

The Effect of Relay Race Activities on English as a Foreign Language Learning among Sixth-Grade Students in Jordan

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ABSTRACT

This study examines the effectiveness of relay race activities as a game-based learning strategy for improving English as Foreign Language (EFL) skills among sixth-grade students in Jordan. A quasi-experimental pretest–posttest design was employed with two intact classes ($N = 88$), assigned to either a relay race intervention group or a traditional instruction control group. Students' performance in grammar, vocabulary, reading, and conversation was measured using researcher-designed achievement tests.

Results indicated that the relay race group achieved statistically significant improvements in grammar ($p = .020$, $d = 0.51$), vocabulary ($p = .019$, $d = 0.52$), reading ($p = .003$, $d = 0.67$), and total proficiency ($p = .003$, $d = 0.65$), with medium to large effect sizes. The traditional instruction group showed significant improvement only in reading ($p = .002$, $d = 0.70$), with no significant gains in other skills. Conversation skills did not improve significantly in either group.

Although no statistically significant between-group differences were found in independent-samples comparisons of gain scores, the overall pattern suggests that relay race activities may promote broader improvements across multiple language skills compared to traditional instruction. The study provides evidence from a Middle Eastern EFL context and supports integrating structured game-based activities into language instruction to foster more comprehensive skill development.

Keywords: EFL, game-based learning, relay race activities, language skills, quasi-experimental design

INTRODUCTION

Background Information

In an increasingly interconnected world, proficiency in English as a Foreign Language (EFL) is widely recognized as a critical asset for educational advancement and professional opportunity. This is especially true in contexts such as Jordan, where English is a gateway to higher education, global communication, and economic participation. However, a persistent challenge in many EFL classrooms—particularly at the primary and secondary levels—is sustaining student motivation and active engagement, which are fundamental to successful language acquisition (Alrabia, 2018).

Traditional, teacher-centered methods, while useful for transmitting knowledge, often fail to create the dynamic, participatory environments in which communication skills flourish. Consequently, there has been a growing emphasis on interactive and experiential teaching strategies that position the learner as an active participant. Among these, game-based learning has emerged as a promising pedagogical approach. Games can lower affective filters, increase intrinsic motivation, and provide meaningful contexts for practicing language (Kurniawan, 2024). More specifically, activities incorporating physical movement and collaboration align with theories of embodied and kinesthetic learning, which posit that cognitive processes are deeply intertwined with physical action, potentially enhancing memory and understanding (Lindgren & Johnson-Glenberg, 2013).

The use of sports and physical games in education taps into this principle. Activities such as relay races are not merely recreational; they structure learning around goal-oriented teamwork, immediate feedback, and healthy competition. Bekirogullari, Burgul, and Yagci (2022) note that such activities generate energy and motivation that can be channeled into academic improvement. The relay race, in particular, with its inherent structure of turn-taking, shared responsibility, and a clear objective, mirrors communicative processes and can be strategically adapted for language practice (Simarmate & Indriani, 2016).

Despite promising applications in regions like Indonesia and Iran, a significant gap remains in the empirical literature regarding the structured use of actual relay race activities in EFL contexts, particularly in the Middle East. Existing studies, often framed as classroom action research (e.g., Annafiah, 2024; Nurdyani, 2022), provide valuable insights into engagement but typically lack the controlled, comparative designs necessary to isolate the method's efficacy. Furthermore, no identified study has empirically investigated this approach within the Jordanian public school system, where curricular, cultural, and motivational dynamics may yield distinct outcomes. This study seeks to address this dual gap—methodological and geographical—by evaluating a relay race intervention through a quasi-experimental design in a Jordanian classroom.

Study Aims and Research Questions

The primary aim of this study is to investigate the effectiveness of a relay race activity as a game-based reinforcement strategy in English language teaching, compared with a traditional teamwork approach, among sixth-grade EFL learners. Specifically, the study seeks to examine whether the relay race method results in greater improvements in students' performance across selected English language skills, namely reading, grammar, vocabulary, and conversation.

To achieve this aim, the study addresses the following research questions:

1. To what extent does the relay race reinforcement strategy affect students' performance in individual language skills (reading, grammar, vocabulary, and conversation) compared to traditional teamwork instruction?
2. Which instructional method—relay race activities or traditional teamwork—leads to greater overall improvement in students' total English language achievement?

