



## Use of Grammar Learning Strategies in University EFL Learners: A Systematic Review

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**Abstract:** Foreign language learning is a very systematic and planned process, and the different activities which take place during this process are designed to achieve some predefined objectives. The study of a foreign language represents a progressive experience and the acquisition of a skill that helps expand learners' intellectual perspective. One of the areas in foreign language pedagogy and learning that has emerged over the last few decades is learning strategies. Within this field, the acquisition of grammar through various Grammar learning strategies (GLS) has received greater attention from researchers in recent years. The objective of this systematic review is to analyse the use of grammar learning strategies among EFL university students according to the specialized literature. For this purpose, 11 empirical studies were selected from the SCOPUS and Web of Science databases, published between 2014 and 2024, following the eligibility criteria. This study followed the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines and a specific categorisation of GLS, complemented by additional literature to analyse the information thematically. In this regard, the results highlight university students' preference for cognitive GLS, particularly in the corrective feedback (CF) subcategory. Metacognitive and social GLS ranked second, followed by affective GLS. In the conclusion, it has been emphasized that the learners favour direct strategies but support them with the use of indirect strategies. Finally, the use of GLS supports the language learning process; therefore, study and constant practice must accompany its use to acquire second-language grammar.

**Keywords:** Grammar Learning Strategies, English as a Foreign Language, University Students, Systematic Review, PRISMA.

### 1. Introduction

Grammar is a fundamental element of language learning (Alzahrani, 2024) and is considered one of the most problematic language subsystems to learn. Grammar learning has been marginalised since the advent of the communicative approach to language (Byram & Méndez García, 2009). Azizmohammadi & Hamed (2020) affirm that, "the level of the language use ability depends [on the] degree [to which] they master the grammar since grammar knowledge is the base of communicative competence" (p. 63). Essential grammar rules are needed for both oral communication and, above all, for written communication to ensure that the messages are understandable to the recipient. Moreover, in the EFL context, grammar enables students to communicate globally, promotes collaboration across cultures, and allows them to "express their unique perspectives and creativity" (Ellis, 2006; Council of Europe, 2020).

Despite the importance of this subskill in learning English, students still face challenges with its grammar (Ajaj, 2022). They often find learning grammar difficult due to its complex rules, exceptions, and abstractions (Aisyah et al., 2024; Mohamad et al., 2023). Furthermore, deficiencies in context and authentic language settings do not motivate learners to use grammar (Narbekov, 2022). As Ajaj (2022) summarises, these challenges in grammar acquisition stem from traditional teaching methods, a curriculum that does not apply knowledge to reality, and students' motivation.



In the same context, Pawlak and Csizér (2022) state that, due to the above-mentioned issues, the task of learning L2 grammar often falls to students in their own free time. Consequently, this endeavour becomes more effective when learners work autonomously (Pawlak, 2017) and can self-regulate the process (Oxford, 2017). At this point, both autonomy and self-regulation capacities require the assistance of language-learning strategies as tools for real, meaningful, overall communication (Pawlak, 2020; Zekrati, 2017).

One practical approach for enhancing grammatical competence in the target language is the appropriate use of grammar learning strategies (henceforth, GLS) (Oxford et al., 2007; Oxford, 2011, 2017; Pawlak, 2018, 2020), which represent a subset of language learning strategies (Alzahrani, 2024). These strategies can be employed by students who want to delve into English grammar for both learning and using grammar in their communicative activities, thus enhancing their knowledge and practical language use (Khalil, 2024). Indeed, successful L2 grammar students are aware of the strategies they use and the intentions behind them, whether for studying or personal reasons (Tilfarlioğlu & Yalçın, 2005). This element of consciousness in the use of strategies makes them different from a process. The strategies tend to become a process (procedural skill) and become automatic and unconscious through frequent use (O'Malley & Chamot, 1990). Therefore, one important attribute of using strategies is consciousness.

Nevertheless, despite the increase in research on grammar learning strategies in recent years, this topic still needs further development (Pawlak, 2020; Pawlak & Csizér, 2022), as GLS has recently been set aside in favour of other topics in L2 research (Oxford, 2017). Despite its usefulness, no systematic review has addressed this topic previously. Hence, this study aims to fill this gap by answering the following research questions:

- a What types of grammar learning strategies do university students use more frequently in their EFL learning trajectory as found in the existing literature from 2014 to 2024?
- b What type of methodology has been used in the selected research studies on grammar learning strategies available from 2014 to 2024?

## 2. Literature Review

### 2.1 Language Learning Strategies

The Language learning strategies (LLS) research started almost fifty years back with the pioneering work of Rubin (1975) titled "What the Good Language Learner can teach us", wherein an attempt was made to examine the question of individual differences in the learning process and language attainment. Thereafter, there has been systematic development in this field over the last two decades, with extensive research from a variety of viewpoints. In the literature, there are many definitions available since its inception; one of the earliest definitions was provided by Oxford (1990), who defined them as "specific actions taken by the learner to make learning easier, faster, more enjoyable, more self-directed, more effective, and more transferable to new situations" (p. 14). More recently, an analysis on LLS definitions was carried out by Oxford (2017) provided a more comprehensive definition; "L2 learning strategies are complex, dynamic thoughts and actions, selected and used by learners with some degree of consciousness in specific contexts in order to regulate multiple aspects of themselves (such as cognitive, emotional, and social) concepts" (p. 48).

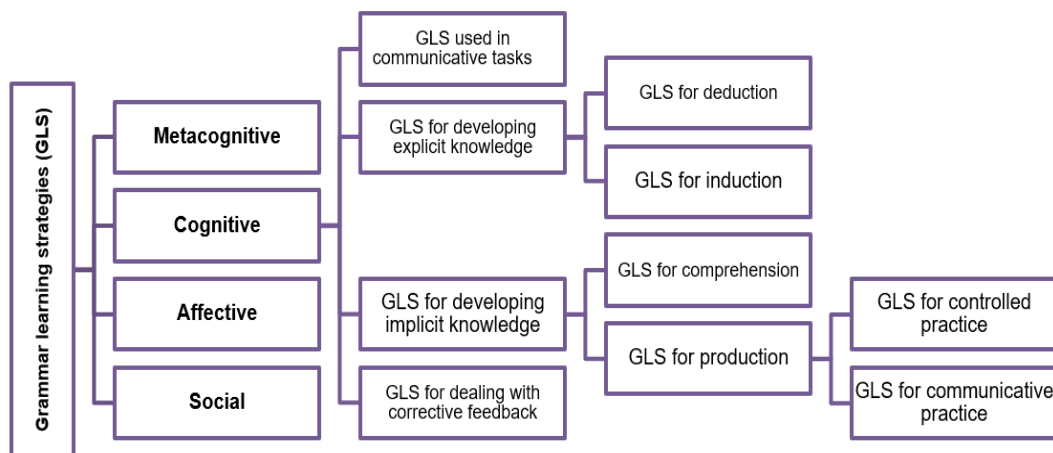
One of the earliest attempts to examine and classify these LLS was carried out by Oxford (1990), from which two paramount groupings emerged: direct strategies and indirect strategies. The former category involves language learning and requires cognitive processing, which is further classified into three subgroups: memory, cognitive, and compensation strategies. Conversely, the indirect strategies play a part in students' ability to oversee their learning process and are divided into metacognitive, affective, and social strategies (Oxford, 1990). There are many other taxonomies of language learning strategies; however, Oxford offers a comprehensive and detailed system of language learning strategies, which is now the starting point for most scholars delving into this field (Domínguez & Juanías, 2024).



