

PERSONALITY TRAITS AND LANGUAGE LEARNING: A SCIENTIFIC APPROACH TO INTELLECTUAL STRUCTURE AND INFLUENTIAL CONSTITUENTS

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Abstract

Language learning is a complex cognitive process that is influenced by various factors, including individual differences in personality traits. This study examines the intricate relationship between personality traits and language learning capacity. Through an extensive bibliometric analysis of existing literature, this study aims to shed light on how personality traits affect an individual's ability to acquire and master new languages. By employing various bibliometric approaches, such as performance analysis, science mapping, and citation analysis, we seek to unveil the intellectual structure behind the correspondence of personality traits and language learning as findings that can open avenues and potential areas for future research. We also attempted to identify patterns that could help educators, language instructors, and learners. Ultimately, this study strives to bridge the gap between psychology and linguistics.

Keywords: bibliometric, language, linguistic, personality, personality trait

Introduction

Language learning is a ceaseless process if one wishes to accumulate multilingual skills. Why does any individual show an interest in acquiring multiple language skills? It depends on the individual, as there are several factors responsible for it (Santosa et al., 2023). Few acquired it out of mere interest (Phoocharoensil, 2013), and few were pushed to learn a new language due to the shift in their geographical location (Ashtari & Krashen, 2023; Phoocharoensil, 2013), while others were blessed with friends and family with multiple spoken languages. However, the ability to grasp and learn a new language is based on the will of a person (Ashtari & Krashen, 2023; Raoofi et al., 2014; Santosa et al., 2023). Do personality traits like extroversion, conscientiousness, neuroticism, agreeableness, and other traits influence the language learning will of an individual? For years, researchers have studied and explored multiple aspects to seek answers to the above question. This study attempted to collect all such studies (i.e., investigating the relationship between personality traits and language learning) and unwrap the intellectual structure and influential constituents behind it. The process



by which individuals learn a second language or potentially a new language has been termed SLA (Second Language Acquisition) or L2A (Language 2 Acquisition). LLS, an acronym for Language Learning Strategies, is a concept that facilitates language learning and its application (Alqarni, 2023; Walsh, 1983). LLS includes various enabling factors, such as self-directedness, self-regulation, agency, autonomy, self-efficacy, hope, and internal attributes (Alqarni, 2023; Thomas & Rose, 2019). Apart from LLS (direct strategy), other indirect strategies include metacognitive, social, and affective strategies that help learners learn about anxiety, self-courage, and emotional temperature (Alqarni, 2023). Other psychological factors such as happiness, optimism, well-being, meaning, empathy, grit and engagement can contribute to successful language learning and application (Alqarni, 2023; Macintyre, Gregersen, & Mercer, 2019). Of these psychological factors, optimism is a stable personality trait (Scheier & Carver, 1985). The attitude towards learning a new language is considered to be the antecedent of LLS and achievement of L2A (Puspitasari & Ishak, 2023). Studies have shown a significant relationship between personality traits and attitudes towards foreign language learning (a-FLL) (Pourfeiz, 2015). It is also important to understand the comprehensive association between personality traits and L2A. Learning styles and tendencies differ from one personality group to another (Khan et al., 2024; Erton, 2010). Personality traits are considered to be one of the most significant predictors and significantly influence the success of L2A (Douglas et al., 1994; Fazeli, 2011), which contradicts the study conducted among groups of students categorized into introverts and extroverts, which showed tiny differences in the success of L2A (Erton, 2010). Therefore, it is important to measure not only the behaviour (tendencies) but also the outcome (success) of different personality groups in learning a new language. However, considering speech production, extroversion seems to have more linguistic ability (including fluency and accuracy) than introverts when learning a second language (Dewaele & Furnham, 2000). A vast body of literature claims a significant association between personality traits and L2A. This bibliometric study attempts to unveil the intellectual structure through science mapping and influential constituents of such vast studies through scientific data mining and analysis techniques.

Bibliometric analysis

Publications from authors across the globe and indexed on global platforms such as Scopus and Web of Science are considered to be scientific knowledge stocks. Collecting scientific information such as author details, source details, affiliations, abstracts, and keywords of any particular topic is considered to be a scientific dataset. This dataset can be processed and analyzed using bibliometric analysis to identify influential constituents (e.g., authors, affiliations, countries, and keywords), emerging areas, intellectual development, and recent trends (Donthu et al., 2021). Bibliometric analysis is a standard statistical method for evaluating scientific knowledge stock to determine its impact on the scientific community (Donthu et al., 2021; Shekhar, 2023). Various domains, including financial literacy, blockchain, medicine, tourism, sports, economy, and psychology, have been evaluated using bibliometric analysis (Shekhar, 2023). However, few studies have focused on linguistic proficiency, especially language-learning skills. Therefore, this study aimed to evaluate the scientific knowledge stock that investigates the

association between personality traits and L2A using bibliometric analyses. The following research questions (Shekhar, 2023; Zupic & Čater, 2015) were used to unveil the intellectual structure of the scientific dataset.

1. What are the volumetric intensity and tendencies of global scientific production (i.e., scientific knowledge stock) that investigated the association between personality traits and L2A?
2. What are the intellectual structures and patterns of global scientific production?
3. What is (are) the future research directions(s) in the field?

To answer the above research questions, the objectives formulated by Shekhar (2023) were as follows:

- To display bibliometric visualizations of a dataset comprising 90 documents downloaded from the Scopus database (scientific knowledge stock that investigates the relationship between personality traits and language learning).
- To unveil the conceptual, intellectual and social structures behind the dataset
- Use Biblioshiny (powered by RStudio) and VOS viewer software packages to run the required bibliometric analyses.

