Trending Topics About Performance in Second Language Learning

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Abstract. This article recomposes the background of this theme during the decade 2001 to 2011. This study aims to discover ten main current research trends of performance in second language from 2012 to 2022. It will search scientific articles in the Social Science Citation Index (WOS) and in the Educational Resources Information Center (ERIC) databases and discover which are emergently compared to the previous decade. Finally, the study discusses these topic trends, other alternates and transversal-related issues. It presents a critical vision of the state-of-the-art of the last 20 years, considering reference publications. The method is a documentary review that selects ten scientific articles from the last decade to discover deep trends. This documentary methodology differs from a systematic bibliographic review in that it allows selecting and delving deeper into the qualitative content of the articles. Thanks to the quality system implemented, the articles published in these journals included in the WOS database ensure significant studies that ensure scientific contributions and discoveries in the field. The main results are ten recurring topic trends with the previous decade on language learning programs, evaluation, teaching strategies, communication and psychological approach, digital devices, teacher action, cognitive approach, speaking performance, motivation and instructional performance language. The major conclusions highlight emerging interdisciplinary approaches to different variables and the adaptive study of emerging technologies, such as AI, without great interest in linguistic or economic policy issues. However, searches on other academic platforms find a broader open debate for two decades with other contextual parameters about economic factors and language policy, such as the literacy of immigrants in L2 as a factor of social and economic interest, the formal programming of a second language in institutions to obtain employment, especially in the professional framework of international mobility. This means that the WOS database collects general trends in this investigated topic. However, it only partially collects the breadth of scientific interest generated as a result of the needs of the socio-economic context.

Keywords: research trends, performance, second language, learning, documentary review.

Пенья-Акунья Беатрис. Актуальні теми щодо успішності оволодіння другою мовою.

Анотація. Ця стаття відтворює огляд літератури з теми протягом десятиліття з 2001 до 2011 року. Дослідження має за мету знайти десять основних сучасних наукових тенденцій у галузі вивчення другої мови протягом 2012-2022 років. Буде здійснено пошук наукових статей у базах даних Social Science Citation Index (WOS) та Educational Resources Information Center (ERIC) і встановлено, які з цих статей з'явилися порівняно з попереднім десятиліттям. Наприкінці дослідження обговорено ці та інші тематичні тенденції, альтернативи та гострі питання, пов'язані з цими темами. Стаття представляє критичне бачення стану справ за останні

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20 років, беручи до уваги довідкові публікації. Методом дослідження є документальний огляд, який обрав десять наукових статей за останне десятиліття, щоб виявити глибинні тенденції. Ця документальна методологія різниться від систематичного бібліографічного огляду тим, що дозволяє відбирати і заглиблюватися в якісний зміст статей. Завдяки впровадженій системі якості, статті, опубліковані в журналах, що входять до бази даних WOS, забезпечують проведення глибоких досліджень, які гарантують науковий внесок і відкриття в цій галузі. Результатом огляду є виокремлення десятьох повторюваних тематичних тенденцій попереднього десятиліття щодо програм вивчення мов, оцінювання, стратегій викладання, комунікативного та психологічного підходу, цифрових пристроїв, дій викладача, когнітивного підходу, мовленнєвих навичок, мотивації та мови викладання. Висновки висвітлюють нові міждисциплінарні підходи до різних змінних та адаптивне вивчення нових технологій, таких як штучний інтелект, без великого інтересу до питань мовної чи економічної політики. Однак пошуки на інших академічних платформах виявляють ширшу відкриту дискусію протягом двох десятиліть з іншими контекстуальними параметрами щодо економічних факторів і мовної політики, такими як грамотність іммігрантів на рівні L2 як чинник соціального та економічного інтересу, формальні програми з другої мови в установах для отримання роботи, особливо в професійному контексті міжнародної мобільності. Це означає, що база даних WOS увібрала загальні тенденції в цій досліджуваній темі. Однак вона лише частково відображає широту наукового інтересу, викликаного потребами соціально-економічного контексту.

Ключові слова: дослідницькі тенденції, успішність, друга мова, навчання, документальний огляд.

Introduction

The study of students' performance is planned based on the practises of nations that legislate the implementation of second language educational programs or on the fact that the state finds itself in a bilingual or multilingual state. The grouping of countries in major communities due to greater economic competitiveness, as is the case in the European Union, contributes to the modification of the legislation pertaining to these countries in terms of language policy directed towards multilingualism so that languages are promoted internally in the EU. Similarly, learning a second language is a topic that is required for immigrants in the EU.

The purpose of this research is to identify the major research trends concerning second language performance. The two research questions that were formulated were the following:

- What research trends are being carried out on L2 learning performance in the last decade in impact journals?
- What themes are emerging among these in such a way that they open up study horizons?