By answering these questions, this research aims to contribute evidence-based insights into the potential of structured, physically active games as a pedagogical strategy, offering practical guidance for EFL educators in Jordan and similar contexts while adding a controlled, empirical study to the international literature on game-based language learning.

LITERATURE REVIEW

Game-based learning has gained increasing attention as an effective approach to enhancing English language instruction, particularly in EFL contexts where learner engagement is often limited by traditional, teacher-centered practices. Educational games provide opportunities for meaningful language use, promote collaboration, and increase motivation, making them especially suitable for young learners. Among these strategies, relay race games represent a highly interactive form of game-based learning that integrates movement, teamwork, and competition. Research across diverse educational contexts suggests that relay race games positively influence learner motivation and classroom engagement. Annafiah (2024), for instance, examined the use of relay race activities with Indonesian high school students and reported significant increases in learner motivation following the implementation of grammar-focused relay tasks. However, the study emphasized that the effectiveness of such games depended on clear instructions, supportive teacher behavior, and structured classroom management, indicating that relay races function best as a reinforcement strategy rather than a stand-alone teaching method.

A substantial body of research has focused on vocabulary development. Safitri (2024) demonstrated that eighth-grade students exposed to relay race vocabulary games outperformed peers taught through discussion-based

instruction. Similar findings were reported by Fotovatnia and Namjoo (2013), whose controlled experiment in Iran showed that team-based and competitive games led to superior vocabulary retention and higher learner motivation compared to traditional textbook exercises. These findings suggest that the competitive and collaborative nature of relay race activities can enhance lexical learning when appropriately scaffolded.

In addition to vocabulary, some studies have explored the impact of relay race games on speaking skills and participation. Nurhana and Latief (2021) found that relay race activities reduced learners' anxiety and increased willingness to speak in English, while Nurdyani (2022) reported improvements in student engagement through a "Paper Relay Running" activity. Despite these positive outcomes, such studies relied primarily on Classroom Action Research designs, which limit the generalizability of findings due to the absence of control groups.

Grammar learning has received comparatively less attention in game-based research. Wazeer (2023) reported that a board race game significantly improved learners' immediate and delayed retention of irregular past tense forms in Sri Lanka, accompanied by higher levels of behavioral, cognitive, and emotional engagement. While these findings align with motivational benefits reported in earlier studies, inconsistencies in the literature remain. For example, some frequently cited sources on game-based grammar learning are difficult to verify or conflate distinct research focuses, underscoring the need for more rigorous and transparent empirical work.

Despite the generally positive evidence, two major gaps can be identified in the existing literature. First, a methodological gap persists, as many studies rely on Classroom Action Research designs without comparison groups, making it difficult to attribute observed gains solely to relay race activities. Second, a geographical gap exists: while game-based learning has been studied in contexts such as Indonesia, Iran, and Sri Lanka, empirical research on relay race games in Jordanian public schools remains absent. Given Jordan's distinct educational context and curriculum, findings from other regions cannot be directly generalized. To address these gaps, the present study adopts a controlled quasi-experimental design to investigate the effects of relay race activities on grammar, vocabulary, reading, and speaking skills among sixth-grade female students in a Jordanian public school. By comparing relay race instruction with traditional practice methods while controlling for teacher and instructional materials, this study aims to provide more robust evidence regarding the pedagogical value of relay race games in EFL classrooms.

METHODOLOGY

This section describes the participants, research design, procedure, intervention implementation, data collection instruments, data analysis techniques, and ethical considerations of the present quasi-experimental study.

Participants

The participants were two intact classes of sixth-grade female students from a public school in Jordan. Both classes were taught by the same English teacher to control for instructional variability, ensuring that the primary difference between the groups was the reinforcement method employed. A total of 88 students participated in the study, with 44 students assigned to the experimental group and 44 to the control group. According to school records and the teacher's assessment, the two classes had comparable English proficiency levels and similar performance in previous English examinations. In both groups, students were organized into teams using the same procedure. Each class was divided into 11 teams of four students, with each team consisting of one high-achieving student, two average-achieving students, and one lower-achieving student. This structure was adopted to promote balanced participation and peer support. Prior to the intervention, each team selected and memorized a team name to facilitate organization during the activities.

