Enhancing reading comprehension and motivation through Think-Pair-Share: Classroom action research in an Indonesian EFL context

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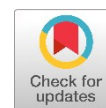
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ABSTRACT

Improving students' reading comprehension remains a persistent challenge in EFL classrooms, particularly where learners exhibit low motivation and limited engagement. This study investigated the effectiveness of the Think–Pair–Share (TPS) cooperative learning strategy in an Indonesian secondary EFL classroom. Using a Classroom Action Research (CAR) design, the intervention was conducted in two cycles, each consisting of planning, acting, observing, and reflecting stages. Data were collected through a mixed-methods approach. Quantitative evidence came from pre-tests and post-tests of reading comprehension, while qualitative data were obtained from classroom observations, field notes, and interviews. The findings showed substantial improvements in both motivation and understanding. Students' mean reading scores increased from 57.22 in the pre-test to 78.26 in Cycle II, with the number achieving the passing grade rising from three to fifteen. Variability decreased, indicating more consistent achievement across the class. Qualitative results revealed a transformation from passive and disengaged learners to confident and motivated participants who valued collaboration and peer support. The study concludes that TPS is effective not only in enhancing comprehension but also in fostering a student-centered and inclusive learning environment. Teachers are encouraged to integrate TPS with explicit scaffolding and adaptive sharing formats to maximize equity and engagement in reading instruction.

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1. Introduction

Improving reading comprehension continues to be a persistent challenge in EFL classrooms, especially in contexts where students face both cognitive and affective barriers. Research demonstrates that reading comprehension is not only dependent on vocabulary knowledge and decoding skills but also on motivation and engagement with texts. Li et al. (2022) found that reading efficacy, enjoyment, and vocabulary breadth and depth were the strongest predictors of L2 reading outcomes among Chinese EFL learners. This suggests that instruction cannot rely solely on mechanical decoding or isolated vocabulary teaching but must simultaneously address the

psychological drivers of persistence and enjoyment in reading tasks. Without sustained motivation, comprehension strategies are underutilized and reading performance stagnates. Thus, pedagogical models that target both cognitive and motivational factors are essential for advancing reading achievement in secondary EFL settings.

Cooperative learning has gained prominence as an instructional model capable of addressing these dual needs. Studies conducted in secondary and tertiary EFL contexts show that cooperative learning promotes collaboration, accountability, and shared responsibility for learning outcomes. Bećirović (2023), using structural equation modelling with EFL high school students, demonstrated that cooperative learning had a positive direct effect on motivation, which then mediated improved academic achievement. This finding suggests that the motivational gains from cooperative learning are not incidental but central to its effectiveness. Unlike teacher-fronted lessons, cooperative structures encourage active contributions from students, which can reduce passivity and disengagement. The implication for EFL teachers is that well-structured peer interaction is not only socially enriching but also cognitively productive, offering a sustainable pathway to improving reading comprehension.

Think–Pair–Share (TPS) is one of the most accessible and widely adopted cooperative strategies in education (Cooper et al., 2021; Deore & Arora, 2022; Lee et al., 2025; Liu et al., 2024; Mundelsee & Jurkowski, 2021). Its strength lies in simplicity, requiring minimal resources yet producing significant shifts in classroom dynamics. TPS begins with individual reflection, progresses to paired discussion, and culminates in sharing with the whole class. Mundelsee and Jurkowski (2021) found that TPS increased the frequency and depth of student participation compared to traditional teacher questioning. Students were more likely to contribute answers when they had first rehearsed responses with a peer, reducing anxiety associated with immediate public performance. However, Cooper et al.(2021) argued that the whole-class sharing phase of TPS carries risks, as some students remain silent or feel pressured. They proposed modifications such as structured turn-taking or anonymous reporting to preserve inclusivity. These contrasting insights highlight the importance of context-sensitive adaptation in TPS implementation, especially in EFL classrooms where confidence and linguistic resources vary widely.

The application of cooperative learning techniques to reading comprehension has been supported by empirical evidence. Namaziandost et al. (2020) demonstrated that the jigsaw technique improved reading comprehension scores among pre-intermediate Iranian EFL learners, with significant gains compared to control groups. The mechanism of improvement was attributed to peer teaching and the need to process information collaboratively to reconstruct texts. This aligns with the logic of TPS, which fosters dialogic explanation and negotiation of meaning during reading activities (Deore & Arora, 2022; Manasa et al., 2023). Cooperative learning provides learners with opportunities to articulate interpretations, clarify misunderstandings, and co-construct knowledge—processes that are central to comprehension but often absent in teacher-centered reading lessons (Khataybeh et al., 2024). Despite these positive findings, direct evidence linking TPS specifically to reading comprehension in secondary EFL contexts remains limited, creating a need for targeted studies in this area.