In a complementary way, this study aims to achieve the following:

- Track down the debate on the topic trends;
- Learn about these topic trends, as well as other alternatives and transversal issues;
- Gain a critical perspective on the state of the art over the last ten years using reference publications.

The discoveries and casuistry about performance in a second language are extensive in this field, considering the socio-economic circumstances of the educational segment in question. For example, Bassuk et al. (1998) are aware that the

educational opportunity to learn a second language implies the development of adult mothers without a partner in immigrant conditions. Gibb (2008) examines the attempt to couple a Canadian adult second language policy with a job skills policy. This author proposes another way of conceiving second language learning in adults and its potential for policy development. Betancur (2009) reveals that for Colombian immigrants, learning a second language in the US means demonstrating optimal communication skills in the workplace. Where there is no recognised linguistic-political debate, Keeves and Darmawan (2007) established debates in language learning.

The interdisciplinary interest is reflected in some studies. For instance, Miura and Okamoto (2013) study, from a language perspective, the characteristics of mathematical language with respect to L2 mathematics skills that affect performance. Haag et al. (2013) conclude that academic language increases the difficulty of math items for second language learners. Fernández-Fernández and Fonseca-Mora (2022) apply mental maps to improve reading skills.

Literature Review and Background

The trends discovered during 2012-2022 are exposed as meta-analysis, which, for the most part, were also addressed in the previous period of 2001-2011.

Regarding the programming of L2, an inquiry is made about the evaluation of an L2 learning program in its beginning stages (Davin, 2011). Stepp-Greany (2002) describes students' perceptions of technology-enhanced language learning (TELL) programming. Cultural awareness, listening and reading skills, as well as individual learning skills, are emphasized. Montes (2002) investigates the Content Area Program Enhancement (CAPE) model based on the cognitive approach to language learning that improved reading and mathematics scores.

In contrast, there are other positions that are critical for learning the second language in a programmed or institutionalised way. Toukomaa and Skutnabb-Kangas (1977) announced that the foundation for reaching the level of proficiency in L2 seems to be the level reached in the mother tongue. They stated that at an early age the child, belonging to a minority, is in the context of learning a foreign language, but if a learner does not receive adequate support in the mother tongue at the same time, the ability in the mother tongue will slow down or even cease, leaving the child with no basis for learning the second language properly. Along the same lines, reading difficulties in the mother tongue (L1) have been found to be correlative to the results in a foreign language (FL) (Fonseca-Mora & Fernández-Corbacho, 2017). Macnamara (1966) stated that learning in L2 as a means of instruction slows down learning. In this way, students who have L2 as a means of instruction, if they do not have adequate instruction in their mother tongue, are not guaranteed to participate satisfactorily in the current global economy.

Regarding the evaluation of L2, Okada (2015) investigates the conversational practises of the interviewer who evaluates the candidate in L2 job interviews for a particular position. This academic concludes that a candidate's understanding of the

expected behaviours and the ability to adapt to those behaviours in the interaction result in a positive evaluation from the interviewer.

Short memory and working memory are investigated in phonological functionality using a cognitive approach (Kormos & Sáfár, 2008). Kuiken and Vedder (2008) test and compare two models proposed to explain the influence of cognitive task complexity on L2 language performance in writing. The study supports the cognition hypothesis. Coiro (2011) presents models of think-aloud instruction to explicitly teach students how they approach texts, interact with them, regulate their comprehension, and respond to informational texts on the Internet.

Regarding teaching strategies, Oxford (2002) compiles the usual teaching strategies. In the same way, Chamot (2004) collects the procedures and debates about various approaches:

- The identification, terminology, and classification of learning strategies;
- The effects of learner characteristics on the use of the strategy;
- The effects of culture and context on the use of the strategy;
- The instruction of integrated strategy;
- The language of instruction;
- The transfer of strategies to new tasks;
- Language learning strategy instruction models.

In reference to the communicative and psychological approaches, the communicative approach is investigated by studying the interpretative, interpersonal, and presentation modes of communication (Glisan et al., 2007). In addition, the emotional aspect is still being investigated. Gregersen and Horwitz (2002) explore how perfectionism influences the emotional reaction of anxiety in language students. Lu and Han (2010) research student participation, isolating some influential variables: language; knowledge of the educational system; knowledge of the social system; personality; influence of traditional culture; and social/economic/political changes.

Chang and Ho (2009) investigate the effects of place control and learner control in web-based language learning to use digital devices in L2. Chinnery (2006) examines mobile assisted language learning (MALL) and foresees an expansion of technologically based research.

