The Role of Sports Activities in Enhancing English Language Learning Motivation: Analysing the Impact

Dandan Tian¹, Haibo Xue^{2*}

Abstract

This study investigates the influence of sports activities on English Language Learning Motivation (ELLM), with a particular focus on how interaction and cooperation within these activities impact students in multilingual environments. Data were collected through surveys administered to 150 students who engaged in sports as part of their ELLM program. Leveraging theories of the interaction hypothesis and cooperative learning, the research examines how real-life communication scenarios in sports—such as teamwork, game instructions, and peer interactions—offer authentic opportunities for language use. These experiences are shown to significantly enhance students' motivation to learn English by increasing language usage frequency and boosting confidence. The study also explores the distinct challenges and opportunities presented by multilingual contexts, demonstrating how sports activities can act as a dynamic tool to mitigate language anxiety and facilitate language acquisition. The results reveal moderate to strong positive correlations between teamwork (r = 0.65), game instructions (r = 0.70), and peer interactions (r = 0.75) with ELLM. ANOVA results indicate significant variations in motivation related to participation in teamwork (F (2, 96) = 12.45, p < 0.01), game instructions (F (2, 97) = 12.45, p < 0.01), game instructions (F (2, 97) = 12.45, p < 0.01) 9.32, p = 0.0002), and peer interactions (F (2, 97) = 14.67, p < 0.0001). However, post-hoc analysis suggests that while peer interactions positively affect motivation, the effects of teamwork, game instructions, and peer interactions on motivation do not differ statistically. This paper provides practical insights into integrating sports into language education, advocating for a more engaging and effective learning environment through a blend of theoretical analysis and empirical research, including surveys, interviews, and classroom observations.

Keywords: Sports, Sports Activities, English Language Learning Motivation (ELLM), Motivation, Multilingual Environments.

Introduction

The integration of sports into the teaching-learning process has gained prominence, especially regarding the advancement of student development. This integration raises pertinent issues related to the connection between language acquisition and sports. In English language instruction, there is often a concern that addressing students' needs and preferences might lead to an overemphasis on creative strategies that merge physical movement with educational objectives. Sports, a highly engaging and popular domain, can be utilized as a means to diversify English language learning and enhance student motivation (Yu, Gao, & Wang, 2021).

The Role of Sports in Language Acquisition

Participation in sports activities necessitates various forms of communication, including speaking, listening, and following instructions. These skills are essential for language acquisition, positioning sports as an excellent platform for language practice (Chen & Kent, 2020). By incorporating English into realistic sports contexts, students engage with the language in dynamic and engaging environments. This approach enhances the learning experience, fostering greater interest and involvement among students. Furthermore, it provides practical applications for language use (Papi & Hiver, 2020).

Social and Motivational Benefits

Sports foster social interactions and teamwork, which are integral to language acquisition beyond traditional instruction. In a collaborative sports setting, students are motivated to use English in everyday contexts, thereby enhancing their language skills and strengthening social bonds with peers (Bailey, Almusharraf, & Hatcher, 2021). Particireducein sports reduces students' language learning anxiety by creating a supportive environment that boosts confidence. Additionally, motivation plays a crucial role in language acquisition, as incentives can increase students'

¹ Department of Foreign Language, Universiti Putra Malaysia, Malaysia.

ORCID iD: https://orcid.org/0009-0001-1897-1812, Email: 289226679@qq.com

² Department of Education, University of Edinburgh, United Kingdom.

 $ORCID\ iD: \underline{https://orcid.org/0009-0000-5475-1270}, Email: \underline{harbour19890927@gmail.com}$

^{*}Correspondence: harbour19890927@gmail.com

engagement and commitment. Teachers can enhance motivation by integrating language learning with enjoyable sports activities, thereby promoting intrinsic motivation. Furthermore, sports offer physiological benefits, such as improved mood and reduced stress levels, which contribute to a positive and stimulating learning environment (Yu, Xu, & Sukjairungwattana, 2023).

This study explores the impact of sports activities on students' motivation to learn English, specifically examining the influence of cooperation and interaction within multilingual environments. Section 2 presents a review of relevant literature. Section 3 outlines the research methodology. Section 4 discusses the study's findings. Section 5 provides an analysis and interpretation of the results. Finally, Section 6 offers the conclusion.

