

Enhancing EFL student's grammar competence: The effects of beliefs about grammar instruction, teaching methods, learning strategies and learning motivation

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Abstract: This research aims to examine the relationship among students' beliefs about grammar, teaching methods, learning strategies, and learning motivation with grammar competence in EFL learners within the context of Chinese higher education. The study involved a sample of 192 first-year non-English majors at Sichuan Minzu College, utilizing Structural Equation Modeling (SEM) analysis to evaluate the predictive effect of these parameters on students' grammar competence. Research instruments included tests for grammar competence and questionnaires for evaluating hybrid teaching method engagement. Data collection was conducted through pretests and posttests over a 10-week period, followed by thorough statistical analysis using t-tests to assess the teaching intervention. The research results revealed that a substantial positive connection exists between the four factors and grammar competence, highlighting the critical role of teaching methods. The incorporation of digital teaching platforms, particularly Chaoxing Apps, demonstrated beneficial effects on grammar competence due to their flexibility and engagement. Furthermore, these findings emphasize the necessity for a comprehensive teaching strategy that combines beliefs in the significance of grammar instruction enhancement, more efficient learning strategies, and the use of digital resources to facilitate better grammar understanding while improving students' learning interest.

Keywords: College students, Grammar competence, Hybrid teaching.

1. Introduction

In an increasingly globalizing world, English has been serving as a useful tool and dominant lingua franca, facilitating interactions across diverse cultures and nations [1, 2]. Mastery of English grammar is important not only for native speakers but also for non-native learners, as it enhances their proficiency in the four basic skills: listening, speaking, reading, and writing [3]. These skills are interconnected, and a good command of grammar facilitate language learners in expressing their thoughts accurately and effectively [4]. Therefore, understanding grammar thus plays a crucial role in achieving overall language competence.

However, a number of students are confronted with many challenges in the mastery of grammar [5, 6]. This is also the case with the EFL students in Sichuan Min Zu college from their examination results and class observation. There are numerous factors which affect students' grammar competence according to the research conducted by many researchers, which highlight the urgent need to explore the most influential factors. The author has tried to search the studies concerning the multiple factors within one article and it turned out the most overlapped factors are as follows: beliefs about grammar instruction, teaching methods, learning strategies and learning motivation [7-13].

Therefore, it is vital to conduct a study and examine the current situation of the above four factors

among the EFL students in Sichuan Min Zu college and explore the interplay of them with grammar competence in order to help students to improve their English grammar learning.

1.1. *The Purpose of the Study*

The purpose of this study is in twofold. Firstly, it investigates the relationship between belief about teaching instruction, teaching method, learning strategies, learning motivation and grammar competence for EFL students. Secondly, it aims to improve the students' grammar competence.

1.2. *Significance of the Study*

The significance of the study is to improve our understanding of the relationship between the variables mentioned above. This knowledge helps teachers make better instructional decisions when teaching grammar to Chinese EFL students, which could help and assist many researchers, teachers and trainers as to how to teach in an effective way, particularly in the EFL grammar classroom.

1.3. *Research Objectives*

Objective 1. To examine the relationship between EFL Students' Beliefs about grammar instruction, teaching methods, learning strategies, learning motivation and their grammatical competence through Structural Equation Modeling.

Objective 2. To construct a set of hybrid teaching materials to teach EFL Chinese students' grammar to enhance the EFL Chinese students' grammar competence.

Objective 3. To assess the effect of the hybrid teaching method in terms of its effect size and students' satisfaction in teaching technique, teaching contents, learning interest and learning outcome.

1.4. *Research Hypotheses*

H₀₁: Belief of grammar instruction has no influence on EFL Chinese students' grammar competence at p=0.05.

H_{a1}: Belief of grammar instruction has a positive influence on EFL Chinese students' grammar competence at p=0.05.

H₀₂: Teaching method has no influence on EFL Chinese students' grammar competence at p=0.05.

H_{a2}: Teaching method has a positive influence on EFL Chinese students' grammar competence at p=0.05.

H₀₃: Learning strategy has no influence on EFL Chinese students' grammar competence at p=0.05.