## 2.2 Grammar Learning Strategies

One offshoot of this field of LLS is the emergence of Grammar Learning Strategies (GLS). There are many conceptual definitions available in the literature; for example, [Oxford \*et al.\* \(2007\)](#) define them as “actions or thoughts that learners consciously employ to make language learning and/or language use easier, more effective, more efficient, and more enjoyable” (p. 117). [Cohen \*et al.\* \(2010\)](#) describe GLS as purposeful, conscious behaviour for learning grammar structure better. Therefore, GLS are important elements that learners can use consciously in their grammar learning and transfer to different contexts, thereby favouring language improvement. For [Pawlak \(2013\)](#), grammar learning and grammar use are intertwined because grammar learning involves understanding and remembering grammar rules and attempting to use them “in spontaneous, real-time communication”. The skilful employment of GLS has a key role in learning L2 grammar, whether GLS are meant to master rules, or “automatize these rules” ([Pawlak, 2018](#)).

According to [Pawlak \(2018\)](#), GLS are divided into four main groups, with cognitive strategies including four subcategories (Figure 1). The first group corresponds to metacognitive strategies to manage L2 grammar learning through planning, organizing, monitoring and self-evaluating. Cognitive strategies belong in the second main group, and these are further divided into the following: (A) GLS employed for communicative tasks, such as comparing speech and writing with that of a higher level language user, (B) GLS playing a part in the development of explicit grammar knowledge, also subdivided into GLS for inductive and deductive learning, (C) GLS as tools to develop implicit grammar knowledge, divided into GLS for comprehension and GLS for production, whether it be in controlled practice (e.g. creating new sentences with recently learnt rules) or communicative practice (e.g. employing these newly learnt rules in authentic settings), and (D) GLS to approach corrective feedback (CF) in overall grammar production. The third group involves affective strategies for self-regulating emotions and for students’ motivation when learning grammar. The final group focuses on social strategies, which primarily require interaction. This may involve the teacher, the rest of the class, or any proficient person to enhance the grammar learning process.



**Figure 1.** Grammar learning strategies classification proposed by [Pawlak \(2018\)](#)

It is important to note that this classification served as a cornerstone for [Pawlak \(2009\)](#) in developing a data collection tool to report the use of grammar learning strategies by university students majoring in English: The Grammar Learning Strategy Inventory (GLSI). In particular, regarding corrective feedback, [Ellis \(2009\)](#) cites [VanPatten \(2003\)](#) to explain that CF involving negotiating meaning helps learners acknowledge their errors and create form-meaning connections, promoting acquisition.

In addition, some literature highlights specific strategies worth mentioning. The first group corresponds to self-regulated learning strategies, which, according to [Chen \(2002\)](#), include five categories: metacognitive self-regulation, time and study environment, effort regulation, peer learning, and help-seeking. Likewise, [Aliasin \*et al.\* \(2022\)](#) found that the use of self-regulated learning strategies significantly affected grammar acquisition. All in all, there is an interconnection between self-regulation and academic achievement in EFL learning. The second group involves L1-based strategies, as learners report feeling ‘linguistically safer’ when allowed to use their L1 ([Tsagari & Giannikas, 2018](#)). Consequently, and in accordance with [Wangdi and Shimray \(2022\)](#) and their study on students’



perceptions of this topic, the use of L1 has numerous advantages in general. Some of these include reducing anxiety and improving vocabulary and grammar acquisition. The final group delved into language imitation, which entails transforming the means and transferring them to other contexts (de Guerrero & Commander, 2013). Furthermore, one imitation-based strategy is copying skills. Within this framework, Ye *et al.* (2021) found that copying skills greatly aid reading and spelling, leading to the conclusion that employing copying skills enables learners to understand the internal structures of grammar in context, thereby improving all four language skills.

### 3. Methodology

#### 3.1 Type of Research

This research employed a systematic review, which is referred to by Dempster (2011) as an in-depth literature review with the difference "that it is conducted in a methodical (or systematic) manner, according to a pre-specified protocol to minimize bias, with the aim of synthesizing the retrieved information" (p. 15). This study followed the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines (Page *et al.*, 2021), and the data were analysed thematically. For the quality assessment of the included studies, 2 reviewers independently assessed each included study. Then, the eligible research studies were evaluated according to the relevant study design category, keeping in mind the central research question formulated at the outset. In the event of any disagreement between the two reviewers, a detailed discussion and deliberation were held with the third reviewer. In line with the MMAT recommendations, results were reported by domain and study design.

#### 3.2 Boolean Operators

Two internationally recognized databases are used to search for the most appropriate and relevant articles for this systematic review: SCOPUS and Web of Science (WOS). The selection of articles for this systematic review is performed manually and uses two Boolean operators (AND, OR). The core concepts are the following: Grammar learning strategies and university students. However, the core concept 'university students' is associated with the following synonyms: Pre-service teachers, college students, undergraduate students, higher education students, tertiary students, university learners, and undergraduate learners. Defined the terms, the search string is the following: Grammar learning strategies AND ("university students" OR "pre-service teachers" OR "college students" OR "undergraduate students" OR "higher education students" OR "tertiary students" OR "university learners" OR "undergraduate learners") OR "Grammar learning strategies". The use of synonyms and the Boolean operator OR increases the number of transcendental results that need to be filtered with inclusion and exclusion criteria.

#### 3.3 Delimitation of the Article Search by Means of Criteria

To determine the sample of articles analysed in this systematic review, the inclusion and exclusion criteria are listed below.

- **Inclusion Criteria (IC):** Articles published between 2014 and 2024 written in English or Spanish that involve university students.
- **Exclusion Criteria (EC):** Articles older than ten years, studies not involving the EFL context, students of primary and secondary education, and research that is not an article.

