1578 links, and 3637 total link strength were obtained (Figure 9). The authors with the highest number of bibliographic matches are Lent-Robert with 519 citations (4218 link strength), Penn, Lee with 464 citations (3449 link strength), Penn, Lee with 460 citations (3415 link strength), and Hirschi Andreas with 357 citations (1849 link strength).

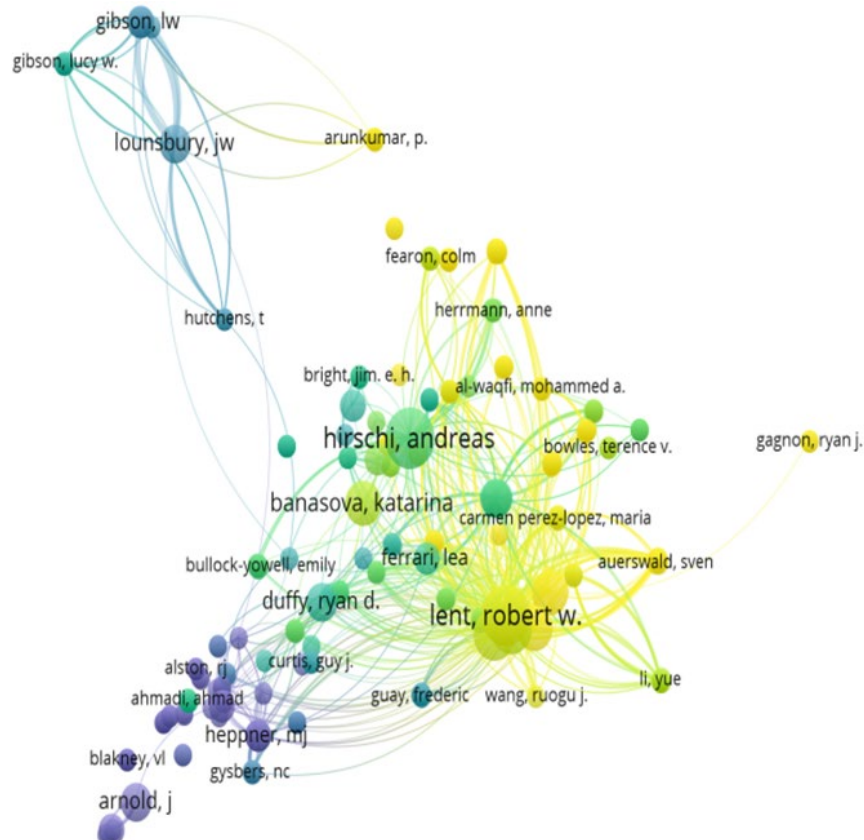


Figure 9: Authors' Bibliographic Match Links

Co-citation of co-authors

After analyzing sources cited at least ten times, the study identified 12 clusters and examined 9082 links with a total link strength of 46979 across 204 co-citation units. Among the most cited authors were Lent-Robert (144 citations), Hirschi Andreas (63 citations), and Savickas (63 citations) (Figure 10). This analysis underscores the significant scholarly impact and interconnections among these authors in the field.

