Written corrective feedback, mobile-assisted language learning utilization, and syntactic competence among Chinese sport majors

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Abstract

As international sport exchanges between China and other countries are becoming more frequent, how to improve the English writing of sport students turns more important. In order to improve Chinese sport major students' English writing competence with modern techniques, written corrective feedback, mobile-assisted language learning utilization, and syntactic competence were selected in this study as research variables to analyze their important role in English writing teaching and their interrelationships. Descriptive research was used in this study. Totally 400 participants were required to complete a comprehensive questionnaire. They are four grades sport major students from three different levels of Chinese universities containing sport majors. The findings indicated that most respondents agreed with all the subscales under the variables of written corrective feedback, mobile-assisted language learning utilization, and syntactic competence. Although there was no significant difference on above three variables when grouped according to demographic variables, the three variables were highly significantly correlated with each other. By stressing the role of written corrective feedback and mobile-assisted language learning utilization in cultivating sport major students' syntactic competence, a program was proposed to enhance the English writing competence of Chinese sport majors in universities, focusing on the lowest indicator in each subdomain. It also provided necessary guidance for educators, administrators and enterprises to design more suitable English writing course for sport majors with modern techniques.

Keywords: written corrective feedback, mobile-assisted language learning utilization, syntactic competence, sport major, writing

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1. Introduction

English writing competence is a core skill in English teaching. The comprehensive level of English ability can be fully reflected by writing, so writing is considered as an effective way to test learners 'learning results and assess their English ability. Many researchers have studied how to improve the learner's writing ability from different perspectives, and some of them have conducted some research from written corrective feedback and syntactic competence, which are mostly focused on the off-line learning system. As a result, this study is to focus on the online learning and teaching as one breakthrough.

With the rapid development of modern information technology, network technology has been integrated into college English teaching. College English Curriculum Teaching Requirements (2020) clearly pointed out that colleges and universities should make full use of many advanced information technology, develop a large number of computer and network courses to provide students with an excellent language learning environment as well as conditions. Therefore, this study is to be conducted based on the mobile-assisted language learning, which has just begun to be widely used in most colleges and universities in China.

On the other hand, with the booming development of the world sports industry, sport exchanges between China and other countries are becoming more frequent. The market demand for high-quality sport talents has increased substantially. While the reality is that students majoring in sports have rich knowledge of sports specialties but poor English skills. This puts forward higher requirements for college English teaching in sport colleges. Specifically for the English writing of sport majors, improving their syntactic competence is an effective way to enhance their English proficiency.

A large amount of practice is needed to improve students' writing, but according to the current situation of college English classes, students are unable to have enough time to practice writing in class. It is a concern in English teaching how to teach writing effectively and make full use of students' spare time to practice writing. When it comes to students' writing independent practice, some of the teachers have begun to use different apps in mobile-assisted language learning to check students' assignments for saving time. Written corrective feedback plays an important role in improving the writer's writing ability. The practice will possibly be more effective if the teacher can guide the students to use written corrective feedback properly in their writing exercises.

The author selects written corrective feedback, mobile-assisted language learning, and syntactic competence as research variables to analyze their current situation among sport majors in China, their important role in English writing teaching and their interrelationships and differences. The author also proposes a scientific and complete teaching model to cultivate the ability to write independently, and to improve English writing level.

Objective of the study - The purpose of this study was to explore the written corrective feedback, mobile-assisted language learning utilization, and syntactic competence among Chinese sport majors in three universities in order to propose an intervention to enhance English language teaching and learning. Specifically, this study described the respondents' written corrective feedback in terms of perceptions, preferences, and adaptability; described the respondents' utilization of mobile-assisted language learning as to students' perception, learning content and learning outcome; described the syntactic competence used by the respondents as to sentence construction, lexical knowledge and writing proficiency; tested significant differences among Written Corrective Feedback, Mobile-assisted Language Learning Utilization and Syntactic Competence when demographic variables are grouped; tested significant relationship among Written Corrective Feedback, Mobile-assisted Language Learning Utilization and Syntactic Competence; based on the results of the study, a program and recommendations

for improving English writing were proposed for Chinese sport majors.

2. Methods

Descriptive quantitative research method was used in this study. The purpose of this research investigated written corrective feedback (WCF), mobile-assisted language learning (MALL) utilization, and syntactic competence among sports major students in three different types of Chinese universities, exploring these three variables' relationship. The sample totally consisted of 400 undergraduate students majoring in sports. Also, the stratified random sampling was utilized to confirm representation from different universities, majors, and years of English study in this investigation. In order to ensure the reliability and validity of the results, Raosoft calculator was used to determine the sample size and analyze the statistics.