Method

This study adapted the scientific data mining flowchart (Figure 1) developed by Donthu et al. (2021) to extract the dataset from the scientific knowledge stock that investigated the association between personality traits and language learning. The search fields included titles, abstracts, and keywords. Because the Boolean operator 'AND' has been used, the dataset includes publications that include both personality traits and language learning. The search results yielded 92 documents, and the study was limited to publications written in English. Therefore, the final output of 90 documents was extracted as a scientific dataset.

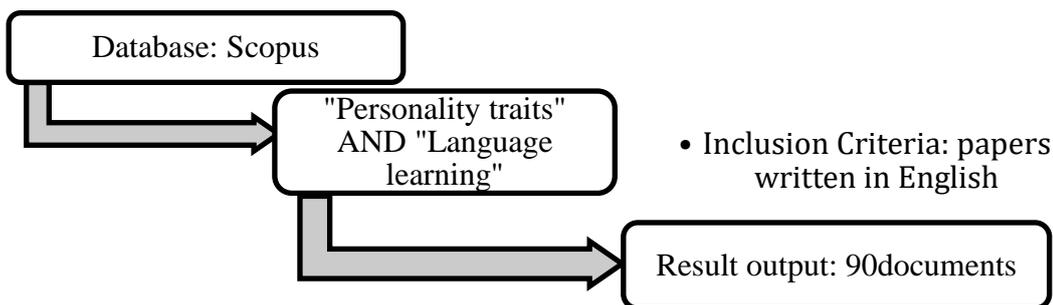


Figure 1. Scientific dataset flowchart

The tools and techniques of the study follow Raamkhumar & Swamy (2023), which include various bibliometric techniques such as performance mapping, science mapping, and trend mapping, which are performed through bibliometric

analyses such as citation analysis, co-occurrence analysis, thematic map, influential constituents, and thematic evolution using bibliometric tools such as Biblioshiny powered by RStudio, and VOSviewer (Kumar & Ragini, 2024).

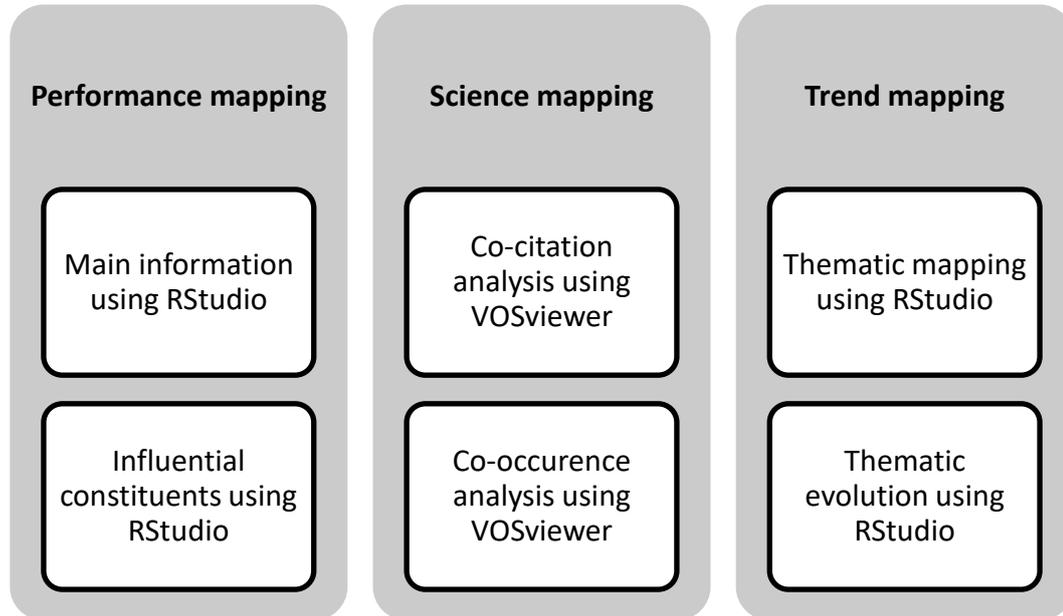


Figure 2. Tools and techniques

Findings and Discussion

This section describes and explains the outcomes of the analyses. This section includes three different stages: 1. Displays and discusses the performance of the dataset, that is, influential constituents, publication frequency, and citation frequency. As the number of publications and citations directly proportionate to the performance of any chosen topic (Raamkhumar & Swamy, 2023), 2. Displays and discusses the science mapping of the dataset, that is, the co-occurrence of author keywords and citations of dataset publications. 3. Displays and discusses recent trends mined from the dataset and discusses the evolution of topics and emerging topics.

Table 1. Main information about the scientific dataset

Timespan	1977 to 2023
Sources (journals, books, etc)	66
Documents	90
Annual growth rate %	3.06
Document average age	6.8
Average citations per doc	19.29
References	4066
DOCUMENT CONTENTS	
Keywords plus (id)	120
Author's keywords (de)	261
AUTHORS	
Authors	177

Timespan	1977 to 2023
Authors of single-authored docs	18
Authors collaboration	
Single-authored docs	24
Co-authors per doc	2.34
International co-authorships %	21.11
DOCUMENT TYPES	
Article	68
Book chapter	9
Conference paper	8
Conference review	3
Review	2

It is unblemished that the dataset includes a wide range of publications (from 1977 to the present), which comprises research articles, book chapters, conference papers, conference review papers, and review papers that have investigated the association of personality traits with L2A.

