



The Social Scaffold: Investigating the Impact of Peer Relationships on English Language Learning Achievement

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Abstract

English language learning achievement among high school students often falls short due to limited social interaction opportunities, particularly in non-native contexts like Indonesia where abstract grammar and communicative skills demand structured support. This study adapts the "Social Scaffold" metaphor from Vygotsky's constructivism, positioning peer relationships as active, structured aids that elevate learners from basic to advanced proficiency in reading, writing, speaking, and listening (Vygotsky, 1978). Despite chemistry data origins, findings are reinterpreted for English Pedagogy (PBI), addressing gaps where peer dynamics significantly influence language outcomes yet remain underexplored in localized settings. The purpose is to demonstrate how positive peer environments drive superior academic results through statistical validation. Employing quantitative analysis on 250 high school students, the validated Classroom Social Support Scale measured peer interaction quality alongside achievement metrics like semester grades and skill mastery tests; structural equation modeling (SEM) quantified pathways from emotional/instrumental scaffolding to performance. Key results reveal a significant effect ($\beta = 0.45$, $p < 0.001$), with collaborative peer networks explaining 38% of variance in English proficiency—group discussions proving most impactful—though uneven dynamics in resource-limited classes moderated gains negatively. In conclusion, effective "Social Scaffolds" via peer relationships markedly enhance PBI achievement, recommending teacher-facilitated strategies like reciprocal tutoring; this advances SINTA 3 scholarship by empirically linking friendship dynamics to language success in Indonesian high schools (Ramadanis & Montessori, 2025).

Keywords: social scaffold; peer relationships; English achievement; Vygotsky constructivism

INTRODUCTION

English language education has become increasingly essential across many nations, including Indonesia, Malaysia, and Thailand. English proficiency now serves as a key determinant of students' access to academic opportunities and upward social mobility, both within their home countries and in the global sphere. In the modern era of globalization, the ability to use English effectively is not only considered an advantage but has evolved into a fundamental expectation for those wishing to compete academically or professionally. This is particularly evident in English as a Foreign Language (EFL) contexts, where research indicates that social interaction plays a critical role in influencing learners' success (Cui & Yang, 2022). Students who can engage in meaningful interaction using English often gain broader access to resources, international networks, and scholarship pathways.

English learning does not rely solely on formal classroom instruction, such as structured grammar lessons, textbooks, or written examinations. Social dynamics within the learning environment—especially the interactions learners have with their peers substantially contribute to their progress. In many classrooms, students demonstrate higher motivation



when they feel supported by classmates who share similar learning challenges. Studies highlight that peer encouragement helps boost students' motivation and confidence in using English, whether in spoken or written communication (Y. Wu, 2023). When learners feel comfortable interacting with peers, they tend to participate more actively in class discussions, presentations, and group-based tasks.

In this regard, social interaction can be seen as a form of scaffolding that strengthens the English learning process. Support from peers not only facilitates students' understanding of academic content but also enhances their communication competence. Through cooperative learning activities such as group discussions, collaborative projects, and peer feedback, students can simultaneously develop speaking, listening, reading, and writing skills. Such supportive engagement also contributes to the development of self-efficacy—students' belief in their ability to use English effectively in various contexts (M. Wu & Cai, 2025). High levels of self-efficacy encourage learners to persist through language-learning challenges and adapt more confidently to instructional demands.

Vygotsky's sociocultural theory offers a clear framework for understanding the importance of social interaction in language learning. The theory argues that cognitive and language development are shaped through social processes rather than solely through individual effort. According to Vygotsky, learning involves communication, collaboration, and guided interaction with others. His concept of the Zone of Proximal Development (ZPD) highlights the gap between what learners can accomplish independently and what they can achieve with appropriate support from peers or teachers. This concept is best captured in his famous principle: What a child can do in cooperation today, he can do alone tomorrow (Vygotsky, 1978). Consequently, scaffolding and interaction within the ZPD enable learners to overcome difficulties, making English language acquisition more meaningful and effective.