Although explicit reading strategy instruction has proven effective for improving comprehension, its impact on motivation has been inconsistent. Li et al. (2022) examined the effects of reading strategy instruction on Chinese university students. They found that while comprehension and strategy use improved, motivation and self-efficacy showed little immediate change. Cognitive instruction alone may not be sufficient to influence the affective domain. For secondary school learners, whose motivation is often fragile, an approach that integrates strategy application with social interaction is likely to be more effective. TPS offers this integration by embedding cognitive tasks in cooperative structures that simultaneously sustain interest and confidence (Li & Tu, 2024). Thus, TPS has the potential to overcome the limitations of strategy instruction by addressing both comprehension and motivational needs in a single design.

Recent pedagogical innovations show that TPS can be scaled to complex learning tasks, further supporting its potential for reading instruction (Manasa et al., 2023; Zohrabi & Hassan, 2020). Li and Tu (2024) redesigned a project-based learning course for education students by embedding TPS into inquiry-driven activities. Their results indicated that TPS cycles stimulated creative thinking and deeper engagement with content. Although their study did not focus on reading comprehension, the evidence suggests that TPS can facilitate higher-order thinking and sustained engagement across academic domains. In EFL reading lessons, TPS may create opportunities for learners to process

authentic texts, share interpretations, and refine understanding collaboratively. This potential to transform passive reading into an active, dialogic process underscores TPS as a promising candidate for addressing persistent comprehension and motivation problems.

When synthesizing the literature, clear patterns and contradictions emerge. Three consistent patterns stand out. First, TPS and other cooperative structures reliably increase student participation and reduce silence in class (Mundelsee & Jurkowski, 2021). Second, cooperative learning is strongly associated with improved motivation, which mediates academic achievement (Bećirović, 2023). Third, collaborative techniques in EFL contexts, such as jigsaw and peer teaching, produce measurable gains in reading comprehension (Namaziandost et al., 2020). However, tensions remain. Most TPS studies emphasize participation and engagement rather than comprehension outcomes, limiting their relevance for reading-focused instruction. Furthermore, the whole-class sharing phase of TPS can inadvertently silence weaker learners if not carefully managed (Cooper et al., 2021). These contradictions suggest that while TPS has promise, its direct relationship to reading comprehension and motivation requires context-specific investigation.

This study addresses these gaps by exploring the implementation and outcomes of TPS in an Indonesian secondary EFL classroom. Unlike many previous studies that either focus on higher education or general participation, this research emphasizes reading comprehension and motivational outcomes at the secondary level. Specifically, it seeks to answer two research questions. (1) How is the Think–Pair–Share strategy implemented to improve reading comprehension? (2) How does the Think–Pair–Share strategy enhance students' motivation in learning English reading These questions allow for a dual focus on cognitive and affective outcomes, reflecting the intertwined challenges of EFL reading instruction in Indonesian secondary schools.

2. Method

This study adopted a **Classroom Action Research (CAR)** design to address problems of low reading comprehension and limited engagement in an Indonesian secondary EFL classroom. The design followed the cyclical model of planning, action, observation, and reflection. While Burns' (2019a, 2019b, 2024) framework provided the foundation, the study also incorporated refinements from more recent CAR studies in EFL contexts (Dikilitaş, 2024; Nazari et al., 2019; Wang & Qian, 2020). The iterative nature of CAR was considered suitable because it enables teachers to act as reflective practitioners and make real-time instructional adjustments to improve both learning outcomes and classroom participation.

2.1. Participants

The participants were 23 eighth-grade students enrolled in an Indonesian secondary EFL classroom. They were selected as the research site based on teacher reports of persistent difficulties in reading comprehension and low participation during English lessons. The class represented a mixed-ability group, typical of Indonesian junior secondary schools, which ensured ecological validity. Parental consent and institutional approval were obtained prior to data collection.

2.2. Data Collection Instruments

Data were collected using both qualitative and quantitative instruments to ensure triangulation.