H_{a3}: Learning strategy has a positive influence on EFL Chinese students' grammar competence at p=0.05

H₀₄: Motivation has NO influence on EFL Chinese students' grammar competence at p=0.05

H_{a4}: Motivation has a positive influence on EFL Chinese students' grammar competence at p=0.05

2. Literature Review

2.1. *The Importance of Beliefs About Grammar Instruction*

Many researchers have realized the significance of belief about grammar instruction and conducted studies about it. Ahmadi and Shafiee [14] investigated the beliefs of teachers and learners regarding grammar instruction in language institutes in Isfahan, Iran. Utilizing questionnaires administered to 35 English language teachers and 200 learners, the research aimed to identify their perspectives on various aspects of grammar teaching and learning and finally pointed out the significance of aligning teachers' and learners' beliefs meanwhile suggested that understanding these perspectives can enhance the effectiveness of grammar instruction.

Similarly, more researchers have done studies about the effects of teacher's and learner's beliefs about grammar instruction separately [15]. Firstly, the effect of the teachers' beliefs on grammar teaching practices has been investigated in many previous studies [16-18] analyzed current teachers' beliefs regarding grammar instruction and the impact on students' grammar competencies. Alghanmi

and Shukri [19] explored teachers' beliefs of grammar instruction and its alignment with classroom practices in Saudi Arabia having discovered the importance of effects of teacher belief in grammar instruction which are reflected in six aspects of students' proficiency level, attitudes toward the language, needs, learning styles, classroom environment, and teacher development.

2.2. The Significance of Teaching Methods in Grammar

Generally speaking, a teaching method refers to the systematic way in which an instructor imparts knowledge or skills to students including the strategies, techniques, and activities used to facilitate learning and engage students effectively [20]. Then many researchers realized the significance of teaching methods in grammar. Takala [21] examined the grammar teaching methods used by Finnish EFL teachers, highlighting factors that influence the choice of instruction techniques and their perceived importance in language learning. Dalil and Harrizi [22] discuss the inescapability and importance of grammar teaching techniques in language learning, emphasizing its role in improving English proficiency.

Subsequently, Rao [23] also realized the importance of grammar instruction and advocated teachers and students to improve their teaching and learning skills through various teaching techniques. This paper began with introducing the Grammar Translation Method, Direct Method, Audio-Lingual Method, and Oral-Situational Language Teaching. Additionally, the paper addressed the significance of grammar teaching method in contemporary approaches such as Communicative Language Teaching, Total Physical Response, and the Eclectic Approach.

In addition, with the development of technology special attention is given to innovative teaching methods especially a combination of online and offline teaching methods which is more attractive and modern to students [24]. Specifically, Mynbayeva, et al. [25] proposed numerous innovative teaching methods for the twenty-first century, stressing the advantages of choosing the proper teaching methods such as increasing the interest of students, active involvement of students in educational work and cognitive activity, development of the creativity of the students.

2.3. The Role of Learning Strategies

Thomas and Rohwer Jr [26] explored the significant impact of learning strategies on academic studying, claiming that these strategies enhance students' ability to process and retain information. Chamot [27] emphasizes the increasing importance of instructing students in learning strategies as part of teacher preparation and curriculum design, particularly in second language acquisition because learning strategy can provide better goal orientation and greater efficiency.

Moreover, more empirical studies have been conducted to examine the benefits of learning strategy. Neroni, et al. [28] conducted a study on the role of learning strategies in distance education, revealing their contribution to academic success and aiding self-regulated learning by a questionnaire with a sample size of 758 students, aged 19 to 71 years, enrolled at a distance education university in the Netherlands. Besides, Schmeck [29] asserted that the effectiveness and quality of learning strategies are influenced by student personality traits, indicating that personalized learning approaches could optimize educational outcomes.

The above literature review showcases the critical role of learning strategies in educational success across various contexts and educational levels. It underscores the need for strategic instruction tailored to individual learning environments and student needs.

2.4. The Importance of Learning Motivation

Filgona, et al. [30] underscored that motivation is essential for stimulating students' engagement and success in the learning process. They highlight that motivation serves as a critical driver of learning outcomes. Furthermore, Albrecht and Karabenick [31] examined how motivation influences academic achievement through appraisal processes, crucial for fostering motivation in educational and psychological context. Similarly, Hartnett [32] discussed the significance of learning motivation in the

context of knowledge construction and the integration of digital technologies in higher education. It introduces online learning and foundational concepts while highlighting the crucial role of motivation in online teaching environments.

When it comes to the importance of learning motivation in grammar, more research can be found. Ali, et al. [33] emphasize the need for motivational strategies in grammar teaching, proposing the use of language games to enhance adult learners' engagement with English grammar. Then Refat, et al. [34] investigated the role of mobile-assisted tools in increasing motivation for grammar learning, illustrating how integrating technology can foster more interactive and motivated learning environments.