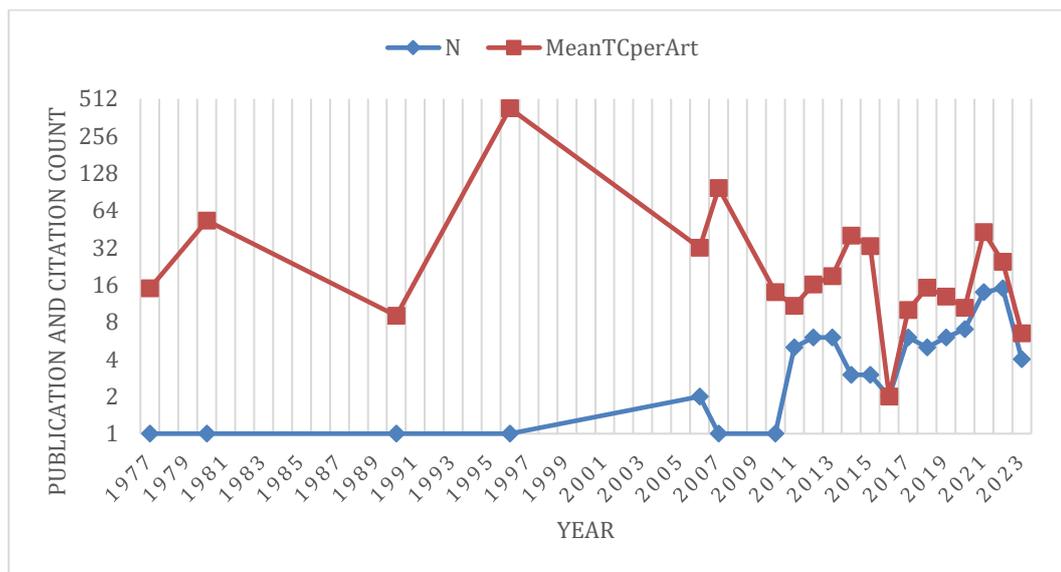


Figure 3. Production and performance curve of the scientific data

The citations of articles directly represent the intensity of the knowledge stock of any journal or topic (Raamkumar & Swamy, 2023). Thus, considering citation as a performance factor, (Figure 3) depicts the production performance and mean total citations per article of the chosen scientific dataset.

Influential constituents

Influential constituents are the significant, influential, and impactful elements (e.g., authors, affiliations, countries, sources, and keywords) of a scientific dataset (Donthu et al., 2021; Raamkumar & Swamy, 2023). The significance of identifying these influential constituents is that they depict the direct influential elements in the research field. For instance, identifying influential authors of the

chosen dataset provides information on authors who have ample knowledge on offer in the field of L2A and personality traits. It can help future researchers contact authors to gather knowledge. The following tables (Ref. Tables 2–6) list the top 10 influential constituents of the research field.

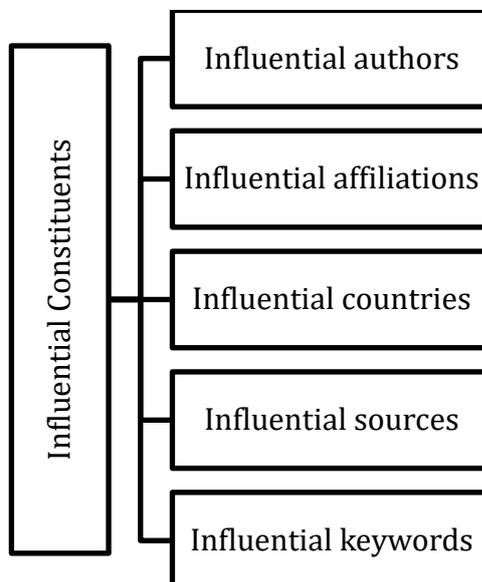


Figure 4. The pattern of identifying influential constituents

Influential authors

Influential authors of a particular research area can identify publication frequency using bibliometrics. Influential authors who have investigated the association between personality traits and language learning are listed below (ref. Table 2). The top 10 authors who published a good number of articles have been listed, but none have secured citations. Seyed Hossein Fazeli tops the list as the author contributed five Scopus-indexed publications that investigated the association between language learning and personality traits. Apart from these Scopus publications, the author has received a sound number of publications in linguistics. Thus, future researchers can consider Fazeli SH as a person of contact who has ample knowledge of the relationship between personality traits and language learning. Followed by Fazeli SH, Jean-Marc Dewaele, who is a professor at Birkbeck, University of London, has four Scopus-indexed publications in the field.

Table 2. Most significant authors of the dataset

Authors	Articles
Fazeli SH	5
Dewaele J-M	4
Šafranĵ J	4
Kanero J	3
Piechurska-Kuciel E	3
Blanco-Fernández Y	2
Fan X	2
García-Vélez RA	2
Genesee F	2
Gojkov-Rajić A	2

Influential affiliations

The number of articles published by a particular institute constitutes its publication frequency average. This publication frequency of institutions is used to measure the depth of their knowledge database and rank them (Raamkhumar & Swamy, 2024). Table 3 lists the institutions with the highest publication frequency in the field of personality traits and language learning. Out of the 90 documents in the chosen dataset, KOC University from Turkey has 12 publications, which account for 13.3%. Southwest University from China follows Turkey with six publications. However, considering the numbers, the future orientation of these countries towards assessing the association between personality traits and second language learning could possibly increase.