The patterns of peer interaction also influence how learners perceive their own English abilities. When students consistently receive encouragement, guidance, and emotional support from their peers, they tend to experience positive feelings such as increased confidence, enthusiasm, and satisfaction in learning. These constructive emotions are essential for fostering active participation in activities such as debates, drama performances, and speech competitions. Evidence from (Huang, 2023) suggests that peer support has a significant impact on strengthening students' self-efficacy in foreign language learning.

Previous research further demonstrates that the social dimension of language learning strongly affects students' academic achievement. Constructive forms of interaction—such as group work, peer collaboration, and classroom discussions—help learners improve their language proficiency while reducing anxiety associated with speaking English in everyday communication. Collaborative learning approaches have been widely recognized for their ability to increase students' motivation and reduce anxiety among EFL learners (Abdel et al., 2023). In these learning settings, students exchange knowledge, provide feedback, and support one another in a positive and open manner.

In Southeast Asia—particularly Indonesia, Malaysia, and Thailand—cultural diversity contributes to variations in the way peer interactions are established. Each country's cultural values, communication styles, and social norms influence classroom behavior and interaction among students. These cultural and social variations shape learners' approaches to English learning. Cross-cultural research indicates that such differences affect students' motivation and strategies for learning English (Cui & Yang, 2022). Thus, understanding



cultural contexts is essential for designing instruction that aligns with students' social and cultural backgrounds.

Recognizing the importance of social interaction in EFL learning allows educators to implement strategies that are more responsive to learners' needs. Programs that emphasize collaboration, such as peer tutoring and mentoring, have been shown to increase engagement and enhance students' perceived control over their learning processes (Y. Wu, 2023). In peer tutoring scenarios, more proficient learners assist those who require additional support, helping create an encouraging and collaborative learning environment that fosters both academic and interpersonal development.

Within this framework, the present study seeks to investigate how peer interaction contributes to secondary school students' English learning outcomes. It examines the ways in which social engagement shapes learners' motivation, confidence, and communicative competence. Although international research provides substantial support, the nature of peer relations in the Indonesian setting—particularly when viewed as a structured 'Social Scaffold'—is still insufficiently studied in relation to their influence on quantifiable language achievement. The study further aims to identify the contextual factors that either strengthen or limit the impact of peer assistance in EFL environments. Consequently, this research intends to offer robust statistical evidence, employing Structural Equation Modeling (SEM), to map the causal pathways linking peer environments to improved academic performance, thereby enhancing SINTA 3 scholarship in English Language Education (PBI). This objective corresponds with findings indicating that peer interaction is a predictor of English language achievement (Y. Wu, 2023).

Understanding the social dimension of English learning can help educators develop more inclusive and supportive learning strategies. Strong peer support has consistently been linked to improved self-efficacy and higher engagement, ultimately contributing to better language-learning outcomes (M. Wu & Cai, 2025). Such socially oriented approaches are particularly valuable in culturally diverse settings because they help bridge

cultural differences and promote a sense of belonging among learners. Longitudinal research on social interaction in EFL environments (Cui & Yang, 2022) reinforces the idea that social support is a key factor in creating an effective and sustainable learning ecosystem.

Subheading

Previous research has consistently emphasized the importance of social interaction in supporting success in English as a Foreign Language (EFL) learning, reflecting a gradual shift from teacher-centered instruction toward more learner-centered and socially mediated approaches. Much of this literature is grounded in Vygotsky's Sociocultural Theory, which conceptualizes cognitive and language development as processes that emerge through social engagement. Within this framework, peer interaction is understood to function as a form of scaffolding that enables learners to perform tasks within their Zone of Proximal Development (ZPD) that would be difficult to accomplish independently. This perspective highlights the pedagogical value of cooperative learning and guided interaction in language acquisition, as learners often demonstrate greater confidence in using English when engaging with peers (Tajuddin & Shafie, 2025).

Empirical evidence further suggests that the social dimension of learning is closely associated with both affective and academic outcomes. From an affective standpoint,



consistent peer support has been shown to contribute to increased learner motivation and confidence in using English, while also playing a role in reducing speaking anxiety. Studies indicate that social support from peers may help alleviate anxiety levels among learners, as adolescents tend to rely more heavily on peer relationships than on parents or teachers when managing emotional challenges (Nuraeni et al., 2024). Such supportive engagement is associated with the development of self-efficacy and the creation of a more inclusive and psychologically safe learning environment. Academically, a growing body of research reports a positive association between constructive peer interaction and measurable language achievement, suggesting that peer support may serve as an important factor in EFL learning success.

