Psychosocial Constructs in Career Development and Readiness Research: A Bibliometric Analysis

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DOI: https://doi.org/10.47772/IJRISS.2026.101000118

Received: 10 October 2026; Accepted: 15 October 2026; Published: 30 October 2026

ABSTRACT

Despite growing interest in the psychosocial dimensions of career development and readiness, the bibliometric landscape of research examining these interconnected constructs remains insufficiently mapped. This study examines publication trends, citation performance, influential contributors, and thematic patterns in research on psychosocial constructs related to career development and readiness from 1990 to 2025. Using Scopus data retrieved through a search strategy encompassing student and youth populations and counselling- or guidance-related contexts, 41 publications were selected through a modified PRISMA-guided process and analysed using biblioMagika®, VOSviewer, and OpenRefine. The dataset accumulated 863 citations, with an h-index of 15 and a g-index of 29, while publication output peaked in 2024. The Journal of Vocational Behavior demonstrated notable citation impact, and publications by Rogers et al. (2008) and Hirschi et al. (2014) emerged as influential contributions. Author keyword co-occurrence analysis identified eight keywords organised into three clusters: career adaptability, career construction, career counselling, and adolescents; career development and career maturity; and self-efficacy and Social Cognitive Career Theory. The findings provide a bibliometric overview of the interdisciplinary connections among psychosocial constructs, career development, and readiness, highlighting opportunities for future research across diverse educational and career-related contexts.

Keywords: psychosocial constructs, career development, career readiness, bibliometric analysis, career counselling

INTRODUCTION

In the context of rapid technological change and shifting labour markets, preparing individuals for future careers has become a pressing global challenge (Hirschi, 2012; Potgieter & Coetzee, 2013). Individuals are increasingly expected to make informed career decisions while navigating educational disruptions, uncertain job prospects, and heightened psychosocial pressures (Dimitriou & Panaoura, 2024; Wang et al., 2022). Therefore, career readiness serves as an important developmental outcome in preparing individuals for transitions across education and employment. This perspective is supported by Hirschi (2012), who emphasised the importance of career preparation during the transition from school to the workforce.

Psychosocial constructs such as self-efficacy, social support, career adaptability, identity formation, motivation, and resilience have emerged as central in shaping individuals' career trajectories (Fang et al., 2024; Hirschi, 2012; Sung & Connor, 2017). These constructs are associated with how individuals respond to career uncertainty, manage barriers, and align personal aspirations with occupational opportunities (Qamaria & Astuti, 2021; Rogers et al., 2008). For example, career decision-making self-efficacy is associated with career preparation behaviour (Youngju & Seungkyoung, 2024), parents, teachers, and peers are among the factors influencing adolescents' career decisions (Chinyamurindi et al., 2021), and proactive personality is associated with career adaptability through college experiences (Fang et al., 2024).

In this study, psychosocial constructs refer to psychological and social factors associated with individuals' career-related beliefs, attitudes, behaviours, and developmental processes. These include self-efficacy, motivation, career adaptability, vocational identity, resilience, and perceived social support. Within the context of career development and readiness, these constructs are considered relevant when examined in relation to career exploration, planning, decision-making, preparation, or transitions to further education and employment.

Career development and readiness are examined across diverse educational and occupational contexts, reflecting the developmental nature of career-related beliefs, attitudes, and behaviours. Psychosocial constructs such as self-efficacy, motivation, social support, personality, and career adaptability contribute to understanding how individuals explore career opportunities, formulate career goals, and prepare for future transitions. Accordingly, this bibliometric study adopts a broad perspective to map research on these interconnected constructs across different populations and educational settings, rather than restricting its focus to a single developmental stage or formal counselling intervention.

Proactive career behaviours are reflected in career engagement, which has been associated with vocational identity clarity, career self-efficacy, and subsequent career satisfaction (Hirschi et al., 2014). Career competencies and supportive learning environments have also been associated with career identity, learning motivation, and certainty of career choice (Meijers & Kuijpers, 2014). Across career development and readiness research, these constructs have been examined in relation to educational contexts, developmental stages, and career-related support processes (Meijers & Kuijpers, 2014; Szabó et al., 2020). Career counselling and guidance also provide relevant support contexts, as illustrated by research examining school counsellors' self-efficacy in addressing adolescents' mental health and career-related concerns (Dimitriou & Panaoura, 2024). Within this broader research scope, career counselling and guidance represent relevant support contexts rather than the exclusive focus of the study. Their inclusion reflects the role of career-related support processes in research examining psychosocial constructs associated with career development and readiness.

Despite growing scholarly interest, research examining psychosocial constructs in career development and readiness remains dispersed across different theoretical perspectives, populations, and educational contexts (Pignault et al., 2023; Sung & Connor, 2017; Woods et al., 2016). Three limitations are particularly relevant. First, theoretical diversity. Research on career development and readiness draws on different theoretical perspectives, including Social Cognitive Career Theory (SCCT), Holland’s RIASEC model, and career-related psychosocial perspectives (Meijers & Kuijpers, 2014; Pignault et al., 2023; Sung & Connor, 2017; Woods et al., 2016). Examining how these perspectives are represented within the retrieved literature may provide insights into the theoretical orientation of this research area.

Second, contextual imbalance. Research spans different educational and career-related settings, but the representation of psychosocial constructs across geographical and cultural contexts remains uneven (Chinyamurindi et al., 2021; Hirschi, 2012; Rafanan et al., 2020; Rogers et al., 2008). Third, temporal development. Changes in educational environments, labour market conditions, and career guidance practices highlight the importance of examining how research interests and thematic patterns have evolved over time (Dimitriou & Panaoura, 2024; Wang et al., 2022). Although existing studies provide valuable empirical and theoretical insights, a consolidated bibliometric overview is needed to identify publication trends, influential contributors, and thematic relationships within research on psychosocial constructs in career development and readiness.

To give a thorough picture of this intellectual landscape, a bibliometric method is thus required. By mapping publication trends, influential contributors, and emerging themes, bibliometric analysis can identify research gaps, highlight underexplored contexts, and trace the evolution of knowledge in the field (Zupic & Čater, 2015). This study addresses this gap by mapping the research landscape of psychosocial constructs in career development and readiness from 1990 to 2025, drawing on 41 publications representing diverse educational and career-related contexts. The analysis examines publication trends, authorship patterns, citation performance, leading journals, influential publications, and thematic relationships. As a bibliometric study, it does not examine causal relationships or evaluate the effectiveness of career counselling interventions.

Research Questions

Six research questions (RQs) guide the bibliometric analysis of psychosocial constructs in career development and readiness research:

RQ1: What is the current bibliometric landscape of research on psychosocial constructs in career development and readiness?