Procedure

Data collection took place over six school visits conducted by the researchers. These visits included one pre-test session, four instructional intervention sessions, and one post-test session. Both groups studied the same textbook unit, covering reading, grammar, vocabulary, and speaking skills.

In the experimental group, a relay race activity was used as a reinforcement strategy. Four stations (booths) were

set up in the schoolyard, each representing one language skill: Grammar, Reading, Vocabulary, and Speaking. At the beginning of each session, a referee signaled the start of the race, and students from each team took turns running to the stations. At each station, a researcher posed an objective question related to the assigned skill. A correct response allowed the student to pass the baton to the next team member, while an incorrect response required the student to answer an additional penalty question before proceeding. This process continued until all team members completed their turns, with the final runner crossing the finish line to stop the timer. Teams then engaged in a brief discussion of the questions they had encountered.

Although the discussion phase is not typical of relay race games, it was intentionally included to ensure that both experimental and control groups engaged in collaborative review and reflection. Winning teams were determined based on completion time and performance on a randomly selected bonus question. Certificates and medals were awarded to maintain consistency with the control condition.

In the control group, a traditional teamwork approach was employed. Each team received four objective questions—one from each skill area—identical to those used in the relay stations and worked collaboratively to solve them. The researcher monitored group progress, and the first team to complete all questions correctly was declared the winner. In cases of ties, random questions were used to determine the final result. Certificates and medals were awarded in the same manner as in the experimental group.

Data Collection Instruments

The primary data collection instruments were parallel pre-tests and post-tests, each comprising 40 objective items distributed evenly across four skills: Grammar, Vocabulary, Reading, and Speaking (10 items per skill). All questions were in multiple-choice or true/false formats and were directly derived from the target textbook unit. Initially, a pool of 200 questions was developed, from which 80 items were selected—40 for the pre-test and 40 for the post-test—and subsequently refined and validated by a panel of two experts, a professor of Linguistics and a senior EFL teacher trainer, who reviewed the items for content appropriateness, clarity, and alignment with the unit's learning objectives. The finalized tests followed a stratified difficulty distribution, with 25% easy, 50% moderate, and 25% difficult items, as determined by expert judgment and textbook guidelines. Each test was scored out of 40 points, with each skill contributing 10 points, and scoring was fully objective and independently double-checked by two researchers to ensure accuracy and reliability.

Implementation Adjustments

A pilot session revealed initial challenges. In the experimental group, some students were confused by baton-passing rules and the discussion phase. In the control group, passive participation and over-reliance on high-achieving peers were observed. Before the second session, researchers and the teacher held a brief clarification meeting with all students. Rules were re-explained using demonstrations, and expectations for equal participation in both conditions were emphasized. Subsequent sessions proceeded smoothly, confirming the adaptability of the interventions.

Data Analysis

Descriptive statistics, including means and standard deviations, were calculated for all measures. Independent-samples *t*-tests were conducted to compare the performance of the experimental and control groups at the pre-test and post-test stages. Additional comparisons were made between pre-test and post-test scores within each group to examine changes in performance over time. Statistical significance was set at $p < .05$.

Ethical Considerations

Participation in the study was voluntary. Approval to conduct the study was obtained from the school administration, and all participants and the teacher were informed of the study's purpose and procedures. Confidentiality was maintained by anonymizing all data, and results were used exclusively for research purposes. These ethical measures ensured the protection of participants and enhanced the credibility of the study.

RESULTS AND DISCUSSION

This section presents and discusses the findings of the study in four subsections. The first subsection examines the pre-test scores of the traditional and relay race groups to determine their initial equivalence. The second subsection presents and discusses the pre- and post-test scores of the traditional group. The third subsection focuses on the pre- and post-test scores of the relay race group. Finally, the fourth subsection compares the post-test scores of both groups to evaluate the effectiveness of relay race games in enhancing students' English vocabulary learning.

Pre-Test Scores: Traditional vs. Relay Race

Prior to the intervention, independent-samples *t*-tests were conducted to compare the baseline English proficiency of the Traditional and Relay Race groups. This analysis was performed to ensure that the two groups began the study with comparable skill levels, allowing any post-test differences to be attributed to the instructional methods. Descriptive statistics for these pre-test comparisons are presented in Table 1.