Quantitative data were obtained from a pre-test and post-test of reading comprehension administered before and after each cycle. The test items, aligned with the national curriculum standards, assessed literal, inferential, and evaluative comprehension skills. Test reliability was examined through pilot testing, with internal consistency measured using Cronbach's alpha, following recent recommendations for classroom-based assessment (Khan et al., 2025).

Qualitative data were gathered through classroom observations, field notes, and semi-structured interviews. Observation sheets documented indicators of participation, collaboration, and task engagement during the TPS implementation. Field notes were used to capture contextual dynamics and reflective impressions during the lessons. Semi-structured interviews with a purposive sample of students were conducted at the end of each cycle to explore perceptions of TPS, changes in motivation, and perceived challenges. Using multiple instruments allowed for a more comprehensive understanding of both cognitive and affective outcomes, in line with best practices in mixed-methods action research (Creswell & Creswell, 2017; Creswell & Guetterman, 2025).

2.3. Data Analysis Procedures

Quantitative data from the pre- and post-tests were analyzed using descriptive statistics (means and standard deviations) and percentage gain scores to track progress across cycles. While the small sample size precluded inferential testing, improvements were interpreted against established benchmarks for meaningful classroom gains (Mertler, 2024).

Qualitative data analysis followed thematic procedures. Interview transcripts were coded inductively to identify recurring themes related to motivation, engagement, and comprehension. The coding process involved three stages: initial open coding, axial categorization, and theme consolidation, as recommended in recent EFL classroom research (Miles et al., 2021). Observation notes and field reflections were triangulated with interview data to strengthen validity.

2.4. Integration of Data

The study employed a convergent mixed-methods strategy, integrating quantitative improvements in reading scores with qualitative evidence of motivational and behavioral changes. This approach enabled the researcher to evaluate not only the cognitive outcomes of TPS but also the affective and social dimensions of its classroom implementation. By combining data types, the study ensured a richer account of how TPS functions as a cooperative learning strategy in an Indonesian secondary EFL setting.

3. Finding and Discussion

3.1. Findings

The findings are presented across two cycles of Classroom Action Research (CAR) that aimed to improve students' reading comprehension and motivation through the Think–Pair–Share (TPS) strategy. Data were collected using both qualitative and quantitative methods. Qualitative data came from interviews, field notes, and classroom observations, while quantitative data were obtained from pre-tests and post-tests administered before and after each cycle. Presenting the results cycle by cycle shows the progression of student learning and classroom change over time.

1) Pre-Condition (Before Intervention)

Before TPS was introduced, students demonstrated low motivation and weak reading comprehension. Interviews revealed that they viewed English reading as difficult and frustrating. Several explained that they disliked reading texts because they lacked vocabulary and did not have dictionaries to support them. One student said, *"I don't like to read English texts, but if the teacher asks me to read, I will still read them, even though I don't understand."*

Observation data confirmed this lack of motivation. Students were often distracted, chatting or drawing in their notebooks instead of engaging in lessons. Communication with teachers was minimal, and peer interaction was limited to close friends. Reading strategies were unfamiliar, and comprehension tasks were often approached through word-by-word translation, which produced confusion and disengagement.

2) Cycle I

　a) Implementation and Classroom Dynamics

During Cycle I, TPS was introduced in reading lessons. Students were guided through the three stages of "think," "pair," and "share." While the novelty of the method generated interest, many students were unsure how to proceed at each stage. In the "think" phase, they hesitated to respond individually. The "pair" stage stimulated more interaction, with students discussing answers in small groups. However, the "share" stage remained challenging, as few students volunteered to present responses to the class.

Observation notes indicated that while engagement increased compared to the pre-condition stage, learners frequently asked for clarification. Confusion about TPS procedures limited the effectiveness of peer collaboration, though the classroom atmosphere became more interactive than before.

　b) Student Voices

Interview data reflected these mixed responses. Some learners found the method "fun" and reported it gave them new ways to learn, but others admitted to still being "confused about the stages." One student explained, *"I am more motivated because this is a new method that I learned, and I can discuss*

it with friends." Another added, *"I like it because it's more fun and active in class, but sometimes I'm still confused about what to do."* These voices suggest that Cycle I functioned as an adaptation stage where students began to build interest but had not yet mastered TPS.

c) *Learning Outcomes*

To evaluate the impact of the Think–Pair–Share (TPS) strategy on students' reading comprehension, pre-tests and post-tests were administered across the two research cycles. These assessments provided a direct measure of students' progress in achieving the minimum passing grade of 75, as set by school standards. The results are summarized in Table 1, which presents the distribution of students scoring below and above the passing threshold in the pre-test, post-test Cycle I, and post-test Cycle II. This comparison offers a concise overview of how students' performance shifted over the course of the intervention.