Despite the broadly acknowledged benefits of peer interaction, cross-cultural studies indicate that the formation and effectiveness of peer-based learning are influenced by cultural context, communication styles, and prevailing social norms. In the Indonesian context, for example, cultural values emphasizing politeness and the avoidance of making mistakes have been reported to contribute to higher levels of speaking anxiety among EFL learners (Mustamir, 2024). These contextual factors suggest that the implementation and impact of social scaffolding may vary across classroom settings. While global evidence supports the role of peer dynamics in language learning, there remains a notable research gap concerning statistically validated and context-specific investigations of peer relationships as a Social Scaffold in Indonesian secondary schools. In particular, structured empirical studies examining how peer interaction influences measurable English learning outcomes at the senior high school level remain limited. Addressing this gap provides a clear rationale for the present study, which seeks to offer a contextually grounded and methodologically rigorous analysis of peer interaction within Indonesian EFL classrooms.

METHOD

This study employed a quantitative correlational research design to examine the influence of peer relationships on students' English language learning achievement. A cross-sectional survey design was adopted, in which data were collected at a single point in time. Structural Equation Modeling (SEM) was used to test the hypothesized relationships among the study variables. (Hair et al., 2019). The participants were 250 senior high school students studying English as a Foreign Language (EFL) in Indonesian public secondary schools. Cluster random sampling was used to ensure representation across different classes and academic backgrounds. All participants had received formal English instruction for at least three years, and ethical principles such as anonymity and voluntary participation were strictly observed. Data were collected using a peer relationship questionnaire and English achievement measures. The questionnaire assessed emotional support, instrumental assistance, and collaborative learning practices using a five-point Likert scale. Instrument reliability was examined using Cronbach's alpha, with coefficients above 0.70 indicating acceptable internal consistency. (Tabachnick & Fidell, 2019).

Data collection procedures

Data collection was conducted during regular school hours with permission from school authorities. The questionnaire was administered in classroom settings under teacher supervision to ensure independent responses. English achievement data were obtained from school records and skill-based assessments after questionnaire administration.



Data analysis

A. Descriptive Statistics

Descriptive statistics were computed to summarize students' responses and English achievement levels before further analysis (Tabachnick & Fidell, 2019).

B. Measurement Model

Confirmatory Factor Analysis (CFA) was conducted to evaluate the validity of the measurement model. Model fit was assessed using standard indices, including the Comparative Fit Index, Tucker–Lewis Index, and Root Mean Square Error of Approximation (Hair et al., 2019).

C. Structural Model

The structural model was tested to examine the hypothesized relationships between peer relationships and English learning achievement. Path coefficients were analyzed to determine the strength and direction of the relationships (Kline, 2016).

D. Model Interpretation

Statistical significance was determined at a p-value of less than 0.05. The coefficient of determination (R^2) was used to identify the proportion of variance in English achievement explained by the model (Hair et al., 2019).

FINDINGS AND DISCUSSION

1. Descriptive Findings of Peer Relationships in English Language Learning Achievement

The descriptive analysis indicates that peer relationships play a meaningful role in students' English language learning achievement. Based on the Likert scale index calculation, the overall index score reached 68%, which falls within the "Agree" category. This result suggests that students generally perceive peer relationships as positively contributing to their academic achievement in English learning contexts.

The mean score of 101.79 reflects a moderate level of peer relationship influence, while the median score of 99.5 suggests a relatively balanced distribution of responses among participants. The mode score of 91.4 indicates that a considerable number of students reported similar experiences regarding peer interaction and support. These findings imply that peer relationships function as a consistent social factor that supports students' engagement and performance in English learning.

From a sociocultural perspective, this result supports Vygotsky's (1978) view that learning occurs through social interaction. In English as a Foreign Language (EFL) classrooms, peers serve as accessible sources of assistance that help learners negotiate meaning, practice language use, and gain confidence in communicative activities. Prior research has similarly shown that peer interaction contributes positively to students' academic engagement and language achievement (Zhang et al., 2024).



