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Modelling factors associated with Indonesian fifth graders' English learning motivation and task engagement

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This study examined the roles of teachers, peers and young learners' (YLS) socio-economic status (SES) play from the children's perspective. The theoretical background drew on self-determination theory and YLS' language learning motivation. We collected data with a survey and analyzed them using structural equation modeling involving 598 fifth graders in Indonesia. The model tested direct and mediated relationships between YLS' views of their teachers and peers and their SES (operationalized as parents' educational background, occupation, and income) and task engagement and indirectly with motivation. The results showed that YLS' perceptions of their teachers' and peers' roles significantly and strongly predicted their motivation, whereas their SES showed a significantly weaker relationship with motivation. Parents' income and occupation, however, had a statistically nonsignificant relationship with the children's motivation. YLS' English learning motivation significantly and strongly predicted their engagement with English tasks. YLS' views of their teachers and peers had a small, significant direct relationship with task engagement and a significant indirect relationship via motivation. Additional indirect relationships resulting from parental income, occupation, and educational background were positive but lacked statistical significance. In sum, we found that YLS' perceptions of their teachers' and peers' roles, together with their SES, were positively associated with task engagement through their motivation. Teachers play key roles in creating supportive relationships and positive peer interactions, enhancing motivation and engagement. Extra support is needed for students from less privileged backgrounds.

KEYWORDS

EFL teachers' roles, motivation, peers' roles, socio-economic status, task engagement, young learners' views

1 Introduction

Motivation and task engagement play crucial roles in learning an additional language. Researchers agree that young learners' (YLS') motivation to learn a new language and to engage with tasks developing their proficiency tends to be related to three groups of significant others: their teachers, peers, and parents (Mihaljević Djigunović and Nikolov, 2019). Parents are essential to their children's learning accomplishment (OECD, 2023). Socio-economic status (SES) means an individual's availability of

financial, educational, social support and resources, their position within the social hierarchy, entitlements, and reputation that result from these assets (Duncan et al., 2015). SES is a widely used construct in language education, and multiple recent studies have underpinned its role. For instance, parents' SES was significantly associated with YLs' motivation to learn English as a second or foreign language (ESL/EFL) in China (Butler, 2015). Moreover, high-SES 11-year-old immigrant learners in Germany were more motivated than their lower-SES peers (Brandmiller et al., 2020).

Although such findings are common in educational research (OECD, 2023), there is hardly any evidence on the relationships between these factors and YLs' motivation and task engagement in the EFL context in primary schools in Indonesia (Lena and Nikolov, 2025a, 2025c). A previous study investigated YLs' and their parents' perceptions of stakeholder roles in motivation and task engagement, but not how SES relates to motivation and task engagement (Lena and Nikolov, 2025c). This research seeks to fill this void by using structural equation modelling (SEM) to examine the intricate relationships among fifth graders' perceptions of the roles their teachers and classmates play and how their SES is associated with YLs' motivation and engagement with tasks in early English programs at Indonesian schools. We aim to provide perspectives for educators and policymakers on how supportive atmospheres can enhance YLs' English learning motivation and promote sustained task engagement.

This study investigates how YLs' perceptions of their teachers' and peers' roles, together with their SES, are associated with their English learning motivation from the children's perspectives. We aim to model how YLs' motivation is related to their level of involvement in learning the English language and how their views and SES are related to their task engagement and motivation.

We seek answers to two research questions:

1. How do YLs' views on teachers and peers, and their SES relate to their English learning motivation and task engagement?
2. To what extent does YLs' English learning motivation mediate the relationship between their views on teachers and peers, their SES, and task engagement?

2 Literature review

2.1 Conceptual framework

This research draws on two related conceptual frameworks to shed light on the relationships between YLs' perceptions of their teachers and peers, their SES, and motivation and task engagement. Self-determination theory differentiates motivation into two types: extrinsic motivation is fuelled by outside rewards or obligations, whereas intrinsic motivation derives from interest and enjoyment (Ryan and Deci, 2020). According to this theory, learners become more motivated when their three basic psychological needs are supported. First, autonomy concerns learners' sense of choice and control in their learning. Second, competence is the feeling of being capable and successful in completing learning tasks. Finally, relatedness is defined as feeling connected and supported by teachers, parents, or peers.

When these three needs are fulfilled, learners are more likely to develop intrinsic motivation, positive attitudes toward learning, and engagement with tasks (Ryan and Deci, 2020). We used these two types of motivation because the model is widely applied in educational psychology and well-suited to the developmental stage of fifth graders. Overall, both extrinsic and intrinsic motives are associated with YLs' level of engagement during English learning activities (Jiao, 2024; Mihaljević Djigunović and Nikolov, 2019). This framework underscores how teachers, peers, and SES indicators all contribute to how motivated children are and how much they engage with English tasks.