Table 1: Pre-intervention self-rated English skills: comparison between experimental and control groups

Skill	Experimental Group (n = 44) M (SD)	Control Group (n = 44) M (SD)
Grammar	3.93 (1.40)	3.77 (1.91)
Vocabulary	3.35 (1.21)	3.33 (1.23)
Reading	3.81 (1.69)	3.53 (2.25)
Conversation	3.95 (1.72)	3.79 (1.85)
Total Score	15.14 (2.66)	14.42 (4.79)

Note. M = mean; SD = standard deviation. Total score represents the sum of all four skills (maximum = 40).

As shown in Table 1, the mean scores for both groups were closely aligned across all skill areas. In grammar, the Relay Race group obtained a mean score of 3.93 (SD = 1.40), compared to 3.77 (SD = 1.91) for the Traditional group. Vocabulary scores were nearly identical, with the Relay Race group averaging 3.35 (SD = 1.21) and the Traditional group 3.33 (SD = 1.23). For reading, the Relay Race group scored 3.81 (SD = 1.69) while the Traditional group scored 3.53 (SD = 2.25). In conversation, the means were 3.95 (SD = 1.72) and 3.79 (SD = 1.85), respectively. The total pre-test scores were also comparable, with the Relay Race group achieving a mean of 15.14 (SD = 2.66) and the Traditional group 14.42 (SD = 4.79). Independent-samples *t*-tests confirmed that there were no statistically significant differences between the groups on any individual skill or on the total pre-test score ($p > .05$ for all comparisons).

These findings indicate that the two groups were comparable prior to the intervention and possessed similar levels of English proficiency across all measured skills. The absence of significant differences supports the assumption of baseline equivalence and strengthens the internal validity of the study. Consequently, any differences observed in the post-test results may be more confidently attributed to the instructional approaches employed rather than to pre-existing differences between the groups.

Traditional Group: Pre- and Post-Test Scores

Paired-samples *t*-tests were conducted to examine whether the Traditional instructional method led to improvements in English language proficiency across the four skills and the total score. Descriptive statistics and inferential results are presented in Table 2.

Table 2: Pre-test and Post-test English Language Scores for the Traditional Group (n = 44)

Skill	Pre-test M (SD)	Post-test M (SD)	<i>p</i>	Cohen's <i>d</i>
Grammar	3.77 (1.91)	4.47 (1.99)	.124	0.36
Vocabulary	3.33 (1.23)	3.47 (2.41)	.678	0.07
Reading	3.53 (2.25)	5.23 (2.57)	.002	0.70

Conversation	3.79 (1.85)	3.63 (1.54)	.563	-0.10
Total Score	14.42 (4.79)	16.51 (6.28)	.057	0.38

Note. M = Mean; SD = Standard Deviation. Total score represents the sum of all four skills (maximum = 40).

As shown in Table 2, the Traditional group demonstrated uneven patterns of improvement across language skills. Reading was the only skill that showed a statistically significant gain, increasing from 3.53 (SD = 2.25) to 5.23 (SD = 2.57), with a medium-to-large effect size ($p = .002$, $d = 0.70$). This suggests that the Traditional instructional approach was particularly effective in supporting reading development.

In contrast, grammar and vocabulary showed small, non-significant improvements ($d = 0.36$ and $d = 0.07$, respectively), indicating limited instructional impact on these areas. Conversation scores slightly declined from 3.79 (SD = 1.85) to 3.63 (SD = 1.54), although this change was not statistically significant ($p = .563$), suggesting no meaningful deterioration in speaking ability.

Overall, the total score increased from 14.42 (SD = 4.79) to 16.51 (SD = 6.28), approaching statistical significance ($p = .057$) with a small-to-medium effect size ($d = 0.38$). This indicates modest overall gains in language proficiency, primarily driven by improvements in reading.

These findings suggest that the Traditional instructional method was most effective in developing reading-related skills, likely due to its emphasis on text-based learning and comprehension activities. However, its limited impact on vocabulary and conversational skills may reflect a lack of opportunities for active language use and communicative practice. The results of this group therefore provide a baseline against which the effectiveness of the Relay Race instructional method can be more meaningfully evaluated in the subsequent analysis.

Relay Race Group: Pre- and Post-Test Scores

The pre-post analysis of the Relay Race group, as presented in Table 3, reveals a pattern of broad and meaningful improvement across multiple language skills, particularly in reading, grammar, and vocabulary. These gains suggest that the game-based, collaborative instructional approach was effective in enhancing students' English language proficiency in receptive and form-focused skills.