Literature Review

Motivation in Language Learning

Dörnyei and Henry (2022) motivational self-system offers a comprehensive perspective on motivation by incorporating individuals' self-perceptions and envisioned future selves as significant motivational factors. Learners who envision themselves as proficient language speakers are more inclined to continue their studies despite facing challenges. Furthermore, motivation is shaped by learners' expectations, self-concept, and future aspirations, which are intricately connected to their perceptions and goals, thereby influencing their educational trajectory.

Sports Activities and Language Learning

Teaching and learning languages within the context of sports offer an engaging and highly interactive environment. A qualitative study by Aoyagi et al. (2020) examined the effects of extracurricular sports on students' motivation in Japan. The results indicated that participation in sports activities fostered a sense of belonging and community among students, which positively influenced their overall motivation in school activities. This social connection indirectly affects language acquisition by integrating various aspects of academic life. Furthermore, Gil-Lopez, Gonzalez-Villora and Hortigüela-Alcalá (2021) investigated how Content and Language Integrated Learning (CLIL) can be combined with physical education to enhance learning. Their systematic analysis revealed that the integration of language and physical activities improves comprehension and learning efficiency among students. Cooperative learning theory posits that learning in a collaborative environment can enhance educational outcomes (Basihr,

Nisar, & Gul, 2020). According to this theory, teamwork, mutual assistance, and group problem-solving are crucial for achieving learning objectives. In sports, cooperative learning is inherently applied, as successful gameplay necessitates that all participants work together towards shared goals.

Multilingual Environments and Learning

Multilingual settings in language education present both significant opportunities and challenges. Hiver et al. (2024) emphasize the importance of incorporating meaningful interactions and social contexts to engage learners effectively in multilingual classrooms. They also note that language anxiety can be mitigated and motivation can be enhanced through interactive and contextually relevant assignments (Opstoel et al., 2020). The principles of engagement observed in sports may also be applicable to language education within multilingual environments. The immersive and stimulating nature of sports activities can provide valuable insights for second language instruction (Dehghanzadeh et al., 2019). Thus, similar strategies for promoting active participation should be employed in both sports events and interactive tasks within multilingual language classes.

Sports as Opportunities for Motivation and Language Learning

Participating in team sports naturally fosters collaboration and essential communication skills beneficial for language acquisition (Toro et al., 2019). Team members must work together towards shared goals, which enhances active listening—crucial for language learning. Effective communication in sports involves attentive listening, appropriate tone, and nonverbal cues, skills directly transferable to language development (Paranduk & Karisi, 2020). Consequently, the listening and comprehension skills developed in sports can enhance classroom learning and dialogue skills.

Methodology

Conceptual Framework

This study examined the relationships among three types of interactions—teamwork, game instructions, and peer interactions in sports activities—and their impact on motivation to learn English. Here, teamwork, game instructions, and peer interactions are treated as dependent variables, while motivation to learn English is considered the independent variable. The conceptual framework underpinning this study is illustrated in Figure 1.

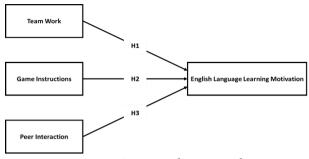


Figure 1: Conceptual Framework.

Hypothesis Development

H1: ELLM in students will be significantly improved by involvement in sports teamwork.

H2: ELLM in students will be significantly improved by involvement in sports game instructions.

Table 1Sample Data

H3: ELLM in students will be significantly improved by involvement in sports peer interactions.

Data Collection

A total of 150 students participating in sports as part of their English language learning program completed surveys. Utilizing a quantitative approach, the survey aimed to assess both the students' motivation levels and the frequency of their English use in sports-related contexts. The dataset is categorized into two segments: English usage frequency and motivation level. The survey comprised ten questions, with a Likert scale of 1 to 5 (1 indicating "not motivated" and 5 indicating "highly motivated") used to measure motivation levels. For English usage frequency, a 5-point scale (1 = "Never" and 5 = "Always") was employed, as detailed in Table 1.