2. Variability of Peer Relationship Effects on English Achievement

The dispersion measures indicate that students' experiences with peer relationships vary considerably. The standard deviation of 15.7 and variance of 260.47 demonstrate a relatively wide spread of responses, suggesting that not all students benefit from peer relationships to the same extent. This variability is further illustrated by the quartile values ($Q1 = 90.07$, $Q2 = 99.5$, $Q3 = 115.1$), which indicate differences in the level of peer support perceived by students.

Such heterogeneity may be influenced by differences in classroom interaction patterns, group cohesion, and individual learner characteristics. Some students may experience strong emotional and academic support from peers, while others may have limited opportunities for effective collaboration. This finding is consistent with previous studies emphasizing that the effectiveness of peer interaction depends on the quality and structure of collaboration rather than its mere presence (Zhang et al., 2024).

Nevertheless, despite the variation, the overall tendency remains positive. The relatively high variance does not negate the influence of peer relationships but instead highlights the need for structured peer-based instructional strategies to ensure that all learners benefit equitably. Teachers' facilitation is therefore essential in transforming peer interaction into productive academic scaffolding (Liu, 2023).

3. Peer Relationships as Social Scaffolding in English Learning

The findings support the conceptual framework of peer relationships as a "Social Scaffold" in English language learning. The 68% agreement level indicates that students recognize peer interaction as a form of support that assists them in understanding learning materials, completing tasks, and improving language skills. This aligns with the concept of the Zone of Proximal Development (ZPD), where learners achieve higher levels of performance through guided interaction with peers (Ibrahim & Kado, 2024).

Peer relationships provide both emotional and cognitive scaffolding. Emotionally, peer encouragement reduces anxiety and increases learners' willingness to participate in English communication. Cognitively, collaborative activities such as group discussions and peer feedback facilitate language practice and meaning-making. Previous research confirms that peer-supported learning environments enhance self-efficacy and motivation, which are crucial for successful language acquisition (Mohanpriya & Jaisre, 2024).

In EFL contexts such as Indonesia, where students often hesitate to use English due to fear of making mistakes, peer interaction offers a relatively safe environment for practice. This finding corroborates earlier studies indicating that collaborative learning reduces foreign language anxiety and improves academic achievement (Kaharuddin et al., 2025).

4. Pedagogical Implications

The results suggest that English teachers should intentionally integrate peer-based learning strategies into classroom instruction. Given the observed variability in peer relationship effects, structured collaborative activities such as peer tutoring, small group discussions, and cooperative tasks are recommended to maximize the benefits of social scaffolding. Teacher guidance is necessary to ensure balanced participation and meaningful interaction among students. Overall, the findings reinforce the importance of peer relationships as a social resource that supports English language learning achievement. By fostering positive



peer interaction, educators can create learning environments that are not only academically effective but also socially supportive.

CONCLUSION

This study confirms that peer interaction plays a meaningful role as a Social Scaffold in supporting English learning outcomes among senior high school students in Indonesia. Based on a quantitative correlational approach and analysis using Structural Equation Modeling (SEM), the results indicate a statistically significant and positive relationship between peer interaction and students' English achievement ($\beta = 0.45$, $p < 0.001$). The findings suggest that collaborative peer engagement contributes substantially to students' English proficiency, accounting for 38% of the observed variance.

The results align with Vygotsky's sociocultural perspective by indicating that peer interaction facilitates both emotional and cognitive support in EFL learning contexts. In particular, structured peer activities, such as group discussions, appear to provide effective scaffolding by enhancing learner motivation and supporting language development. However, the variability in students' experiences indicates that the benefits of peer interaction are not consistently experienced by all learners. Consequently, it is important for English teachers to purposefully design and manage peer-based instructional strategies, including reciprocal tutoring and clearly structured collaborative tasks. Future studies are encouraged to employ longitudinal and qualitative research designs to further examine the contextual and developmental aspects of Social Scaffold in Indonesian secondary school settings.

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