YLs' motivation is fluid and strongly associated with the surrounding context, including significant others (Mihaljević Djigunović and Nikolov, 2019). YLs' language learning motivation is defined as situational and sustained willingness to engage in language-learning activities related to their interests, enjoyment, perceived competence, task characteristics, and support from their teachers, peers, and parents. Children's motivated learning behaviour is predicted by others; more specifically, it evolves in response to how they perceive their teachers, peers, and SES indicators as well as other internal and external environmental effects. As learners grow older, their teachers' effect on their motivation declines, whereas their classmates' influence increases (Mihaljević Djigunović and Nikolov, 2019). Task engagement is defined as the extent of learners' participation in language learning tasks, and it has four dimensions: behavioural, emotional, cognitive, and social engagement (Philp and Duchesne, 2016).

2.2 Stakeholders' roles in YLs' language learning motivation and task engagement

Three groups of stakeholders are associated with YLs' motivation to learn a new language and to engage with tasks that are conducive to developing their abilities in the target language: they include language teachers, peers, and SES (Mihaljević Djigunović and Nikolov, 2019).

2.2.1 YLs' views of their teachers' roles

Teachers model positive attitudes, motivate participation, scaffold learning, and build supportive environments through rapport, engaging tasks, helpful feedback, and cooperation (Mihaljević Djigunović and Nikolov, 2019). Several studies have examined how YLs perceive their teachers and their peers' motivation (Tseng, 2021; Wallace and Leong, 2020) and task engagement (Lu et al., 2022). Young learners who view their teachers more positively generally show higher levels of motivation (Tseng, 2021; Wallace and Leong, 2020) and are more willing to cognitively and emotionally engage with tasks in the learning process (Lu et al., 2022; Núñez et al., 2019).

The most often mentioned teachers' roles specified in the literature include being role models as learners and users of the target language, scaffolding YLs' learning (Mihaljević Djigunović and Nikolov, 2019), and facilitating their task engagement (Mihaljević Djigunović and Nikolov, 2019; Pinter, 2017). The way learners view and feel about their teachers is associated with their motivational levels (Hiver and Al-Hoorie, 2020). This study therefore investigates YLs' views of their teachers' roles as

role models, engagement facilitators and scaffolders (Mihaljević Djigunović and Nikolov, 2019; Pinter, 2017).

2.2.2 YLs' views of their peers' roles

Children's motivation and engagement are also significantly associated with their peers' behaviour. The dynamics in peer groups not only relate to motivation and self-confidence but also encourage engagement in individual, pair, and group work (Bui and Dao, 2023). More specifically, research has demonstrated that YLs' views of their classmates can predict how motivated they are to learn English (Wallace and Leong, 2020). Peer support was found to be significantly associated with YLs' motivation (Solhi, 2024) and their emotional and behavioural engagement (Ansong et al., 2017). Peers can act as role models, rivals, partners and can support each other's learning through scaffolding (Mihaljević Djigunović and Nikolov, 2019). This study investigates YLs' views of their peers' roles as competitors, collaborators, and scaffolders.

2.2.3 YLs' SES

Educational research tends to operationalize learners' socioeconomic status (SES) through family income, parents' educational level, and occupational prestige (Duncan et al., 2015). Butler (2015) investigated how parents' SES was associated with their children's motivation to learn English. She found that parents with higher SES provided better opportunities for English language learning, in line with other authors (Liu and Chiang, 2019; Qureshi et al., 2023). Moreover, high-SES 11-year-old learners were more motivated than lower-SES learners (Brandmiller et al., 2020). Learners in rural schools and those whose parents were less educated tended to show lower motivation than students in urban schools and those whose parents had a higher level of education (Iwaniec, 2020). Overall, previous studies have consistently indicated that SES plays a prominent role in YLs' motivation to learn English and to participate in activities improving their abilities. Findings have suggested that SES, measured by parental income, education, and occupation, is associated with YLs' motivation, which subsequently relates to their engagement with English tasks. Motivation has therefore been considered a potential mediating mechanism linking YLs' socioeconomic background and their engagement in learning activities.

2.2.4 Motivation and task engagement

Researchers have also documented a significant relationship between motivation and task engagement among children learning English (e.g., Zhang and Crawford, 2024). Previous syntheses of research on what drives engagement emphasized that teachers, classmates, and students' motivation are related to how learners engage with tasks (Dörnyei and Ushioda, 2011). Building positive rapport with teachers and classmates is also closely linked to fostering motivation, including individual goals, and increasing involvement, both of which are vital for academic success (Collie et al., 2016). Supportive relationships with both instructors and classmates can increase students' involvement in classroom activities (Gan, 2021; Li et al., 2024). YLs who experienced challenging interactions with their

teachers tended to persist less in tasks, whereas those who had supportive and close relationships demonstrated heightened motivation and higher engagement (Silinskas and Kikas, 2022). Understanding these factors in the Indonesian context is crucial for enhancing YLs' EFL learning.