Survey Aspect	S	Response	Number of	Percentage
	Survey Question	Option	Students	(%)
	How driven are you to use sports to study English?	1 (Not Motivated)	22	14.7%
Motivation Level	How driven are you to complete English language activities that are connected to sports?	2	16	10.7%
	Does engaging in sporting activities make you more excited to learn English?	3	45	30%
	To what extent are you inspired to speak English during sporting events?	4	38	25.3%
	Does participating in sports make you want to get better at English?	5(Highly Motivated)	29	19.3%
	Total		150	100%
	How frequently do you communicate in English when playing sports?	1 (Never)	18	12.0%
English Usage Frequency	How often do you speak to your teammates when playing sports in English?	2	22	14.7%
	How frequently do you follow directions in English when participating in sports?	3	55	36.7%
	How often do you converse with friends in English when discussing gaming strategies?	4	35	23.3%
	To improve your language skills, how often do you speak English when participating in sports?	5 (Always)	20	13.3%
	Total		150	100%

Statistical Assessment

The strength of the relationships between variables such as peer interactions, game instructions, teamwork, and motivation to learn English was assessed using Spearman Correlation Analysis. To determine significant differences in motivation levels across various phases of teamwork,

game instructions, and peer interactions, an ANOVA was performed. Post-hoc analysis, conducted following significant ANOVA results, was used to identify specific group differences and highlight substantially distinct levels among the factors. The demographic data is presented in Table 2 and Figure 2.

Table 2

Demographic Data

Demographic Variable	Category	Sample Count (N=150)	Percentage (%)	
	10-12 years	22	14.67%	
A	13-15 years	53	35.33%	
Age	16-18 years	45	30.00%	
	19-21 years	30	20.00%	
Cara Lar	Male	68	45.33%	
Gender	Female	82	54.67%	
	Team Sports	90	60%	
Type of Sports Activity	Individual Sports	45	30%	
	Mixed Sports	15	10%	
	Beginner	22	14.67%	
English Proficiency Level	Intermediate	75	50%	
·	Advanced	53	35.33%	
	Less than 6 Months	37	24.67%	
Duration of Participation	6 Months - 1 Year	53	35.33%	
•	More than 1 Year	60	40%	

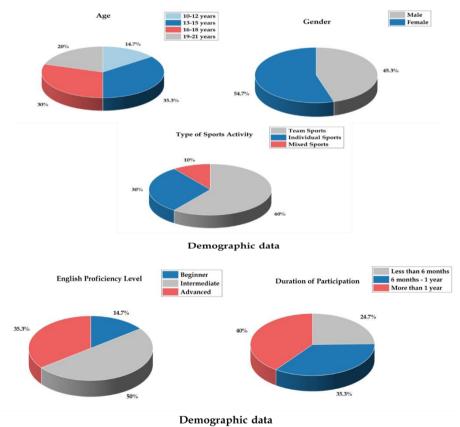


Figure 2: Pie Chart of Demographic Data.

Result

Pearson Correlation Analysis

Identify the aspects of sports most strongly associated with motivation. Explore areas that warrant additional research,

such as intervention design or causal relationships. Provide evidence on how sports-related factors can be utilized to enhance motivation for learning English. The correlation results are presented in Table 3. A correlation of 0.65 indicates a moderate to strong positive relationship, suggesting that students exhibit increased motivation to learn English when

engaged in team-based activities. A correlation of 0.70 reflects a strong positive association, demonstrating that higher levels of motivation are linked to greater involvement in sports

instruction. An exceptionally strong positive correlation of 0.75 signifies that higher motivation to learn English is associated with more frequent peer interactions.

Table 3 Pearson Correlation Coefficients

Variable	Teamwork	Game Instructions	Peer Interactions	Motivation to Learn English
Teamwork	1.00	0.60	0.55	0.65
Game Instructions	0.60	1.00	0.50	0.70
Peer Interactions	0.55	0.50	1.00	0.75
Motivation to Learn English	0.65	0.70	0.75	1.00

ANOVA (Analysis of Variance)

An ANOVA test should be performed to determine whether significant differences in motivation exist based on varying levels of participation in teamwork, game instructions, and peer interactions. The analysis evaluates overall variance through the sum of squares for each source (between groups and within groups). The degrees of freedom (df) associated with each source are used to calculate the Mean Square, which is derived by dividing the sum of squares by df. The F-Value is computed by dividing the mean square within groups by the mean square between groups, reflecting the extent to which the variance within groups is less than the variance between groups. The significance of the F-Value is indicated by the P-value. Significant variations are noted in Table 4, where the p-value is less than 0.05.