#### 3.4 Sample

Figure 2 presents a PRISMA flow diagram showing the search and selection of articles according to the inclusion and exclusion criteria. The search yielded a total of 177 articles (SCOPUS=95, WOS=82). 38 duplicated articles were excluded, resulting in 139 records being screened by analysing the titles, abstracts, and time frame. The remaining 71 were checked for retrieval; three were not available. Then, 68 articles were assessed for eligibility using inclusion criteria (IC), such as articles written in English and Spanish and involving university students, and exclusion criteria (EC), such as studies that were not empirical and those not developed in an EFL context. The result



was a total of 11 articles that met the criteria for this research. The chosen articles and their details are available at the link in the Appendix.

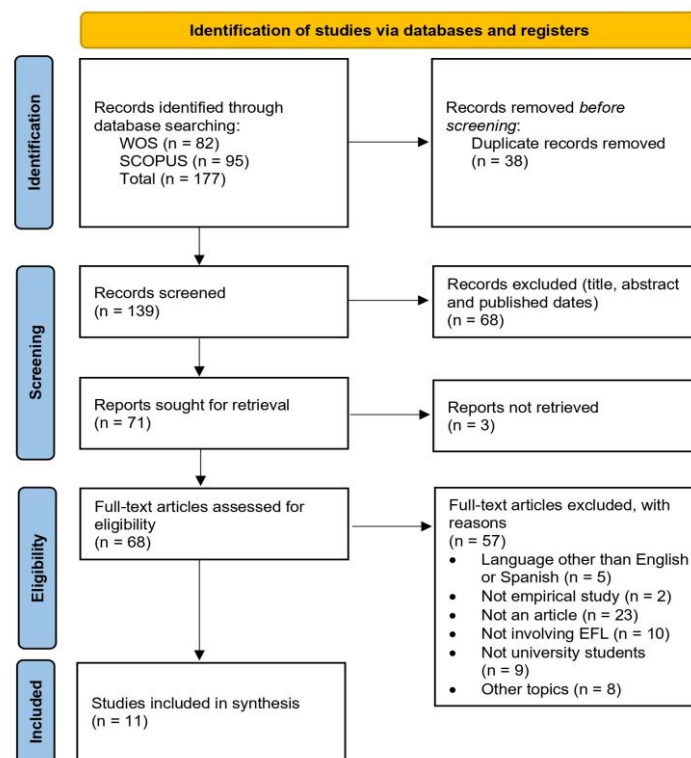


Figure 2. PRISMA Flow Diagram

### 4. Results

The analysis of the selected articles yielded the following findings. Figure 3 displays the number of studies by year of publication. Most studies on grammar-learning strategies among university EFL learners (63%) were published in the last 2 years. The remaining articles (36% in total) were published before 2022. Figure 4 shows the number of studies by the countries in which they were carried out. It can be seen that 27% were conducted in Saudi Arabia (three articles) and 18% in Indonesia (two articles). Overall, 33% of the total were performed in Europe, while 67% were in Asia. Lastly, only one publication has been conducted across two countries, namely Hungary and Poland. This highlights that the examination of grammar constitutes a significant area of research in Asian nations. This finding also indicates that linguistic, cultural, or educational system factors might mediate GLS use.

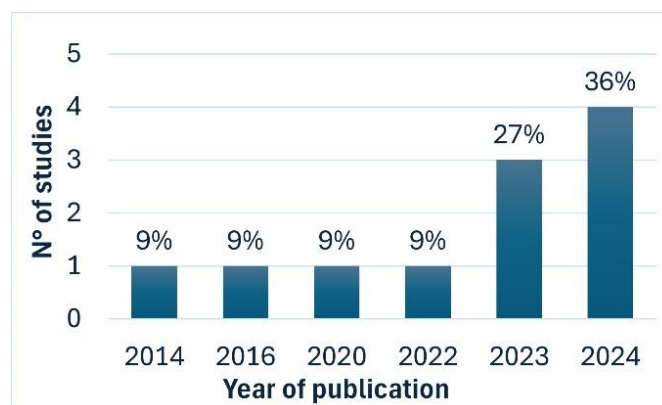


Figure 3. Studies by year of publication



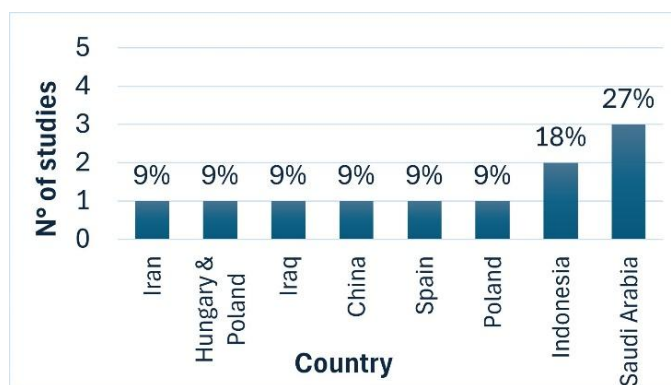


Figure 4. Studies by country

This geographical distribution highlights the variability and importance of grammar in EFL learning in the Asian context. It is worth noting that all selected studies were conducted in Asia or Europe, indicating a lack of representation from Latin American and African countries, and thus inviting further research in these contexts to provide additional insights into GLS among university students.

Figure 5 shows that 55% of publications include both male and female participants, while only 2 studies (18%) were conducted exclusively with men, both in Saudi Arabia. Three studies (27%) do not specify the gender in the sample. There are no publications that analyse only women, which constitutes an interesting research sample for future studies. In Figure 6, 27% of publications (three occurrences) report that participants belong to the English department at their universities, without specifying which program they are in. Additionally, in 18% of the articles, participants are enrolled in an English major, and the same percentage is in a general English program. The remaining four studies (36%) have participants from other programs, or the program was not specified.