All in all, motivation significantly impacts the success of language learners, particularly in English grammar acquisition. Besides, high motivation correlates with achieving language learning goals effectively [35]

3. Methods and Materials

This study employed a mixed research method, combining both quantitative and qualitative research approaches.

3.1. Population and Sample

The study included 478 first-year non-English major students in Sichuan Minzu College during the 2024 academic year. Initially, 192 students were calculated by a priori Sample Size calculator and selected through simple random sampling. All of them participated fully in both pretest and posttest assessments. This sample size was determined to ensure statistical significance, representativeness, and accuracy for the analysis of relationships among the targeted variables.

3.2. Research Instrument

This research involved research tools as follows: (1) pretest and posttest to evaluate students' grammar competence; (2) a five-Likert questionnaire to examine the relationship of the four variables with grammar competence; (3) a satisfaction questionnaire to collect feedback about hybrid grammar teaching materials within the context of Chaoxing apps.

Two questionnaires and test were developed based on the theoretical framework, and the IOC (Index of Item-Objective Congruence) was used with expert input to ensure content validity. As for reliability, Cronbach alpha (questionnaire for four variables) =0.923; the Cronbach alpha for satisfaction questionnaire=0.973; the Cronbach alpha for pretest and posttest=0.913. Besides, a pilot test was conducted to ensure its content validity.

3.3. Data Collection

Data collection was conducted in three phases. Initially, participants took pretests to measure grammar competence, which is the basis. The second phase involved an intervention where participants used the Chaoxing E-learning platform to engage with hybrid teaching materials for 10 weeks. This phase included activities focused on grammar enhancement, tasks, and exercises designed to improve grammar competence. Finally, posttests were conducted to assess any changes in grammar competence with digital platforms, evaluating the effectiveness of the employed strategies.

3.4. Data Analysis

The data were initially analyzed by a ready-made statistical package. After analyzing the reliability and validity of the questionnaire data, confirmatory factor analysis (CFA) was conducted with another ready-made statistical package, which is a software for structural equation modeling (SEM). Next, path effects of structural and measurement models were performed. The teacher's interview data helped the researcher better design items for student questionnaire.

Furthermore, student's pretest and posttest data were analyzed by paired t-test with calculation of

the effect size, and satisfaction questionnaire data were analyzed by one sample t-test with the set criteria of 3.5.

In conclusion, both the quantitative and qualitative research data were analyzed collectively, revealing a good grammar teaching model for EFL students in Minzu Colleges in China and acts as a guideline for assessing and enhancing hybrid teaching among university students in ethnic colleges within the area.

3.5. Research Conceptual Framework

The conceptual framework of this study examines the relationship among belief about grammar instruction, teaching method, learning strategies, learning motivation and grammar competence (GC1) (see Figure 1). The researcher has studied many relevant articles from a variety of platforms to construct the model. The researcher puts forward that this framework guides the investigation into how these factors interact and contribute to grammar competence among EFL learners, informing targeted interventions intending to improve overall learning outcomes.

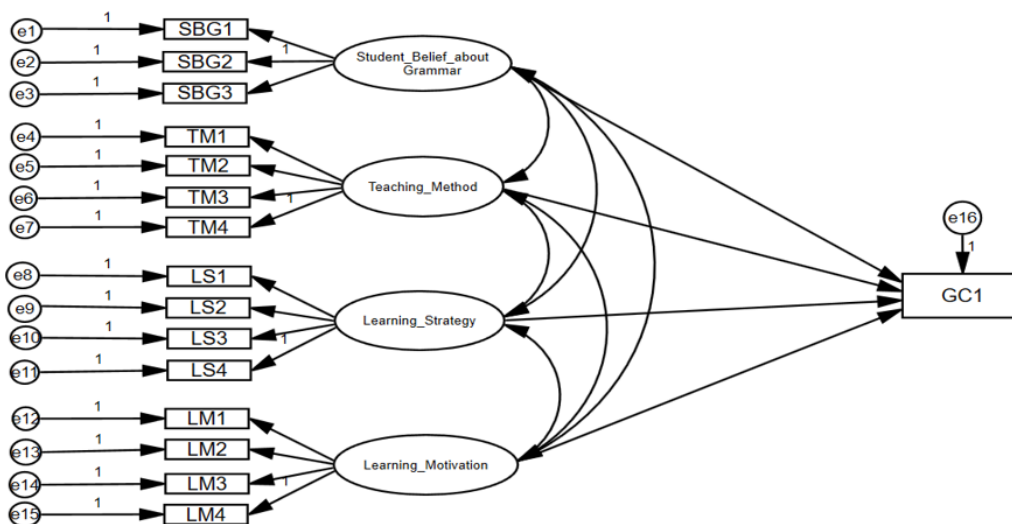


Figure 1. Research conceptual framework.