Regarding the influence of the teacher's actions in L2, Ibrahim (2001) studies an English Medium of Instruction (EMI) program in Indonesia. He points out that a teacher who does not speak fluent English can hinder student learning. Feryok (2013) suggests that teachers' language performances are complex and dynamic, and that even short-term programs with non-language objectives can have a positive effect on language performances.

The performance of orality in L2 is investigated in the dialogue (Swain et al., 2002). Likewise, aspects of orality are investigated using cross-disciplinary factors such as cultural studies (Morton & Jack, 2010). Likewise, other factors such as listening, writing, and reading are studied. Qian (2002) studies vocabulary mastery as an influence on reading comprehension. For this reason, this author recommends that vocabulary be assessed in L2.

With respect to motivation in L2, Petrides (2006) highlights that motivation is a crucial factor for learning L2, aimed at preparing classroom material or preparing a schedule. The desire to find employment is mentioned as one of the factors that encourage the study of a second language by a number of authors (González López, 2005; Pereira & Cassart, 2009).

Concerning the instructional language for performance, Cirino et al. (2007) talk about the language of instruction and the results. They discover that teacher quality is positively related to student engagement. In other publications on language performance, it appears to be referred to in WOS as computational language during 2022-2021.

Method

The method is a document review of meta-analysis based on a selection of samples (Nuñez, 2002; Espinoza, 2003; Perdomo, 2008; Sánchez Abascal, 2021). In a first stage of research, the document review method selects 10 scientific articles from the last decade to discover and deepen trends. This documentation methodology differs from a systematic bibliographic review in that it delves deeper into the qualitative content, in a complete way, of the articles.

The database consulted is the Social Science Citation Index (Web of Science, or WOS). The WOS database is the most relevant generalist database (Lamé, 2019; Liang et al., 2021) and the one with the most prestige that collects scientific journals. This database reaches a multidisciplinary audience in English, above all, and includes other languages. In addition, this database brings together various collections: The Web of Science Core Collection, Current Contents Connect, Derwent Innovations Index, KCI-Korean Journal Database, Medline, Russian Science Citation Index, and SciELO Citation Index. The articles published in these journals, thanks to the quality system implemented in them, ensure significant studies.

In addition, a specific education database called the Educational Resources Information Center (ERIC) has been consulted. This database contains "close to one million citations and abstracts reflecting both published and 'gray literature' (conference papers, contractor reports, etc.) gathered by the 16 ERIC subject area clearing houses" (Hertzberg & Rudner, 1999, p.1).

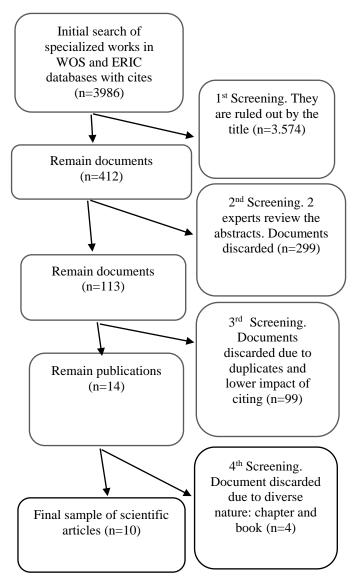
There were three inclusion and exclusion criteria at this stage. First, the texts needed to be peer-reviewed journal articles. Second, be written in English. Third, focus on L2 and performance (or synonyms) within the educational context. So, it should have the words 'second language + learning + performance', 'L2 + learning + performance', 'foreign language + learning + performance', 'secondary language + learning+performance' 'alternate language + learning + performance', 'other language + learning + performance' or 'new language + learning + performance', (or English variations of these terms) in the title and/or abstract.

The documentation selection process is described in Figure 1. In this first phase of research, a screening of peer-reviewed scientific articles with citations found in

WOS (401) and ERIC (3585) is carried out, for a total of (n=3986), during the period 2012-2022.

In the first screening, the publications are selected by title, and a total of (3579) are discarded, leaving (n=412). The data is extracted in Excel from the functions provided by WOS and ERIC. All the complete data from the references and the abstracts provided by WOS and ERIC are noted in a first-ever Excel document. In the second screening, in which two experts participate, the abstracts are reviewed, and (299) are discarded, leaving (n=113) documents.

Figure 1Descriptive Flow Chart of the Documentation Process



Source: own elaboration

In the third screening, 99 duplicates of this documentation are excluded, as are those documents with fewer citations. Instead, those documents that present frequent themes are selected, leaving a total of (n=14).

In the fourth screening, the references are reviewed, and those publications that, due to their content, are not articles (4), but chapters or papers or do not cover the selected subject about performance in L2 learning, are discarded from Excel. Once the articles that meet the requirements (=10) have been noted, the abstract is carefully reviewed, and then each of the articles is studied and criticised in depth.