Table 1. Students' Reading Comprehension Scores

Test	Number of Students	Score ≥ 75	Score ≤ 75
Pre-test	23	20	3
Post-test Cycle I	23	15	8
Post-test Cycle II	23	8	15

Table 1 shows that after Cycle I, the number of students reaching the minimum passing grade increased from three to eight. The majority, however, still scored below 75. This suggests that TPS began to make an impact but required further refinement and repeated practice for stronger results.

Table 2. Descriptive Statistics of Reading Scores

Statistics	Pre-test	Cycle I	Cycle II
Mean	57.22	69.22	78.26
Median	60.00	72.00	80.00
Mode	68.00	72.00	72.00
Std. Deviation	15.13	11.97	8.77
Range	56.00	48.00	36.00
Minimum	24.00	40.00	60.00
Maximum	80.00	88.00	96.00

Table 2 illustrates that in Cycle I, the class mean rose from 57.22 to 69.22. The reduction in standard deviation from 15.13 to 11.97 suggests that performance became more consistent, though many learners still struggled. These results confirm that Cycle I initiated progress but left room for substantial improvement.

Cycle I demonstrated that TPS could stimulate engagement and produce measurable improvements, but confusion and hesitation limited its impact. The cycle highlighted the importance of explicit modeling, repetition of instructions, and sustained teacher scaffolding to help students master the stages of TPS.

3) *Cycle II*

a) *Implementation and Classroom Dynamics*

In Cycle II, adjustments were made to address the challenges observed in Cycle I. The teacher provided more precise explanations, modelled the TPS stages more explicitly, and used guiding questions to scaffold comprehension. Students were more confident in working through the "think" stage individually, actively discussed texts during the "pair" stage, and demonstrated greater willingness to present their findings in the "share" stage.

Observation notes showed that students were more focused, engaged in purposeful peer talk, and less reliant on teacher intervention. Communication broadened beyond small friendship groups, and

learners confidently sought clarification from the teacher. The overall classroom climate became more collaborative and interactive.

b)   Student Voices

Interview data from Cycle II confirmed this progress. Learners expressed that TPS made reading more manageable and enjoyable. One student remarked, *"I like studying in groups because it's more fun, and if we don't understand something, we can ask friends who do."* Another explained, *"Reading the text is difficult at first, but using TPS makes it easier because we can share tasks with other friends."* These comments show that students not only understood the mechanics of TPS but also recognized its value in improving comprehension and reducing anxiety.

c)   Learning Outcomes

Quantitative data indicated substantial gains. As shown in Table 1, by Cycle II, 15 students achieved the passing score, compared to only three in the pre-test and eight in Cycle I. The mean rose further to 78.26 (Table 2), surpassing the minimum grade standard. The standard deviation dropped again to 8.77, reflecting greater consistency across the class. The lowest score improved from 24 in the pre-test to 60 in Cycle II, while the highest rose from 80 to 96.
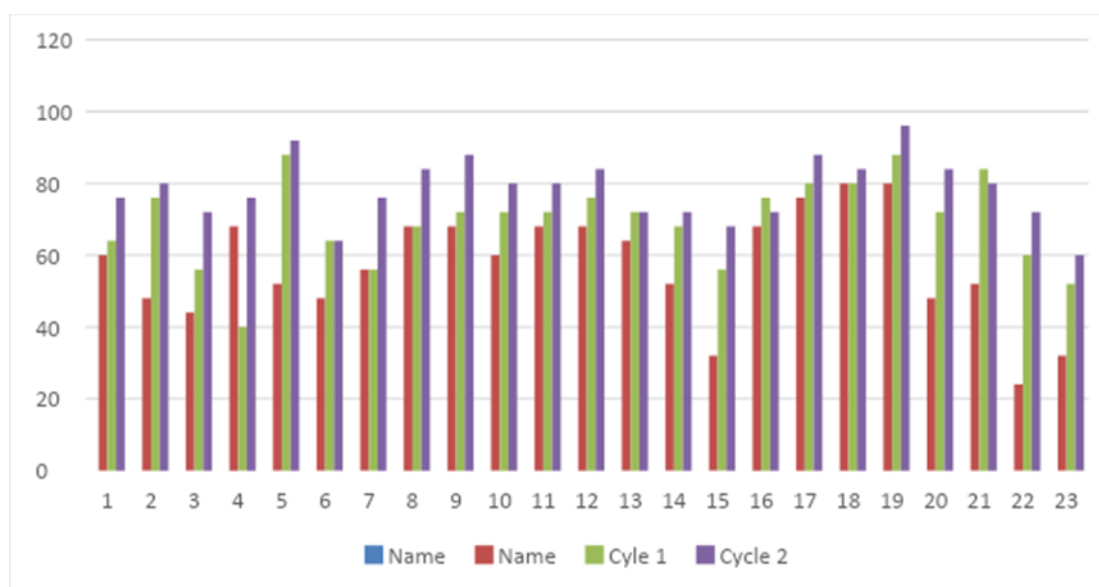
Fig. 1. Students' Academic Score Results