Table 3. Pre-test and Post-test English Language Scores for the Relay Race Group (n = 44)

Skill	Pre-test M (SD)	Post-test M (SD)	p	Cohen's d
Grammar	3.93 (1.40)	4.77 (1.84)	.002	0.51
Vocabulary	3.35 (1.21)	4.30 (2.30)	.005	0.52
Reading	3.81 (1.69)	5.21 (2.41)	<.001	0.67
Conversation	3.95 (1.72)	3.95 (1.99)	1.000	0.00
Total Score	15.14 (2.66)	18.09 (5.81)	<.001	0.65

Note. M = Mean; SD = Standard Deviation. Total score represents the sum of all four skills (maximum = 40).

As shown in Table 3, the Relay Race group demonstrated statistically significant improvements in grammar, vocabulary, reading, and overall English proficiency, with effect sizes ranging from medium to medium-to-large. Reading showed the strongest gain, increasing from 3.81 (SD = 1.69) to 5.21 (SD = 2.41) ($p < .001$, $d = 0.67$), indicating a substantial improvement in students' comprehension skills.

Grammar and vocabulary also improved significantly, from 3.93 to 4.77 ($d = 0.51$) and from 3.35 to 4.30 ($d = 0.52$), respectively. These results suggest that the interactive and structured nature of the relay race—characterized by repeated retrieval, immediate feedback, and peer collaboration—facilitated the reinforcement of linguistic forms and lexical knowledge.

In contrast, conversation scores remained unchanged ($d = 0.00$), indicating that the intervention did not produce measurable gains in speaking performance within the duration of the study. This suggests that while the relay

race promotes engagement and participation, speaking fluency development may require longer exposure and more communicative practice beyond structured task responses.

The total score increased significantly from 15.14 to 18.09 ($p < .001$, $d = 0.65$), reflecting a meaningful overall improvement in English proficiency. This medium-to-large effect supports the effectiveness of the relay race method in enhancing integrated language skills.

From a theoretical perspective, these outcomes align with game-based and collaborative learning principles, which emphasize active engagement, repetition, and meaningful interaction. Consistent with Fotovatnia and Namjoo (2013), competitive and cooperative learning environments enhance comprehension and cognitive engagement in language learning. Similarly, Annafiah (2024) found that relay race activities increase learner motivation and active participation in English learning contexts.

Grammar improvement aligns with Fithriani (2021), who highlighted that game-based grammar instruction strengthens learning through interaction and repeated practice. Vocabulary gains are consistent with Fauziyah, Arifani, and Muhammad (2024), who reported that board race and relay-based activities enhance vocabulary retention through repetition and competition.

The absence of improvement in conversation is consistent with Nurhana and Latief (2021) and Nurdiani (2022), who found that while relay race activities reduce anxiety and increase willingness to participate, they do not automatically translate into measurable gains in speaking fluency without extended communicative practice.

When compared with traditional instruction, the Relay Race method demonstrates broader instructional benefits. While the Traditional group showed significant improvement mainly in reading, the Relay Race group achieved significant gains in three areas—reading, grammar, and vocabulary—with consistently medium effect sizes. These results indicate that the relay race approach provides a more comprehensive learning environment by integrating physical movement, competition, collaboration, and immediate feedback, all of which contribute to more effective language learning outcomes.

Post-Test Comparison: Traditional vs. Relay Race Groups

This subsection presents a direct comparison of the pre- and post-test performance patterns of the Traditional and Relay Race groups to examine differences in the breadth and magnitude of improvement across English language skills. Descriptive statistics and within-group pre-post comparisons for both groups are summarised in Table 4.