The aims of this work are:

- discovering the ten main trends in students' second language performance over the last decade by searching the WOS and ERIC databases;
- finding out which of these trends are emerging.

Results

A content analysis of the selected scientific articles is described below.

Selectivity of Content and Language Integrated Learning Programs in German Secondary Schools (2016)

Dallinger et al. (2016) experimentally investigate the previous preparation of 1362 eighth graders inserted in a CLIL program in Germany. The quantitative study shows a positive appreciation of students with previous preparation, with significant differences in several variables: listening comprehension, verbal cognitive abilities, parental education level, socioeconomic and cultural level, as well as achievement orientation and motivation.

Improving the Validity of L2 Performance Assessments: Use of Many-Facet Rasch Measurement (2017)

Kim (2017) attends performance evaluations from a theoretical standpoint. This type of assessment considers the new competency framework, or Competency-Based Educational Model (CBEM). This model values the actions and products carried out by the student during the learning process, allowing feedback on learning, as well as verifying the development of their skills.

Kim justifies that this type of performance evaluation is valid thanks to validation through the multifaceted Rasch measurement. The author compares it to other traditional assessment tests or a communicative approach. The Rash model confirms the psychometric properties of the assessment tests. Its mathematical formula relates the probability of answering the item correctly to the difference in the level of the construct or attribute of the individual and the difficulty of the item.

One Task Fits All? The Roles of Task Complexity, Modality, and Working Memory Capacity in L2 Performance (2017)

Zalbidea (2017) studied (n=32) North American pre-university students and administered various tests. First, the execution of an argumentative task, one complex task measurement test, and one quantitative test of working memory. She intends to know about a less studied topic, such as the roles of task complexity and modality (speaking or writing) in L2 (in this case Spanish) performance in combination with learners' working memory.

This author concluded that task modality played a more robust role than task complexity in promoting improved linguistic performance among lower-intermediate learners. In speaking tasks, learners produced more syntactically complex output. In writing tasks, learners produced language that was lexically more complex as well as more accurate overall. Besides, working memory can play a role in influencing certain types of linguistic measures of L2 performance, but only when the cognitive demands of tasks are increased.

Instructional Mode: A Better Predictor of Performance Than Student Preferred Learning Styles (2019)

Moussa-Inaty et al. (2019) carried out a quantitative study with a sample (n=94) of undergraduate female students at the Zayed University (United Arab Emirates). These academics wanted to find out which variable significantly affected performance: preferred learning styles or cognitive load. The cognitive load, according to Sweller's psycho-cognitive theory (cited in Moreno & Park, 2010), corresponds to the amount of information that the working memory can store at the same time. The study's authors concluded that cognitive load was the best indicator of performance.

More Than Meets the Ear: Individual Differences in Trait and State Willingness to Communicate as Predictors of Language Learning Performance in a Chinese EFL Context (2020)

Zhang et al. (2020) carry out a quantitative study on the variables of the willingness to communicate (WTC) in relation to individual differences regarding participation in the classroom of L1 (Chinese) and L2 (English) in the case of students. Chinese university (n=103). The strength of this study is that it emphasises the volitional-communicative aspect, or communicative will. They found that individual differences in L1 were correlated with the extraversion factor. However, individual differences in L2 were correlated to other factors: experience, conscientiousness, and agreeableness. Furthermore, they found that both the communicative trait and the communicative state influence L2 performance, despite being related differently to personality.

Improving English as a Foreign Language-Learning Performance Using Mobile Devices in Unfamiliar Environments (2021)

Shadiev et al. (2021) carry out an experimental quantitative study with an experimental group (n=50) and a control group (n=50). However, we estimate that the sample size of only 50 individuals is small and should have been expanded. An intervention was carried out to check the performance of learning English (EFL) with mobile devices in unknown environments. So, the students took photographs of people, objects, situations, and scenarios that they described in detail, becoming familiar with the mobile. A pre-test and a post-test were applied to verify the translation of phrases, sentences, and writing elements. Five tasks were also assessed for quantity with respect to vocabulary, grammar, content, origin, and dimensions of creativity. The results showed an improvement in the experimental group only in relation to the writing element and in the quality of the tasks' writing. They were also enthusiastic about learning the mobile in new environments

An Instructor's Beat Gestures Facilitate Second Language Vocabulary Learning from Instructional Videos: Behavioral and Neural Evidence (2021)

Pi et al. (2021) combined two experiments to approximate the phenomenon of the influence of the kinaesthetic gesture of rhythm in the teacher on vocabulary learning in L2 with three data collection tools. In a first quantitative experiment, they tested whether the instructor's speaking rhythm gestures on the screen of instructional videos improved performance in terms of accuracy and reaction time in EFL vocabulary learning in English. The sample consisted of 27 Chinese university students. The second experiment, carried out with a self-report test and electroencephalograms analysed with a quantitative technique, involved 53 university students. In this, they discovered that the benefits of rhythm gestures in learning L2 vocabulary are due to reducing the cognitive load during this process. The results are aimed at recommending the design of instructional videos with gestures by instructors for vocabulary learning in L2.