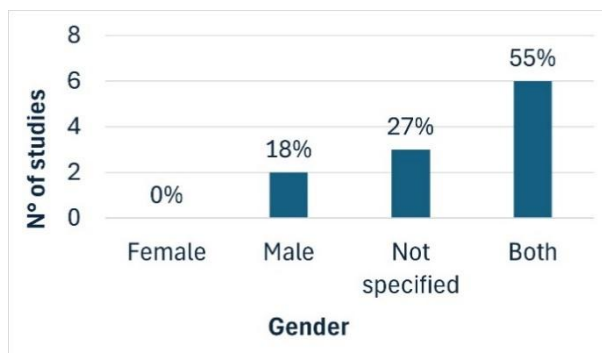


Figure 5. Studies by sample gender

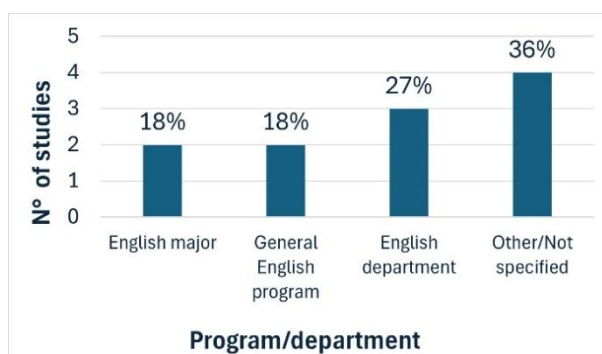


Figure 6. Studies by program or department

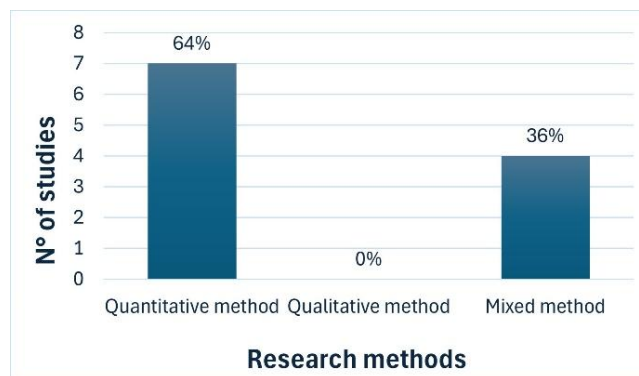
According to Table 1, most participants' ages range from 19 to 22, indicating that the researchers selected a young population for their interventions. Most of them are university students from 1st to 4th year. Two publications selected a sample in their college preparation year. Only the article by Pawlak et al. (2023) includes a population with a wide age range (from under 20 to 50 years old). Finally, five studies do not specify participants' ages.



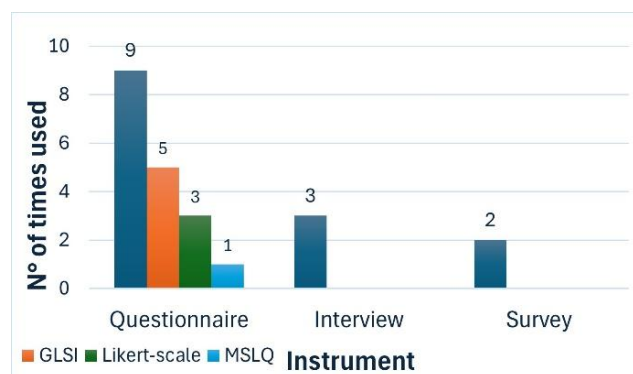
**Table 1.** Studies by age and grade of the participants

Author(s) and year	Age	Grade
Abdulhassan <i>et al.</i> (2024)	Not specified	3rd year (university)
Alnufaie (2024)	Not specified	College preparation year
Alnufaie & Alzahrani (2024)	Not specified	College preparation year
Khalil (2024)	19 – 22	Not specified (university)
Crespo-Fernández (2024)	21 – 22	4th year (university)
Pawlak <i>et al.</i> (2023)	below 20 - 50	1st to 4th year BA / 1st, 2nd year MA
Wardani <i>et al.</i> (2023)	Not specified	1st year (university)
Pawlak & Csizer (2022)	Not specified	BA / MA
Mistar & Zuhairi (2020)	20 – 23	2nd to 4th year (university)
Wach (2016)	19 (mean)	1st and 2nd year (BA)
Zhang & Hung (2014)	19 – 20	2nd year (university)

Figure 7 presents the number of studies by research method, showing that 7 (64%) use a quantitative method and 3 (36%) use a mixed method. There are no articles that exclusively utilize qualitative methods to study the phenomena in depth, overlooking this perspective that is also necessary for a profound analysis. Figure 8 shows the type of instruments used to collect data. Generally, there is a preference for questionnaires to collect data, specifically for the Grammar Learning Strategy Inventory (GLSI), which is the preferred instrument, with a frequency of 5. Additionally, Likert-scale questionnaires were administered three times, and the Motivated Strategies for Learning Questionnaire (MSLQ) was employed in one study. Furthermore, three studies conducted interviews, and two used surveys.



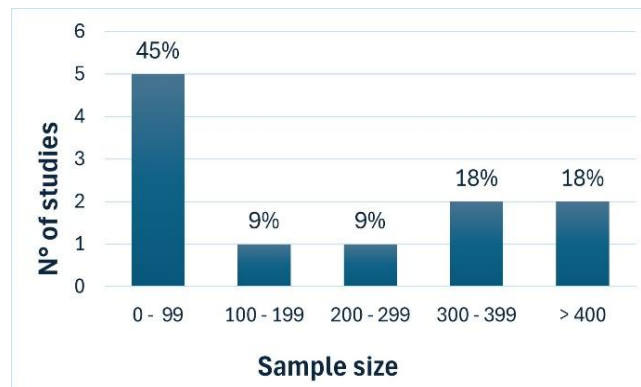
**Figure 7.** Studies by research methods



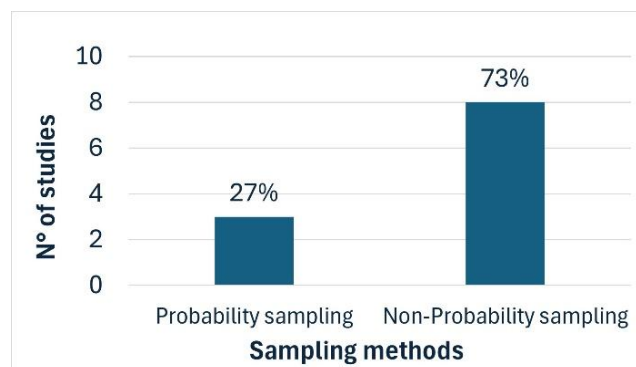
**Figure 8.** Studies by the instrument used



Figure 9 shows a graph that categorizes sample sizes by range. Almost half of the studies (45%) have fewer than 100 participants. On the other hand, the ranges 300–399 and 400+ have the same frequency of 2 (18% each). Lastly, only two studies have a sample size between 100 and 299. The sample type is highlighted in Figure 10, which describes how participants were selected. It indicates that 73% of the publications, with a frequency of eight, employed non-probability sampling in their research; this implies that the researchers did not use random methods to select participants but rather applied certain criteria. Only three articles (27%) utilized probability sampling, signifying that the participants were selected randomly.