4. Results

4.1. SEM analysis

In this study, four independent variables were established: belief about grammar instruction, teaching method, learning strategies and learning motivation as well as one dependent variable: grammar competence (GC1). The model included 16 observed variables and 16 residual variables. The maximum likelihood estimation method was utilized to run the model, aiming to explore the degree to which empirical data supported the theoretical model. The results are shown in the figure.

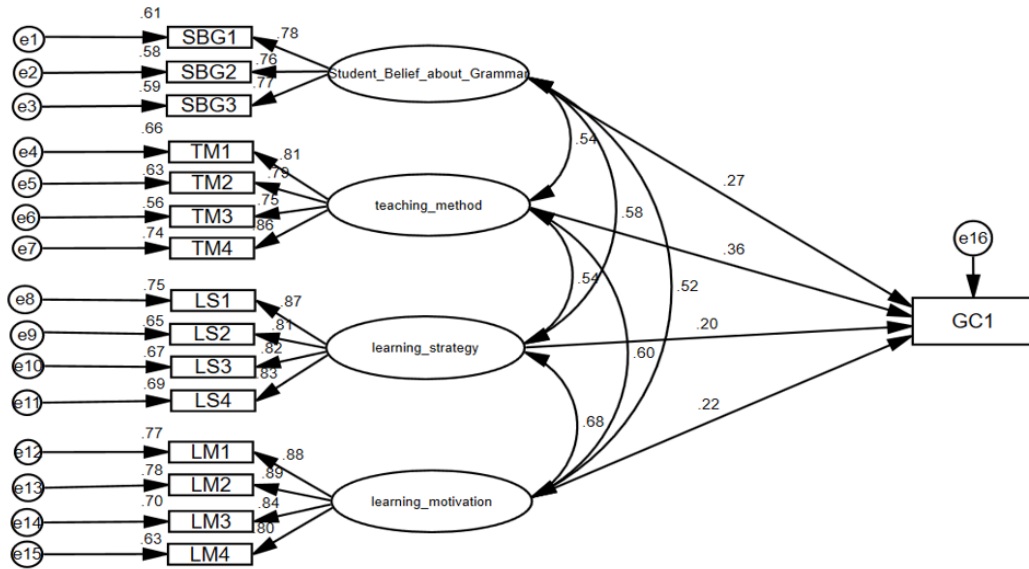


Figure 2.
The results of the SEM model (Standardized estimates).

4.1.1. The Results of Confirmatory Factor Analysis

According to Figure 2, the factor loadings for belief about grammar instruction, teaching method, learning strategies and learning motivation are all above 0.76 except one 0.75 which is also very close. It indicated a strong and significant relationship between these factors and their corresponding latent variables.

In addition, multiple model fit indices such as chi-square/df (χ^2/df), Root Mean Square Error of Approximation (RMSEA), Incremental Fit Index (IFI), Comparative Fit Index (CFI), Parsimony Goodness of Fit Index (PGFI), Normed Fit Index (PNFI), and Comparative Fit Index (PCFI) were employed to evaluate the structural validity of the scale, as shown in Table 1. Based on the acceptable thresholds for these indices, the model's fit effectively meets the testing requirements

Table 1.
Confirmatory factor analysis model fit.

Model Fit Indices										
Common Indices	χ^2	df	p	χ^2/df	GFI	RMSEA	RMR	CFI	NFI	NNFI
Criteria	-	-	>0.05	<3	>0.9	<0.08	<0.05	>0.9	>0.9	>0.9
Value	130.969	84	0.001	1.559	0.924	0.054	0.053	0.975	0.933	0.968
Fit				Good	Good	Good	Good	Good	Good	Good
Other indices	TLI	AGFI	IFI	PGFI	PNFI	PCFI	SRMR	RMSEA 90% CI		
Criteria	>0.9	>0.9	>0.9	>0.5	>0.5	>0.5	<0.1	-		
Value	0.968	0.891	0.975	0.647	0.746	0.780	0.039	0.035 ~ 0.071		
Fit	Good		Good	Good	Good	Good	Good			

Note: For the Default Model, $\chi^2(105) = 1950.403, p = 1.000$.