Table 3. Most significant affiliations of the dataset

Affiliations	Articles
Department of Psychology Koç University Istanbul, Turkey	12
Center for Mental Health Education Southwest University China	6
Labuan Faculty of International Finance Universiti Malaysia Sabah Malaysia	4
Mcgill University Canada	4
University of Antwerp, Belgium	4
Departamento De Ingeniería Telemática Atlanttic Research Center for Information and Communication Technologies Ee Telecomunicación Universidade De Vigo Campus Universitario S/N Vigo 36310 Spain	3
Department of Computer Science Hatfield University of Hertfordshire United Kingdom	3
Department of English Language Teaching Abadan Branch Islamic Azad University Abadan Iran	3
Department of Fundamental Sciences in Engineering Faculty of Technical Sciences University of Novi Sad TRG Dositeja Obradovića 6 Novi Sad 21000 Serbia	3
Department of Language Science and Technology Saarland University Saarbrücken Germany	3

Influential countries

Influential countries in any research domain can be identified based on their publication volume and citation count (Raamkhumar & Swamy, 2024). Table 4 lists the influential countries with larger knowledge bases and citations on assessing the relationship between personality traits and language learning. China as a country (with multiple affiliations) has the highest number of publications in the research field, followed by Iran. However, the volume of publication is not the only parameter to decide significant countries. Based on the citation count, Canada received 428 citations, followed by Iran with 365 citations. Therefore, considering in a basket, China, Iran, Canada, Turkey, the UK, and the USA play significant roles in assessing the relationship between personality traits and L2A (Table 4).

Table 4. Most significant countries of the dataset

Based on Publication Volume		Based on Citation Count		
Country	Articles	Country	Total Citation	Average Article Citations
China	33	Canada	428	428
Iran	24	Iran	365	36.5
Turkey	19	USA	216	54
United Kingdom	16	United Kingdom	102	34
USA	13	China	89	7.42
Germany	12	Turkey	39	9.75
Malaysia	12	France	33	33
Serbia	10	Netherlands	19	19
Spain	10	Australia	18	18
Poland	9	Korea	15	15

Influential sources

Likewise, in countries, significant sources of the research field can be identified using both publication volume and citation count (Raamkhumar & Swamy, 2024). Thus, journals that focus on publishing articles related to personality traits and language learning are listed below (see Table 5). Based on both parameters, the Journal of Language and Social Psychology, Frontiers in Psychology, Language Teaching Research, Journal of Multilingual and Multicultural Development, International Journal of Bilingualism and Learning, Individual Differences, and System are significant sources of the research area. These journals can provide an adequate body of knowledge for future orientation on assessing personality traits with L2A.

Table 5. Most significant sources of the dataset

Based on publication volume		Based on citation count	
Sources	Articles	Sources	Total Citation
Language Teaching Research	4	Journal of Language and Social Psychology	428
System	4	Frontiers in Psychology	290
Frontiers in Psychology	3	Language Teaching Research	157
Indian Journal of Science and Technology	3	Journal of Multilingual and Multicultural Development	122
Learning and Individual Differences	3	International Journal of Bilingualism	96
Lecture Notes in Computer Science (Including Subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)	3	Learning and Individual Differences	75
Second Language Learning and Teaching	3	System	75
Theory and Practice in Language Studies	3	Applied Psycholinguistics	52

Based on publication volume		Based on citation count		Total Citation
Sources	Articles	Sources		
30th International Conference on Computers in Education Conference, ICCE 2022 - Proceedings	2	Current Psychology		39
Croatian Journal of Education	2	Language and Intercultural Communication		35

Influential keywords

Author’s keywords are crucial to placing articles on platforms and enhancing the visibility of articles as they undergo search engine optimization. To identify significant keywords in the research area, author keywords were analyzed, and the top ten influential keywords in the area were found. Personality traits, extraversion, and language learning seem to be the most common author keywords of the dataset.