**Figure 9.** Studies by sample size



**Figure 10.** Studies by sampling methods

Table 2 presents a classification of the studies by research objectives into four categories, which are described below.

**Identification and use of GLS:** The focus is on the strategies learners employ and their effectiveness. Four articles investigate this matter (37%), and the results show that the most commonly used cognitive strategy is corrective feedback, except for Wach (2016), who studied only the use of L1-based GLS. Three studies prove the effectiveness of GLS in learning grammar structures and its accuracy (Abdulhassan *et al.*, 2024; Pawlak & Csizer, 2022; Wach, 2016); however, Alnufaie and Alzahrani (2024) conclude that there is no link between the employment of GLS and students' progress.

**Development and validation of GLSI:** Only one study falls into this category (9%) and directly focuses on validating the GLSI with a sample of 605 Iranian EFL university students who completed the questionnaire. The findings also revealed that the most commonly used strategy is cognitive, including corrective feedback.

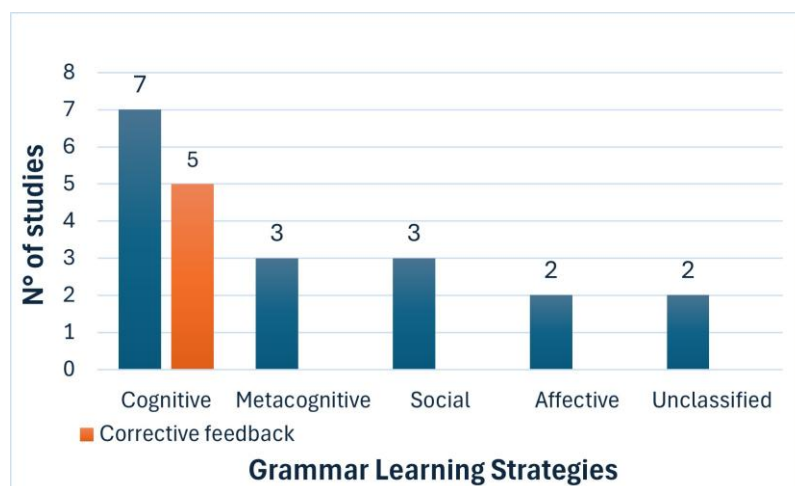
**Effects of strategies for learning grammar in classroom interventions:** In this context, studies conduct pedagogical interventions to examine the application of a specific grammar-learning strategy and its outcomes. There are three case studies in this category (27%), which demonstrated that the use of these strategies contributes to a better understanding and integration of grammar (Alnufaie, 2024; Crespo-Fernández, 2023) and to positive developments in students' attitudes and beliefs towards learning grammar (Zhang & Hung, 2014).

**GLS and its relationship with grammar proficiency:** These studies examine how grammar learning strategies affect grammar achievement among university students. Three studies fall into this category (27%); two of them stated that the intensive use of a variety of strategies has a positive impact on grammar mastery (Khalil, 2024; Mistar & Zuhairi, 2020). Conversely, Wardani *et al.* (2023) found a negative relationship because the more self-regulated learning strategies students use, the lower their grammatical performance.

**Table 2.** Categorisation according to research objectives

Category	Author(s) and year
Identification and use of GLS	Abdulhassan <i>et al.</i> (2024) Alnufaie & Alzahrani (2024) Pawlak & Csizer (2022) Wach (2016)
Development and validation of GLSI	Pawlak <i>et al.</i> (2023)
Effects of strategies for learning grammar in classroom interventions	Alnufaie (2024) Crespo-Fernández (2024) Zhang & Hung (2014)
GLS and their relationship with grammar proficiency	Khalil (2024) Wardani <i>et al.</i> (2023) Mistar & Zuhairi (2020)

Figure 11 illustrates the grammar-learning strategies identified in the publications. The most commonly used grammar learning strategy, as reported in the included studies, is the cognitive strategy, which is strongly represented in 7 studies. For this classification, Pawlak's taxonomy was used as a reference. There are many sub-strategies that students use, but the most frequent is corrective feedback, which is also considered a cognitive GLS; five of the seven studies that use cognitive GLS affirm that students employ this specific strategy. The second most preferred strategy among EFL learners is the metacognitive and social strategy, with a frequency of 3 articles each. Also, affective strategies were employed, albeit less frequently, in only two articles. Finally, two unclassified strategies were used by EFL university students, which are text-copying and L1-based strategies. However, there was also some complementary research since there was one study where the categorization was different, and there were others in which single strategies were addressed.



**Figure 11.** Number of studies by GLS



## 5. Discussion

The findings show that university EFL students tend to favour the cognitive GLS (Abdulhassan *et al.*, 2024; Alnufaie & Alzahrani, 2024; Khalil, 2024; Mistar & Zuhairi, 2020; Pawlak & Csizer, 2022; Pawlak *et al.*, 2023; Zhang & Hung, 2014). These are classified as direct strategies because they work directly with the target language, which is complemented using indirect strategies to support their language learning (Oxford, 1990). It is evident that learners must study the language itself, explaining the high utilization of cognitive strategies. However, the overall use of indirect strategies remains significant, supporting Oxford's (1990) assertion that the two sets of strategies enhance each other and are more effective when integrated.

In that sense, corrective feedback is the most employed cognitive GLS (Abdulhassan *et al.*, 2024; Alnufaie & Alzahrani, 2024; Khalil, 2024; Pawlak & Csizer, 2022; Pawlak *et al.*, 2023) by university students, which aligns with Ellis' (2009) and Basturkmen and Fu's (2021) studies. These findings revealed that CF promotes the acquisition and development of L2 grammar in all areas, but mainly in accuracy. Furthermore, there is evidence of its aid in fluency (Basturkmen & Fu, 2021).

In the same context and still following Pawlak's (2018) classification, the results on peer learning (Wardani *et al.*, 2023) and cooperative work (Crespo-Fernández, 2024) align with the description of social GLS in the context of student-student interaction. In addition, peer learning is one of the five self-regulated strategies found by Chen (2002). Finally, the work of Aliasin *et al.* (2022) suggests that these strategies greatly improved grammar acquisition. These authors also conclude that self-regulation is related to academic achievement in EFL learning. Furthermore, the success of L1 strategies (Wach, 2016) can be attributed to the fact that EFL students feel more comfortable when using them (Tsagari & Giannikas, 2018). Many learners believe that it is an excellent tool for grammar acquisition (Wangdi & Shimray, 2022).