According to Table 1, it is evident that the model structure effectively explains the data, demonstrating that the hypothesized latent variables and their interrelationships are reasonable. The PGFI/PNFI and PCFI values exceed 0.50, indicating that the model achieves a strong fit while efficiently managing the number of parameters, thereby preventing overfitting. This reflects the model's

good parsimony. The model adequately explains the observed variables across various dimensions.

In conclusion, the model for EFL students' grammar learning in Sichuan Minzu college shows strong structural validity, keeps high parsimony, and reveals a reasonable fit, making it a useful resource for both research and practical uses.

Table 2.
Convergent validity.

Latent factor	Observation factor	Factor loadings	CR	AVE
Student belief about grammar	SBG1	0.779	0.813	0.593
	SBG2	0.76		
	SBG3	0.771		
Teaching methods	TM1	0.82	0.881	0.65
	TM2	0.792		
	TM3	0.751		
	TM4	0.857		
Learning strategies	LS1	0.864	0.899	0.69
	LS2	0.808		
	LS3	0.823		
	LS4	0.827		
Learning motivation	LM1	0.875	0.911	0.721
	LM2	0.888		
	LM3	0.834		
	LM4	0.795		

Convergent validity mainly evaluates the correlation among different measurement items within each latent variable. It is typically measured using factor loadings, composite reliability (CR) above 0.50, and average variance extracted (AVE) above 0.70 [36]. As shown in the table above, this study conducted a confirmatory factor analysis (CFA) on a total of four factors and fifteen analysis items. the AVE values for all four factors are greater than 0.5, and the CR values are all above 0.7, indicating that the data from this analysis has good convergent validity.

Table 3.
Discriminant validity.

Pearson correlation and the square root of AVE.				
	Student belief about grammar	Teaching methods	Learning strategies	Learning motivation
Student belief about grammar	0.770			
Teaching methods	0.450	0.806		
Learning strategies	0.505	0.474	0.831	
Learning motivation	0.450	0.528	0.615	0.849

Note: The blue numbers on the graph represent the square root of AVE.

Discriminant validity assessment has become a generally accepted prerequisite for analyzing relationships between latent variables. Fornell and Larcker [37] propose each construct's average variance extracted (AVE) must be compared with its squared correlations with other constructs in the model to measure the degree of distinction between different variables. When the square root of the AVE for each variable is greater than the correlations between that variable and the others, it suggests that the measurement scale has good discriminant validity.

According to Table 3, the square roots of the AVE (bold numbers on the diagonal) for each variable are greater than the correlations with other variables in the corresponding rows and columns. This shows that the measurement scale demonstrates strong discriminant validity. The latent variables reveal significant relationships while maintaining clear distinctions, ensuring there is no overlap or ambiguity between the concepts represented by the different latent variables. This finding reinforces the

discriminant validity of the model for college students in Minzu colleges, in China.

Table 4.

The regression weights of structural equation modeling.

Hypotheses	Path	Estimate	S.E.	C.R.	p *	Decision
H _{A1}	GC1<---Student_Belief_about_Grammar	0.271	0.729	4.257	.001	Accepted
H _{A2}	GC1<---Teaching-Method	0.359	0.675	5.907	.001	Accepted
H _{A3}	GC1<---Learning_Strategy	0.204	0.635	3.057	.002	Accepted
H _{A4}	GC1<---learning_Motivation	0.217	0.732	3.298	.001	Accepted

Note: *p<0.05.

4.1.2. The Results of Path Analysis

The research hypotheses validation confirmed that all 4 hypotheses regarding GC1(Grammar Competence) were accepted, on the basis of path estimates, standard errors, critical ratios, and p-values. H1, showing a positive correlation between Student Belief about Grammar and Grammar Competence (GC1), was strongly significant (path estimate: 0.271, C.R.:4.257). H2 supported a strong connection between Teaching Method (TM) and Grammar Competence (GC1) (path estimate:0.359, C.R.: 5.907). H3, relating Learning Strategy to Grammar Competence (GC1) was confirmed (path estimate: 0.204, C.R.: 3.057, p-value: 0.002**). Lastly, H4, connecting Learning Motivation to Grammar Competence (GC1), showed great significance (path estimate: 0.217, C.R.: 3.298). A thorough analysis demonstrates these educational factors have a significant impact on Grammar Competence, substantiating a well-validated structural model within the context of the study.

Table 5.