To What Extent Are Foreign Language Anxiety and Foreign Language Enjoyment Related to L2 Fluency? An Investigation of Task-Specific Emotions and Breakdown and Speed Fluency in An Oral Task (2022)

Bielak (2022), from an interdisciplinary, affective, and attitudinal point of view, studies the relationship between anxiety (FLA) and enjoyment (FLE) of a foreign language correlated with speech fluency. The sample consisted of 43 Polish university students who spoke L2 English at a medium-to-high intermediate level (n = 43). Various data collection tools were used: a pre-test and post-test to measure FLA and FLE together with a monologue task, another for English level, another test to measure both speed fluency and breakdown fluency. For the first time, FLE and L2 fluency have been shown to be related. Moreover, with quite low FLA, and high FLE, the combined effects of proficiency level, FLA, and FLE on L2 fluency can be quite relevant. Thus, the level of acquired competence is the main predictor of fluency, followed by FLA. Therefore, for teachers, it is important to prepare tasks with a positive emotional impact and focused on enjoyment.

Research on Language Learning Motivation in School Settings in System (2022)

Zhang et al. (2022) carry out a documentation review of the *System* journal from 1990 to 2021, analysing the theoretical and methodological changes regarding motivation. They conclude that the approaches enhance the complex, dynamic, and situated nature of motivation. Studies have focused on adult high school students. However, it is highlighted that it is still an expanding field of study. Among the aspects that have been discussed, the following are presented:

- Motivational change
- Interaction between instructional and motivational approaches
- The role of the sociocultural context in the formation and direction of student motivation
 - Teachers' cognition about motivation
 - Teachers' own motivation for language teaching

An Analysis of the Types of Educational Performance Language and Its Use in High School English Class (2022)

Sung-Wook (2022) studied the specific use of language in educational performance in a real context, first categorising it theoretically and then observing most of these categories in the secondary classroom. The unobserved constructs were attributed to institutional conditions and class members' late recognition of education. The authors suggest additional research be conducted in this area through follow-up studies.

Table 1
Summary of Authors' Selection, Year of Publications and Topics

| Authors | Year | Research Trending Topics |
|---------------------|------|---------------------------------------|
| Dallinger et al. | 2016 | Language learning program. |
| Kim | 2017 | Assessment of L2 |
| Zalbidea | 2017 | Cognitive approach for L2 |
| Moussa-Inaty et al. | 2019 | Teaching strategies for L2 |
| Zhang et al. | 2020 | Communicative and psychological |
| | | approach |
| Shadiev et al. | 2021 | Digital devices for L2. |
| Pi et al. | 2021 | Influence of teacher action for L2 |
| Bielak | 2022 | Enjoyment and speaking performance of |
| | | L2 |
| Zhang et al. | 2022 | Motivation for L2 |
| Sung-Wook | 2022 | Performance language |
| | | |

Source: own elaboration

Discussion

The findings of this study are revealed by responding to the intentions and research questions. In this way, the listed tendencies are discovered below, just as the first intention and first starting question of this inquiry were posed. In turn, in this section, the weight they contain as trends is highlighted. In the same way, other findings are presented, as well as the debates raised by the trending themes.

First, the interest in L2 programming is discovered in this study, it is a subject of constant tendency that arouses debate (Keeves & Darmawan, 2007). However, it is required by the competitive global socioeconomic environment. In the case of Europe, educational institutions invest in L2 programming because it is a necessary component of children's education within a broader legal framework, the European *Erasmus* + (*plus*) *Program* for the promotion of multilingualism and the adaptation of labour to the current context. In the case of Latin America, legislative programming is due to the fact that it is considered the key to access to studies, jobs, and higher income (Santana Villegas et al., 2016, p.80). The CLIL bilingual program is not exempt from criticism and studies in its favour.

It is highlighted bilingual CLIL programming (Dallinger et al., 2016) with advantages in verbal cognitive skills and listening comprehension over monolingual learning, opening a debate about the ideal type of monolingual or bilingual programming. Nieto-Moreno-de-Diezmas (2019) in another comparative study of a large sample, also adds positive results for CLIL in secondary school in overall results, oral comprehension, and complex tasks with respect to non-CLIL students. At this level, there is a difference, whereas in primary education, there is none. However, there are other concerns about programming. These results could be understood considering the age of the students and other contextual factors between the CLIL program in primary education and secondary education.