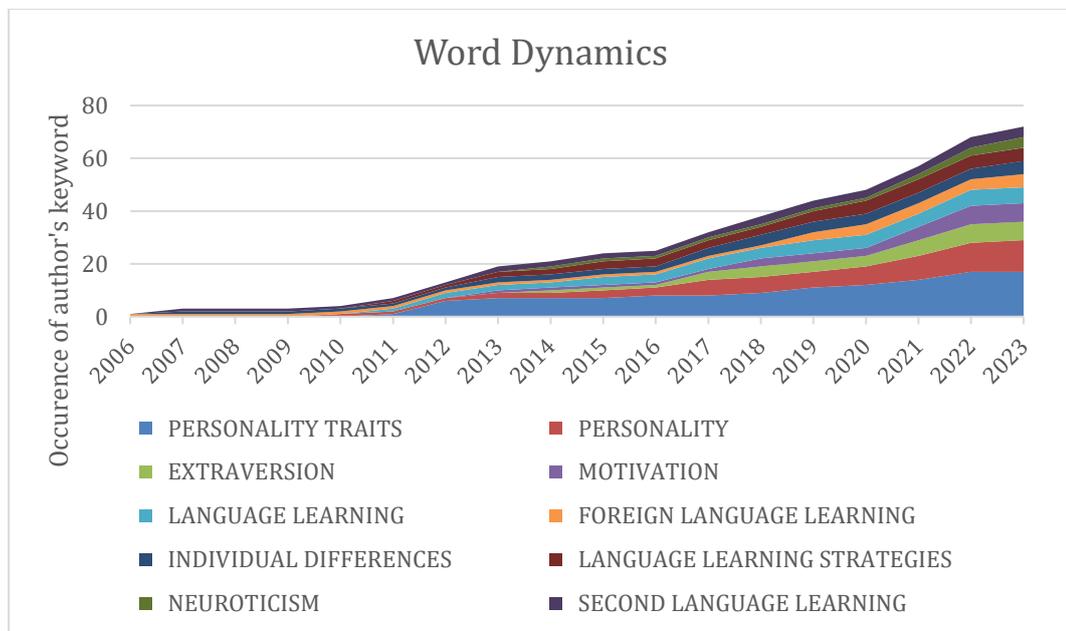


Figure 5. Word dynamics to identify influential keywords

Science mapping

Co-citation analysis

Co-citation of cited references - Out of 4040 cited references with a minimum of 2 citations among publications of the dataset, 298 meet the threshold. Out of these 298 cited references, 249 have strong connections. Therefore, among these 249 cited references, the top seven are chosen and explained (see Figure 6). Cluster 1 relates to the research papers of authors Goldberg L.R, Macintyre P.D., and Dornyei Z (red nodes), who have highly co-cited research work on language learning. The second cluster (green nodes) of authors Dewaele J.M. and Van Tubergen F. have highly co-cited networks in the context of education. Cluster 3 (blue nodes) depicts the authors Cattell R.B., Hampson S.E., and Moemeni M., who have highly co-cited works on language learning in a cultural context. Cluster 4

(yellow nodes) represents authors Bankowski E., Miles R., and Dornyei Z., who have highly co-cited work on English language proficiency. Cluster 5 (purple nodes) groups authors O'Malley J.M., Ehrman M.E., and Wakamoto N., who have contributed co-cited work on types of language learners (introvert and extrovert). Cluster 6 (sky blue nodes) presents authors Gregersen T. and Thompson A.S., who have co-cited work on multilingualism. Cluster 7 (orange nodes) denotes the co-cited work of Dornyei Z. and Ellis R., which relates to language acquisition, as shown in Figure 6.

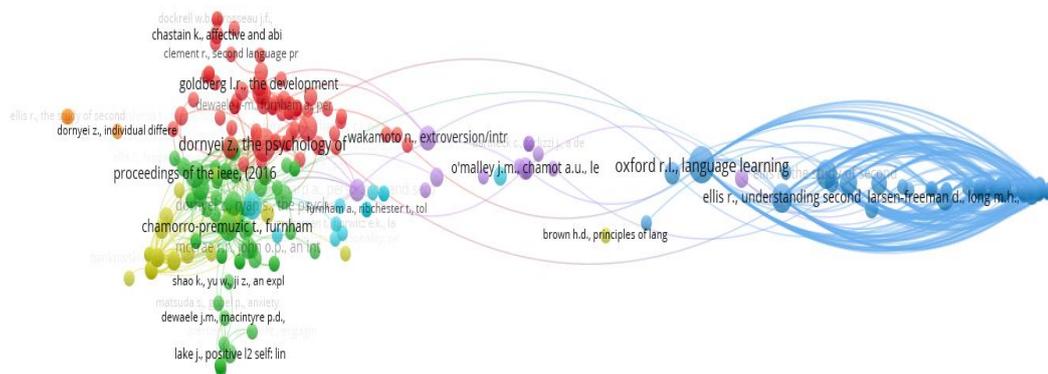


Figure 6. Co-citation of cited references

Co-occurrence analysis

Figure 7 shows the co-occurrence of author keywords. Out of 261 keywords, 44 met the threshold when a minimum of 2 occurrences of a keyword was applied. With 44 items (keywords), it formed seven different clusters with 134 links and a total link strength of 166. The co-occurrence analysis of keywords is a method to assess the similarity of the studies of different authors on the selected topic (Donthu et al., 2021). A link between two words indicates that they are related to a similar topic or theme (Krishnan & Raghuram, 2023; Narayanan & Pradhan, 2024; Raamkhumar & Swamy, 2023). In this study, it is identified that there are six major clusters: personality, personality traits, motivation, extraversion, language learning, and neuroticism. Personality traits, language learning strategies, and foreign language learning appear to be closely related to each other, which means that most of the articles have studied this relationship. This suggests that the strategies of language learning may vary according to the personality traits of the learners. Furthermore, the learning of a foreign language may also be influenced by the personality traits of the learners. Most of the studies were related to personality traits in association with motivation. Different personality traits exhibit different levels of motivation in the language learning process. For example, a person with an extraversion personality trait is considered to be extroverted and sociable, and this trait is positively associated with engagement, enjoyment, and achievement in the language learning process. On the other hand, a neuroticism trait is negatively associated with language learning outcomes, as it indicates a tendency to experience negative emotions and anxiety.