Questionnaire was used as a research instrument to collect and organize information by posing a series of questions to respondents. It aims to gather opinions, perspectives, experiences, or attitudes on a specific topic. In this research, the researcher surveyed and collected information by questionnaires in terms of written corrective feedback (WCF), mobile-assisted language learning (MALL), and syntactic competence of the respondents. In addition, before conducting the large-scale test, among students, the researcher selected some sport majors to conduct a pilot test, ensuring the reliability of the questionnaire. The questionnaire was distributed through an electronic online survey platform, Questionnaire Star, and by contacting student counsellors at the three universities, it was ensured that the questionnaire was distributed to relevant sport students. The questionnaire was anonymized to ensure that the survey complied with prevailing ethical guidelines. Meanwhile, some prizes were delivered to ensure the motivation and validity of the students' responses.

The data collected through the platform were analyzed by the researcher in SPSS to investigate the relationship among variables using a descriptive approach. This process included descriptive analysis of the participants' profile and the means of the three variables, containing correlation analysis among the three main variables. Quantitative research methods offer a systematic, objective, and precise approach to studying phenomena, allowing researchers to draw statistically supported conclusions, generalize findings, and contribute valuable insights to various fields. In this research, how written corrective feedback and MALL utilization promote sport majors' syntactic competence is the focus of the research. The results of the study would be useful in acquire a deeper understanding of the current situation of English learning in sport major students and the researcher provided rationalized suggestions for improving their English study.

3. Results and discussion

Table 1

Summary Table on Written Corrective Feedback (WCF)

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. Perceptions	3.47	Agree	1
2. Preferences in the WCF strategy	3.37	Agree	3
3. Adaptability	3.42	Agree	2
Composite Mean	3.42	Agree	

Legend: 3.50 – 4.00 = Strongly Agree; 2.50 – 3.49 = Agree; 1.50 – 2.49 = Disagree; 1.00 - 1.49 = Strongly Disagree

Table 1 presents a summary of the findings related to Written Corrective Feedback (WCF) in the context of mobile-assisted language learning (MALL) and its impact on syntactic competence. The table includes three key indicators: Perceptions, Preferences in the WCF strategy, and Adaptability, which the weighted means of above indicators are respectively 3.47, 3.37, and 3.42. These values suggest that participants in the study generally agreed with statements related to these indicators. The verbal interpretation categorizes these agreement levels as Agree. the overall data suggest that learners hold positive perceptions of WCF in the context of MALL and its impact on improving syntactic competence. They recognize WCF as a valuable strategy that can be adapted to different writing tasks and contexts.

The indicator of perceptions received the highest weighted mean of 3.47, indicating that participants generally held positive perceptions of Written Corrective Feedback. This suggests that sport major learners believed WCF to be a beneficial strategy for improving their syntactic competence in the context of MALL, highlighting the sport students' belief in the effectiveness and usefulness of WCF in improving their writing skills. Positive perceptions of WCF align with previous research that highlights its potential for enhancing writing skills (Bitchener, 2018).and encouraging learners to engage with the feedback provided (Hyland, 2019). The indicator of adaptability received a weighted mean of 3.42, indicating that participants believed WCF could be adapted to different contexts and writing tasks. This suggests that learners recognized the flexibility of WCF in catering to their specific needs, goals, and the requirements of different types of writing. Written Corrective Feedback (WCF) can be adapted to different contexts and writing tasks in several ways, which means the adaptability ensures that the feedback provided aligns with the specific needs and goals of language learners.

For sport major students at different levels, they have varying needs and priorities. So, adaptation of WCF involves considering the proficiency level of the learners and providing feedback appropriate for their level of language development. For instance, Lee et al. (2020) emphasized the importance of providing different types of feedback for novice and more advanced learners to address their specific language learning needs. The other thing to consider is the learner's personality. Each language learner has unique strengths, weaknesses, and learning preferences. Adaptable WCF involves customizing the feedback to address the specific needs and preferences of individual learners. This personalization can include tailoring the feedback to the learner's specific language errors, focusing on areas of improvement, and providing feedback that aligns with their learning style. Park (2015) advocated for personalized and adaptive WCF strategies to meet students' specific needs and enhance their motivation for learning. Finally, WCF can be delivered using different types and formats of feedback to suit different writing tasks and contexts. Ferris (2017) recommended using a combination of direct corrective feedback (e.g., error correction) and indirect feedback (e.g., providing suggestions and asking questions) based on the specific writing tasks. This adaptive approach caters to the different demands and objectives of various writing assignments.