RQ2: What publication and citation trends are observable in this research area from 1990 to 2025?

RQ3: Which journals contribute most prominently to the publication output and citation impact of this research area?

RQ4: Which publications have received the highest citation impact in this research area?

RQ5: Which authors, institutions, and countries are the leading contributors to this research area?

RQ6: What psychosocial constructs and thematic relationships are most prominently represented in the author keyword co-occurrence network?

METHODOLOGY

This study employed a bibliometric approach to examine research on psychosocial constructs in career development and readiness. The dataset included multiple bibliographic variables, including document types, source titles, subject areas, publication trends, authorship patterns, institutional affiliations, country distribution, and citation metrics. These data were analysed to provide a structured overview of the research landscape on psychosocial constructs in career development and readiness. The analysis was limited to English-language publications to ensure consistency in data extraction and interpretation. This may result in the underrepresentation of region-specific research on career development and readiness, particularly from non-Western contexts. Therefore, the findings should be interpreted within the scope of the selected database and language criteria.

Search Strategy

The literature search was conducted using the Scopus database on 4 August 2025, covering publications from 1990 to 2025. The search strategy combined four groups of terms representing career development and readiness, psychosocial constructs, student and youth populations, and counselling- or guidance-related contexts. These terms were combined using Boolean operators (AND and OR) and applied to the TITLE-ABS-KEY fields. The inclusion of broader terms such as "student" and "career development" was intended to capture research across different educational stages and career-related contexts, while counselling- and guidance-related terms provided a connection to career support and developmental processes. The complete search string was formulated as follows:

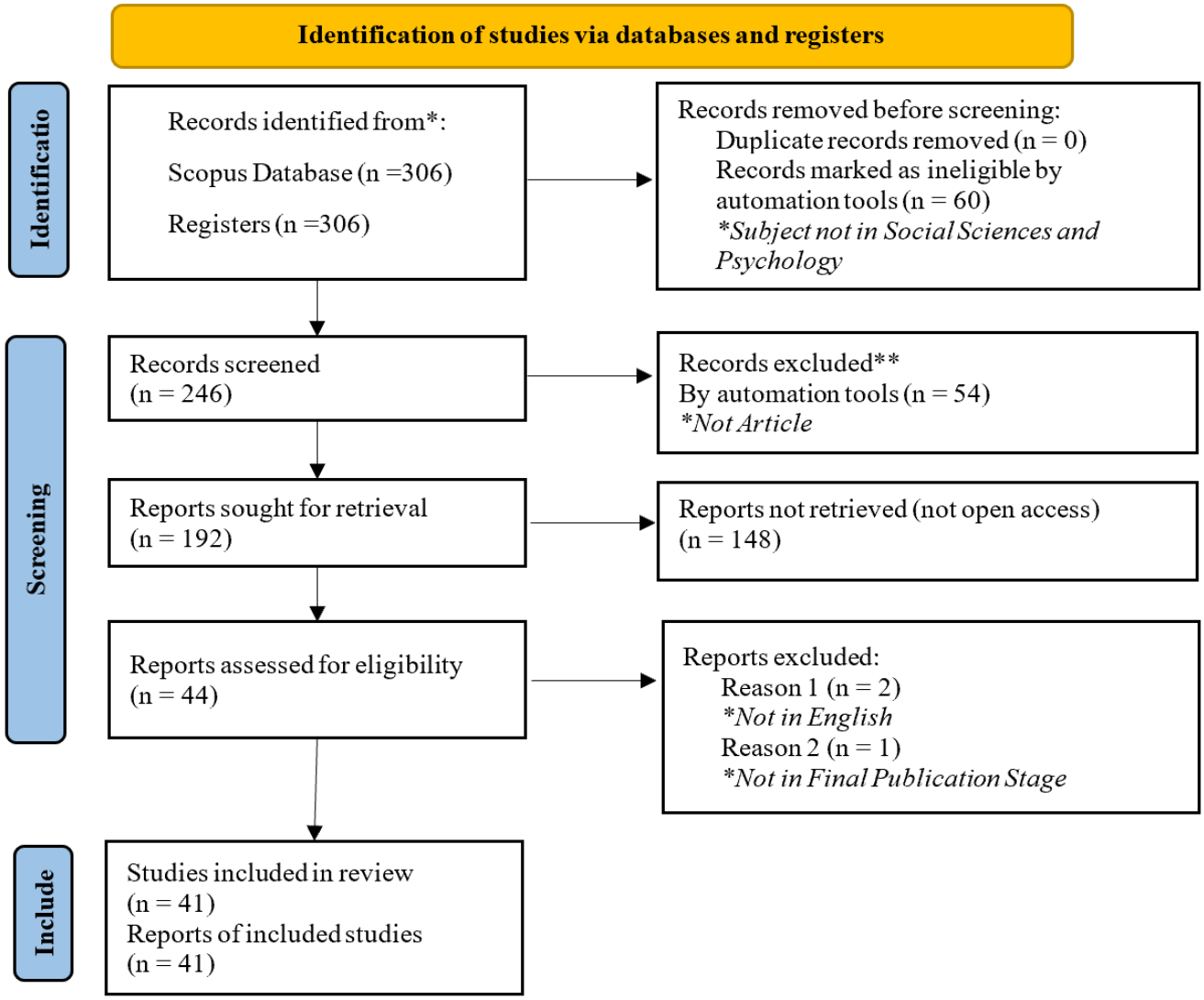
(("career readiness" OR "college readiness" OR "work readiness" OR "career preparation" OR "career development") AND ("psychosocial" OR "career self-efficacy" OR "career interest" OR "career aspiration" OR "motivation" OR "social support" OR "resilience" OR "career outcome expectation" OR "mental health" OR "emotional intelligence" OR "cognitive" OR "personality") AND ("adolescent" OR "teen" OR "youth" OR "student" OR "secondary school" OR "high school") AND ("counselling" OR "counseling" OR "guidance"))

The dataset was established based on the predefined search parameters and bibliographic eligibility criteria, including publication period, document type, language, and publication status. Accordingly, the dataset represents the body of literature retrieved within these defined parameters, encompassing diverse educational contexts and research perspectives related to psychosocial constructs in career development and readiness.

The modified PRISMA guidelines were used to structure the identification and screening of publications (Moher et al., 2009). The initial search yielded 306 records, as illustrated in Figure 1. Subject-area restrictions were subsequently applied to retain publications classified under Social Sciences and Psychology, resulting in the exclusion of 60 records and leaving 246 records for further screening. An additional 54 records were excluded based on document type, retaining journal articles and conference proceedings, resulting in 192 records sought for retrieval.