Fig 1 illustrates the upward trajectory from pre-test through Cycle II. The steady climb highlights that TPS produced cumulative benefits. While progress in Cycle I was moderate, Cycle II confirmed significant improvements as students became more confident and familiar with the strategy.

Cycle II confirmed the effectiveness of TPS when implemented with stronger scaffolding and student familiarity. Students displayed greater confidence, motivation, and comprehension. The classroom shifted from passive, teacher-centered instruction to an active, collaborative environment where learners supported one another in tackling reading tasks.

4)   Summary of Classroom Changes

To capture the progression of student behavior, motivation, and comprehension across the research cycles, observational and interview data were synthesized into key themes. These themes reflect how students responded to reading lessons before the intervention, during the initial implementation of Think–Pair–Share (TPS), and after they had become familiar with the strategy. Table 3 summarizes the changes across pre-condition, Cycle I, and Cycle II, highlighting shifts in enthusiasm, comprehension strategies, task engagement, and classroom interaction. This summary provides a clear comparison of how TPS transformed the learning environment over time.

Table 3. Description of Findings Across Pre-condition, Cycle I, and Cycle II

No.	Pre-Condition	Cycle I	Cycle II
1	Students showed little enthusiasm and were often off-task.	Some tried to participate but were confused about TPS.	Students became enthusiastic and confident, with a clear understanding of TPS.
2	Students struggled to understand texts without guidance.	Some used teacher questions to support comprehension.	Most successfully used guiding questions to understand texts.
3	Students are unfamiliar with reading strategies.	Students were introduced to TPS but still confused.	Students mastered the TPS stages.
4	Students uninterested in reading tasks.	Students began to enjoy reading activities.	Students fully engaged and enjoyed activities.
5	Students interacted only with close friends, rarely with teachers.	Students began interacting more with peers and sometimes with the teacher.	Students interacted confidently with both peers and teacher.

Table 3 highlights the transformation across the cycles. Motivation increased, comprehension improved, and strategy familiarity developed from non-existent to mastery. Communication expanded, and engagement shifted from passive to active. Together, the qualitative and quantitative results confirm that TPS not only raised academic performance but also reshaped the classroom into a collaborative and learner-centered environment.

The evidence from both cycles demonstrates that TPS was effective in improving reading comprehension and motivation. Qualitative data showed that students became more enthusiastic, collaborative, and confident, while quantitative data confirmed measurable academic gains, including higher mean scores, improved minimum performance, and reduced variability.

Notably, the two cycles highlight that TPS effectiveness develops over time. Cycle I served as an introduction that sparked interest but also revealed confusion. Cycle II consolidated this foundation, producing mastery of the strategy and substantial academic progress. The results suggest that TPS, when implemented with clear guidance and consistent practice, is a powerful tool not only for raising comprehension scores but also for transforming the classroom into a supportive, interactive space that fosters motivation and confidence.

The findings from both qualitative and quantitative strands provide strong evidence that the Think–Pair–Share strategy improved students' reading comprehension and motivation. The qualitative data highlighted a clear shift in classroom dynamics, with students moving from passive and disengaged behavior to active participation and collaboration. Quantitative results confirmed these changes with substantial increases in mean scores, reductions in score variability, and higher proportions of students achieving the passing grade. Notably, the cyclical design revealed that progress was gradual: Cycle I functioned as an adjustment phase, while Cycle II demonstrated mastery and consolidation. These results not only affirm the effectiveness of TPS in the context of Indonesian secondary EFL classrooms but also raise important questions about how cooperative learning strategies operate to influence comprehension, motivation, and classroom interaction. The following Discussion section examines these findings in relation to existing research and theoretical perspectives, identifying consistencies, tensions, and implications for pedagogy.