Regarding text copying (Alnufaie, 2024), the findings align with those of Ye *et al.* (2021), who found a correlation between copying skills and reading and spelling, suggesting that it aids comprehension of the internal structure of grammar within context. Additionally, both L1-based strategies and text copying can be classified according to Pawlak's (2018) framework, as they align with the cognitive GLS. For instance, text copying can help learners to be aware of the grammar mistakes that they normally make while writing or applying L1 rules may be useful in creating new English sentences (de Guerrero & Commander, 2013; Tsagari & Giannikas, 2018; Wangdi & Shimray, 2022; Ye *et al.*, 2021).

Furthermore, the results of the study can be discussed in the light of some fundamental theoretical paradigms such as vygotskian sociocultural theory, self-regulated learning theory etc. In any learning context in general, and in L2 acquisition, in particular, Vygotsky's Sociocultural theory provides the theoretical base to discuss and analyse in depth the phenomenon. To illustrate to same, de Guerrero & Commander (2013) refer to imitation as a major element in the internalisation of information and the movement within the Zone of Proximal Development (ZPD), which is also the case for copying skills in general, since it is through interaction with an expert that learners can employ the language and then transfer it to other contexts. Moreover, the relevance of this theory is proven by the predominance of corrective feedback as the most popular cognitive GLS, since most EFL university students prefer to learn alongside an expert in the field who can guide them towards the recognition of their errors, hence allowing them to step out of their ZPD, for instance (VanPatten, 2003, as cited in Ellis, 2009). Furthermore, starting with the claim that the use of learning strategies in general must be a conscious action to succeed in being able to employ them unconsciously (O'Malley & Chamot, 1990; Tilfarloğlu & Yalçın, 2005), self-regulation learning theory can be applied because learners need to be aware of their goals and what strategies work best for them, under what circumstances. Given that metacognitive GLS were the second most popular group, the findings reaffirm that LLS and self-regulation need to go hand in hand. It can even be said that, for the predominant sub-category, corrective feedback, the majority of students consciously acknowledge that they learn better with the guidance of a more knowledgeable other and actively seek that person's assistance. It should be noted that in strategy-based theory, some researchers, such as Thomas & Rose (2019), have critiqued the self in self-regulation and emphasized that "current conceptualizations of strategies" should be reconsidered and that they should encompass both "self-regulated strategy use and other-regulated strategy use" (p. 5).



In terms of methodological characterisation and sampling methods, most articles used non-probability sampling, which entails that the researcher applies specific criteria to select the population. While this sampling technique offers advantages such as cost-effectiveness and faster application, it can introduce bias, limiting the generalizability of the results (Sarstedt *et al.*, 2018). Moreover, most studies use small sample sizes, and only four can be considered for analysing a larger sample (over 300 university students). This highlights the importance of conducting GLS studies with larger populations, as the results are more representative and reliable. According to Andrade (2020), a larger sample will better represent the population, leading to more accurate results and a smaller margin of error. With regard to the geographical distribution, it is worth noting that all selected studies were conducted in Asia or Europe, indicating a lack of representation from Latin American and African countries, as well as other regions that could provide additional insights into GLS among university students. Regarding the participants, their ages range from 19 to 22 years, which is consistent with the selection of university students, as individuals in this age range typically pursue higher education. It can be useful to know which GLS master's and PhD students use in their EFL learning and to examine any differences compared to those of undergraduate learners.

Regarding gender, most of the selected articles analyse a mixed population, incorporating diverse perspectives that enhance the research's social relevance. Nonetheless, there was a lack of studies with a gender-difference perspective, and it would be interesting to compare the similarities and differences between university men and women in their use of grammar-learning strategies, as was done by Azizmohammadi and Barjesteh (2020). Lastly, one instrument deserves special attention: Pawlak's (2018) GLSI, which was employed in five of the selected studies for data collection, highlighting its importance to the field. The author has noted that this instrument must be validated across diverse cultural environments; therefore, relying solely on the GLSI may compromise the reliability of the results. However, recently, many attempts have been made to validate this instrument across various contexts, including Hungary (Pawlak & Csizér, 2022), Iran (Pawlak *et al.*, 2023), and China (Wang *et al.*, 2024), demonstrating its cross-cultural applicability. The authors of the current research (work in progress) are also in the process of validating this instrument.

## 6. Conclusions

This study aimed to analyse the use of grammar learning strategies among university students in their EFL learning trajectory, according to the existing literature published in indexed journals from 2014 to 2024. Thus, the main findings point to the use of cognitive GLS in university learners, particularly the cognitive subcategory of corrective feedback. According to the findings, the metacognitive and social GLS are second, followed by the affective GLS. As a result, one can conclude that students prefer direct strategies; however, this is supported by their use of indirect strategies. In addition, a general analysis of the sample used shows that most studies selected small samples, included participants of both genders, were non-randomly chosen, and had an age range of 19 to 22. In terms of temporality, most articles (63%) were published in 2023 and 2024. These studies were conducted in Asia and Europe using a quantitative or mixed-methods approach. Furthermore, the GLSI is a reliable instrument for collecting GLS data, but it needs further development.

As a final note reflecting on the topic of study, the acquisition of grammar is just one aspect that aids in the language learning process. In that sense, grammar learning strategies play a supportive role in a longer journey. The utilization of these tools cannot replace the study and constant practice that is essential for the internalization of the language. For this reason, university students need to be aware of their inspirations and career goals to boost their EFL learning and employ these strategies effectively.

The current systematic review helps identify the important GLS used by students, as reported in the included research studies, and provides a current overview for practical implications for all teachers and researchers involved in the area of teaching EFL. At a broader level, the study promotes reflective teaching that integrates metacognitive awareness and teacher autonomy, linking grammar-learning-strategy theory with pedagogical practice. The incorporation of effective, efficient strategy-based instruction in the EFL classroom will facilitate learning. It is important to note that the current study has certain limitations. First, the study was confined to two databases, WoS and Scopus, and it is recommended to include additional scientific databases in future research. Secondly, the search's temporal scope needs to be expanded to include more research studies, thereby enabling further strengthening of the review's findings. In terms of methodology, a deep micro perspective with a qualitative approach



is recommended, as this has been lacking in the included studies. Further, a meta-analysis on the theme is recommended, including more research studies with cross-study comparisons by demographic variable, which could add value to the research. This type of analysis will also help provide insight into the dynamism and variability of GLS use across contexts.