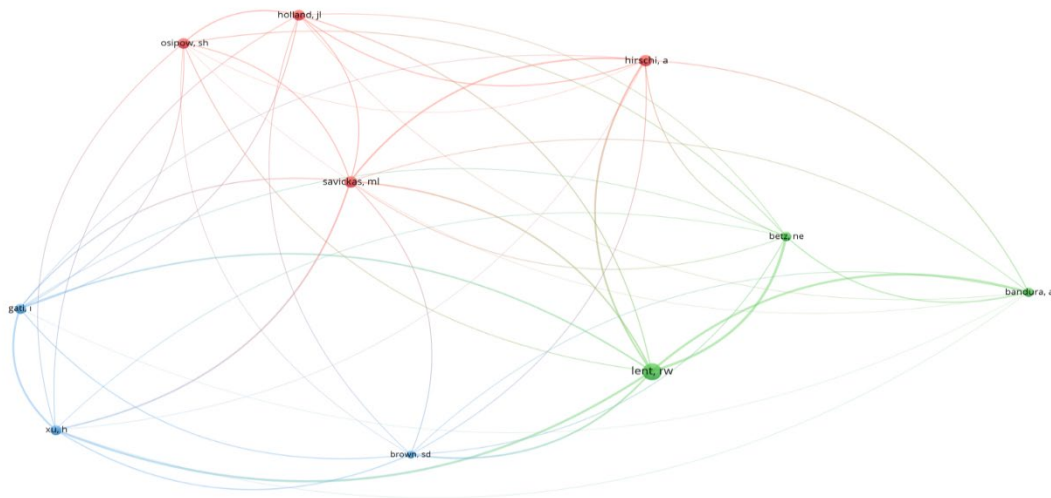


Figure 10: Links between Co-Cited Authors

Conclusion

A significant part of individuals' lives is spent in business life. Individuals who excel in these business processes ascend the career ladder. However, a career-related failure can lead to dissatisfaction, dissatisfaction with one's job, and even quitting. These adverse situations can negatively affect both work and social life. Therefore, a person's job choice and career progression is critical. An individual's success in their career can positively impact their personal and family happiness by increasing both personal satisfaction and family wellbeing. This study utilized the VOSviewer bibliometric mapping software, known for its accessibility and widespread use in international research, albeit less common in national publications (Kurt, 2024; Başaran, 2024). The research introduced and extensively detailed the functionalities of the VOSviewer program throughout its methodology. It has been observed that the use of the software has started to increase in local literature in recent years.

This comprehensive analysis provides insights into the global research landscape on career decidedness, highlighting key contributors, influential institutions, and prevalent themes. By analyzing data from various countries, institutions, authors, and publication years related to the keyword "career decidedness," this study establishes a systematic framework. Such an approach is essential in providing fundamental knowledge and comprehensive insights into the field. This increases the impact of studies in the literature and contributes to establishing a solid academic foundation on topics such as career development and professional behaviour.

When the research results were analyzed, the first study in the career decidedness literature was published in 1995. Between 2007-2011, 4 studies were conducted every year. After 2014, the number of studies in this field started to fluctuate. While eight studies were published in 2021, 9 were published in 2023, reaching the highest number. It is seen that the interest in this subject continues today. According to document types, 93 journal articles, 12 papers, two early view studies, two review articles, and one meeting abstract were reached. In terms of disciplines, the majority of the studies belonged to the fields of social psychology (88), education and educational research (6), management (5), design and manufacturing (1), psychiatry-psychology (1) and political philosophy (1). According to the authors' citation criteria, the most cited authors were Lent-Robert with 519 citations, Penn and Lee with 464 citations and Ireland Gleen with 460 citations. These three authors are also among the top three in terms of total link strength.

Based on citation analysis, the United States emerges as the leader with 1676 citations, followed by Germany with 2586 citations, and Australia with 252 citations. These countries also exhibit the highest total link strength, indicating robust interconnectedness within the research network. Regarding publication output, the USA leads with 46 publications, followed by Australia with nine publications,

and Germany with seven. Examining inter-institutional citations reveals the University of Maryland's prominence with 749 citations, the University of Tennessee with 235 citations, and the Leuphana University of Lüneburg with 181 citations. Notably, the University of Maryland also leads in the number of publications, contributing significantly to the discourse on career decidedness alongside the University of Tennessee and New South Wales University.

Keyword analyses show that "career decidedness" is used most frequently (159 times). This is followed by the terms "career self-management model" (44 times), "career decision making" (42 times), "social cognitive career theory" (38 times) and "career development" (36 times). These terms highlight the main themes and concepts that guide research in the field. These results show that the term "career determination" is central to the research and that this topic has a broad impact. They also reveal that studies on "career determination" are frequently associated with concepts such as the "career self-management model" and "career decision making". In this context, the relationships between these keywords provide essential information regarding understanding the scope and depth of research on career determination.