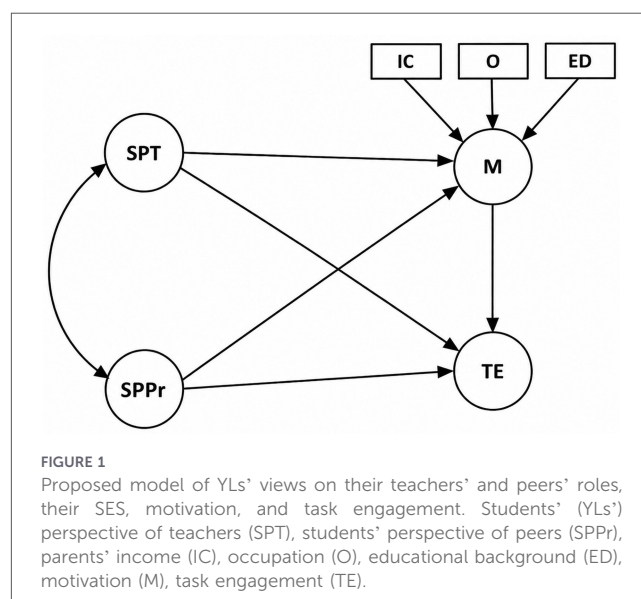
2.3 The proposed model

Based on the above overview of the literature, we built a model integrating how YLs perceive the roles of their teachers and peers, their SES, and how these are associated with their motivation to learn English and to engage with tasks using English. This model integrates all suggested pathways, including both direct and indirect links between variables, to assess the possible relationships of each variable with YLs' motivation and task engagement. It also includes interrelationships between the external latent constructs to consider the shared variance stemming from YLs' views. Figure 1 depicts the theoretical model.

3 Method

3.1 Research design

This study adopted a quantitative cross-sectional research design to examine the associations between YLs' views of their teachers and peers, their SES, and their motivation and task engagement in elementary schools in Indonesia. Data were collected at a specific moment in time to reflect the participants' views of these variables alongside children's motivational and engagement levels (Creswell and Creswell, 2018). SEM was used as the main analytical approach to examine the proposed model, enabling the concurrent exploration of direct and mediated relationships between latent constructs (Kline, 2023).



3.2 Participants

Participants were 598 fifth-grade students (303 males and 295 females) learning English at 15 Indonesian (8 public and 7 private) elementary schools in a specific urban setting in Indonesia. They were selected using a cluster random sampling method from the eligible population (152 schools): we divided the population into groups or clusters based on their school types (public and private) and then randomly selected entire clusters for participation in the study (Creswell and Creswell, 2018). YLs' SES was operationalized as their parents' level of education, occupation, and income.

Based on students' self-reports, their parents' educational background varied: 261 had completed senior high school, 41 had a diploma, 215 obtained a four-year degree, 64 held a graduate degree, and 17 had a doctoral degree. The parents' employment status ranged from housewives (254), civil servants (184), private employment (61), entrepreneurs/traders (58), to labourers (41). Concerning parents' income, most parents (374) earned between IDR 1 and 5 million monthly; 94 parents earned from IDR 6 to 10 million, 76 earned between IDR 11 million and 15 million, and 54 made over IDR 15 million.

3.3 Instrument

A questionnaire was developed drawing on findings in the literature concerning what roles teachers, peers, and YLs' SES play (Mihaljević Djigunović and Nikolov, 2019; Pinter, 2017), how intrinsic and extrinsic language learning motivation (Mihaljević Djigunović and Nikolov, 2019; Ryan and Deci, 2020), and task engagement are related (Philp and Duchesne, 2016). Three experts reviewed the items for content, clarity, readability, and appropriateness for fifth graders. One was a child survey expert with decades of teaching and research experience, and two experienced Indonesian teachers of English also evaluated the items both in English and in Indonesian. In a short pilot, two children completed the Indonesian survey to confirm that the wording, instructions, and response options were understandable to fifth-grade students, and they did so without difficulty, confirming that it was ready for use.

To evaluate the accuracy and consistency of the questionnaire, we conducted a validation study with 579 fifth graders (Lena and Nikolov, 2025b) who were not included in this study sample; thus, we did not use the same participants for validation and the main study; therefore, there is no overlap in the sample.

The CFA results showed that the YLs' perceptions of the stakeholder roles model had an acceptable fit, with a significant chi-square and acceptable fit indices ($\chi^2 = 433$, $p < .001$, CFI = .93, TLI = .91, SRMR = .048, RMSEA = .054). The motivation model fit the data well, with a non-significant chi-square statistic and strong fit indices ($\chi^2 = 10.9$, $df = 8$, $p = .209$, CFI = .994, TLI = .989, SRMR = .021, RMSEA = .042). The task engagement model demonstrated an acceptable to good fit, with a significant chi-square statistic and satisfactory approximate fit indices ($\chi^2 = 136$, $df = 59$, $p < .001$, CFI = .944, TLI = .926, SRMR = .039, RMSEA = .079).

The questionnaire was valid and reliable, and it comprised 37 items and measured seven variables: children's views of their teachers (9 items) and their peers (6 items), three SES

indicators: parental education (1 item), parental occupation (1 item), and family income (1 item), motivation (6 items), and task engagement (13 items). The instrument used a four-point Likert scale ranging from strongly disagree to strongly agree. The questionnaire was developed in English and administered in Indonesian. The items were translated into Indonesian by two experts who are proficient in English and Indonesian.