Of the 192 records remaining after the initial screening, 148 were excluded because their full texts could not be retrieved. Consequently, 44 publications were available for further eligibility assessment. The eligibility assessment of these 44 publications was based on publication language and publication status. Two non-English publications and one publication that had not reached final publication status were excluded, resulting in a final dataset of 41 publications for bibliometric analysis.

Figure 1. Flow Diagram of the Search Strategy



Data Cleaning

Careful data cleaning and harmonisation are essential to the integrity of bibliometric analysis. Thus, OpenRefine and biblioMagika® (Ahmi, 2024) were applied to systematically correct and harmonize discrepancies in author names, affiliations, keywords, and other bibliographic elements. Data in CSV format was first downloaded, and some files were designated for further processing. Various functions within the clustering tools were used to target certain columns for modifications, such as keywords, authors' names, and affiliations.

Total Publications (TP), Number of Contributing Authors (NCA), Number of Cited Publications (NCP), Total Citations (TC), Citations per Publication (C/P), Citations per Cited Publication (C/CP), Citations per Author (C/A), Authors per Publication (A/P), Citations per Year (C/Y), Citable Year, h-index, g-index, m-index, and Citation Sum within the h-Core, were all measured with biblioMagika®, such as publication year, source titles, authors, institutions, and countries.

Additionally, biblioMagika® made it easier to find missing data, allowing for manual completion and aiding the process of data harmonisation and cleaning. The data harmonisation and cleaning process improved the consistency of the dataset and provided a reliable basis for examining research on psychosocial constructs in career development and readiness.

Data Analysis

The data analysis was structured to directly address the research questions of this study. The current landscape of research on psychosocial constructs in career development and readiness was mapped with consideration for document types, source categories, languages, subject areas and citation metrics. The analysis took into account elements like yearly publication output, author productivity, institutional and national contributions, as well as leading journals, to pinpoint main contributors and changing trends in the subject. The academic impact and contribution of the publications (such as total number of publications, cited papers, total citations, citations per publication, citations per cited publication, h-index, g-index, m-index and total citation count within the h-core), was evaluated using a set of bibliometric variables.

Additionally, to visualise authors' keywords, co-occurrence analysis was used to explore leading themes and conceptual linkages. Co-occurrence analysis was conducted based on keyword frequency and co-appearance within documents to identify relationships between research themes. The visual maps enabled recognition of topic clusters, observation of research trends and exploration of links across subfields. The bibliometric approach is descriptive in nature and does not allow for the examination of causal or predictive relationships between psychosocial constructs.

Tools

A bibliometric analysis was conducted using several analytical tools. Microsoft Excel was used for initial data organisation and cleaning, while biblioMagika® facilitated the analysis of bibliometric indicators and the standardisation of author affiliations and country data. Author keywords were cleaned and harmonised using OpenRefine to standardise spelling variations, hyphenation, and singular–plural forms. Mendeley was used for reference management. VOSviewer version 1.6.20 was employed to construct and visualise the author keyword co-occurrence network, applying a minimum threshold of two occurrences. The network was generated using full counting and the association strength normalisation method. Together, these tools supported the examination of publication patterns, scholarly contributions, and thematic relationships within research on psychosocial constructs in career development and readiness.

FINDINGS AND DISCUSSION

This section presents the bibliometric findings on psychosocial constructs in career development and readiness research, covering publication trends, citation performance, leading journals, influential publications, scholarly contributions, and thematic relationships.

Current Landscape of Research on Psychosocial Constructs in Career Development and Readiness

Table 1 presents the descriptive statistics for the dataset on psychosocial constructs in career development and readiness research (1990–2025). A total of 41 publications were identified across 36 citable years, with 33 papers having received citations within the academic literature. The dataset accumulates 863 total citations, averaging 21.05 citations per paper, considerably higher than the social sciences benchmark of 2.1 (Mumu et al., 2021), indicating strong scholarly influence relative to the field's modest volume.

For cited papers specifically, the average rises to 26.15, reflecting concentrated recognition among the most referenced works. The citation per year stands at 24.66, suggesting sustained research interest over time. The h-index of 15 and g-index of 29 further confirm a solid core of impactful works. Collectively, these metrics indicate that research on psychosocial constructs in career development and readiness, although represented by a relatively small dataset, includes a core of highly cited publications that have contributed to the development of this interdisciplinary research area.

Table 1. **Citation metric**

Main Information	Data
Publication Years	1990 - 2025
Total Publications	41
Citable Year	36
Number of Contributing Authors	41
Number of Cited Papers	33
Total Citations	863
Citation per Paper	21.05
Citation per Cited Paper	26.15
Citation per Year	24.66
Citation per Author	21.05
Author per Paper	1.00
Citation sum within h-Core	862
h-index	15
g-index	29
m-index	0.417

Publication and Citation Trends

Figure 2 and Table 2 trace the developmental trajectory of this field from 1990 to 2025. The earliest contribution emerged in 1990 by Adachi, followed by sporadic output with one publication in 2005 and two in 2007. Two pronounced citation peaks define the field's early intellectual trajectory. The first occurred in 2008, when Rogers et al.'s study on personality traits, goal-setting, and social support in adolescent career planning garnered 194 citations. This study contributed empirical evidence on the roles of personality, social support, and social cognitive factors in adolescents' career planning and exploration.

The second peak came in 2014, with three publications collectively receiving 149 citations, driven by Hirschi et al.'s development of the Career Engagement Scale. The scale provided a validated measure of proactive career behaviours, while Meijers and Kuijpers' work highlighted the role of identity coherence in career development. Together, these works contributed theoretical and measurement foundations for subsequent research on career development and readiness.

Annual publication output fluctuated between one and four publications from 2015 to 2023, before reaching a peak of five publications in 2024 (see Table 3). This represents the highest annual publication output within the dataset, indicating increased research activity on psychosocial constructs in career development and readiness during the most recent years examined.

The post-2020 increase coincides with heightened scholarly attention to pandemic-related educational disruptions, adolescent mental health concerns, and changing career pathways, alongside growing interest in the psychosocial dimensions of career readiness (Dimitriou & Panaoura, 2024; Fang et al., 2024; Wang et al., 2022). Recent citation counts, such as 47 in 2022 and 6 in 2024, are significantly lower than earlier peaks, consistent with the expected lag in citation accrual for recently published work.