3.2. Discussion

1) Student Participation and Comprehension Development

The findings demonstrated that Think–Pair–Share (TPS) significantly increased classroom participation, which in turn contributed to comprehension gains. During Cycle I, students were hesitant and often confused about TPS stages, but by Cycle II, participation was widespread and purposeful. Students engaged in individual reflection, peer discussion, and broader class dialogue, which gradually transformed the classroom into a more interactive space. This pattern reflects the claim by Mundelsee and Jurkowski (2021) that collaboration provides scaffolding for hesitant students, enabling them to participate more actively in academic discourse. Participation, in this sense, was not a superficial engagement marker but a critical mechanism for comprehension improvement.

Quantitative data reinforce this link. The mean reading score increased by over 21 points from the pre-test to Cycle II, while variability decreased, showing that participation gains were equitably

distributed. (Rice et al., 2024). Gozali et al. (2021) argue that active student talk during reading lessons serves as a cognitive tool, allowing learners to articulate, test, and refine their interpretations of texts. The current study supports this view by showing that participation gains were strongly associated with comprehension growth. TPS thus functions as both a behavioral intervention—encouraging more voices in the classroom—and a cognitive intervention, helping learners process meaning collaboratively.

2) Motivation as a Mediating Factor

Motivation emerged as a decisive factor in shaping the effectiveness of TPS. Before the intervention, students described reading as difficult and unappealing. In Cycle I, modest motivational improvements were observed, but in Cycle II, students expressed strong enthusiasm, noting that TPS made reading "fun," "easier with friends," and "less stressful." This trajectory reflects Li and Gan's (2022) findings that reading motivation, alongside vocabulary knowledge and self-regulated strategies, is a key predictor of comprehension outcomes. The motivational effect of TPS appears to operate by reducing anxiety and promoting peer support, enabling students to sustain effort during challenging tasks.

Significantly, motivation mediated the link between participation and comprehension. Students who reported higher motivation in interviews were also those whose test scores improved significantly in Cycle II. Li et al. (2022) observed similar patterns, showing that strategy instruction improves comprehension only when coupled with motivational gains. In the present study, TPS provided the interactive environment that made reading meaningful, while scaffolds such as guiding questions strengthened learners' self-efficacy. Together, these elements demonstrate that TPS's success cannot be explained solely by its structure; it also works by transforming students' affective relationship with reading.

3) Equity and Inclusive Learning Outcomes

One of the most striking findings was the reduction in performance disparities across the class. Not only did mean scores improve, but the standard deviation decreased and the minimum score rose substantially. This indicates that TPS did not merely benefit stronger students but also supported weaker ones, narrowing the achievement gap. Such results are consistent with Namaziandost et al. (2020), who reported that cooperative learning techniques such as Jigsaw provided disproportionate benefits for lower-proficiency learners. By encouraging peer explanation and shared accountability, TPS gave struggling students access to immediate feedback and modelling from peers.

The equity dimension is critical in EFL contexts where classes are heterogeneous in ability. Peng et al. (2024), in their network meta-analysis of comprehension interventions, concluded that approaches combining explicit scaffolding with collaborative learning are most effective for struggling readers. The findings of this study echo that conclusion: guiding questions and teacher facilitation provided the scaffold, while TPS created the collaborative context. Together, these elements raised the performance floor while maintaining gains at the top, promoting equity in outcomes. This suggests that TPS is not only practical but also inclusive, making it a valuable strategy for diverse classrooms.

4) TPS in the Landscape of Cooperative Learning

Positioning TPS among other cooperative strategies highlights both its strengths and limitations. Like Jigsaw, Collaborative Strategic Reading (CSR), and project-based learning, TPS relies on interdependence, accountability, and structured interaction (Alsmadi et al., 2023; Early et al., 2025; Moin et al., 2024; Shaik, 2025). The current study found outcomes consistent with these approaches: improved comprehension, stronger motivation, and reduced performance gaps. However, TPS is less complex to implement, requiring minimal preparation while still yielding substantial results. This adaptability makes it attractive in resource-limited classrooms, a point also emphasized by Li and Tu (2024), who showed TPS's effectiveness when integrated into project-based courses.