3.4 Procedure of data collection

Ethical clearance was secured from the Ethics Committee of the Doctoral School of Education, University of Szeged (No.24/2023, dated 21 December 2023). We invited the participants to be part of this study online and provided their parents through their teachers with detailed information about the survey. As YLs were underage, consent forms signed by the children's parents were collected, and assent was obtained from the children prior to their participation in the survey. Data were collected between April and June 2025 through the online questionnaire administered via Google Forms in the Indonesian language. English teachers facilitated distributing the online survey to parents using a WhatsApp group. All participants and their parents were informed that their participation was voluntary, they could opt out at any point, and their data would remain confidential. The fifth graders completed the survey independently at their own convenience at home using a mobile phone or other devices.

3.5 Data analysis

Structural equation modelling was conducted using IBM SPSS AMOS version 26. A two-step approach was applied, involving the evaluation of the measurement model followed by the structural model (Kline, 2023). The model comprised four latent variables: YLs' views of their teachers' and peers' roles, motivation, and task engagement, each defined by their corresponding indicators. Parental education, occupation, and income (SES) were treated as observed exogenous variables in the SEM model. Prior to model estimation, data screening procedures were conducted to assess normality and potential estimation issues. Skewness and kurtosis values fell within acceptable limits, and multivariate critical ratios did not indicate severe deviations from normality. No negative error variances were detected, indicating the absence of Heywood cases. The measurement model was evaluated using composite reliability (CR), average variance extracted (AVE), and discriminant validity. The structural model was tested by examining standardized path coefficients and their significance levels. Model fit was assessed using the chi-square statistic (χ^2), CMIN/DF, comparative fit index (CFI), Tucker-Lewis index (TLI), root mean square error of approximation (RMSEA), and standardized root mean square residual (SRMR). Squared multiple correlations (R^2) were calculated to determine the proportion of variance explained in endogenous constructs.

3.5.1 Prerequisite analysis

The results of the normality test display the range of skewness, kurtosis, and their critical ratios (c.r.) for variables. Skewness

values range from $-.21$ to $-.97$, pointing to a slight negative skew among the variables. Kurtosis values range from $.07$ to $.90$, which convey distributions that are relatively flat to moderately peaked. Most critical ratios for skewness and kurtosis were under the widely accepted limit of ± 2.58 , signifying that deviations from normality were mostly within tolerable bounds (Hair et al., 2018; Kline, 2023). However, a few variables, such as cognitive engagement, competitor, role model, engagement facilitator, and scaffolding, neared or surpassed this threshold for skewness. The multivariate skewness ($c.r. = 2.01$) and kurtosis ($c.r. = 1.99$) values suggest that deviations from normality were within acceptable limits for maximum likelihood estimation (Hair et al., 2018; Kline, 2023).

Inter-construct correlations were examined to assess potential multicollinearity. None of the correlations exceeded $.85$, indicating no multicollinearity concerns (Kline, 2023). Correlations among first-order factors were theoretically expected and did not suggest redundancy among constructs. Furthermore, the model was examined for possible Heywood cases (Byrne, 2013; Kline, 2023). The findings indicate that no indicators associated with latent constructs display negative variance estimates. Although the variance estimate for intrinsic motivation is low ($.01$), it does not indicate model instability but rather limited dispersion in the latent trait within the sample. However, it is positive, greater than zero, and statistically acceptable; thus, a Heywood case issue is absent (Kline, 2023). In general, the results indicate that the measurement framework is psychometrically robust, exhibiting satisfactory reliability and convergent validity, while also avoiding significant multicollinearity or estimation problems.

4 Results

4.1 The final model

The model was estimated using the maximum likelihood technique (Kline, 2023). The model fit was assessed based on multiple goodness-of-fit indices to ascertain that the defined paths sufficiently described the observed data before model adjustments. Although the chi-square test was significant, which is common in large samples, additional fit indices indicated acceptable model fit. The CMIN/DF value of 4.75 indicates an acceptable, though not optimal, model fit (Schumacker and Lomax, 2010). The RMSEA value was $.07$, and the SRMR was $.02$, both suggesting that the model provided an adequate fit (see Figure 2). In addition, the goodness-of-fit indices corroborated this conclusion, CFI = $.96$; TLI = $.94$, both surpassing the commonly suggested cutoff values (Hu and Bentler, 1999), thus suggesting that the model presents an accurate reflection of the observed data. YLs' perceptions of their teachers' and peers' roles, their SES were associated with their motivation to learn English. The same variables were associated with task engagement in both direct and indirect ways via motivation. SES was associated with task engagement indirectly via motivation. YLs' motivation showed a significant direct path to task engagement.