Figure 2. Total publications and citations by year (as data is only available up to 4 August 2025)

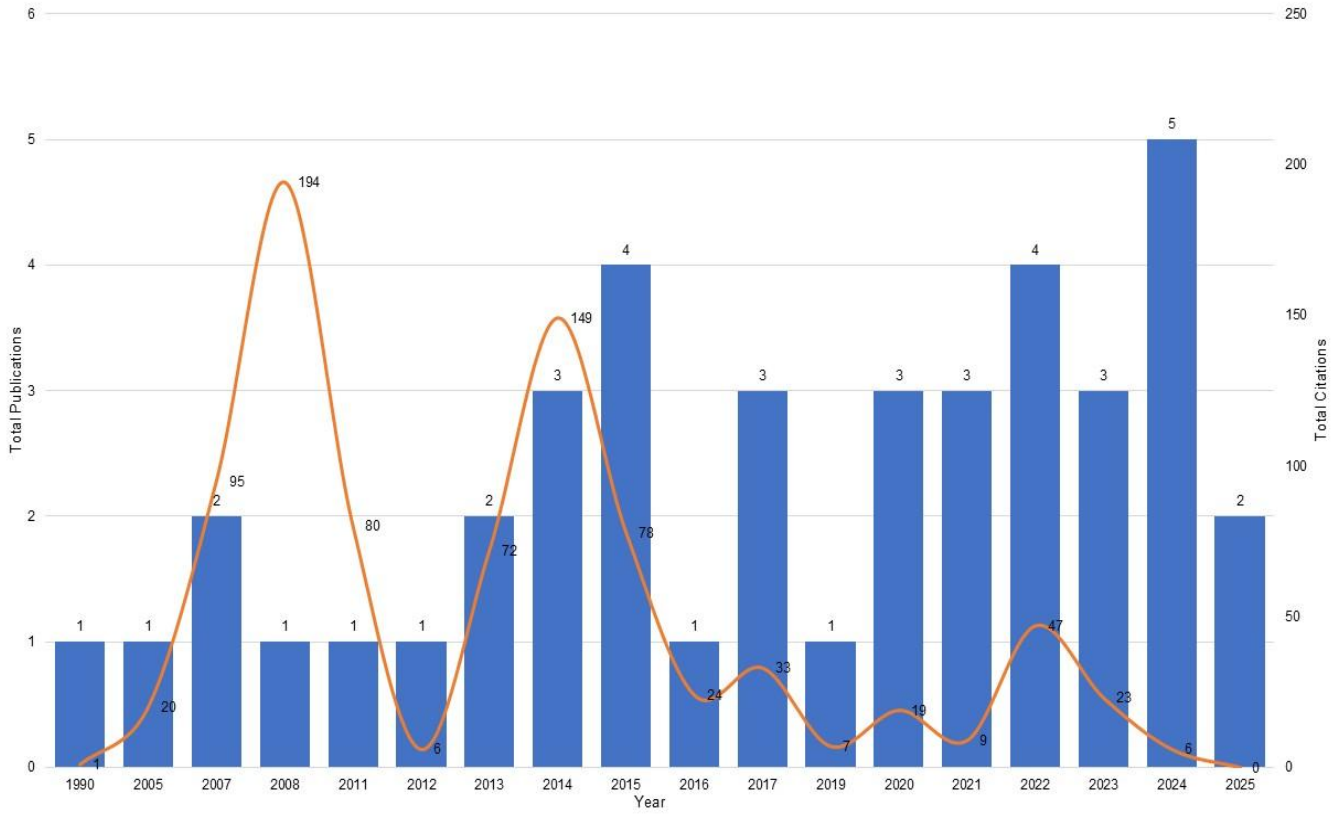


Table 2. Publication by Year

Year	TP	NCA	NCP	TC	C/P	C/CP	*h*	*g*	*m*
1990	1	1	1	1	1.00	1.00	1	1	0.028
2005	1	1	1	20	20.00	20.00	1	1	0.048
2007	2	2	2	95	47.50	47.50	2	2	0.105
2008	1	1	1	194	194.00	194.00	1	1	0.056
2011	1	1	1	80	80.00	80.00	1	1	0.067
2012	1	1	1	6	6.00	6.00	1	1	0.071
2013	2	2	2	72	36.00	36.00	2	2	0.154
2014	3	3	2	149	49.67	74.50	2	3	0.167
2015	4	4	4	78	19.50	19.50	4	4	0.364
2016	1	1	1	24	24.00	24.00	1	1	0.100
2017	3	3	3	33	11.00	11.00	3	3	0.333
2019	1	1	1	7	7.00	7.00	1	1	0.143
2020	3	3	3	19	6.33	6.33	3	3	0.500
2021	3	3	2	9	3.00	4.50	2	3	0.400
2022	4	4	4	47	11.75	11.75	4	4	1.000
2023	3	3	2	23	7.67	11.50	1	3	0.333
2024	5	5	2	6	1.20	3.00	2	2	1.000
2025	2	2	0	0	0.00	0.00	0	0	0.000
Total	41	41	33	863	21.05	26.15	15	29	0.417

Note. TP = total number of publications; NCA = number of contributing authors; NCP = number of cited publications; TC = total citations; C/P = average citations per publication; C/CP = average citations per cited publication; h = h-index; g = g-index; m = m-index.

* Publication data for the year 2025 is only up until 4 August 2025

Table 3. Publications Driving the 2024 Peak in Scholarly Output

Author(s) & Year	Title (Abbreviated)	Source Title	Key Focus Area
Dimitriou and Panaoura (2024)	School counselors' self-efficacy in addressing adolescents' mental health post-COVID	Psychological Thought	Mental health integration
Fang et al. (2024)	Effect of proactive personality on career adaptability in vocational students	Frontiers in Psychology	Personality-adaptability linkage
Chen et al. (2024)	A survey on improving core literacy among impoverished students in Chinese pharmaceutical universities under a development-oriented funding system	BMC Medical Education	Developmental funding integration
Wohlgezogen and Cotronei-Baird (2024)	Responsible career guidance: Career capital in restless times	Journal of Management Education	Ethical career development
Youngju and Seungkyoung (2024)	Career decision-making self-efficacy in nursing students	Journal of Curriculum and Teaching	Profession-specific readiness

Note. Full titles available in the Reference list; TC = 6 collectively (Table 2), consistent with publication recency.

Leading Source Titles

Table 4 presents the leading source titles in the dataset. Despite only two publications, the Journal of Vocational Behavior dominates citation impact with a TC of 228 and a C/P of 114.00, confirming its foundational role in vocational and career development literature. Frontiers in Psychology leads in publication volume (TP = 3) with a favourable m-index of 0.500, reflecting consistent and growing scholarly recognition. Single publication journals also demonstrate strong individual article impact. The Journal of Individual Differences (TC = 61, C/P = 61.00) and Career Development Quarterly (TC = 38, C/P = 38.00) both illustrate how one landmark paper can significantly anchor a journal's presence in a field.