The Results of paired t-test

	N	Full score	Mean	S.D	df	t	Sig (1-tailed)	d
Pre-test	192	100	60.69	10.273	191	23.391	.005*	1.10
Post-test	192	100	71.31	9.056	191			

Note: *p<0.05.

4.2. The Results of Student's T-Test

According to Table 5, the results of the paired sample t-test show the difference of the average scores is very big between pretest and posttest, which is 10.62. Besides, the t value is 23.391, which is greater than the critical value of t (1.972) when p=0.05 and df=191. Except statistical significance, the effect size is 1.10 indicating the student's average grammar competence have been improved a lot after the teaching intervention based on the hybrid teaching grammar teaching materials. The effect size 1.10 corresponds to the 86th percentile [38]. This reveals the student's grammar competence has improved by 36 percentile rankings.

Table 6.

The Results of one sample t-test for student satisfaction questionnaire regarding the application of the hybrid teaching material in English grammar (Criteria>3.5=very satisfied).

no	Aspects	n of items	mean	SD	t-value	df	Sig(1-tailed)
1	Learning technique	5	4.08	0.69	11.60	191	0.005*
2	Learning content	6	4.07	0.69	11.50	191	0.005*
3	Learning interest	5	3.93	0.71	8.39	191	0.005*
4	Learning outcome	5	4.03	0.69	10.57	191	0.005*
	Overall		4.03	0.69	Very satisfied		

Note: *p<0.05.

From table 6, the comparison of the satisfaction scores in the above four aspects demonstrated the following findings:1) learning technique: the mean differences in satisfaction scores between the group is 4.08 which is higher than the set criteria of 3.5, with a t-value of 11.60 (sig=0.00). 2) learning content: the mean differences in satisfaction scores between the group is 4.07 which is higher than the set criteria

of 3.5, with a t-value of 11.50 (sig=0.00). 3) learning interest: the mean differences in satisfaction scores between the group is 3.93 which is higher than the set criteria of 3.5, with a t-value of 8.39 (sig=0.004) learning outcome: the mean differences in satisfaction scores between the group is 3.93 which is higher than the set criteria of 3.5, with a t-value of 8.39 (sig=0.00). According to the t-critical value of 1.972 with the df of 191, it is evident that all the students are very satisfied with the hybrid teaching materials.

5. Conclusion and Suggestions

The findings of the study provided a comparatively thorough insight into the relationship of the four factors: student belief of grammar, teaching methods, learning strategies, learning motivation with grammar competence among Chinese EFL learners. According to the results displayed above, the four factors will have a very significant effect on EFL students' grammar competence. Among the path coefficients of four groups of independent variable with grammar competence, all of them demonstrate a strong significance, however, the path coefficient of teaching method and grammar competence is the greatest, indicating teaching method is mostly affecting grammar competence. Furthermore, the findings support the importance of employing hybrid teaching materials in grammar teaching which is also a new trend with the development of modern technology and necessary for some critical moments such as the pandemic Covid-19.

Next, based on the results of the t-tests and effect size, it turned out the hybrid teaching materials are suitable to improve the students' grammar competence effectively. In other words, they are practically significant and give a strong magnitude by a comparison of the results of pretest and posttest. Then, the results of the students' satisfaction questionnaire were revealed from four aspects: learning technique, learning content, learning interest and learning outcome, which indicated on average the students are very satisfied with the hybrid teaching materials.

In terms of suggestions, they are briefly summarized as follows:

Firstly, to improve our theoretical understanding of the connections between student belief of grammar, teaching methods, learning strategies, learning motivation, future studies should employ an interdisciplinary approach. By integrating knowledge from cognitive psychology, linguistics, and educational technology, researchers can develop a more holistic framework for examining how these elements influence each other. Furthermore, delving deeper into the attraction of students' learning interest hypothesis and its relevance to English as a Foreign Language (EFL) environments can strengthen our theoretical base.

Secondly, in terms of the aspect of policy, educational institutions ought to emphasize the significance of grammar competence discourse analysis within their curricula. Policymakers should advocate for the creation and execution of training programs for EFL teachers that concentrate on effective strategies for teaching grammar. Additionally, it is essential to require the integration of digital learning platforms into the curriculum to boost engagement and comprehension skills, especially given the increasing significance of technology in education.