Preferences in the WCF strategy had the lowest but still agreeable weighted mean of 3.37, indicating a generally favorable attitude toward specific aspects of the feedback strategy. Participants expressed their preferences for certain forms of WCF, such as direct corrections or knowing the right forms of errors, indicating a desire for explicit guidance in error correction. These preferences, which align with research that suggests learners tend to benefit from explicit correction (Ferris, 2017), can guide instructors in designing or delivering more targeted and effective feedback, thereby enhancing learners' understanding and application of syntactic competence in their writing.

Table 2

Summary Table on Mobile-assisted Language Learning (MALL) Utilization

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. Perception	3.44	Agree	1
2. Learning content	3.42	Agree	3
3. Learning outcome	3.43	Agree	2
Composite Mean	3.43	Agree	

Legend: 3.50 – 4.00 = Strongly Agree; 2.50 – 3.49 = Agree; 1.50 – 2.49 = Disagree; 1.00 - 1.49 = Strongly Disagree

Table 2 reveals a generally favorable view of MALL utilization among the participants, the table includes three subdomains: perception, learning content and learning outcome, with the weighted mean of 3.44, 3.42 and 3.43 respectively. All 3 subdomains fall within the "Agree" range with composite mean of 3.43. This implies a consensus among sport major learners that MALL is a beneficial tool for English learning, impacting both their perception and the actual learning process.

Perception, received the highest mean of 3.44, indicating that sport major participants generally agree that MALL is perceived positively. This aligns with the idea that other major learners view MALL as a valuable tool

for language learning. On the one hand, it is because students' curiosity and love for new technologies make them brave enough to try new technologies. On the other hand, because sport students have to invest a lot in training or experiments, they have a higher demand for the convenience of mobile learning. Therefore, sport students have a positive attitude towards the application of MALL. This positive outlook could be attributed to the flexibility and accessibility offered by mobile devices. Learners may appreciate the convenience of learning English through MALL, which aligns with the idea that positive perceptions contribute to the success of language learning technologies. Scholars such as Forsythe (2021) and Saarna (2022) also emphasized the importance of learners' perceptions in the success of mobile-assisted language learning.

Learning outcome ranked the second with a mean of 3.43, reflecting an agreement among participants regarding the positive impact of MALL on learning outcomes. This aligns with the notion that mobile-assisted language learning can contribute to effective language acquisition and skill development (Linton, 2021). The positive learning outcomes could further reinforce the efficacy of MALL in supporting language learning objectives for sport major students. However, the rank is lower than the perception on MALL in this table, the researcher considers the following reasons may influence their choices. First, resistance to adopting new technologies, including MALL, can influence participants' perceptions. Those resistant to change may be less inclined to attribute positive learning outcomes to MALL, even if the potential benefits are present. Second, sport majors might not have had sufficient exposure or engagement with MALL activities. Limited usage can hinder the realization of positive learning outcomes, as learners may not have fully explored the potential benefits offered by mobile-assisted language learning.

Learning content ranked the third place with mean of 3.42, suggesting that learners find the content delivered through MALL to be satisfactory. This aligns with the concept that mobile-assisted language learning should provide engaging and relevant content to meet the diverse needs of learner. As shown in the result, it indicates that MALL platforms are successful in delivering content that resonates with the interests and preferences of sport major students. However, some reasons may lead to the lowest rank in the three indicators. One reason is that the content is lack of relevance, especially for their majors. Sport majors may find the content delivered through MALL not directly relevant to their field of study or major. If language learning materials do not incorporate sports-related terminology or scenarios, learners may perceive a mismatch between the content and their professional interests (Burston & Giannakou, 2022). Besides, sport majors may have specific expectations regarding the content's depth, coverage, or alignment with their language learning needs. Unmet expectations can lead to dissatisfaction, highlighting the importance of clear communication and content relevance. Another important reason is inadequate customization. MALL platforms that do not allow learners to customize their learning paths or content based on proficiency levels, interests, or specific language goals might contribute to dissatisfaction. In fact, learners, including sport majors, benefit from personalized learning experiences.

In conclusion, the interpretation of Table 2 suggests that sport major students perceive MALL as a beneficial tool for language learning, finding the content engaging and experiencing positive learning outcomes. These findings align with the existing literature on mobile-assisted language learning and emphasize the potential of MALL in enhancing language education for sport major students.