Journals such as Career Development International (C/P = 24.00), Rehabilitation Psychology (C/P = 11.00), and Journal of Deaf Studies and Deaf Education (C/P = 20.00) show moderate to strong citation performance, while titles such as BMC Medical Education and International Journal of Emerging Technologies in Learning contribute to the field's interdisciplinary reach despite modest citation metrics. Journals with zero citation activity include Psychological Thought, Journal of Curriculum and Teaching, and Electronic Journal of Research in Educational Psychology. These represent emerging outlets whose contributions have yet to accumulate scholarly recognition. The diversity of source titles represented in the dataset reflects the interdisciplinary nature of research on psychosocial constructs in career development and readiness, with contributions spanning psychology, education, and career development.

Table 4. Most Active Source Titles That Published One or More Documents

Source Title	TP	NCA	NCP	TC	C/P	C/CP	*h*	*g*	*m*
Frontiers in Psychology	3	3	2	10	3.33	5.00	2	3	0.500
BMC Medical Education	2	2	1	4	2.00	4.00	1	2	0.167
Journal of Vocational Behavior	2	2	2	228	114.00	114.00	2	2	0.105
Sustainability (Switzerland)	1	1	1	3	3.00	3.00	1	1	0.167
Career Development Quarterly	1	1	1	38	38.00	38.00	1	1	0.077
Journal of Pacific Rim Psychology	1	1	1	4	4.00	4.00	1	1	0.091
Journal of Individual Differences	1	1	1	61	61.00	61.00	1	1	0.053

Source Title	TP	NCA	NCP	TC	C/P	C/CP	*h*	*g*	*m*
Psychological Thought	1	1	0	0	0.00	0.00	0	0	0.000
Frontiers in Education	1	1	1	1	1.00	1.00	1	1	0.333
International Journal of Emerging Technologies in Learning	1	1	1	7	7.00	7.00	1	1	0.143
Cakrawala Pendidikan	1	1	1	4	4.00	4.00	1	1	0.200
Journal of Curriculum and Teaching	1	1	0	0	0.00	0.00	0	0	0.000
Orientation Scolaire et Professionnelle	1	1	1	6	6.00	6.00	1	1	0.071
Cypriot Journal of Educational Sciences	1	1	1	5	5.00	5.00	1	1	0.200
The Japanese Journal of Educational Psychology	1	1	1	1	1.00	1.00	1	1	0.028
Rehabilitation Psychology	1	1	1	11	11.00	11.00	1	1	0.111
Counseling Psychologist	1	1	1	12	12.00	12.00	1	1	0.250
Electronic Journal of Research in Educational Psychology	1	1	0	0	0.00	0.00	0	0	0.000
Career Development International	1	1	1	24	24.00	24.00	1	1	0.100
Journal of Deaf Studies and Deaf Education	1	1	1	20	20.00	20.00	1	1	0.048

Note. TP=total number of publications; NCA=number of contributing authors; NCP=number of cited publications; TC=total citations; C/P=average citations per publication; C/CP=average citations per cited publication; h = h-index; g = g-index; m = m-index

Highly Cited Publications

Table 5 presents the six most highly cited documents in the dataset. Rogers et al. (2008) leads with 194 total citations and an annual average of 10.78, establishing how personality traits and social cognitive processes shape adolescent career planning. Hirschi et al. (2014) follows with 133 citations (C/Y = 11.08).

Their development and validation of the Career Engagement Scale provided a psychometrically robust instrument for measuring proactive career behaviours, supporting its subsequent use in research and applied counselling contexts. Byars-Winston et al. (2011) provides a crucial foundation for improving diversity in the scientific workforce through graduate research training career development interventions (80 citations, C/Y = 5.33), underscoring the importance of inclusive career support for underrepresented populations.

The remaining three landmark works extend the field's theoretical and cultural breadth. Hirschi and Läge (2007) examine Holland's secondary constructs of vocational interests and career choice readiness among secondary students (61 citations, C/Y = 3.21). Shin and Kelly (2013) explore cross cultural variations in vocational identity formation through optimism, intrinsic motivation, and family dynamics (38 citations, C/Y = 2.92).

This provides a notable contrast to the predominantly Western frameworks that dominate the broader literature. Peterson (2015) addresses the dual cognitive and affective needs of gifted students within school counselling contexts (38 citations, C/Y = 3.45). Collectively, these works reveal a field shaped by a small number of highly influential studies, with theoretical concentration around SCCT and psychometric instrument development. While this pattern provides disciplinary coherence, it also risks narrowing the conceptual boundaries of what constitutes legitimate research in this space.

Table 5. Top Six (6) Highly Cited Articles

No.	Author(s)	Title	Source Title	TC	C/Y
1	Rogers et al. (2008)	The role of personality in adolescent career planning and exploration: A social cognitive perspective	Journal of Vocational Behavior	194	10.78

No.	Author(s)	Title	Source Title	TC	C/Y
2	Hirschi et al. (2014)	The career engagement scale: development and validation of a measure of proactive career behaviors	Journal of Career Assessment	133	11.08
3	Byars-Winston et al. (2011)	Integrating theory and practice to increase scientific workforce diversity: A framework for career development in graduate research training	CBE Life Sciences Education	80	5.33
4	Hirschi and Läge (2007)	Holland's secondary constructs of vocational interests and career choice readiness of secondary students: Measures for related but different constructs	Journal of Individual Differences	61	3.21
5	Peterson (2015)	School counselors and gifted kids: Respecting both cognitive and affective	Journal of Counseling and Development	38	3.45
6	Shin and Kelly (2013)	Cross-cultural comparison of the effects of optimism, intrinsic motivation, and family relations on vocational identity	Career Development Quarterly	38	2.92

Note. TC = Total Citations; C/Y = Citation per Year

Contributions by Authors, Institutions and Countries

The global distribution of research was examined from three complementary perspectives involving authors, institutions, and countries. These analyses provide an overview of the geographical and institutional patterns of scholarly contributions within the field.

Authors

Table 6 presents the most productive authors with two or more publications. Andreas Hirschi (University of Lausanne, Switzerland) leads with three publications, all cited, accumulating 200 total citations and a C/P of 66.67, reflecting sustained and consistent scholarly impact. Peter A. Creed (Griffith University, Australia) surpasses Hirschi in citation impact despite only two publications, recording 214 total citations and an exceptional C/P of 107.00, underscoring his disproportionate influence in shaping the field. Seema Gupta and Shaizy Khan (Amity University, India) each made two publications with 10 citations each, but their notably high m-index of 0.667 suggests focused influence in a brief academic period.