Thirdly, future research should examine the long-term impact of incorporating digital teaching tools, such as Chaoxin E-learning, on grammar learning among various learner demographics. Comparative studies between different EFL environments, like urban and rural schools, could shed light on the effectiveness of these tools in varied educational contexts. Furthermore, it would be valuable to investigate which grammar learning strategies have the strongest correlation with enhanced grammar competence. Longitudinal studies could also monitor the progress of grammar skills over time and their influence on language learning results.

Transparency:

The authors confirm that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

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References

- [1] R. Godwin-Jones, "Towards transculturality: English as a lingua franca in intercultural communication and in online language learning," *Languages and International Studies*, vol. 23, pp. 1-34, 2020.
- [2] J. Jenkins, *Global englishes: A resource book for students*. Routledge. <https://doi.org/10.4324/9781315761596>, 2014.
- [3] A. Ahmad, "Developing the English grammar module based-cooperative learning to teach basic English grammar: Focus on students' needs," *ELT-Lectura*, vol. 5, no. 2, pp. 138-148, 2018. <https://doi.org/10.31849/elt-lectura.v5i2.1586>
- [4] S. Thornbury, *Learning grammar. In The Cambridge guide to learning a second language*. Cambridge University Press. <https://doi.org/10.1017/9781009024761.026>, 2018.
- [5] T. Kumayas and F. Lengkoan, "The challenges of teaching grammar at the university level: Learning from the experience of English lecturer," *Journal of English Culture, Language, Literature and Education*, vol. 11, no. 1, pp. 98-105, 2023. <https://doi.org/10.53682/eclue.v11i1.6058>
- [6] J. A. Mustafa, "Challenges facing EFL students of English department in some topics of grammar," *Zanco Journal of Human Sciences*, vol. 25, no. 2, pp. 188-200, 2021. <https://doi.org/10.21271/zjhs.25.2.13>
- [7] D. Sasmita, "Innovative approaches in teaching English grammar: A case study in Indonesian High schools," *Journal of English Education and Teaching*, vol. 6, no. 1, pp. 45-55, 2022.
- [8] V. Ombati and N. Koske, "An evaluation of the effectiveness of teaching methods used in secondary school history and government in Kenya," *International Journal of Humanities and Social Science*, vol. 3, no. 19, pp. 281-290, 2013.
- [9] O. O. Olagbaju, "Challenges of teaching English Language in Nigerian secondary schools: Implications for policy and practice," *International Journal of English Language and Literature Studies*, vol. 9, no. 4, pp. 151-157, 2020.
- [10] P. Prihantoro, "Empowering ICT potentials in English language teaching," *Polingua: Scientific Journal of Linguistics, Literature and Language Education*, vol. 10, no. 2, pp. 42-48, 2017.
- [11] O. Deji-Afuye and O. Alonge, "Teaching English for communication: Pedagogy and performance in Nigerian secondary schools," *International Journal of Academic Research in Education and Review*, vol. 6, no. 2, pp. 29-35, 2018.
- [12] Y. Xiao, "The impact of online learning on EFL students' motivation and attitudes: A case study," *Journal of Language Teaching and Research*, vol. 11, no. 5, pp. 773-779, 2020.
- [13] M. Pawlak, "Investigating language learning strategies: Prospects, pitfalls and challenges," *Language Teaching Research*, vol. 25, no. 5, pp. 669-689, 2021.
- [14] F. Ahmadi and S. Shafiee, "L2 teachers' and learners' beliefs about grammar," *International Journal of Language Learning and Applied Linguistics World*, vol. 9, no. 1, pp. 254-261, 2015.
- [15] J. Graus and P.-A. Coppin, "Student teacher beliefs on grammar instruction," *Language Teaching Research*, vol. 20, no. 5, pp. 571-599, 2016. <https://doi.org/10.1177/1362168815603237>
- [16] M. A. K. Azad, "Grammar teaching in EFL classrooms: Teachers' attitudes and beliefs," *ASA University Review*, vol. 7, no. 2, pp. 111-126, 2013.
- [17] R. P. Nagaratnam and A. Al-Mekhlafi, "Attitudes towards EFL grammar instruction," *LEARN Journal: Language Education and Acquisition Research Network*, vol. 1, no. 2, pp. 78-105, 2013.
- [18] R. Hos and M. Kekec, "The mismatch between non-native English as a foreign language (EFL) teachers' grammar beliefs and classroom practices," *Journal of Language Teaching & Research*, vol. 5, no. 1, pp. 80-87, 2014. <http://dx.doi.org/10.4304/jltr.5.1.80-87>
- [19] B. Alghanmi and N. Shukri, "The relationship between teachers' beliefs of grammar instruction and classroom practices in the Saudi context," *English Language Teaching*, vol. 9, no. 7, pp. 70-86, 2016. <https://doi.org/10.5539/elt.v9n7p70>
- [20] N. L. Gage and D. C. Berliner, *Educational psychology*, 6th ed. Boston, MA: Houghton Mifflin, 1998.
- [21] A. Takala, "Grammar teaching methods in EFL lessons: Factors to consider when making instructional decisions," Master's Thesis, University of Jyväskylä, 2016.
- [22] Z. Dalil and M. Harrizi, "The importance of grammar in second language teaching," Unpublished Manuscript, Université Hassan II, Casablanca, Morocco, 2013.
- [23] P. S. Rao, "The role of grammar in English language teaching (ELT) techniques," *Research Journal Of English (RJOE)*, vol. 4, no. 2, pp. 239-249, 2019.
- [24] M. D. Kahramonovna, "Innovative teaching methods," *International Journal on Orange Technologies*, vol. 3, no. 7, pp. 35-37, 2021.
- [25] A. Mynbayeva, Z. Sadvakassova, and B. Akshalova, "Pedagogy of the twenty-first century: Innovative teaching methods," presented at the New Pedagogical Challenges in the 21st Century: Contributions of Research in Education, IntechOpen. <https://doi.org/10.5772/intechopen.72341>, 2018.