Table 3

Summary Table on Syntactic Competence

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. Students' lexical knowledge	3.44	Agree	1
2. Sentence construction	3.39	Agree	3
3. Students' writing proficiency	3.43	Agree	2
Composite Mean	3.42	Agree	

Legend: 3.50 – 4.00 = Strongly Agree; 2.50 – 3.49 = Agree; 1.50 – 2.49 = Disagree; 1.00 - 1.49 = Strongly Disagree

The summary Table 3 on syntactic competence presents the results of a study evaluating the effectiveness of written corrective feedback and mobile-assisted language learning (MALL) on the syntactic competence of

language learners. The table includes three subdomains: students' lexical knowledge, sentence construction, and writing proficiency. According to the table, the students' lexical knowledge received the highest mean of 3.44, indicating that the participants generally agreed that the students possess strong lexical knowledge. The second subdomain, sentence construction, received a mean of 3.39, indicating that the participants agreed that the students have developed reasonable sentence construction skills. The third subdomain, students' writing proficiency, received a weighted mean of 3.43, indicating that the participants agreed that the students have developed strong writing proficiency. The composite mean of 3.42 suggests that the participants generally agreed that the students could form solid syntactic competence. In other word, written corrective feedback and MALL could be effective tools for developing language learners' syntactic competence.

The highest rank for lexical knowledge suggested that lexical knowledge is the most crucial component of language proficiency in participants' impression, and a strong vocabulary is necessary for effective communication. it is widely recognized in the field of second language acquisition that lexical knowledge plays a crucial role in the development of syntactic competence, and this is particularly relevant for sport majors. According to the researchers, a strong lexical foundation is necessary for sport majors to understand and produce complex sports-related sentences. Based on the study of Schmitt (2023), a rich and well-organized lexicon is essential for successful communication in any domain, and this is especially true for specialized discourses such as sport. Therefore, having a broad and deep knowledge of sport-specific vocabulary is crucial for sport majors to comprehend and construct syntactically complex sentences. Besides, rich lexical knowledge facilitates the acquisition of syntactic structures. Julian Maywald et al. (2023) argue that lexical knowledge is a prerequisite for the acquisition of syntactic structure. In other words, sport majors need to have a solid understanding of sports-related vocabulary before they can begin to grasp the grammatical rules that govern the construction of sentences in this domain. This is supported by a study by Alqahtani (2015), which found that the relationship between lexical and syntactic knowledge is reciprocal, with each type of knowledge supporting the other.

Finally, lexical knowledge is important for sport majors to develop automaticity in their language use. According to a study by Shao et al. (2020), automaticity in language use is achieved through frequent encounters with language forms and meanings, which are stored in memory as lexical entries. Therefore, having a rich and varied lexicon enables sport majors to retrieve words and phrases quickly and automatically, which in turn facilitates the production of syntactically complex sentences. Therefore, having a broad and deep knowledge of vocabulary enables sport majors to communicate their ideas and opinions more effectively, which is essential for success in their field.

The second-highest rank for writing proficiency indicated that the students could express their ideas in writing in a clear and coherent manner, implying writing is a critical skill for academic and professional success in sport participants 'mind. Developing writing proficiency is essential for sport language learners, because it enhances their ability to document and communicate critical aspects such as injury reports, training regimes, and performance assessments. The ability to convey these details accurately contributes to the overall effectiveness of the sports industry. Furthermore, research by Martínez-López et al. (2022) underscored how sports professionals often engage with a diverse range of stakeholders, including athletes, sponsors, and fans. Effective written communication becomes a bridge between these parties, fostering understanding and collaboration. Martinez argues that sports majors with proficient writing skills are better equipped to navigate these intricate relationships.

Lastly, in the context of academic research within sports science and related fields, scholars such as Malika et al (2023) emphasized that clear and well-structured writing is essential for the dissemination of research findings. This contributes to the advancement of knowledge within the field and facilitates the integration of new insights into sports training, performance analysis, and sports medicine. The lowest rank for sentence construction suggested that the students have developed reasonable sentence construction skills, but there is still room for improvement. This finding showed that sentence construction is an area where language learners often struggle. There may be several reasons for the low score sentence construction ability of sport major students. A study by Kormos and Smith (2023) noted that low sentence construction ability may be related to the understanding and

application of grammatical rules. They found that students among sport majors had relatively weak knowledge of grammar, which directly affected their syntactic construction skills.

In addition, Martínez-López et al. (2022) study emphasized that the low level of sentence construction skills among sport major students may reflect their difficulties in expressing complex sport concepts and tactical strategies. Good syntactic construction requires not only the mastery of basic grammatical rules, but also the ability to express complex sport concepts in a clear and coherent manner, which is crucial for sport major students. Effective sentence construction is seen as paramount for articulating complex concepts related to sports training and strategies. This precision becomes instrumental in the academic and professional discourse within the sports domain. Nurrachmad's (2019) research suggested that sentence construction proficiency is a critical component in sports writing. The ability to construct coherent sentences enhances the clarity of writing, contributing to insightful and impactful sports-related discourse. Martínez-López et al. (2022) also argued that syntactic competence, demonstrated through adept sentence construction, is essential for seamless communication within sports teams. The ability to convey instructions clearly during training sessions contributes to team cohesion and successful implementation of strategies.