Demkura (2021) investigates the effects of a linguistic program that introduces immigrant students to L2 in a Swiss context so that, by recognising their culture, they find their identity, and also calls for policies that serve these segments.

Salaberri-Ramiro and Sánchez-Pérez (2021) quantitatively investigate the perceptions of Spanish university students (n=310) about the use of English in bilingual programs. The students' overall satisfaction with the teachers' command of the English language and use of comprehension strategies is concluded. However, the refusal to be evaluated in that language, the demand for greater interaction in the classroom, and the inclusion of language-related courses in bilingual higher education curricula are also concluded. For promoting multilingualism, Barros et al. (2021) recommend including trans language theories in the curricula of conventional and TESOL teacher preparation programs.

If possible, the offer of subjects within a multilingualism policy and programs is already being implemented in European universities (Council of Europe, 2020). It is being carried out and promoted in Spanish and European universities, aided by the Erasmus + (plus) international mobility framework, and approved KA2-type funded

European teaching innovation projects. This is the case with the project "Digitalization of multilingual programs in the EHEA" (dimpe.inerciadigital.com).

Second, this investigation confirms the appearance of a constant trend in the study of evaluation, as it is a subject closely related to performance. This is a common method for educational systems to verify this. Previously, it was debated whether the questionnaires could be used to assess L2 learning throughout the studies and in terms of speaking, writing, reading, and listening (Keeves & Darmawan, 2007). Research continues on this topic. Kim (2017) recommends the Rash test for checking questionnaires to assess performance tasks. In the same way, Kuiken and Vedder (2018) investigate the applicability of a rating scale to assess functional adequacy in L2, based on task-based language teaching (TBLT) and task-based language assessment (TBLA). The scale is composed of four components of functional adequacy, namely content, task requirements, understandability, and coherence and cohesion. They reach the conclusion that the scale appears to be a reliable and efficient tool for assessing the functional adequacy of written and spoken production in L2.

Third, in reference to the interest in cognitive issues, Zalbidea (2017) proposes a novel way to study task-based learning in relation to working memory. She says that working memory was shown to be related to the improvement in the cognitive complexity of tasks. This study is complemented by Awwad & Tavakoli (2019). These show that intentional reasoning had a significant influence on complexity and precision. Proficiency and working memory reliably predicted accuracy on both task archetypes. However, language proficiency and working memory favoured differently models predicting lexical complexity and fluency in speech rate. In this sense, the tendency to discover what influence memory has (Kormos & Sáfár, 2008) and the rationale on performance in L2 learning continues. Previously, Keeves and Darmawan (2007) highlighted the debate about the acceleration of cognitive procedures in the service of performance.

Fourth, the topic of teaching strategies is reaffirmed in these articles because they are teaching tools established to improve performance. However, there are previous studies (Chamot, 2004) and current ones that raise a debate about the impact on performance. On the one hand, the research by Moussa-Inaty et al. (2019) has been found, in which they conclude that the cognitive load of female students was a better predictor of student performance than auditory or visual learning styles. We understand that this study presents a sample bias, since it should also be carried out on male students. On the other hand, alternatively, Ku et al. (2015) propose a game-based learning strategy with Sifteo Cubes and a device with a tangible user interface in L1 that is influential in terms of performance. They conclude that the score was higher than that of the experimental group to which the learning strategy was applied, and that the Chinese idioms learning system (CILS) is adequate for active and visual learners. Levis et al. (2016) conclude a comparative study on the influence of native and non-native teachers that most affects teaching strategies.

Fifth, previously, there already existed a recurrent approach to the study of performance in L2 based on variables belonging to communication (Glisan et al.,

2007). One finding is the emerging preference of scientists for the approach of combining innovative variables from two fields: psychology and communication. These are more recent sciences that contribute to a greater knowledge of performance in learning L2. Shadiev et al. (2021) approach communicative will from the perspective of the correlative personality variable. They start from the problem that there is a stereotype about Chinese students being perceived as passive due to the presumed resistance to speak, especially in L2. They conclude that, despite being related to personality differently, both trait and willingness to communicate (L2) state are important predictors of L2 learning performance.

Indeed, there are other previously studied variables belonging to the psychology of education and affective learning, such as the emotion of anxiety (Salehi & Marefat, 2014), the relationship between anxiety and happiness (Dewaele & Alfawzan, 2018), the affections in L2, or the ability to work in an international context projected towards expanding employability (Martín, 2016; Michavila et al., 2018).