## References

- Abdulhassan, M., Hussein, A., Abdul-Settar, R. (2024). The Investigation of Grammar Learning Strategies among Iraqi EFL Learners. *Journal of Teaching English for Specific and Academic Purposes*, 12 (3), 677–691. <https://doi.org/10.22190/jtesap240919051a>.
- Aisyah, A., Hidayad, F., Purwanto, M.B. (2024). Effect of Grammar Learning Strategies (GLS) in Language Learning: Case Study on Vocational High School Students in Determining Proficiency Levels. *Wiralodra English Journal (WEJ)*, 8(1), 141–153. <https://doi.org/10.31943/wej.v8i1.281>
- Ajaj, I.E. (2022). Investigating the Difficulties of Learning English Grammar and Suggested Methods to Overcome Them. *Journal of Tikrit University for Humanities*, 29(6), 45–58. <https://doi.org/10.25130/jtuh.29.6.2022.24>
- Aliasin S.H., Reza K., Jodairi, P.A. (2022). The Efficacy of Self-Regulated Learning Strategies on Learning English Grammar: the Mediating Role of Identity Styles. *Journal of Psychological Science*. 21(115), 1359-1374. <http://dx.doi.org/10.52547/JPS.21.115.1359>
- Alnufaie, M.R. (2024). Text Copying as a Culture-Based Learning Strategy: A Case of EFL Grammar Learners in an Arabic Context. *Theory and Practice in Language Studies*, 14(5), 1421–1430. <https://doi.org/10.17507/tpls.1405.14>
- Alnufaie, M.R., Alzahrani, I.M. (2024). EFL Grammar Learning Strategy Use: Utilizing Grammar Learning Strategy Inventory in an Arabic Context. *TESL-EJ*, 27(4), 1-15. <https://doi.org/10.55593/ej.27108a6>
- Alzahrani, I.H. (2024). Grammar Learning Methods and Grammar Learning Strategies: Are They Related? *World Journal of English Language*, 14(6), 59–67. <https://doi.org/10.5430/wjel.v14n6p59>
- Andrade, C. (2020). Sample Size and its Importance in Research. *Indian journal of psychological medicine*, 42(1), 102–103. [https://doi.org/10.4103/IJPSYM.IJPSYM\\_504\\_19](https://doi.org/10.4103/IJPSYM.IJPSYM_504_19)
- Azizmohammadi, F., Barjesteh, H. (2020). On the Relationship between EFL Learners' Grammar Learning Strategy Use and Their Grammar Performance: Learners' Gender in Focus. *Journal of Language Teaching and Research*, 11(4), 583–592. <http://dx.doi.org/10.17507/jltr.1104.08>
- Basturkmen, H., Fu, M. (2021). Corrective Feedback and the Development of Second Language Grammar. *The Cambridge Handbook of Corrective Feedback in Second Language Learning and Teaching*, Chapter, Cambridge University Press. Cambridge. <https://doi.org/10.1017/9781108589789.018>
- Byram, M., Mendez, M. (2009). Communicative language teaching. *Handbook of Foreign Language Communication and Learning*. Berlin, New York. <https://doi.org/10.1515/9783110214246.4.491>
- Chen, S.C. (2002). Self-Regulated Learning Strategies and Regulated Learning Strategies and Achievement in an Introduction to Information Achievement in an Introduction to Information Systems Course Systems Course. *Information Technology, Learning, and Performance Journal*, 20 (1), 11–25.
- Cohen, A.D., Pinilla-Herrera, A. (2010). Communicating grammatically: Constructing a learner strategies website for Spanish. *A new look at language teaching and testing: English as subject and vehicle*. Taipei, The Language Training and Testing Center. Taiwan
- Council of Europe. (2020). Common European Framework of Reference for Languages: Learning, teaching, assessment (Companion volume). Council of Europe Publishing.
- Crespo-Fernández E. (2024). Aprendizaje Cooperativo En la asignatura de Gramática Inglesa: Percepciones Del alumnado de Educación Superior. *Didáctica. Lengua y Literatura*, 36, 113-125. <https://doi.org/10.5209/dill.85759>



- de Guerrero, M.C., Commander, M. (2013). Shadow-Reading: Affordances for Imitation in the Language Classroom. *Language Teaching Research*, 17(4), 433-453. <https://doi.org/10.1177/1362168813494125>
- Dempster, M. (2011). A Research Guide for Health and Clinical Psychology. *Bloomsbury Publishing*, London. <https://doi.org/10.1007/978-0-230-34477-8>
- Domínguez, J.M., Juanias, J.M. (2024). Language Learning Strategies Research in English as Foreign Language Contexts: A Systematic Literature Review. *Journal of Education and Learning (EduLearn)*, 18(2), 471–479. <https://doi.org/10.11591/edulearn.v18i2.21144>
- Ellis, R. (2006). Current issues in the teaching of grammar: An SLA perspective. *TESOL Quarterly*, 40(1), 83–107. <https://doi.org/10.2307/40264512>
- Ellis, R. (2009). Corrective Feedback and Teacher Development. *L2 Journal*, 1(1), 3–18. <https://doi.org/10.5070/l2.v1i1.9054>
- Khalil, S.M. (2024). Toward Strategic EFL Learners: A Correlational Study between Proficiency Level and Grammar Learning Strategies. *Journal of Language Teaching and Research*, 15(6), 1951–1958. <https://doi.org/10.17507/jltr.1506.20>
- Mistar, J., Zuhairi, A. (2020). Grammar Learning Strategies across Individual Differences and Their Relationship with Grammar Mastery. *Asian EFL Journal*, 27(2), 89–108.
- Mohamad, F., Abdul Halim, N.S., Abdul Kadir, Z., Abdulliah, N. (2023). Grammar Learning Strategies Used by ESL Undergraduate Students. *Asian Journal of University Education*, 19(3), 462–473. <https://doi.org/10.24191/ajue.v19i3.23325>
- Narbekov, F. (2022). Teaching Grammar in Context. *Current Research Journal of Philological Sciences*, 3(3), 122–126. <https://inlibrary.uz/index.php/crjps/article/view/17589>
- O'Malley, J., Chamot, A. (1990). Language Learning Strategies. *Cambridge University Press*, Cambridge.
- Oxford, R. (2011). Teaching and Researching Language Learning Strategies. *Pearson Education*, Harlow, United Kingdom.
- Oxford, R. L. (1990). Language Learning Strategies: What Every Teacher Should Know. *Newbury House*, New York.
- Oxford, R. L. (2017). Teaching and Researching Language Learning Strategies. *Routledge*, New York. <https://doi.org/10.1080/17501229.2017.1317262>
- Oxford, R. L., Lee, R. L., & Park, G. (2007). L2 Grammar Strategies: The Second Cinderella and beyond. *Language learner strategies: Thirty years of research and practice*, Oxford University Press.
- Page, M.J., McKenzie, J.E., Bossuyt, P.M., Boutron, I., Hoffmann, T.C., Mulrow, C.D., Shamseer, L., Tetzlaff, J.M., Akl, E.A., Brennan, S.E., Chou, R., Glanville, J., Grimshaw, J.M., Hróbjartsson, A., Lalu, M.M., Li, T., Loder, E.W., Mayo-Wilson, E., McDonald, S., McGuinness, L.A., Stewart, L.A., Thomas, J., Tricco, A.C., Welch, V.A., Whiting P., Moher, D. (2021). The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. *BMJ*, 372, 71. <https://doi.org/10.1136/bmj.n71>
- Pawlak, M. (2009). Grammar Learning Strategies and Language Attainment: Seeking a Relationship. *Research in Language*, 7, 43-60. <https://doi.org/10.2478/v10015-009-0004-7>
- Pawlak, M. (2013). Researching Grammar Learning Strategies: Combining the Macro- and Micro Perspective. *Perspectives on Foreign Language Learning*. University of Łódź Press, Łódź. <https://doi.org/10.18778/7969-032-9.15>
- Pawlak, M. (2017). The Role of Autonomy in Learning and Teaching Foreign Language Grammar. *Autonomy in Second Language Learning: Managing the Resources*. Springer, Cham. [https://doi.org/10.1007/978-3-319-07764-2\\_1](https://doi.org/10.1007/978-3-319-07764-2_1)
- Pawlak, M. (2018). Grammar Learning Strategy Inventory: Another look. *Studies in Second Language Learning and Teaching*, 8, 351–379. <https://doi.org/10.14746/sslit.2018.8.2.8>