In bibliographic match analysis, Duffy (2007) tops with 203 citations, followed closely by Lent (2016) with 168 citations and Lent (2017) with 164 citations, underscoring their significant influence in the literature. Lent (2016), Kleine (2021), and Lent (2019a) emerge with the highest total link strength, indicating their pivotal roles in scholarly discussions. Among authors, Lent-Robert stands out with 519 citations and 4218 link strength, Penn Lee with 464 citations and 3449 link strength, and Hirschi Andreas with 357 citations and 1849 link strength. These authors are highly co-cited, highlighting their contributions to understanding career decidedness and related concepts.

Among authors, Lent-Robert stands out with 519 citations and 4218 link strength, followed closely by Penn Lee with 464 citations and 3449 link strength, and Hirschi Andreas with 357 citations and 1849 link strength. These authors are highly co-cited, underscoring their pivotal roles in shaping discussions on career decidedness.

According to the journals and in the citation analysis, the first five most frequently cited journals are as follows: Journal of Vocational Behaviour (1620 citations), Journal of Career Assessment (276 citations), Career Development Quarterly (125 citations), Studies in Higher Education (110 citations), Journal of Counseling Psychology (104 citations). This ranking shows that career development, vocational behaviour, and higher education issues are studied intensively in the literature and that research in these areas has a significant impact. In particular, the high citation count of the Journal of Vocational Behaviour suggests that studies in vocational behaviour and career management significantly impact the academic field.

Among authors with the highest bibliographic matches, Lent-Robert stands out with 519 citations and 4218 link strength, Penn, Lee with 464 citations and 3449 link strength, and Hirschi Andreas with 357 citations and 1849 link strength. The most frequently co-cited authors were Lent-Robert (144), Hirschi Andreas (63), and Savickas (63), indicating their significant influence and interconnectedness within the scholarly discourse on "career decidedness."

This study has some limitations. Firstly, "career decidedness" was examined only through Web of Science-indexed studies. Databases such as TÜBİTAK Ulakbim and YÖK Thesis Archive in Turkey and Scopus and Pubmed in the international arena were excluded. Further studies can cover more databases or focus on a specific topic of interest in the career stability literature.

In this study, only the VOSviewer bibliometric mapping program is described, and the application is carried out through this program. Dirik et al. (2023: 173) emphasize that the VOSviewer program offers researchers an essential tool by visualizing the evolution, relationships and emerging themes of concepts in the literature through bibliometric network analysis. The program's mapping and multidimensional analysis opportunities contribute to a better understanding of complex data sets and the emergence of new research questions. Including 104 studies in this study may be sufficient as a starting point for a literature review, but researchers who want to conduct a more comprehensive analysis may need a more extensive data set.

As a recommendation for future researchers, it is recommended that they identify theories related to the concept of career determination and publish using specific keywords in line with these theories. For example, studies based on career decision-making theory and career development theory can contribute to a more in-depth understanding of the field. Within the framework of these theories, literature reviews using keywords such as "career decision making", "cognitive processes", "self-efficacy", "career development stages", and "career planning" can contribute to a better understanding of how individuals make career decisions, the factors that affect these decisions, and their experiences at different stages of

their careers. In particular, studies examining the relationship between cognitive processes affecting career determination, environmental factors, and personal adaptation can fill gaps in knowledge in this area and pose new research questions.

Other applications such as Biblioshiny, BibExcel, SciMat, Pajek and Citespace, frequently used in international literature but relatively less mentioned in national research, are omitted. In future studies, it is recommended that researchers compare these programs using a similar research design, make an example of them, and introduce these programs to the national literature.

The number of studies conducted using bibliometric analysis with the VOSviewer program, especially in career determination, is limited. For example, thanks to visual mapping, the relationships between the factors that affect individuals' career decisions can be revealed more clearly, and new theories can be developed. However, researchers from different disciplines can use this program to examine the cognitive, emotional and social factors in the career determination process in more depth and to visualize the interactions between these factors, which can significantly contribute to the field's development. In addition, visual mapping can be used to compare career determination processes in different countries and to reveal cross-cultural differences. In this context, it is thought that bibliometric analyses conducted with the VOSviewer program can also bring new perspectives to career counselling practices.

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