Milijana Novovic Buric and Ana Lalevic Filipovic (University of Montenegro), and Andjela Jaksic Stojanovic (University of Donja Gorica), three authors from Montenegro, each made two articles, obtaining 16 citations in total, indicating emerging regional scholarship. Additional contributors include Anil Markandya (University of Bath, United Kingdom; C/P = 12.50), Candy Chamorro Gonzalez (Universidad Católica Luis Amigo, Colombia; C/P = 1.50), and Andrew Osei Agyemang (Jiangsu University, China; TC = 8). Collectively, these authors reflect a geographically diverse cohort where established high impact leadership, predominantly from Western institutions, coexists with emerging scholarship from underrepresented regions. This pattern is consistent with the broader geographical imbalance observed across the field.

Table 6. Most Productive Authors That Published Two (2) or More Documents

Full Name	Current Affiliation	Country	TP	NCP	TC	C/P	C/CP	*h*	*g*	*m*
Hirschi, Andreas	University of Lausanne	Switzerland	3	3	200	66.67	66.67	3	3	0.158
Creed, Peter A.	Griffith University	Australia	2	2	214	107.00	107.00	2	2	0.095
Gupta, Seema	Amity University	India	2	2	10	5.00	5.00	2	2	0.667

Full Name	Current Affiliation	Country	TP	NCP	TC	C/P	C/CP	*h*	*g*	*m*
Buric, Milijana Novovic	University of Montenegro	Montenegro	2	2	16	8.00	8.00	1	2	0.250
Chamorro Gonzalez, Candy	Universidad Católica Luis Amigo	Colombia	2	2	3	1.50	1.50	1	1	0.200
Markandya, Anil	University of Bath	United Kingdom	2	2	25	12.50	12.50	2	2	0.095
Khan, Shaizy	Amity University	India	2	2	10	5.00	5.00	2	2	0.667
Lalevic Filipovic, Ana	University of Montenegro	Montenegro	2	2	16	8.00	8.00	1	2	0.250
Stojanovic, Andjela Jaksic	University of Donja Gorica	Montenegro	2	2	16	8.00	8.00	1	2	0.250
Osei Agyemang, Andrew	Jiangsu University	China	2	1	8	4.00	8.00	1	2	0.333

Note. TP = total number of publications; NCP = number of cited publications; TC = total citations; C/P = average citations per publication; C/CP = average citations per cited publication; h = h-index; g = g-index; m = m-index

Institutions

Table 7 highlights institutions with a minimum of three publications. Griffith University (Australia) and Boston University (United States) are notable for combining high productivity with strong citation performance. Griffith University's six cited publications yield an exceptional C/P of 107.00 (TC = 642), while Boston University's six cited publications record TC = 168 and C/P = 28.00. The University of Wisconsin Madison further demonstrates high impact contribution with TC = 320 and C/P = 80.00 from four cited publications. In contrast, Anhui Medical University (China) leads in publication volume with 10 documents but has not yet amassed citations, indicating new rather than established involvement.

Chinese institutions more broadly, including China Pharmaceutical University and the Gene Editing Institute, each with four uncited publications, suggest a growing but still nascent contribution to citation recognised scholarship in this field. The University of Fort Hare (South Africa), President Ramon Magsaysay State University (Philippines), and Macquarie University (Australia) represent notable contributors from non-Western and Global South contexts, though their modest citation counts indicate that high volume Western institutions continue to anchor the field's intellectual core.

Table 7. Most Productive Institutions with a Minimum of Three (3) Publications

Institution Name	Country	TP	NCP	TC	C/P	C/CP	*h*	*g*	*m*
Anhui Medical University	China	10	0	0	0.00	0.00	0	0	0.000
Griffith University	Australia	6	6	642	107.00	107.00	6	6	0.286
Boston University	United States	6	6	168	28.00	28.00	6	6	0.545
China Pharmaceutical University	China	4	0	0	0.00	0.00	0	0	0.000
Beijing Normal University	China	4	4	18	4.50	4.50	4	4	1.000
Gene Editing Institute	United States	4	0	0	0.00	0.00	0	0	0.000

Institution Name	Country	TP	NCP	TC	C/P	C/CP	*h*	*g*	*m*
University of Wisconsin-Madison	United States	4	4	320	80.00	80.00	4	4	0.267
University of Fort Hare	South Africa	4	4	20	5.00	5.00	4	4	0.800
Virginia Commonwealth University	United States	3	3	3	1.00	1.00	1	1	0.333
President Ramon Magsaysay State University	Philippines	3	3	36	12.00	12.00	3	3	0.500
Macquarie University	Australia	3	3	40	13.33	13.33	3	3	0.273
National Changhua University of Education	Taiwan	3	3	12	4.00	4.00	3	3	0.273
University of San Francisco	United States	3	3	36	12.00	12.00	3	3	0.750

Note. TP = total number of publications; NCP = number of cited publications; TC = total citations; C/P = average citations per publication; C/CP = average citations per cited publication; h = h-index; g = g-index; m = m-index

Countries

Figure 3 and Table 8 present the global distribution of contributions among countries with nine or more publications. The United States dominates comprehensively with 42 publications, 890 total citations, an h-index of 17, and a C/P of 21.19. Australia demonstrates the strongest citation efficiency despite fewer publications. All 17 papers are cited, yielding TC = 786 and a C/P of 46.24, positioning it as the highest-impact contributor per publication. The United Kingdom follows with TC = 233 and a C/P of 23.30 across 10 publications. China ranks second in volume (36 TP) but records only 43 total citations (C/P = 1.19), while Indonesia contributes 19 publications with a similarly modest C/P of 2.63, suggesting that quantity has not yet translated to citation influence for these emerging contributors.

South Africa, with TC = 99 and C/P = 11.00, represents the sole Global South country in the top tier. The concentration of citation impact among Western countries within the dataset highlights geographical differences in scholarly visibility and underscores the importance of considering diverse cultural and educational contexts in career development and readiness research. SCCT, which was represented in the co-occurrence network, provides a useful framework for understanding career-related processes. Nevertheless, its application across different cultural contexts warrants consideration of contextual factors, including collectivist values, family expectations, and structural barriers that may shape career decision-making (Chinyamurindi et al., 2021; Rafanan et al., 2020). These considerations highlight the importance of examining how career development frameworks can be applied and adapted to different cultural and educational settings.

Despite notable publication contributions from China and Indonesia, the representation of diverse cultural and educational contexts across Southeast Asia remains an important consideration, particularly as career development and readiness are shaped by distinct structural and cultural conditions. Research in Asian contexts highlights the potential influence of family expectations and collectivist cultural values on career decision-making (Damas & Kurniawati, 2025; Sheu & Bordon, 2017), alongside cultural and structural barriers affecting the provision and utilisation of school counselling services (Larran & Hein, 2024). These contextual factors highlight the importance of considering cultural and structural influences when applying career development frameworks, including SCCT, across different populations and educational settings (Sheu & Bordon, 2017). These considerations highlight the need for greater attention to culturally responsive approaches in career development and readiness research. Career development frameworks developed in Western contexts may require contextual adaptation to account for the diverse cultural, educational, and structural conditions across Southeast Asia.