- [26] J. W. Thomas and W. D. Rohwer Jr, "Academic studying: The role of learning strategies," *Educational Psychologist*, vol. 21, no. 1-2, pp. 19-41, 1986. <https://doi.org/10.1080/00461520.1986.9653022>
- [27] A. U. Chamot, *The role of learning strategies in second language acquisition*. In *Learner contributions to language learning*. Routledge. <https://doi.org/10.4324/9781315838465-3>, 2014.
- [28] J. Neroni, C. Meijs, H. J. Gijsselaers, P. A. Kirschner, and R. H. de Groot, "Learning strategies and academic performance in distance education," *Learning and Individual Differences*, vol. 73, pp. 1-7, 2019. <https://doi.org/10.1016/j.lindif.2019.04.007>
- [29] R. R. Schmeck, *Learning strategies and learning styles*. Springer Science & Business Media. <https://doi.org/10.1007/978-1-4899-2118-5>, 2013.
- [30] J. Filgona, J. Sakiyo, D. Gwany, and A. Okoronka, "Motivation in learning," *Asian Journal of Education and social studies*, vol. 10, no. 4, pp. 16-37, 2020.
- [31] J. R. Albrecht and S. A. Karabenick, "Relevance for learning and motivation in education," *The Journal of Experimental Education*, vol. 86, no. 1, pp. 1-10, 2018. <https://doi.org/10.1080/00220973.2017.1380593>
- [32] M. Hartnett, *The importance of motivation in online learning*. In *Motivation in Online Education*. Springer. https://doi.org/10.1007/978-981-10-0700-2_2, 2016.
- [33] S. S. Ali, M. W. Ali, and T. Amin, "Enhancing adult learners' motivation for learning English grammar through language games," *Research Journal of Social Sciences and Economics Review*, vol. 1, no. 3, pp. 143-150, 2020.
- [34] N. Refat, H. Kassim, M. A. Rahman, and R. b. Razali, "Measuring student motivation on the use of a mobile assisted grammar learning tool," *PloS one*, vol. 15, no. 8, p. e0236862, 2020. <https://doi.org/10.1371/journal.pone.0236862>
- [35] T. Fujimoto, "The impact of focus-on-form instruction on Japanese senior high school students' motivation and communicative competence," Doctoral dissertation, Nagoya University of Foreign Studies, 2020.
- [36] P. Agus, T. S. Agus, T. Muhammad, and M. Siti, "The effect of organizational justice and interpersonal communication on job satisfaction and their impact on organizational commitment in employees of Pt. Asuransi Umum Bumiputera Muda 1967 Jakarta Branch," *International Journal of Scientific Research in Science and Technology*, vol. 6, no. 6, pp. 261-268, 2019.
- [37] C. Fornell and D. F. Larcker, "Evaluating structural equation models with unobservable variables and measurement error," *Journal of Marketing Research*, vol. 18, no. 1, pp. 39-50, 1981. <https://doi.org/10.1177/002224378101800104>
- [38] R. Coe, "It's the effect size, stupid," presented at the British Educational Research Association Annual Conference, 2002.