Sixth, the constant predisposition to understand the performance of digital devices is highlighted, and at the same time, emerging with respect to applying and studying emerging technologies, such as applications with artificial intelligence, is another innovative avenue of research on L2 teaching that has been highlighted in this study. It is a growing field of research into the performance and effectiveness of L2 learning through these devices as they are applied in the educational context. At the same time, the debate between supporters of technological methods versus traditional teaching is evident (Godwin-Jones, 2022). Shadiev et al. (2021) conclude that the effectiveness of mobile learning familiarisation strategies is reflected in writing performance. However, the study by Shadiev et al. (2021) is limited by the sample size. Palasundram et al. (2019) underline the quality of complementarity of the chatbot with artificial intelligence as an educational resource.

Seventh, it is a revelation from this study that there is a tendency to constantly investigate the concrete actions of the teacher in the context of the teacher's role in relation to performance. In relation to the gestural language of this, Pi et al. (2021), in an investigation with a neurological test, conclude that the use of rhythm gestures increased the precision of the students, reducing their reaction time and reducing their cognitive load during learning. Mahmoodi et al. (2022) investigate other aspects of professional training, such as guidance in classroom management, self-efficacy, or emotional management, such as burnout syndrome, in terms of student achievement. Wang et al. (2021, p. 6) present a model with a positive psychology approach with several factors influencing L2 and EFL learning: resilience, grit, well-being, academic engagement, enjoyment, loving pedagogy, and emotion-regulation. Derakhshan (2022) reviews the ways of investigating positive psychology (Seligman, 2006) focused on L2 teachers.

Eighth, the discovery of the constant concern about oral communication in L2 from different perspectives stands out from this study. Regarding orality, Bielak (2022) takes an interdisciplinary approach to both the affective trait of emotionality and the attitudinal, specifically anxiety (FLA) and enjoyment (FLE), in relation to speech fluency. It is concluded that L2 teachers use emotional impact and take care of

the emotional atmosphere in the L2 classroom, especially enjoyment. Bui and Huang (2018) conclude that pre-task planning stands out in the foreground and familiarity with the content in the background, since they optimise fluency. The availability of planning time also helps to compensate for a lack of familiarity with the content.

Foster and Wigglesworth (2016) deal with speech accuracy. Lan et al. (2016) study the performance of oral communication using the Second Life virtual community. Cong-Lem (2018) investigates Web-Based Language Learning (WBLL). Baumgarten (2016) advises reconsidering academic English instruction in L2 in nonnative Anglophone multilingual contexts, where L2 development appears to be influenced by L2 learners' general language use habits. García-Carmona and Fernández-Corbacho (2022), from an affective perspective, improve the fluency of spelling in students with diversity thanks to dictations combined with music (Fonseca-Mora, 2015).

Suvorov (2015) investigates how images affect the performance of examinees in video-based L2 listening tests. This uses eye-tracking technology to record eye movements during the Video-Based Academic Listening Test (VALT). The study reveals statistically significant differences between fixation rates and total dwell time values. At the same time, there are also studies about other aspects of linguistic communication, such as writing or reading. Keeves and Darmawan (2007) indicate that there are debates about which components are important for reading ability. Hanjani and Li (2014) recommend peer scaffolding for collaborative revision in L2 writing.

Ninth, the tendency to study motivation from an attitudinal and volitional perspective, in relation to performance, is recurrent in L2 studies. Zhang et al. (2022) in a documentation review point out that the approaches in the publications allude to the complex nature of such issues as motivational change, the interaction between instructional approaches and motivation, the role of the sociocultural context in the formation and direction of student motivation, teacher knowledge about motivation, and teacher motivation for language teaching.

Ortega-Rodríguez (2022) discovers that the attitude of the students determines their self-efficacy, and anxiety has a negative impact, but the teacher's attitude is the predictive factor with the most influence on performance. Likewise, the documentation on motivation for language learning among adults is extensive. However, they suggest that motivation based on school stages could still linger. Toyama et al. (2017) conclude that the differentiation between intrinsic and extrinsic motivation may not always be useful for predicting L2 learning. Wichadee and Pattanapichet (2018) deduced that the experimental group obtained higher scores and that the motivation of the students was much higher than that of the control group. In the same way, the students revealed that they had a positive attitude towards the *Kahoot* application, a digital game, aimed at learning a foreign language. In the same way, the performance of the tasks is contrasted with contents actively generated by

the students in contrast to the teachers, manifesting higher performance in the former (Lambert et al., 2017).

Tenth, regarding language performance, it has been discovered in this study that it is a recurring trend. According to Sung-Wook (2022), in the observational research that he carried out, the author detected that most of the types of educational performance language that the expert had previously formulated had manifested themselves. This author encourages more research into this type of performance language in follow-up studies.