Figure 3. Global Distribution of Publications on Psychosocial Constructs in Career Development and Readiness Research

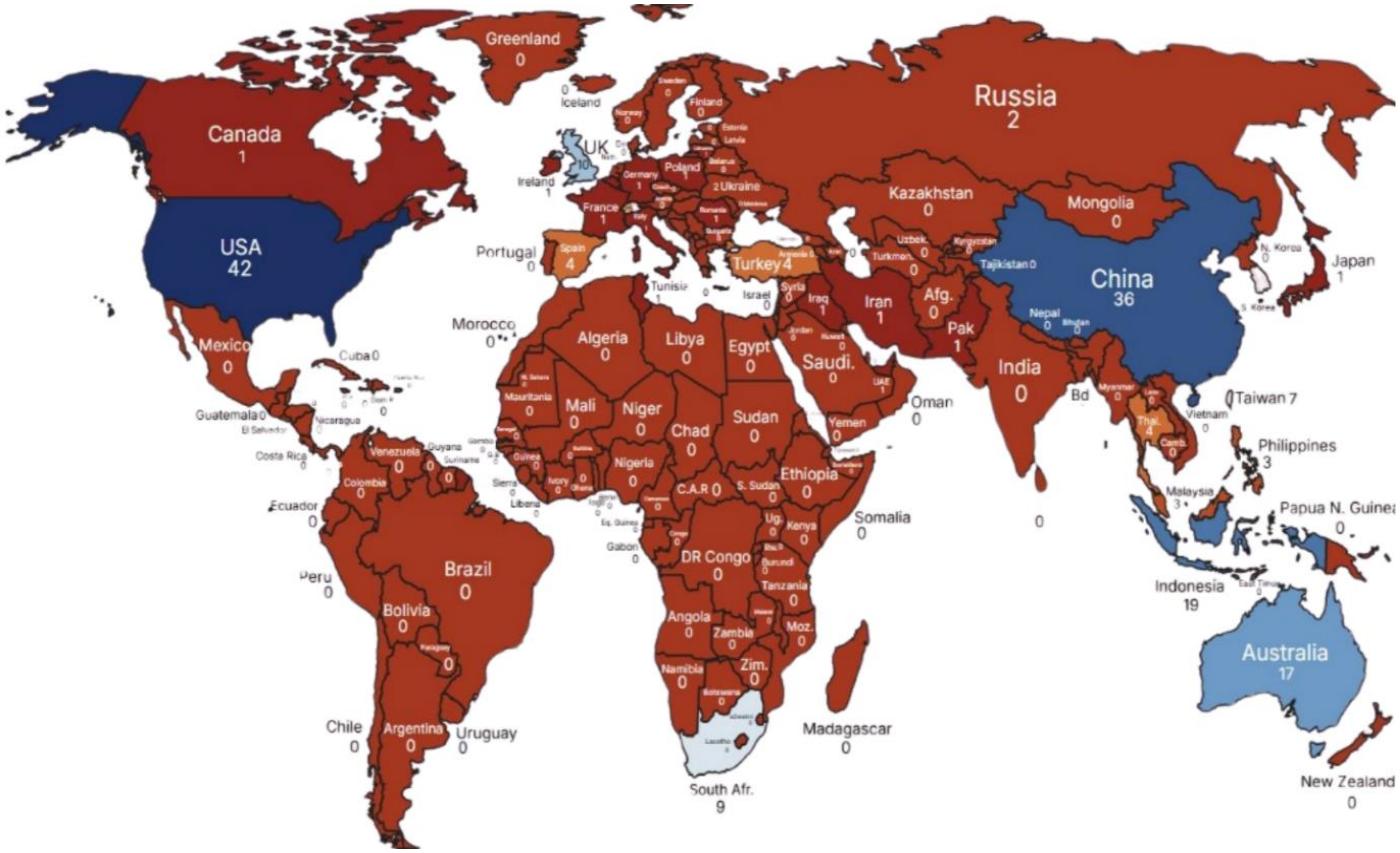


Table 8. Countries That Contributed Nine (9) or More Publications

Country	TP	NCP	TC	C/P	C/CP	*h*	*g*	*m*
United States	42	34	890	21.19	26.18	17	29	0.333
China	36	12	43	1.19	3.58	4	6	0.267
Indonesia	19	11	50	2.63	4.55	4	7	0.333
Australia	17	17	786	46.24	46.24	11	17	0.289
United Kingdom	10	10	233	23.30	23.30	8	10	0.222
South Africa	9	9	99	11.00	11.00	5	9	0.385

Notes. TP = total number of publications; NCP = number of cited publications; TC = total citations; C/P = average citations per publication; C/CP = average citations per cited publication; h = h-index; g = g-index; m = m-index

Co-occurrence Analysis of Psychosocial Constructs and Research Themes

Figure 4 presents the co-occurrence network of author keywords with a minimum of two occurrences. Prior to analysis, keywords were standardised by merging spelling variations, hyphenation differences, and singular–plural forms. Although career readiness defines the broader scope of this study, it did not emerge as a node in the co-occurrence network because the exact term did not meet the minimum threshold of two occurrences among the authors' keywords.

Instead, the network indicates that this broader research domain is represented through more frequently used constructs and related concepts, particularly self-efficacy, career development, career adaptability, career counselling, and career maturity. Self-efficacy and career development emerge as the dominant central nodes, reflecting their prominence across both empirical and theoretical studies. The author keyword co-occurrence analysis identified eight keywords organised into three distinct clusters using VOSviewer. Cluster 1 comprised

adolescents, career adaptability, career construction, and career counselling. Cluster 2 included career development and career maturity, while Cluster 3 consisted of self-efficacy and social cognitive career theory.