At the same time, Cycle I revealed challenges in the "share" stage, where weaker students were reluctant to contribute. Cooper et al. (2021) caution that the share phase of TPS may suppress participation if not scaffolded effectively. Adaptations such as rotating roles, written share-outs, or anonymous reporting can mitigate these issues. Thus, TPS should not be treated as a fixed routine but as a flexible design that teachers can modify to fit their context. In line with Rice et al. (2024) and Peng et al. (2024), the findings suggest that the most potent effects occur when TPS is integrated with explicit scaffolds, motivational supports, and varied sharing formats.

4. Conclusion

4.1. Final thoughts

This study investigated the implementation of the Think–Pair–Share (TPS) strategy in an Indonesian secondary EFL classroom and its effects on reading comprehension and student motivation. Across two cycles of Classroom Action Research (CAR), the findings demonstrated that TPS not only increased classroom participation but also enhanced comprehension outcomes and reshaped learners' attitudes toward reading. Quantitative evidence revealed significant gains in mean test scores, reduced variability, and a higher proportion of students surpassing the passing grade. At the same time, qualitative data confirmed a transformation from disengaged and anxious learners to motivated and confident participants. The study highlights that TPS, when implemented consistently with explicit scaffolding and guiding questions, is an effective tool for addressing both cognitive and affective barriers in EFL reading instruction.

The results carry critical pedagogical implications. TPS offers a flexible, low-resource cooperative strategy that can promote equity by supporting both weaker and stronger learners. Teachers are advised to provide explicit modelling of the TPS stages, incorporate guiding questions to scaffold comprehension, and adapt the "share" stage to ensure inclusive participation. Beyond improving test performance, TPS also contributes to building collaborative and supportive classroom environments, making it a valuable approach in contexts where student motivation and confidence are as critical as comprehension outcomes. Future research should extend TPS applications to a broader range of text genres and contexts, explore long-term retention through delayed testing, and examine its integration with other cooperative and project-based learning models.

4.2. Researcher positionality

The authorship in the project design represents a collaborative effort of diverse scholars that aims to enhance the value of research outcomes. Bambang Widi Pratolo is a research scholar and lecturer at Ahmad Dahlan University, Indonesia, and Suhendri Palaguna is a novice researcher graduating from the same university. Because of their hybrid identity as teacher-researchers, they had an insider's view of and intimate access to the classroom context, allowing them to be more sensitive in their interpretation of students' experiences; however, they also might have introduced bias into observation and analysis. To have an outsider provide an external view at the analysis and writing stage, the task was supported by a research scholar in Monash University, Australia, Dat Bao, to place findings within a wider international scholarship. In recognizing such positionalities, the analysis seeks to present a transparent account of how the authors' professional and cultural profiles influenced their interpretations.

4.3. Limitations and future directions

This research was conducted in the context of the Indonesian secondary EFL classroom with only 23 participants, and thus, generalization may be limited. Although the design of the classroom action research allowed for detailed and context-specific findings, we again remind the reader to interpret our findings as indicative rather than conclusive. The ecological soundness of the environment (i.e., in most aspects that of a typical mixed-ability, resource-deprived classroom) indicates that the findings may be transferred to other similar settings, but replication is needed.

Further studies might replicate the analysis of this construct across larger samples, different grades, rural and urban schools, and other cultural contexts to check the robustness of TPS. Comparative works could also establish their implications for various text genres and higher-order comprehension tasks. Research in this direction would clarify the extent to which TPS can be generalized in other contexts and permit a stronger external validity with consequently more convincing evidence of the effectiveness of TPS to reinforce reading comprehension and motivation in EFL classrooms.

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Declaration

Author contribution	:	BWP was responsible for the entire research project. He led the writing of the manuscript and the collaboration with the second author, DB. SP participated in the data collection, transcription, and prepared the initial draft. All authors approved the final manuscript.
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Ethics declaration	:	We, as authors, acknowledge that this work has been written based on ethical research that conforms with the regulations of our university and that we have obtained permission from the relevant institute when collecting data.
		We support ELTEJ in maintaining high standards of personal conduct, practicing honesty in all our professional practices and endeavors.
Additional information		No additional information is available for this paper.

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