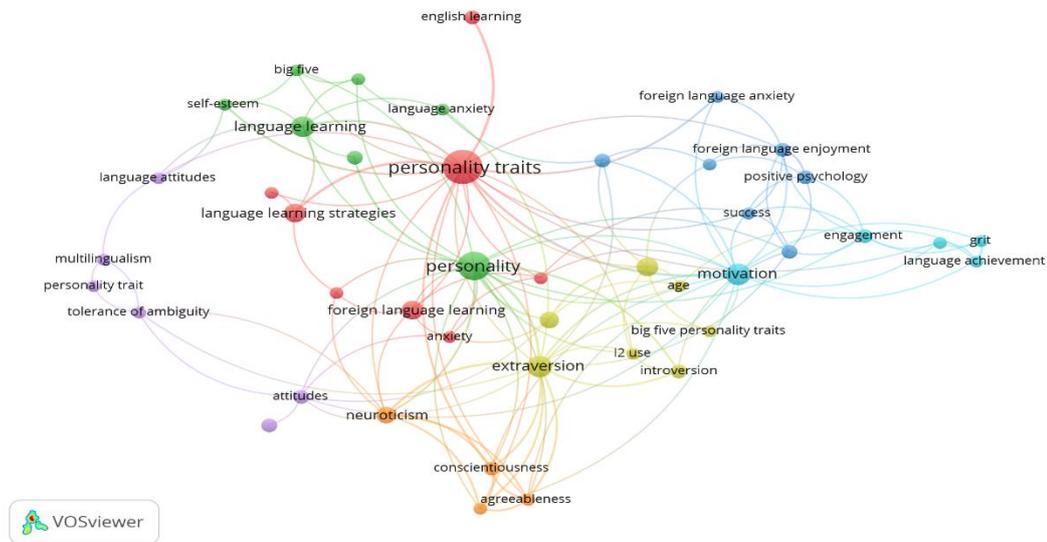


Figure 7. Co-occurrence of author keywords

Trend mapping

Thematic map

Author keywords are used by Raamkhumar & Swamy (2023) to visualize the thematic map of the dataset. The main goal of developing a theme map is to gain a better understanding of the research area, its current state, and what lies ahead for its sustainability (Agbo et al., 2021). Density is used as the vertical axis and centrality as the horizontal axis in this analysis (Dinesh & Alur, 2024). Density and centrality are useful in assessing if a topic has evolved and remains relevant. To demonstrate whether or not a certain problem has arisen, centrality and density are both helpful. The author keyword field was chosen, along with the following specifications: 250 words, a minimum cluster frequency of 5, and number labels chosen at 3.

Thematic analysis was used to map the research. The Louvain clustering algorithm displays the themes in four quadrants. The upper right quadrant (Q1) contains driving themes, the lower right quadrant (Q4) contains underlying themes, the upper left quadrant (Q2) contains highly specialized themes, and the lower left quadrant (Q3) contains emerging or vanishing motifs (Dinesh & Alur, 2024). Language learning is the main theme within the Personality trait and language learning area of research (Figure 8). Language anxiety, second language acquisition, and communication readiness are just a few of the topics that are crucial for the development of this study field. Personality traits, motivation, and personality are well-developed themes in Personality traits and language learning. The study of personality traits and language acquisition was not greatly advanced by the major themes in Q2, despite their specialization.

The findings suggest that themes from Q2, such as engagement, technology, positive psychology, and multilingualism, among others, might be researched further and should be more closely associated with personality traits and language acquisition. Academics may investigate innovative approaches and quantitative perspectives to support personality traits and language learning because there hasn't been much research in this field. It is evident that just a few Q3 topics are crucial

and necessary to advance the study of personality traits and language acquisition. This thematic map indicates that in order to make greater linkages with personality traits and language learning research, more work needs to be done to improve themes like human-robot interaction and its related components, such as learning styles, engagement, and willingness to communicate.