Conclusions

The ten recurring trends (components) are summarised, as seen in Table 2, along with the emerging derivations (subcomponents) concerning the investigation of performance in L2.

First, effective L2 programs, whether bilingual (such as CLIL) or multilingual, must be implemented and tested.

Second, the importance of evaluation to measure performance. In this way, more instruments are created and validated to measure and evaluate the performance of L2.

Third, from the cognitive point of view, the impact of memory and rationing on L2 learning performance is analysed.

Fourth, the theme of learning styles is considered within the didactic context of learning strategies in contrast to other factors that affect performance.

Fifth, it investigates from the communicative and psychological perspective of education how both the will to communicate and personality affect performance in L2 in unfamiliar contexts, as well as emotions and affectivity.

Sixth, the performance and efficiency of digital devices in relation to L2 are studied at a time of rising digital convergence.

Seven, professional management behaviour and external actions subject to the teacher's role arouse interest as factors that contribute to student performance in their intervention in the classroom. These aspects consist of the use of gestural rhythm, orientation in classroom management, self-efficacy, and burnout.

Eighth, the study of the performance of orality predominates over writing and reading in L2. It is studied from different perspectives: emotionality, technology, multilingualism, or even interdisciplinary. It attends to different aspects of the speech act, for example, precision and fluency.

Ninth, the studies on motivation are lengthy, reflecting their complexity. Although the motivation of the elderly is extensive, it can nevertheless be extended in the studies of school levels. Technology is accepted by students and is shown as a motivating factor.

Tenth, studies on the specific language of performance, which manifests itself as a constant trend, are shown to be expanding.

Table 2
Research Trending Topics

| Components | Subcomponents |
|------------------------------------|---|
| Language learning program. | Assess of effectivity belonging to L2 |
| | bilingual or multilingual programs |
| Assessment of L2 | Concrete tools to measure performance |
| Cognitive approach for L2 | Impact of memory and rationing on L2 |
| Teaching strategies for L2 | Learning styles combined with other factors |
| | related to performance |
| Communicative and psychological | How the will to communicate and |
| approach | personality affect performance in L2 |
| Digital devices for L2. | Performance and efficiency of digital |
| C | devices in relation to L2 |
| Influence of teacher action for L2 | Professional management behaviour and |
| | external actions subject to the teacher's |
| Enjoyment and speaking performance | Research on performance of orality |
| of L2 | predominates over writing and reading |
| Motivation for L2 | Motivation at the school level in relation to |
| 1120 12 W11011 101 <u>—</u> | performance still needs to be further |
| | investigated |
| Performance language | The specific language of performance is |
| 1 01101111aii00 luliguugo | expanding. |
| | onpuliants. |

Source: own elaboration

Compared to the previous decade, in the period 2012-2022, as it can be seen in Table 3, interdisciplinary approaches to variables are emerging, the first indication of complexity, in addition to the study of emerging technologies such as AI. If possible, it has been discovered that most of the studies focus on English as L2, on young adults (specifically, university students), and to a lesser extent on young people (secondary level). The samples are not large; however, we found a second indication of complexity in the research design, since two or even three quantitative data collection tools were combined.

Few studies have been found on language learning models, language policy, or the economy. However, studies in the last decade of learning tasks have been frequent.

In addition, with less representation in WOS and ERIC, there has been a debate that has been open for two decades with other contextual parameters about economic factors and language policy. For example, the literacy of immigrants as a factor of social and economic interest (Demkura, 2021) or the formal programming of a second language in institutions with a view to obtaining employment, especially in the professional framework of international mobility.

Table 3
Emerging Trending Topics

Emerging Trending Topics

Interdisciplinary approaches to variables belonging to different disciplines

Research on advanced technology (as IA)

Focus on English as L2 related to young adults

Complexity in research design because of combination of two or three quantitative research tools

Source: own elaboration

So, in this investigation, the second intention and the second research question are also answered, since the emerging topics for this field are revealed, giving advances due to a greater thematic specification or in terms of new combinations between variables or combining statistical tests with neurological tests.

The limitation of this study is that a tasting of 10 items is focused on discovering 10 main trends. In prospective, it should be combined with a subsequent bibliographic systematic review that shows the range of open topics in the last decade, giving a greater global vision of the object of study and promoting other studies.

Finally, it is said that human performance is becoming a science in itself, encompassing the multidisciplinary interests of the arts, business, education, medicine, science, and sport. Within this, L2 performance studies is a still-expanding area of study that offers challenges to researchers thanks to the complexity of variables and the digital transformation of teaching.

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