Figure 2 represents a final SEM showing associations among YLs' views of their teachers' and peers' roles, their SES, English learning motivation, and task engagement at 15 elementary schools in Indonesia. The yellow unobserved constructs of YLs'

views on their teachers and peers are measured by their respective observed variables (e.g., role model, engagement facilitator, scaffolding, competitor, collaborator/scaffolding) with factor loadings ranging from $.60$ to $.79$. YLs' views of their teachers and peers are strongly correlated ($.58$), shown in red. The blue latent variable motivation is measured by intrinsic and extrinsic motivation, and it is predicted by income ($.10$), occupation ($.13$), educational background ($.20$), YLs' views of teachers ($.51$) and peers ($.57$). The latent variable in peach colour, task engagement, is measured by observed variables (e.g., behavioral engagement and social engagement), and is strongly predicted by motivation ($.69$), and weakly by YLs' views of teachers ($.27$) and peers ($.29$).

4.2 Measurement model validation

Validity and reliability were systematically assessed through the analysis of factor loadings, CR, and AVE, and the relationships between latent variables were analyzed to assess discriminant validity. Table 1 confirms that all constructs adhere to the suggested criteria for convergent validity and CR. AVE values range from $.50$ to $.60$, equal to or greater than the threshold of $.50$ (Fornell and Larcker, 1981), demonstrating that each construct accounts for over 50% of the variability of its items. The CR values, varying from $.73$ to $.80$, go beyond the accepted cutoff of $.70$ (Hair et al., 2018), indicating that the constructs display adequate internal consistency. These results indicate that the model has sufficient convergent validity and reliability for the constructs related to YLs' views on teachers and peers, motivation, and task engagement.

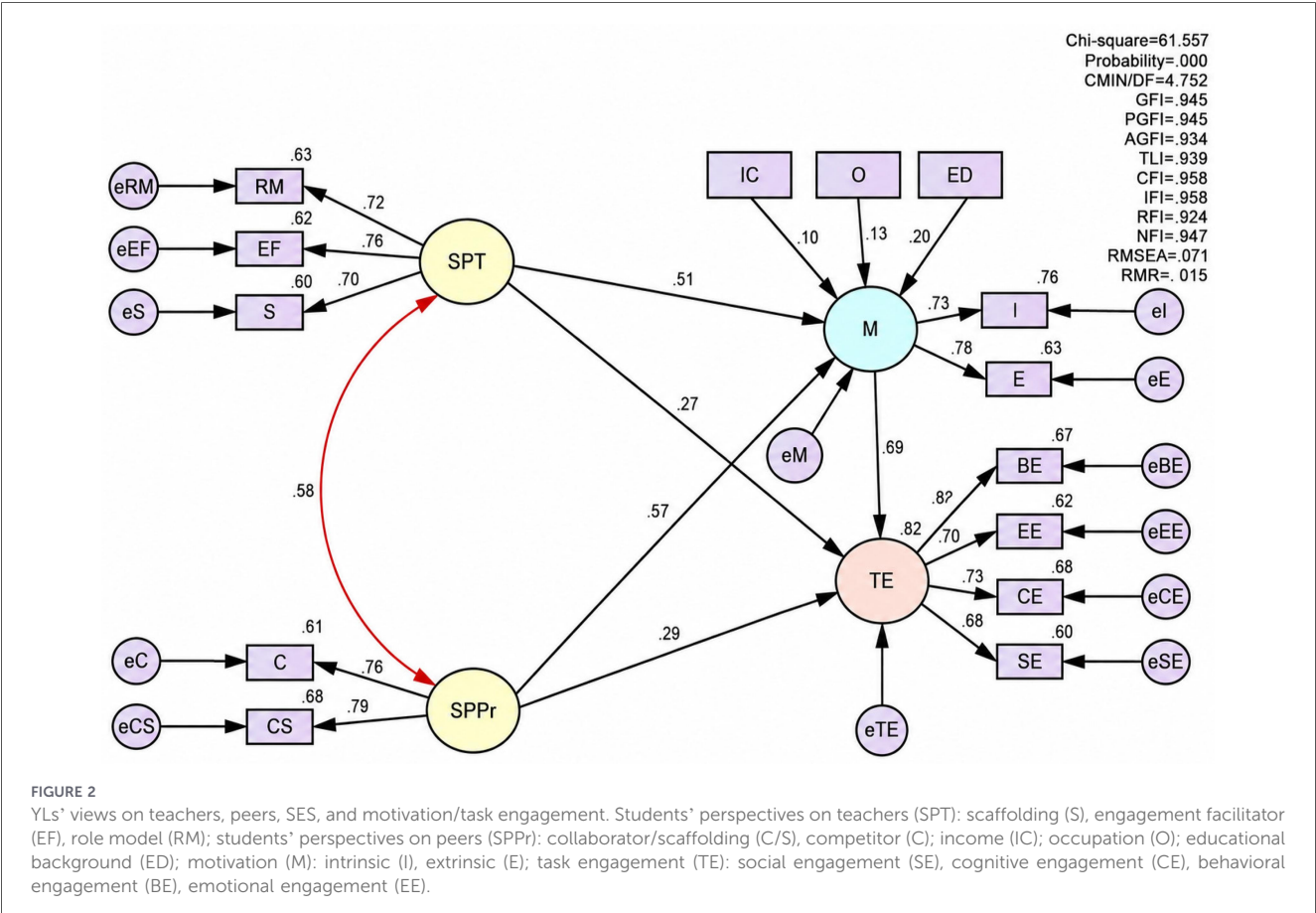
The study displays convergent validity because all standardized factor loadings exceed the $.50$ threshold (Hair et al., 2018). Each indicator exhibits significant loadings for its corresponding construct, with values ranging from $.68$ (social engagement) to $.79$ (collaborator/scaffolding), see Figure 2. This outcome indicates a strong shared variance among the measured variables and their associated latent constructs, underlining the model's effectiveness in representing the specified theoretical relationships.