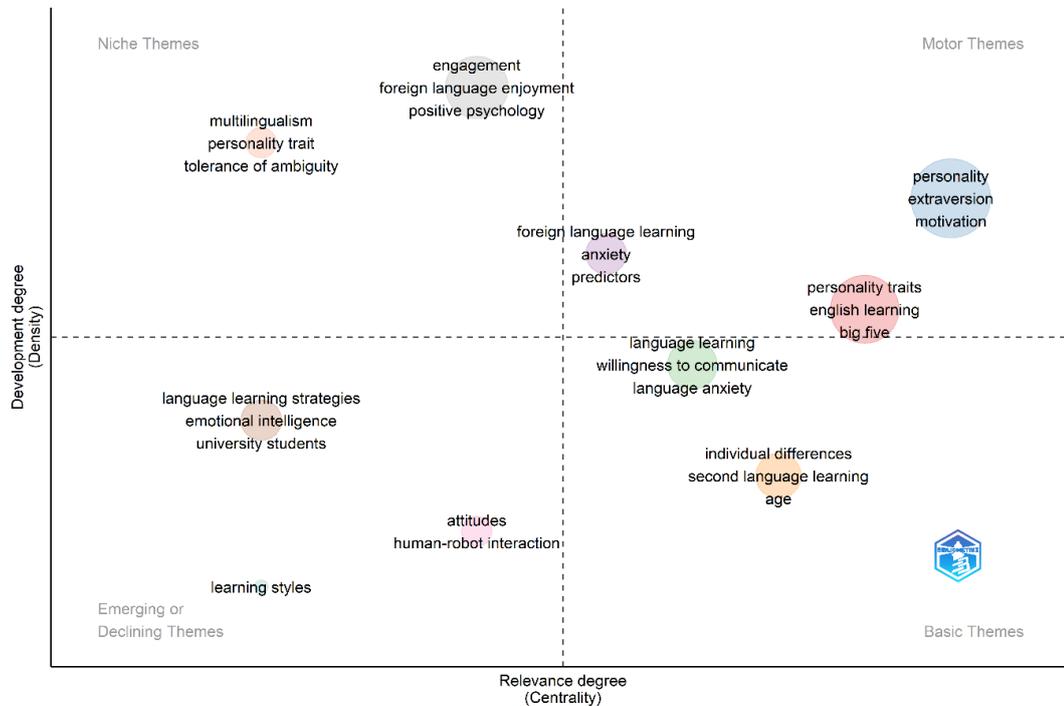


Figure 8. Thematic map

Thematic evolution

Figure 9 depicts the thematic evolution of keywords in four different phases (1977 – 2013, 2014 – 2019, 2020 – 2021, 2022 – 2023). In the first phase (1977 – 2013), it is shown that individual differences and personality traits are the common research themes related to language learning. This phase reflects the interest in exploring how learners' characteristics, such as motivation, attitude, anxiety, self-efficacy, and learning styles, affect their language learning outcomes. From 2014 to 2019, the big five personality traits have been studied in relation to language learning, particularly extraversion, which is one of the big five personality traits. This phase indicates the shift from general individual differences to more specific personality factors that influence language learning. Extraversion, which refers to the tendency to be sociable, outgoing, and energetic, has been significantly studied in relation to language learning, as it is assumed to facilitate communication and interaction in the target language. In the third phase (2020 – 2021), more personality trait studies have been conducted, such as openness, conscientiousness, agreeableness, and neuroticism, which are the other four personality traits in the Big Five model. This phase suggests the need to examine the complex and dynamic interplay of multiple personality traits and their effects on language learning. Grit has emerged in (2022 – 2023) as a common theme in recent language learning studies. Grit, which is defined as the perseverance and passion for long-term goals,

has been proposed as a key factor for language learning success, as it reflects the ability to overcome challenges and maintain motivation in the face of difficulties.

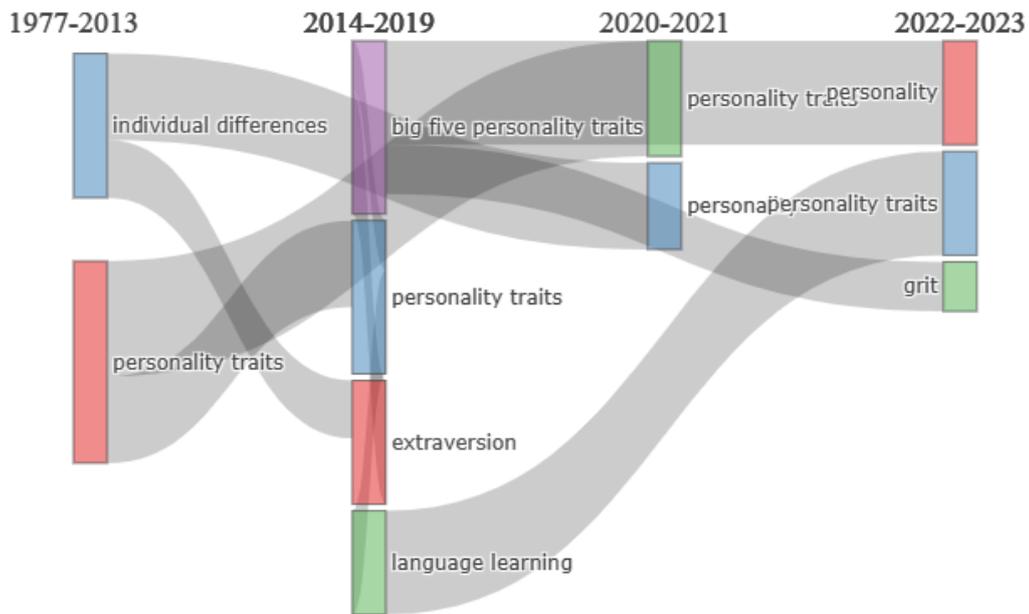


Figure 9. Thematic evolution

Conclusions

The findings of this study show that personality plays a significant role in language learning. It is also evident that language learning capabilities may vary from individual to individual, depending on their personality traits. The studies on personality traits and language learning reveal that extraversion is the trait that is most conducive to learning different languages, as the extraverts are more sociable and outspoken. Culture also plays a significant role in language learning, but few studies have shed light on it. More studies are needed to understand the influence of culture on individual language learning, as well as the interaction between culture and personality. As the world is heading towards technology-based learning, more research is needed to explore the potentialities of technology for language learning, especially the role of AI in language learning. AI can provide personalized and adaptive learning experiences for language learners, as well as feedback and guidance. However, AI also poses some challenges and ethical issues for language learning, such as data privacy, quality assurance, and human-AI interaction. Therefore, future research should address these issues and examine the best practices for integrating AI into language learning.

References

- Agbo, F. J., Oyelere, S. S., Suhonen, J., & Tukiainen, M. (2021). Scientific production and thematic breakthroughs in smart learning environments: A bibliometric analysis. *Smart Learning Environments*, 8(1), 1–25. <https://doi.org/10.1186/s40561-020-00145-4>