Table 4:Pre-Test and Post-Test Performance Comparison between Relay Race and Traditional Groups

Skill	Group	Pre-test M (SD)	Post-test M (SD)	*p*	Cohen's *d*
Grammar	Relay	3.93 (1.40)	4.77 (1.84)	.020	0.51
	Traditional	3.77 (1.91)	4.47 (1.99)	.101	0.36
Vocabulary	Relay	3.35 (1.21)	4.30 (2.30)	.019	0.52
	Traditional	3.33 (1.23)	3.47 (2.41)	.736	0.07
Reading	Relay	3.81 (1.69)	5.21 (2.41)	.003	0.67
	Traditional	3.53 (2.25)	5.23 (2.57)	.002	0.70
Conversation	Relay	3.95 (1.72)	3.95 (1.99)	1.00	0.00

Skill	Group	Pre-test M (SD)	Post-test M (SD)	*p*	Cohen's *d*
	Traditional	3.79 (1.85)	3.63 (1.54)	.658	−0.10
Total Score	Relay	15.14 (2.66)	18.09 (5.81)	.003	0.65
	Traditional	14.42 (4.79)	16.51 (6.28)	.086	0.38

Note. N = 44 for both groups. *p*-values represent within-group paired-samples *t*-tests. Cohen's *d* calculated as $(\text{Post} - \text{Pre}) / \text{SD}_{\text{pooled}}$; positive values indicate improvement, negative values indicate decline. Effect size benchmarks: small = 0.20, medium = 0.50, large = 0.80. Total score represents the sum of all four skills (maximum = 40). Statistically significant improvements (*p* < .05) are shown in bold.

As shown in Table 4, the Relay Race group demonstrated statistically significant pre-to-post improvements in grammar, vocabulary, reading, and total score, whereas the Traditional group showed a significant gain only in reading. Grammar scores in the Relay Race group increased significantly from 3.93 (*SD* = 1.40) to 4.77 (*SD* = 1.84), yielding a medium effect size (*p* = .020, *d* = 0.51), while the Traditional group's improvement from 3.77 (*SD* = 1.91) to 4.47 (*SD* = 1.99) did not reach statistical significance and produced a small-to-medium effect (*p* = .101, *d* = 0.36). This disparity suggests that the interactive, task-based nature of the relay race—characterised by active participation, repeated practice, and immediate corrective feedback—facilitated deeper engagement with grammatical structures than traditional instruction alone, a finding consistent with Wazeer (2023) and El Mahdy (2023), who reported that game-based approaches enhance grammar retention and application among EFL learners. A similar pattern emerged for vocabulary, where the Relay Race group improved significantly from 3.35 (*SD* = 1.21) to 4.30 (*SD* = 2.30) with a medium effect size (*p* = .019, *d* = 0.52), whereas the Traditional group's gain from 3.33 (*SD* = 1.23) to 3.47 (*SD* = 2.41) was negligible (*p* = .736, *d* = 0.07). The competitive and collaborative structure of the relay race likely promoted repeated exposure to target lexical items and active use in context, promoting deeper encoding and retention, in line with Fauziyah, Arifani, and Muhammad (2024) and Nurdiyani (2022), who demonstrated that relay race activities strengthen vocabulary mastery through repetition and peer interaction.

Reading was the one domain in which both instructional approaches proved highly effective. The Relay Race group increased from 3.81 (*SD* = 1.69) to 5.21 (*SD* = 2.41; *p* = .003, *d* = 0.67), and the Traditional group improved from 3.53 (*SD* = 2.25) to 5.23 (*SD* = 2.57; *p* = .002, *d* = 0.70), with near-identical post-test means and medium-to-large effect sizes in both conditions. These findings indicate that reading comprehension developed robustly regardless of instructional method, likely because both approaches provided substantial exposure to written texts and comprehension activities. For the Relay Race group, the game format may have increased motivation to engage with reading materials, aligning with Fotovatnia and Namjoo (2013), who emphasised the benefits of cooperative games for reading comprehension and learner engagement. For the Traditional group, the structured, text-focused nature of instruction appears to have been equally conducive to reading development, consistent with Grabe and Stoller (2019), who emphasize that structured reading instruction and classroom-based reading practice effectively support EFL reading comprehension development.

Conversation was the only skill in which neither group demonstrated improvement. The Relay Race group's scores remained unchanged at 3.95 (*p* = 1.00, *d* = 0.00), while the Traditional group's scores declined slightly from 3.79 (*SD* = 1.85) to 3.63 (*SD* = 1.54), a non-significant change (*p* = .658, *d* = −0.10). This absence of measurable gain in speaking performance suggests that developing oral fluency may require more sustained, communication-focused practice than either instructional condition provided within the study timeframe. Prior research by Latief (2021) and Nurhana indicates that while relay race games can reduce speaking anxiety and increase willingness to participate, measurable improvement in speaking proficiency typically requires extended opportunities for authentic communicative interaction. The null finding may also partially reflect the limitations of self-report measures in capturing subtle changes in oral production skills.