According to the Fornell–Larcker criterion, each construct's AVE square root exceeded its correlations with all other constructs; therefore, the latent variables demonstrated discriminant validity (Fornell and Larcker, 1981). Table 2 provides the relationships between the constructs, with the square roots of AVE presented along the diagonal.

4.3 Path analysis

4.3.1 Direct path

Young learners' motivation is strongly related to how they perceive their teachers and classmates. Although parental income and occupation have a positive relationship with motivation, they are not statistically significant. Parents' education has a small but significant direct association with motivation. Motivation showed the strongest association with task engagement ($\beta = .69$), supported by smaller yet significant



contributions from YLs' perceptions of peers' and teachers' roles and their parents' educational background. These results suggest that motivation is strongly associated with task engagement, while indicating that YLs' perceptions of their teachers and peers have a direct positive relationship with their task engagement. Table 3 demonstrates the direct relationships.

4.3.2 Indirect path

The results revealed that YLs' views of their teachers' and peers' roles exert a significant positive indirect relationship on task engagement via motivation, with coefficients of $\beta = .35$ and $\beta = .39$, respectively. Other indirect relationships stemming from parental income, $\beta = .07$, occupation, $\beta = .09$, and educational background, $\beta = .14$, are positive but not significant. These results indicate that motivation functions as a statistical mediating pathway that connects children's views on their teachers and peers and task engagement. Table 4 presents the indirect relationships in the structural model.

4.3.3 Total path

This study indicated that YLs' views of their teachers' roles have a strong overall association with their task engagement (.62) (Hair et al., 2018; Kline, 2023), comprising both a significant direct relationship (.27) and a notable indirect relationship through motivation (.35). Comparably, YLs' views of their peers' role exhibit the strongest total association (.68) (Hair et al., 2018;

TABLE 1 The constructs' AVE and CR scores.

Constructs	AVE	CR
YLs' views of teachers	.52	.77
YLs' views of peers	.60	.75
Motivation	.57	.73
Task engagement	.50	.80

Kline, 2023), with both direct (.29) and indirect (.39) contributions. Parents' educational background also reveals a meaningful total relationship with task engagement (.14). In contrast, parental income and occupation present weaker overall relationships with task engagement (.07 and .09, respectively), largely through indirect paths via motivation. These results suggest that YLs' perceptions of their peers' and teachers' roles are the most significant factors related to their task engagement directly and indirectly via motivation. Table 5 presents an overview of the total associations that predictors have on YLs' task engagement, integrating both direct and indirect paths through motivation.

4.4 Squared multiple correlations (R^2)

The model's squared multiple correlation coefficients (R^2) demonstrate that the model captures a significant part of the

TABLE 2 The correlations among latent variables and square roots of AVE.

Variables	YLS' views of peers	YLS' views of teachers	Motivation	Task engagement
YLS' views of peers	.78			
YLS' views of teachers	.58	.72		
Motivation	.69	.64	.76	
Task engagement	.41	.32	.67	.71

variation in the endogenous constructs. The R^2 for motivation stands at .68 ($p < .001$), suggesting that 68% of its variance is accounted for by its predictors: YLS' views on teachers, peers, and SES (as measured by family income, education, and occupation). Task engagement shows an even greater R^2 of .82 ($p < .001$), showing that 82% of its variance is accounted for by motivation alongside other direct predictors of YLS' views of their teachers and peers. This result should be interpreted with caution, as all constructs were measured using self-report data from the same learners, which may have contributed to inflated correlations among the constructs. These significant R^2 values reveal the model's strength in predicting motivation and task engagement among YLS of English (Kline, 2023).

5 Discussion

With respect to the first research question, we found that young learners' views on their teachers' and classmates' roles, as well as their socioeconomic status, were significantly associated with their motivation to learn English. YLS' views of teachers' and peers' roles are significantly and strongly associated with their motivation (.51 and .57, respectively) (Hair et al., 2018; Kline, 2023). This finding suggests that YLS' perceptions of support from teachers and peers are closely associated with their motivation. This outcome is in line with the literature emphasizing that YL's motivation is related to their teachers and peers (Mihaljević Djigunović and Nikolov, 2019). As Hiver and Al-Hoorie (2020) and Tseng (2021) pointed out, learners' views of their teachers predicted their level of motivation. Additionally, peers also predicted one another's motivation (Bui and Dao, 2023; Wallace and Leong, 2020), and peer support had a significant association with motivation (Solhi, 2024). Therefore, our outcomes correspond with the outcomes of previous research.