Overall, the summary table on syntactic competence indicated written corrective feedback and MALL have been effective in developing the students' syntactic competence. The findings suggest that these interventions can help language learners develop their lexical knowledge, writing proficiency, and sentence construction skills.

Table 4

Relationship Between Written Corrective Feedback and Mobile-assisted Language Learning (MALL) Utilization

Perceptions	rho-value	p-value	Interpretation
Perception	.665**	0.000	Highly Significant
Learning content	.646**	0.000	Highly Significant
Learning outcome	.678**	0.000	Highly Significant
Preferences in the WCF strategy			
Perception	.758**	0.000	Highly Significant
Learning content	.707**	0.000	Highly Significant
Learning outcome	.736**	0.000	Highly Significant
Adaptability			
Perception	.797**	0.000	Highly Significant
Learning content	.729**	0.000	Highly Significant
Learning outcome	.760**	0.000	Highly Significant

Legend: Significant at p-value < 0.01

Table 4 shows the association between Written Corrective Feedback and Mobile-assisted Language Learning (MALL) Utilization. The computed r-values indicates a strong direct correlation and the resulted p-values were less than the alpha level. This means that there was significant relationship exists and implies that the better is the written corrective feedback, the better is the mobile-assisted language learning utilization. These findings highlight the interconnectedness of feedback strategies and technology-enhanced language learning, emphasizing their potential to reinforce each other in the language learning process.

In terms of perceptions, the high positive correlation between WCF and MALL utilization indicates that when students perceive the written corrective feedback as effective, they are more likely to engage with MALL tools. As the survey showed, if the WCF provided by the MALL sustem to the sport major students includes specific examples, the feedback can effectively inspire the confidence of the them in identifying and revising the various errors that occur in the English writing. In turn, the sport students would build up their confidence in the MALL system and learn English more efficiently by utilizing the authentic materials provided by the MALL system. Literature supports the idea that effective feedback is a catalyst for learner engagement and motivation. According to the findings of Wisniewsk et al. (2020), although written feedback is more effective than oral feedback could not be confirmed, their research proved that feedback is more effective if it contains more information. Simple forms of reinforcement and punishment have low effects, while high-information feedback is most effective.

The high correlation in preferences for WCF strategies and MALL utilization implies that sport students who prefer specific WCF approaches are also inclined to utilize MALL. As the survey implied, among the preferences of sports students for WCF strategy, konwing right forms, providing effective cues and natural corpus are the preferred choices of sport students, which reflects both their key needs in English learning and the urgent requirements of MALL system. These needs are precisely where the MALL system excels. Taking advantage of big data, the learning content provided by MALL's apps can help students analyze their own language errors and give them highly targeted suggestions for correcting them. The example sentences given are real corpus, ensuring the reliability of the feedback. The personalized learning design in turn makes sport students feel good about the MALL system, more efficient in their learning output, as well as more willing to use the MALL system apps.

In term of the highly significant correlation between adaptability in WCF and MALL utilization, it suggests that students who could adapt WCF strategies are more likely to integrate MALL apps into their study routines. According to the results of this survey, sport students valued the feedback most in terms of its adaptability to different specialization and to different cultural backgrounds. With the refinement of disciplines and the deepening of learning, sport students increasingly hope that the WCF can reflect the content of their specialized disciplines, meeting their individual learning needs. At the same time, due to the deepening of international communication, sport students also recognize the importance of cross-cultural communication. So, they hope that the written corrective feedback can reflect cross-cultural knowledge.

On the one hand, the MALL can provide students with more relevant learning content on different mobile devices according to their needs, so as to facilitate their self-learning. On the other hand, the MALL helps students to develop their skills from vocabulary to grammar to writing, and the information conveyed by the corpus itself helps students to broaden their horizons, enhancing their intercultural awareness. Therefore, sport students can take full advantage of the wealth of resources provided by the MALL, allowing the feedback to be better adapted to their needs for disciplinary and cross-cultural communication.

Table 5

Relationship Between Written Corrective Feedback and Syntactic Competence

Perceptions	rho-value	p-value	Interpretation
Students' lexical knowledge	.582**	0.000	Highly Significant
Sentence construction	.630**	0.000	Highly Significant
Students' writing proficiency	.620**	0.000	Highly Significant
Preferences in the WCF strategy			
Students' lexical knowledge	.702**	0.000	Highly Significant
Sentence construction	.733**	0.000	Highly Significant
Students' writing proficiency	.724**	0.000	Highly Significant
Adaptability			
Students' lexical knowledge	.704**	0.000	Highly Significant
Sentence construction	.753**	0.000	Highly Significant
Students' writing proficiency	.752**	0.000	Highly Significant

Legend: Significant at p-value < 0.01

Table 5 displays the association between Written Corrective Feedback and Syntactic Competence. The computed r-values indicates a strong direct correlation and the resulted p-values were less than the alpha level. This means that there was significant relationship exists and implies that the better is the written corrective feedback, the better is the syntactic competence.