The overall proficiency scores reinforce the pattern of broader improvement associated with the Relay Race method. The Relay Race group's total score increased significantly from 15.14 ($SD = 2.66$) to 18.09 ($SD = 5.81$), producing a medium-to-large effect ($*p* = .003$, $*d* = 0.65$), while the Traditional group's gain from 14.42 ($SD = 4.79$) to 16.51 ($SD = 6.28$) approached but did not reach statistical significance and yielded a small-to-medium effect ($*p* = .086$, $*d* = 0.38$). This contrast suggests that the relay race approach promoted more comprehensive language development across multiple skill areas simultaneously, rather than isolated improvement in a single domain. These findings are consistent with Annafiah (2024), who reported that relay race games enhance motivation and engagement across language skills, and with broader research on activity-based learning (Fithriani 2021; Iqbal & Afzal 2022), which supports the conclusion that interactive, student-centred methods contribute to higher overall achievement than traditional teacher-centred instruction alone.

Taken together, these comparative findings indicate that while both instructional methods produced meaningful gains—particularly in reading—the Relay Race strategy was associated with more widespread and consistent improvement. The Relay Race group achieved statistically significant gains in three of the four skills assessed and in total proficiency, each with medium or larger effect sizes, whereas the Traditional group demonstrated a significant gain only in reading. This pattern supports the effectiveness of the Relay Race as a dynamic and engaging pedagogical tool that complements traditional approaches by extending language development across grammar, vocabulary, and overall proficiency.

CONCLUSION

This study examined the effectiveness of the Relay Race method compared to traditional instruction in enhancing English language skills among sixth-grade female students in Jordan. The results demonstrated that the Relay Race method significantly improved grammar, vocabulary, reading, and overall proficiency, with medium effect sizes ($*d* = 0.51$ to 0.67), whereas traditional instruction produced significant gains only in reading ($*d* = 0.70$). Baseline equivalence between groups was confirmed, strengthening internal validity. While both approaches developed reading equally well, the Relay Race method yielded broader improvements across multiple skills. Conversation remained unchanged in both groups, suggesting speaking fluency requires more sustained practice. Overall, these findings support integrating game-based, collaborative strategies in EFL classrooms. Future research should employ direct speaking measures, examine long-term retention, and explore applicability across different age groups and contexts.

Dear Editor-in-Chief,

We are pleased to submit our manuscript entitled "The Effect of Relay Race Activities on EFL Skill Development among Sixth-Grade Students in Jordan" for consideration for publication in the International Journal of Research and Innovation in Social Science.

This study introduces a novel relay-based learning strategy designed to enhance English as Foreign Language (EFL) skills among sixth-grade students in Jordan. Using a quasi-experimental design, we compared the relay race approach with traditional instruction, measuring outcomes in grammar, vocabulary, reading, and conversation. Results show significant gains in grammar, vocabulary, reading, and overall proficiency for the relay-based group, highlighting the benefits of structured, competitive, and collaborative learning activities.

This study originated from a project developed for the English Language Olympiad, where it was awarded Best Project Idea. Its methodology and findings extend beyond competition, offering actionable insights for EFL classrooms internationally. Key contributions include:

- **Innovation:** Among the first empirical evaluations of a relay-based EFL strategy in Jordan and the Middle East.
- **Practical Impact:** Provides teachers with a classroom-ready, motivational, and engaging instructional method.

- Theoretical Relevance: Connects active, game-based learning to cognitive and motivational frameworks in language acquisition.

This manuscript is original, has not been published previously, and is not under consideration elsewhere. All authors have approved the manuscript and declare no conflicts of interest. Ethical guidelines were fully followed, with institutional approval, parental consent, and participant assent secured.

We believe this study aligns strongly with the journal's focus on educational innovation and EFL teaching and would be a valuable contribution to your readership. Thank you for considering our submission.

Sincerely,

Eman Ali, Ph.D.

Assistant Professor in Linguistics

Corresponding Author

On behalf of my co-authors: Safa Muthanna, Donia Ghaith, Raghad Sakarneh, Rama Mahmoud, Leen Dasan, and Abdalah Hamdan, all students of English at Isra University who worked under my supervision.

Isra University

Amman, Jordan

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