We found evidence of an association between children's SES indicators and their motivation. This aligns with previous studies that found that students from more socioeconomically advantaged families generally show greater motivation to learn English (Liu and Chiang, 2019). Parental educational background had a significant positive relationship with motivation to a lesser degree (.20) (Hair et al., 2018; Kline, 2023). Research showed that learners with parents characterized by less education generally showed lower motivation than those whose parents were more educated (Iwaniec, 2020). Parental income and occupation had weak but positive associations with motivation (.10 and .13, respectively), but these relationships were not statistically significant. To sum up, while parental education has a positive but limited association with YLS'

TABLE 3 Direct paths.

Direct path	Standard estimate (β)	p
Motivation $\leftarrow$ YLS' views of teachers	.51	<.001
Motivation $\leftarrow$ YLS' views of peers	.57	<.001
Motivation $\leftarrow$ Income	.10	.08
Motivation $\leftarrow$ Occupation	.13	.06
Motivation $\leftarrow$ Education	.20	.02
Task engagement $\leftarrow$ YLS' views of teachers	.27	.02
Task engagement $\leftarrow$ YLS' views of peers	.29	.01
Task engagement $\leftarrow$ Motivation	.69	<.001

TABLE 4 Indirect paths.

Indirect path	Standard estimate (β)	p
Task engagement $\leftarrow$ Motivation $\leftarrow$ YLS' views of teachers	.35	.01
Task engagement $\leftarrow$ Motivation $\leftarrow$ YLS' views of peers	.39	<.001
Task engagement $\leftarrow$ Motivation $\leftarrow$ Income	.07	.09
Task engagement $\leftarrow$ Motivation $\leftarrow$ Occupation	.09	.08
Task engagement $\leftarrow$ Motivation $\leftarrow$ Education	.14	.06

motivation, income and occupation seem to have a statistically nonsignificant relationship.

YLS' English learning motivation showed a strong positive association with their engagement with English learning tasks (.69). This result suggests that motivation is strongly related to task engagement. This study aligns with a previous study showing that motivation relates to the extent to which children actively participated in learning English (Jiao, 2024). Motivational factors, both extrinsic and intrinsic, are associated with YLS' engagement with EFL tasks during in-person English lessons (Jiao, 2024). These results are consistent with earlier research showing a strong positive relationship between task engagement and YLS' motivation to learn English (Zhang and Crawford, 2024).

YLS' views on their teachers and peers directly predicted their task engagement, with values of .27 and .29, respectively. Although these numbers are small, they are statistically significant. This

TABLE 5 Total paths of the model.

Paths	Predictor	Direct path on task engagement	Indirect path via motivation	Total path
YLS' views of teachers → Task engagement; YLS' views of teachers → Motivation → Task engagement	YLS' views of teachers	.27	.35	.62
YLS' views of peers → Task engagement; YLS' views of peers → Motivation → Task engagement	YLS' views of peers	.29	.39	.68
Income → Task engagement Income → Motivation → Task engagement	Income	–	.07	.07
Occupation → Task engagement Occupation → Motivation → Task engagement	Occupation	–	.09	.09
Education → Task engagement Education → Motivation → Task engagement	Education	–	.14	.14

result aligns with previous studies showing that peers predict engagement (Bui and Dao, 2023; Mihaljević Djigunović and Nikolov, 2019). Also, peer support plays a vital role in predicting YLS' emotional and behavioral engagement (Ansong et al., 2017). Furthermore, how learners view their teachers is associated with their cognitive and emotional involvement in the learning process (Lu et al., 2022; Mihaljević Djigunović and Nikolov, 2019).

Children's motivation to learn English statistically mediates relationships between SES, how they view teachers and peers, and task engagement. YLS' views of their teachers' and peers' roles had a significant positive indirect contribution to task engagement via motivation (.35 and .39, respectively). Students' perceptions of their teachers' roles notably predict their engagement, with motivation acting as a mediator, as was found in other inquiries (e.g., Núñez et al., 2019). Additional indirect relationships resulting from parental income (.07), occupation (.09), and educational background (.14) also showed positive trends but lacked statistical significance. These results suggest that motivation is an essential mediator that links YLS' views of teachers' and peers' roles with task engagement and may support YLS' involvement in English learning.

The predictors' relationship to task engagement includes both direct and indirect paths via motivation. YLS' views of teachers' roles had a strong relationship with task engagement (.62), with direct (.27) and indirect relationships (.35) (Hair et al., 2018; Kline, 2023). Views of peers' roles showed the strongest total association with task engagement (.68), with direct (.29) and indirect (.39) contributions. Parents' educational background also had a meaningful but weaker relationship (.14), whereas family income and occupation had weaker relationships (.07 and .09). These results underscore that views of peers' and teachers' roles are crucial for enhancing task engagement. This outcome is in line with the literature emphasizing that YLS' perceptions of their teachers and peers are related to their task engagement (Mihaljević Djigunović and Nikolov, 2019).