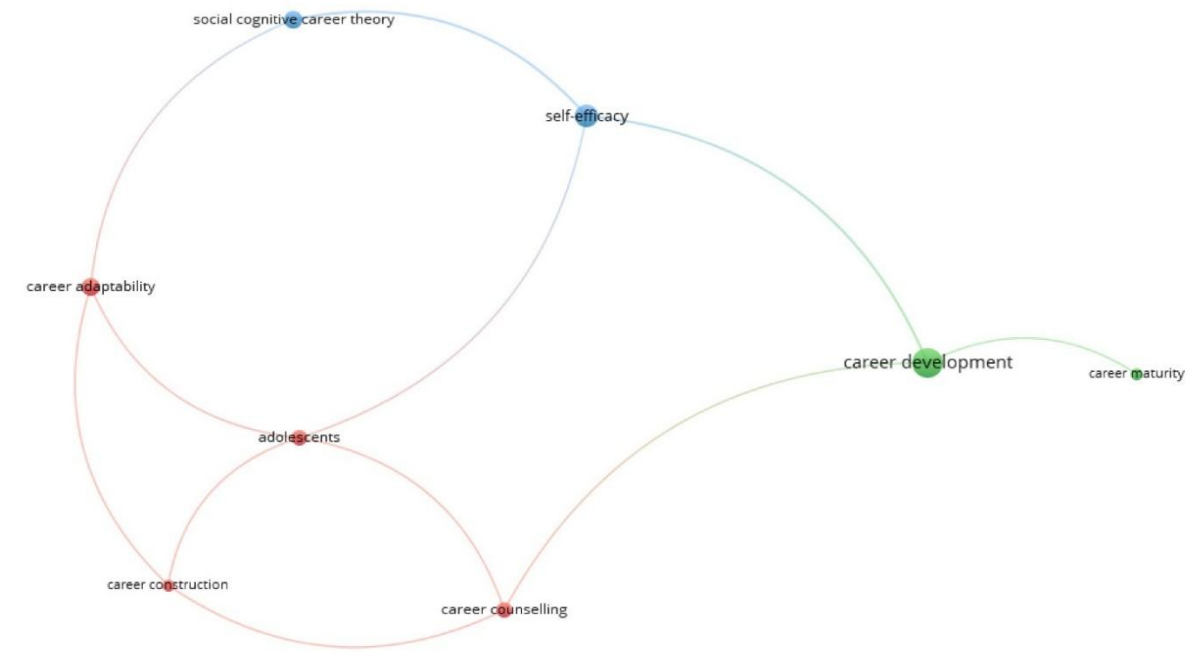
One possible explanation for the prominence of self-efficacy and career adaptability is the availability of well-established psychometric measures for these constructs, which may have facilitated their more frequent examination in career-related research (Fang et al., 2024; Hirschi, 2012; Youngju & Seungkyoung, 2024). However, several psychosocial constructs included within the broader scope of the study did not emerge prominently in the co-occurrence network, indicating uneven representation of psychosocial dimensions within career development and readiness research. Qamaria and Astuti (2021) reported improvements in students' career maturity following an intervention based on the Cognitive Information Processing approach, while Rafanan et al. (2020) identified personal aspirations as an important reason for students' intentions to pursue STEM-related careers.

The co-occurrence network also highlights the relationship between career counselling, career development, and psychosocial constructs, suggesting that guidance-related perspectives form part of the broader interdisciplinary research landscape. Although career counselling and guidance appear among the identified themes, the co-occurrence analysis does not establish the effectiveness of these approaches or their long-term influence on career outcomes. Further empirical research is therefore needed to examine how psychosocial constructs and career-related support contribute to career development and readiness across different educational and occupational contexts. Future research could also examine the potential role of digital platforms and AI-assisted career guidance tools in supporting career development and readiness across different educational contexts.

Taken together, the co-occurrence network reveals a field that is theoretically concentrated around a relatively limited set of established psychosocial constructs. The uneven representation of psychosocial constructs within the keyword network suggests opportunities for future research to examine a wider range of psychological and social factors associated with career development and readiness across different populations and contexts.

For practitioners, the findings highlight the relevance of psychosocial constructs such as self-efficacy, career adaptability, and social support in informing career development and guidance practices across educational settings. For policymakers and educational institutions, the identified research themes may provide a basis for considering more inclusive and context-sensitive career support initiatives. Nevertheless, the effectiveness of specific interventions requires further empirical evaluation beyond the scope of this bibliometric analysis.

Figure 4. Co-occurrence Network of the Author's Keywords with at Least Two Occurrences



CONCLUSION AND FUTURE STUDIES

This bibliometric study mapped the publication trends, citation performance, scholarly contributions, and thematic structure of research on psychosocial constructs in career development and readiness from 1990 to 2025. The findings identified influential publications, including Rogers et al. (2008) and Hirschi et al. (2014), while the Journal of Vocational Behavior demonstrated notable citation impact. Self-efficacy and career development emerged as prominent themes, and the author keyword co-occurrence network revealed interconnected clusters involving SCCT, career counselling, career maturity, career adaptability, and career construction. These findings highlight the interdisciplinary nature of research on psychosocial constructs in career development and readiness across educational and career-related contexts.

Geographically, the United States, China, Indonesia, Australia, the United Kingdom, and South Africa were the leading contributors based on the bibliometric indicators generated by biblioMagika®. Other than that, a rising corpus of literature is also coming from places like Montenegro and Colombia. The distribution of citation impact remains concentrated in Western contexts, indicating opportunities for broader global representation. The interdisciplinary nature of the field is reflected in its links across counselling psychology, vocational behaviour, and education, highlighting the potential contribution of these perspectives to research and practice related to career development and readiness across different educational contexts.

Building on these contributions, several considerations should be noted. The reliance on Scopus as a single database reflects a standard bibliometric approach, although broader database inclusion could further enhance coverage, particularly of regional and non-English literature which can introduce language bias (Van Leeuwen et al., 2001). A further limitation concerns access to full-text publications. Of the reports sought for retrieval, a substantial proportion could not be accessed for full-text eligibility assessment. Consequently, potentially relevant studies may have been excluded, which may have affected the comprehensiveness and representation of the final bibliometric dataset.

Furthermore, longitudinal and applied research is needed to examine how psychosocial constructs relate to career development and readiness across different educational stages and career transitions. Future studies could investigate the role of career guidance and counselling interventions in supporting career decision-making, self-efficacy, adaptability, and resilience among secondary school students, university students, and individuals preparing to enter the workforce. Emerging approaches, including AI-assisted career guidance, also warrant further investigation. Multidisciplinary collaboration across counselling psychology, education, and career development research may contribute to a more comprehensive understanding of these relationships.

Encouraging more inclusive research from underrepresented Global South contexts such as Africa and Latin America could help address regional disparities by revealing culturally unique obstacles including socioeconomic inequality and resource limitations. Future studies could further examine psychosocial constructs in career development and readiness across diverse cultural and educational contexts, particularly in Southeast Asia. Such research could provide insights into how contextual factors, including family expectations, socioeconomic circumstances, and educational opportunities, relate to career development and readiness.

From a practical perspective, the findings provide an overview of psychosocial constructs and research themes that may inform career education and guidance across different educational contexts. Educators, school counsellors, university career advisors, and career development practitioners may use these insights to identify areas for further investigation and programme development. Policymakers may also consider the identified research trends when developing initiatives related to career guidance, psychosocial support, and access to career development resources. However, as bibliometric findings do not establish intervention effectiveness, the practical application of these insights should be supported by further empirical research.

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