- Pawlak, M. (2020). Grammar Learning Strategies as a key to Mastering Second Language Grammar: A Research Agenda. *Language Teaching*, 53(3), 358 – 370. <https://doi.org/10.1017/S0261444819000314>
- Pawlak, M. (2024). Grammar Learning Strategies: Towards a Pedagogical Intervention. *Language Teaching Research Quarterly*, 39, 174–191. <https://doi.org/10.32038/ltrq.2024.39.12>
- Pawlak, M., Csizér, K. (2022). Investigating the Use of Grammar Learning Strategies in Hungary and Poland: A Comparative Study. *Applied Linguistics*, 44(2), 347–369. <https://doi.org/10.1093/applin/amac038>
- Pawlak, M., Derakhshan, A., Mehdizadeh, M., Kruk, M. (2023). Yet another Look at Strategies for Learning Grammar: Validating the Grammar Learning Strategy Inventory in the Iranian EFL Context. *System*, 118, 1–14. <https://doi.org/10.1016/j.system.2023.103139>
- Rubin, J. (1975). What the “Good Language Learner” Can Teach Us. *TESOL Quarterly*, 9(1), 41-51. <https://doi.org/10.2307/3586011>
- Sarstedt, M., Bengart, P., Shaltoni, A.M., Lehmann, S. (2018). The use of Sampling Methods in Advertising Research: a Gap between theory and practice. *International Journal of Advertising*, 37(4), 650–663. <https://doi.org/10.1080/02650487.2017.1348329>
- 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. <https://doi.org/10.1002/tesq.473>
- Tilfarloğlu, F., & Yalçın, E. (2005). An Analysis of the Relationship between the Use of Grammar Learning Strategies and Student Achievement at English Preparatory Classes. *Journal of Language and Linguistic Studies*, 1(2), 155–169.
- Tsagari, D., Giannikas, C. (2020). Re-evaluating the use of the L1 in the L2 Classroom: Students vs. Teachers. *Applied Linguistics Review*, 11(1), 151-181. <https://doi.org/10.1515/applirev-2017-0104>
- Wach, A. (2016). L1-Based Strategies in Learning the Grammar of L2 English and L3 Russian by Polish Learners. *System*, 61, 65–74. <https://doi.org/10.1016/j.system.2016.08.001>
- Wang, Y., Derakhshan, A., Pawlak, M., Mehdizadeh, M. (2024). Exploring the Psychometric Properties of the Grammar Learning Strategy Inventory in the Chinese EFL context. *Studies in Second Language Learning and Teaching*, 14(3), 515–543. <https://doi.org/10.14746/ssl.t.39357>
- Wangdi, T., Shimray, R. (2022). Thai EFL School Students’ Perceptions of Using L1 in English Language Classrooms. *The Journal of Asia TEFL*, 19(1), 257–264. <http://dx.doi.org/10.18823/asiatefl.2022.19.1.17.257>
- Wardani, A.D., Munir, A., Lestari, L.A., Anam, S. (2023). Self-regulated Learning Strategies and Their Relationship to Grammar Achievement of Undergraduate English Department Students. *LLT Journal/LLT Journal*, 26 (2), 634–649. <https://doi.org/10.24071/llt.v26i2.6638>
- Ye, Y., Yan, M., Ruan, Y., McBride, C., Yeung, C. (2021). Literacy Learning in Early Chinese-English Bilinguals: The Role of Pure Copying Skill. *Early Childhood Research Quarterly*, 55, 263–274. <https://doi.org/10.1016/j.ecresq.2020.12.004>
- Zekrati, S. (2017). The Relationship between Grammar Learning Strategy Use and Language Achievement of Iranian High School EFL Learners. *Indonesian EFL Journal*, 3(2), 129–138. <https://doi.org/10.25134/iefj.v3i2.660>
- Zhang, X., Hung, S. (2014). A Case Study of Integrating Language Awareness into Grammar Teaching in the Chinese EFL Context. *Journal of Language Teaching and Research*, 5(1), 106–111. <https://doi.org/10.4304/jltr.5.1.106-111>

## Appendix

The research studies included in the systematic review are presented in the following link: <https://tinyurl.com/5y23wycd>



### Author Contributions

Ranjeeva Ranjan: Conceptualization, Methodology, Validation, Writing - Original Draft, Writing - Review & Editing, Visualization, Supervision, Project administration, Funding acquisition. Ivan Pavez: Conceptualization, Formal analysis, Investigation, data curation, Writing - Original Draft, Visualization. Yanina Aranda: Conceptualization, Formal analysis, Investigation, data curation, Writing - Original Draft, Visualization. Andrew Philominraj: Conceptualization, Validation, Writing - Review & Editing, Visualization, Supervision. All the authors have read and agreed to the published version of the manuscript.

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### Does this article screen for similarity?

Yes

### Conflict of Interest

The authors have no conflicts of interest to declare. There is also no financial interest to report. The author certifies that the submission is original work and is not under review at any other publication.

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