In terms of perceptions, the strong correlation suggests that written corrective feedback has a positive impact on students' syntactic competence, specifically their lexical knowledge, sentence construction, and overall writing proficiency. When sport students receive targeted feedback on their vocabulary errors, they are more likely to increase their understanding and usage of appropriate words and phrases. Such feedback helps students to learn from their mistakes and realize their language level or needs, making progress in improving their lexical knowledge. As the self-confidence of sport students increases, students can continue to improve their competence to correct errors occurring in t sentence construction. They try to express their own opinions with different sentence structures

and improve their sentence construction competence, with the goal of writing grammatically correct English sentences inn relatively complex structures. As far as writing proficiency is concerned, sport students can continuously improve their writing skills according to the written correction feedback, using the prompts given by the feedback to construct a more fluent and smoother articles, to enhance their overall writing proficiency and better express their own opinions. These findings are consistent with previous research that highlights the effectiveness of written corrective feedback in improving syntactic competence A study by Lin, Zhou, Yang, & Sun (2023) investigated the effects of written corrective feedback on lexical knowledge in the context of mobile-assisted language learning. The findings indicated that students who received written corrective feedback demonstrated significant improvement in their lexical knowledge. Zhang and Cheng (2021) explored the impact of written corrective feedback on sentence-level accuracy in the context of computer-assisted language learning. The results indicated a significant improvement in writing proficiency among the students who received written corrective feedback.

The strong positive correlation between the preference for WCF strategy and students' syntactic competence implies that students who receive and value written corrective feedback are more likely to have improved lexical knowledge, sentence construction, and writing proficiency. The results of this survey show that sport students prefer to improve their English level and writing skills by given cues or right forms of feedback. These preferences in WCF reflected sport students' focus on lexical aspects, leading to enhanced lexical knowledge and subsequently influencing syntactic competence. Students who prefer certain WCF approaches exhibit better sentence construction skills. For sport students, they prefer to nature words or phrases given by WCF, which help them construct fluent sentences with more choices. When they receive feedback aligned with their preferences, it may lead to improved sentence construction, contributing to overall syntactic competence.

Preferences in WCF strategies also positively correlate with writing proficiency, indicating that students with specific WCF preferences tend to have higher overall writing proficiency. Sport students tend to hope more native version of feedback for their own reference. They also hope that the feedback errors are complete and specific, which is more conducive to the improvement of writing level. Preferences in WCF may reflect an alignment with effective feedback practices, contributing to improved writing proficiency and, by extension, enhanced syntactic competence.

These findings align with previous studies that emphasize the importance of student engagement and motivation in the effectiveness of written corrective feedback. Lee (2017) discussed the impact of feedback on various aspects of student writing, including vocabulary development. The book emphasized the importance of targeted feedback in enhancing lexical knowledge. The research of Yu and Liu (2021) explored the role of feedback in writing, focusing on sentence-level accuracy and structure. It provided insights into how targeted feedback influences sentence construction skills. For writing proficiency, the research of Qunayeer (2020) provided a comprehensive understanding of the relationship between feedback preferences and overall writing proficiency. He considered that feedback was successful at eliciting appropriate revisions of grammatical structures or surface-level features, but also content and organization.

The strong positive correlation between adaptability in WCF and syntactic competence suggests that students who consider WCF strategies as adaptable tend to demonstrate higher levels of syntactic competence. This relationship can be explored through lexical knowledge, sentence construction, and writing proficiency.

The positive correlation between adaptability in WCF and syntactic competence implies that students who find feedback adaptable are likely to exhibit stronger lexical knowledge. Research indicates that adaptable feedback, tailored to individual needs, fosters a deeper understanding of vocabulary and lexical choices. For sport majors, they could make use of specific and personalized feedback given by MALL to improve their vocabulary level, adapting to their specialization and different writing types. An adaptable approach to WCF may contribute to a more nuanced and personalized enhancement of lexical knowledge, thereby influencing syntactic competence.

Students who perceive feedback as adaptable are more likely to excel in constructing grammatically sound

and complex sentences. This aligns with studies emphasizing the role of feedback in improving sentence-level accuracy and structure. Based on survey, sport students prefer using feedback to adapt to different types of writing, constructing proper sentences to meet essays or presentations. Adaptability in WCF may provide learners with targeted guidance, positively impacting their sentence construction skills and contributing to overall syntactic competence.