This study revealed that YLS' views of their teachers and peers may be stronger predictors of their motivation and task engagement than their SES, as YLS appear more closely associated with their social and classroom environment. Supportive teachers and positive peer relationships are associated with YLS' feelings of relatedness, confidence, and

enjoyment in learning English, which are important factors in self-determination theory (Ryan and Deci, 2020). In contrast, YLS' SES, namely parents' educational background, occupation, and income, may have a less direct relationship with their daily classroom experiences and emotional engagement in English learning tasks in the Indonesian EFL primary-school context. This result underscores that YLS' motivation and task engagement in this context are more directly predicted by classroom social experiences than by broader SES.

Our model's R^2 values indicate that the model accounts for a substantial proportion of the variance in the endogenous constructs (dependent variables). The findings suggest that motivation plays a central role in explaining YLS' task engagement in English learning. Especially, YLS who reported higher levels of motivation and more positive views of their teachers' and peers' roles were likely to show higher task engagement. The high ratio of explained variance indicates that these factors are strongly associated with task engagement.

Nonetheless, the interpretation of these results should be made with caution, as all constructs were measured using self-report data from the same YLS, which could have inflated the observed relationships. These high R^2 values highlight the model's strong predictive ability for motivation and task engagement among Indonesian fifth graders learning English (Kline, 2023). These outcomes align with the literature emphasizing that YLS' motivation and task engagement are related to their language learning experiences (Mihaljević Djigunović and Nikolov, 2019).

This model fit the data well. The results showed that YLS' views of teachers and peers and SES were associated with motivation to learn English and their task engagement directly and via motivation, whereas their SES was associated with task engagement indirectly through motivation, while perception of teachers and peers had both direct and indirect paths. Overall, the results underscore that participants' English learning motivation predicted their task engagement.

6 Conclusions and implications

Our study revealed that young learners' views on their teachers and peers, along with their SES, predicted their motivation to learn English; these directly and indirectly predicted engagement

in tasks through motivation. The association of SES with task engagement was indirect via motivation. Additionally, YLs' motivation was a key factor related to task engagement.

Our study underpins the relevance of using SEM to investigate the intricate connections between social factors (how children perceive their teachers and peers, and their SES) and psychological outcomes (motivation, task engagement) in early EFL education. By incorporating survey responses from multiple schools and confirming the model's reliability and validity, the study presents a model for future investigations into social and motivational aspects of EFL learning in 15 primary-school settings in Indonesia. It emphasizes the necessity of evaluating both direct and indirect relationships to achieve a complete understanding of contextual aspects such as teacher and peer support and SES.

This study has some implications. Theoretically, it reinforces language learning motivation models by demonstrating that teachers, peers, and learners' SES predict their task engagement mainly through motivation. This outcome underscores the role of indirect pathways in understanding learning behaviours. Pedagogically, the study underlines the critical role of teachers in forming supportive relationships and encouraging positive peer interactions, as these are significantly associated with motivation and task engagement. Additionally, the outcomes point to the need to pay attention to learners from less privileged backgrounds who may need extra support. Therefore, the findings support language policies and programs that actively involve parents in nurturing positive learning attitudes, ensuring that home support aligns with school initiatives. However, this implication extends beyond the scope of the current study, as parental involvement was not directly examined. These implications prioritize a comprehensive approach integrating theoretical insights, classroom strategies, and family-school collaboration to support motivation and task engagement in English learning. For teachers of YLs, the results underline that fostering friendly, compassionate teacher-student rapport should be a pivotal part of teaching, as emotional well-being is strongly related to motivation and task engagement. Teachers should use collaborative and pair activities to encourage positive peer interaction, which maintains task engagement and enjoyment in EFL.

7 Limitations and the way forward

This study involved fifth graders at 15 schools in Padang, Indonesia; this fact limits our ability to generalize our findings. Self-report questionnaires may be biased by YLs' desire to present themselves positively or by their level of self-awareness. The cross-sectional research design prevents us from generating causal inferences about what affects YLs' motivation and task engagement over time. While SEM is a strong analytical tool, its effectiveness depends on how well the model fits the observed variables, potentially overlooking intricate motivational processes. Therefore, future research should include learners from varied grade levels and educational settings to broaden the applicability of the results. This study did not use bootstrapping and confidence intervals; future research should apply bootstrapped confidence intervals to more robustly estimate the presence and size of indirect paths. Longitudinal studies are

needed to examine how teachers' and peers' actions interact with YLs' motivation and task engagement over time. Integrating qualitative data elicited in interviews and collected by classroom observations could yield a more nuanced, contextualized understanding of the dynamics associated with children's motivation and task engagement.

Data availability statement

The original contributions presented in the study are included in the article/Supplementary Material, further inquiries can be directed to the corresponding author.

Ethics statement

The studies involving humans were approved by the Ethics Committee of the Doctoral School of Education, University of Szeged (No.24/2023, dated 21 December 2023). The studies were conducted in accordance with the local legislation and institutional requirements. Written informed consent for participation in this study was provided by the participants' legal guardians/next of kin.

Author contributions

MSL: Conceptualization, Data curation, Formal analysis, Investigation, Methodology, Visualization, Writing – original draft, Writing – review & editing. MN: Supervision, Writing – review & editing. ET: Supervision, Writing – review & editing.

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The author(s) declared that this work was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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