- Alqarni, N. (2023). Language learning strategies and learning engagement as predictors of language learning achievement: An investigation of Saudi EFL learners. *Saudi Journal of Language Studies*, 3(3), 129–143. <https://doi.org/10.1108/sjls-12-2022-0084>
- Ashtari, N., & Krashen, S. (2023). Barriers to advanced heritage language development. *LLT Journal: Journal on Language and Language Teaching*, 26(2), 423–428. <https://doi.org/10.24071/llt.v26i2.6429>
- Dewaele, J. M., & Furnham, A. (2000). Personality and speech production: A pilot study of second language learners. *Personality and Individual Differences*, 28(2), 355–365. [https://doi.org/10.1016/S0191-8869\(99\)00106-3](https://doi.org/10.1016/S0191-8869(99)00106-3)
- Dinesh, V.J.P., & Alur, S. (2024). Unleashing the hidden potential of mobile application engagement in contemporary business : A bibliometric analysis and future research agenda. *International Research Journal of Multidisciplinary Scope (IRJMS)*, 5(1), 271–288. <https://doi.org/10.47857/irjms.2024.v05i01.0205>
- Donthu, N., Kumar, S., Mukherjee, D., Pandey, N., & Lim, W. M. (2021). How to conduct a bibliometric analysis: An overview and guidelines. *Journal of Business Research*, 133, 285–296. <https://doi.org/10.1016/j.jbusres.2021.04.070>
- Douglas, D., Selinker, L., Tarone, E. E., Gass, S. M., & Cohen, A. D. (1994). Research methodology in context-based second-language research. In E.E. Tarone, S. M. Gass, & A. D. Cohen (Eds.), *Research methodology in second-language acquisition* (pp.119–131). New York: Routledge. <https://doi.org/10.4324/9781315044774>
- Erton, I. (2010). Relations between personality traits, language learning styles and success in foreign language achievement. *Hacettepe Egitim Dergisi*, 38, 115–126.
- Fazeli, S. H. (2011). The exploring nature of language learning strategies (LLSs) and their relationship with various variables with focus on personality traits in the current studies of second/foreign language learning. *Theory and Practice in Language Studies*, 1(10), 1311–1320. <https://doi.org/10.4304/tpls.1.10.1311-1320>
- Khan, M., Perwez, S. K., Gaddam, R. P., Aiswarya, R., Basha, M. A., Malas, A., Haque, S., & Ahmad, F. (2024). Mind matters: Exploring the intersection of psychological factors and cognitive abilities of university students by using ANN model. *Neuropsychiatric Disease and Treatment*, 20, 137-148. <https://doi.org/10.2147/NDT.S436975>
- Krishnan, G., & Raghuram, N. V. (2023). Trends and trajectories: Mapping the evolution of consumer switching intentions through the push-pull mooring framework. *Qubahan Academic Journal*, 3(4), 457–468. <https://doi.org/10.58429/qaj.v3n4a230>
- Kumar, S. S., & Ragini, C. (2024). The emergence of serious leisure research: trends and directions for leisure-based entrepreneurship. *Multidisciplinary Reviews*, 7(2), 2024033. <http://dx.doi.org/10.31893/multirev.2024033>
- Macintyre, P. D., Gregersen, T., & Mercer, S. (2019). Setting an agenda for positive psychology in SLA: Theory, practice, and research. *Modern Language Journal*, 103(1), 262–274. <https://doi.org/10.1111/modl.12544>

- Narayanan, S., & Pradhan, S. K. (2024). Exploring the research landscape of socially responsible investment through bibliometrics. *Multidisciplinary Reviews*, 7(1), 2024022. <https://doi.org/10.31893/multirev.2024022>
- Phoocharoensil, S. (2013). Cross-linguistic influence: Its impact on L2 English collocation production. *English Language Teaching*, 6(1), 1–10. <https://doi.org/10.5539/elt.v6n1p1>
- Pourfeiz, J. (2015). Exploring the relationship between global personality traits and attitudes toward foreign language learning. *Procedia - Social and Behavioral Sciences*, 186, 467–473. <https://doi.org/10.1016/j.sbspro.2015.04.119>
- Puspitasari, T., & Ishak, C. N. (2023). Indonesian students' perceptions of English medium instruction. *LLT Journal: A Journal on Language and Language Learning*, 25(1), 132–148. <https://doi.org/10.24071/llt.v26i1.5762>
- Raamkhumar, M. H., & Swamy, T. (2024). Analysis of intellectual development behind organizational change management (2012-2022): A bibliometric study. *Multidisciplinary Reviews*, 7(1), 2024013.
- Raamkhumar, M. H., & Swamy, T. N. V. R. (2023). Workplace spirituality: the game changer of 21st century workplace. *Multidisciplinary Reviews*, 6(4), 2023042. <https://doi.org/10.31893/multirev.2023042>
- Raofi, S., Chan, S. H., Mukundan, J., & Rashid, S. M. (2014). A qualitative study into L2 writing strategies of university students. *English Language Teaching*, 7(11), 39–45. <https://doi.org/10.5539/elt.v7n11p39>
- Santosa, M. H., Wulandari, N. L. P. N., & Mahendrayana, G. (2023). Exploring students' and lecturers' anxiety in learning English during emergency remote teaching in a public university in North Bali. *LLT Journal: Journal on Language and Language Teaching*, 26(2), 429–439. <https://doi.org/10.24071/llt.v26i2.3760>
- Scheier, M.F., & Carver, C.S. (1985). Optimism, coping, and health - assessment and implications of generalized outcome expectancies. *Health Psychology*, 4(3), 219–247. <https://doi.org/10.1037//0278-6133.4.3.219>
- Shekhar, S. K. (2023). Covid-19 and destination marketing : A science mapping and descriptive analysis. *Interdisciplinary Journal of Management Studies (Formerly known as Iranian Journal of Management Studies)*, 16(4), 989-1010. <https://doi.org/10.22059/ijms.2023.348750.675381>
- Thomas, N., & Rose, H. (2019). Do language learning strategies need to be self-directed? Disentangling strategies from self-regulated learning. *TESOL Quarterly*, 53(1), 248–257. <http://dx.doi.org/10.1002/tesq.473>
- Walsh, C. E. (1983). The construction of meaning in a second language: The polemics of family and school. *TESOL Quarterly*, 17(3), 489-491. <https://doi.org/10.2307/3586262>
- Zupic, I., & Čater, T. (2015). Bibliometric methods in management and organization. *Organizational Research Methods*, 18(3), 429–472. <https://doi.org/10.1177/1094428114562629>