Students who view WCF as adaptable are likely to have higher writing proficiency. Studies emphasize the connection between effective feedback and improvements in overall writing skills. Sport students participated in the research preferred to use feedback to improve their writing style and strategies, fitting diverse academic requirements. Adaptability in WCF may offer learners the flexibility to address various aspects of writing, leading to enhanced proficiency and, consequently, improved syntactic competence.

Previous studies have emphasized the connection between adaptation in WCF and syntactic competence. The book of Kang and Han (2015) explored various aspects of written corrective feedback, including its impact on sentence construction. It provides insights into how adaptable feedback strategies contribute to improving sentence-level accuracy. The work of Ferris and Hedgcock (2023) emphasized the importance of feedback in addressing different aspects of student writing, contributing to improved writing proficiency. It supports the idea that adaptable feedback positively influences syntactic competence.

Table 6

Relationship Between Mobile-assisted Language Learning (MALL) Utilization and Syntactic Competence

Perceptions	rho-value	p-value	Interpretation
Students' lexical knowledge	.768**	0.000	Highly Significant
Sentence construction	.788**	0.000	Highly Significant
Students' writing proficiency	.776**	0.000	Highly Significant
Learning content			
Students' lexical knowledge	.746**	0.000	Highly Significant
Sentence construction	.786**	0.000	Highly Significant
Students' writing proficiency	.753**	0.000	Highly Significant
Learning outcome			
Students' lexical knowledge	.818**	0.000	Highly Significant
Sentence construction	.841**	0.000	Highly Significant
Students' writing proficiency	.800**	0.000	Highly Significant

Legend: Significant at p-value < 0.01

Table 6 presents the association between Mobile-assisted Language Learning (MALL) Utilization and Syntactic Competence. The computed r-values indicates a strong direct correlation and the resulted p-values were less than the alpha level. This means that there was significant relationship exists and implies that the better is the mobile-assisted language learning utilization, the better is the syntactic competence.

The correlation between positive perceptions of Mobile-assisted Language Learning (MALL) and improved syntactic competence among sport students is a notable finding. It suggests that sports students who view MALL favorably tend to exhibit enhanced vocabulary acquisition. The MALL system not only provides authentic English materials according to the specialization of the students, but also provides the opportunity to practice English vocabulary outside the classroom at any time, which increases the confidence of the students in learning English.This will help students engage in activities to expand their vocabulary. Engaging sports students with MALL can provide context-specific language content, contribtuting to the acquisition of sports-related lexicon and, consequently, improving their lexical knowledge.

The strong correlation between MALL perceptions and improved sentence construction skills indicates that sport students with favorable views of MALL tend to construct grammatically correct and complex sentences. Technology-driven language learning experiences often emphasize interactive and communicative tasks. Using MALL, sport students could learn English on their own pace and construct sentence in writing outsideclass more efficiently. In other words, positive perceptions of MALL may motivate sports students to actively engage in

language tasks related to their majors, leading to improvements in sentence-level accuracy and complexity.

The highly significant correlation between positive MALL perceptions and enhanced writing proficiency suggests that sports students who perceive MALL positively demonstrate higher levels of writing skills. MALL platforms often facilitate authentic writing tasks and feedback, contributing to improved writing proficiency. Sport sutdetns could make use these feedback to efficiently edit their writing on line, express their thoughts more flunelty and accurately. Positive perceptions of MALL among sport students may encourage them to actively participate in writing activities, ultimately enhancing their writing proficiency. Some research highlights the benefits of MALL in improving language skills. For instance, Sytwu and Wang (2016) conducted a study on the effects of mobile-assisted vocabulary learning on students' lexical knowledge. Their results supported the positive impact of MALL on vocabulary acquisition. Similarly, a study by Al-Shehab (2020) examined the effects of MALL on writing proficiency among EFL learners. The findings of his study indicated that MALL facilitated improvements in writing skills.

The strong correlation between learning content in MALL and students' lexical knowledge implies that engaging with targeted content through MALL positively influences vocabulary acquisition. Context-specific and meaningful content contributes to enhanced lexical knowledge. Learning content tailored to specific linguistic domains or topics, such as sports or academic disciplines, can enrich sport students' vocabulary and improve their overall lexical knowledge.

The significant correlation between MALL learning content and improved sentence construction skills indicates that exposure to context-specific language content positively affects the construction of grammatically accurate and complex sentences.The meaningful and contextualized content in language learning, contributes to improvements in sentence-level accuracy and structure. Based on the students' level and major interset, MALL system could provide learning content aligned with students' interests, such as sports-related language tasks, enhancing their ability to construct sentences effectively.