Table 4 ANOVA Result

Source	Sum of Squares	df	Mean Square	F – Value	p – Value			
	Teamwork							
Between Groups	35.20	2	17.60	12.45	< 0.01			
Within Groups	120.50	96	0.68	-	-			
	Game Instructions							
Between Groups	29.75	2	14.88	9.32	0.0002			
Within Groups	140.25	97	1.45	-	-			
Peer Interactions								
Between Groups	40.10	2	20.05	14.67	< 0.0001			
Within Groups	105.90	97	1.09	-	-			

H1: The findings indicate that teamwork has a substantial influence on motivation for learning English (Fvalue of 12.45, p - value < 0.0001).

H2: The F – value of 9.32 and p – value of 0.0002 shows that the game instructions have a significant influence on the desire to learn English.

H3: Peer interaction has a considerable impact on motivation for learning English, as evidenced by the F*value of* 14.67 *and* p - value of < 0.0001.

Post-Hoc Analysis

Upon finding a significant result in the ANOVA, post-

hoc analysis is conducted to pinpoint which specific groups exhibit significant differences from one another. Post-hoc tests provide detailed insights into these differences, as ANOVA only indicates the presence of differences among groups but does not specify their exact locations. The results of the post-hoc analysis is presented in Table 5.

Teamwork vs. Game Instructions: A p-value of 0.32 and a mean difference of 0.15 were observed. The lack of statistically significant variation between these two levels of involvement indicates that no discernible difference in motivation is present.

Table 5 Post-Hoc Result

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Group Comparison	Mean Difference	Standard Error	P-value			
Teamwork vs. Game Instructions	0.15	0.12	0.32			
Teamwork vs. Peer Interactions	0.05	0.11	0.66			
Game Instructions vs. Peer Interactions	-0.10	0.13	0.45			

Teamwork vs. Peer Interactions: A p-value of 0.66 and a mean difference of 0.05 were recorded. The absence of statistical significance in this difference suggests that the motivation levels associated with the two types of involvement are comparable.

Game Instructions vs. Peer Interactions: With a p-value of 0.45 and a mean difference of -0.10, the lack of statistical significance suggests that there is no discernible difference in motivation across these levels of involvement.

The ANOVA results suggest that peer interactions positively influence motivation. However, the post-hoc analysis reveals no significant differences between peer interactions and other forms of sports participation. This implies that, although peer interactions are beneficial, their effects are not significantly different from those of teamwork and game instructions.

Discussion

The positive impact of sports on motivation for learning is a crucial factor enhancing student engagement and language acquisition through various mechanisms. This study highlights the benefits of incorporating physical activities into foreign language teaching programs. Suraya et al. (2021) explore student motivation for learning English, emphasizing both internal and extrinsic factors. Their research reveals that exchange students' perceptions of English's relevance to future employment and their positive views of English-speaking individuals in their environment significantly contribute to their extrinsic motivation to learn the language. Fuaddi et al. (2020) examine how peer teaching can enhance student motivation and learning outcomes. Their findings illustrate the academic advantages

of peer teaching, including improvements in students' psychomotor, cognitive, and affective domains. Sun et al. (2024) investigate the effects of physical education curricula on English vocabulary development, focusing on learners' motivation for acquiring vocabulary. Their research indicates that integrating physical education programs with English vocabulary development can be highly beneficial for children learning English as a second language.

Conclusion

This paper explores how students' motivation to learn English is influenced by their participation in sports, with particular focus on peer interactions, teamwork, and game-related activities. Spearman correlation analysis indicates moderate to strong positive relationships between these sports-related factors and the intention to study English, with peer interactions showing the highest correlation coefficient (0.75). ANOVA results reveal that teamwork (F = 12.45, p < 0.01), game instructions (F = 9.32, p < 0.0002), and peer interactions (F = 14.67, p < 0.0001) significantly affect motivation. However, post-hoc analysis using ANOVA did not identify statistically significant differences in motivation levels based on the type of sport-related activity. Potential issues include the allocation of time for language learning, as some participants may be unwilling to leave their sports or work environments to attend classes. Future research could benefit from examining the impact of specific types of sports on language skills. Additionally, qualitative methods such as surveys may provide further insights into personal experiences and motivations.

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