Besides, exposal to tailored content also positively impacts overall writing proficiency. MALL platforms often provide opportunities for authentic writing tasks and feedback, contributing to improved writing proficienc. The content is relative to students' majors and updated in time. When sport students engage with learning content that aligns with their interests, it can motivate them to actively participate in writing activities and make use of feedback, ultimately contributing to improved writing proficiency.

Some rresearch demonstrated the above ffindings. In the book of Chapelle and Sauro (2017), these findings emphasized the significance of incorporating targeted learning content in MALL interventions to enhance syntactic competence among sports students. By designing content that aligns with students' specific linguistic needs and interests, educators can create meaningful language learning experiences that positively impact lexical knowledge, sentence construction, and writing proficiency.

The significant correlation between learning outcomes in MALL and students' lexical knowledge suggests that positive learning experiences contribute to vocabulary acquisition. Research supports the idea that successful language learning outcomes are associated with increased lexical knowledge (Chapelle & Sauro, 2017). In the research, sport students agree that utilizing MALL could improve their vocabulary efficiently. MALL interventions that result in positive outcomes can lead to improved sports-related vocabulary, enriching lexical knowledge among sports students.

Similarly, successful learning experiences positively influence the ability to construct grammatically accurate and complex sentences. Studies highlight the importance of positive learning outcomes in language learning, contributing to improvements in sentence-level accuracy and structure.For example, sport students could utilize MALL system to improve their grammar knowledge and comprehension skills, which benefit for their writing in English. Positive outcomes from MALL activities can motivate sport students to construct sentences effectively, applying their learning in meaningful ways.

Finally, positive learning experiences contribute to overall writing proficiency. MALL platforms often provide opportunities for cconcrete writing tasks and feedback, fostering improvements in writing proficiency. Sport students could use these platforms to practice their writing and enhance their cultural understanding, fitting more writing styles and improving their academic performance. Positive learning outcomes can inspire sport students to actively engage in writing activities, resulting in enhanced writing proficiency.

In conclusion, the significance of MALL in enhancing syntactic competence can be attributed to the unique features and affordances of mobile technology. Mobile devices offer learners access to various language-learning applications, online resources, and interactive exercises that target specific grammar and syntax concepts. These features enable learners to engage in independent and personalized language learning, which can contribute to improvements in syntactic competence.

4. Conclusion

1. All of the respondents were students majoring in sports-related specialization from three different types of Chinese universities, most of them with low English level. There were more male respondents than female respondents, evenly distributed as for school type and year level.
2. All Respondents totally agreed with three subscales of written corrective feedback, with perception higher than preferences in the WCF strategy and adaptability.
3. All respondents totally agreed with three subscales of mobile-assisted language learning utilization, with perception higher than learning content and learning outcome.
4. All respondents totally agreed with three subscales of syntactic competence, with students' lexical knowledge higher than students' writing proficiency and sentence construction.
5. There was no significant difference on written corrective feedback, mobile-assisted language learning utilization and syntactic competence when grouped according to demographic variables. This non-significant result pointed towards a universality in the perception, preferences, and adaptability of participants to WCF within the framework of MALL and syntactic competence.
6. The three variables of written corrective feedback, mobile-assisted language learning utilization and syntactic competence were highly significantly correlated with each other, suggesting that the better is the written corrective feedback, the better is the mobile-assisted language learning utilization; the better is the mobile-assisted language learning utilization, the better is the syntactic competence; the better is written corrective feedback, the better is the syntactic competence.
7. A language learning program for Chinese sport majors was proposed.

5. Recommendations

1. College English teachers may fully make use of MALL to give specific written corrective feedback according to the English language competence of the sport students, which contributes to students' understanding and application of the feedback.
2. Sport students may use MALL systems to select appropriate learning content and cultivate their learning interest, carrying out learning outcomes through continuous practice. Thereby they could improve their syntactic competence and writing skills.
3. School administrators may consider investing more in constructing network environment suitable for mobile-assisted learning. They should also foster foreign language teachers' technologies for applying MALL system better.
4. Enterprises may improve the applicability of MALL system for the reality of sport students. They should develop online English course contents that are more suitable for the level and personalized learning of sport students, improving the content and form of corrective feedback.
5. The implementers of the proposed language program may need adequate policy support from school administrators. With the help of the software providers, teachers and students will work together to research English writing content and forms of written feedback, which are appropriate for sport major

students' language level, utilizing technology to improve students' syntactic competence and learning efficiency.

6. Future researchers may focus on how diversified written feedback, especially meta-linguistic corrective feedback and non-corrective feedback, is applied in learners' syntactic competence and English writing practice.

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