

The Influence of Parental Involvement, Family Income and Learners' Motivational Beliefs on English Learning Achievement of Primary School Students: A Structural Equation Modelling Approach

Peewara Harnwongsa

Faculty of Education, Ubon Ratchathani University, Thailand

Apisak Sukying*

Department of Western Languages and Linguistics, Faculty of Humanities and Social Sciences, Mahasarakham University, Thailand

Abstract—This study examined the influence of parental involvement, family income, and learners' motivational beliefs on the English language learning achievement of primary school students in Thailand, utilising a structural equation modelling (SEM) approach. A total of 306 student-parent pairs from Grade 6 participated in the study. Data were collected using parent questionnaires on family income and parental involvement, student surveys on motivation and self-efficacy, and standardised measures of English achievement. The hypothesised model proposed that family income enhances parental involvement, which, in turn, influences students' motivational beliefs and, subsequently, their English achievement. The results demonstrated a good model fit ($\chi^2 = 103.078$, $df = 85$, $p = .089$; RMSEA = .026; GFI = .958), providing support for the hypothesised relationships. Family income had a significant positive effect on parental involvement ($\beta = 0.463$), while parental involvement strongly predicted students' self-efficacy ($\beta = 0.492$) and moderately predicted motivation ($\beta = 0.231$). Both motivation ($\beta = 0.221$) and self-efficacy ($\beta = 0.201$) significantly predicted English learning achievement, whereas parental involvement did not have a direct effect on achievement. Mediation analyses argued that motivational beliefs fully mediated the effects of family and parental factors on English learning achievement. These findings highlight the critical role of learners' psychological resources as proximal determinants of English learning outcomes. The study also underlines the importance of policies and interventions that promote parental engagement while enhancing students' motivation and self-efficacy to sustain long-term English achievement.

Index Terms—parental involvement, family income, motivational beliefs, self-efficacy, English language learning achievement

I. INTRODUCTION

Parental involvement is widely recognised as a predictor of children's academic achievement. There is ample empirical evidence that active parental involvement, including home-based academic support, checking homework completion, communicating high expectations, and keeping an open line of communication with teachers, is positively related to students' achievement, motivation, and cognitive development (Epstein, 2018; Fan & Chen, 2001). In terms of EFL, early language skills are even more important. Being able to read and write in English has become a key determinant of access to academic advancement and long-term social mobility. Hence, it is educationally and socially important to understand the predictors of young EFL learners' English achievement.

Although the advantages of parent engagement are universally espoused, inequalities in young learners' English proficiency persist, especially across socioeconomic groups. For example, family income has long been associated with academic achievement (Sirin, 2005). Limited financial capital may limit access to resources (e.g., learning materials and enrichment opportunities) and the time parents can invest, thereby affecting perceptions of parental efficacy and the quality of home support. But social class is not the end of the story in English achievement. It is still worthwhile to study how parental involvement interacts with children's internal subjective characteristics and processes, such as motivation beliefs, to determine language learning outcomes.

Motivational beliefs, motivation, and self-efficacy are at the heart of language learning achievement. Motivation is associated with learner engagement, perseverance, and willingness to make an effort in learning a language, while self-

* Corresponding Author. Email: apisak.s@msu.ac.th

efficacy represents learners' judgments of their own capability to perform language-related tasks effectively (Bandura, 1997; Dörnyei & Ushioda, 2011). Both scales have been found to predict strategic behaviour and academic success. However, little is known about the role of parental involvement in shaping these beliefs in primary school settings. As early education is formative in establishing long-lasting learning dispositions, investigating these psychological mediators is important.

Moreover, parent involvement is multidimensional, encompassing home practices, parental ability, and environmental stressors tied to family income. However, much of the literature draws on Western contexts. Culture, parental roles, and socioeconomic conditions vary across Asian and developing countries such as Thailand, where context-specific research is needed.

To fill these gaps, the present study uses Structural Equation Modelling (SEM) to investigate the direct and indirect influences of parental involvement, family income, learners' motivational beliefs (motivation and self-efficacy), and English learning achievement among elementary school students. The study aims to delineate the interaction between external (family-related) and internal (psychological) causal factors in English achievement using an expanded structural model applicable to an EFL setting. Therefore, this study is guided by the following research questions:

1. To what extent does parental involvement influence primary students' motivational beliefs (motivation and self-efficacy) in English learning achievement?
2. How do primary students' motivation and self-efficacy contribute to their English learning achievement?
3. To what extent does family income predict parent involvement, and through what mechanisms does it influence primary students' motivation, self-efficacy, and achievement?
4. Do motivational beliefs mediate the relationships between family income, parental involvement, and students' English learning achievement?

II. LITERATURE REVIEW

A. Parental Involvement in English Language Learning

A key factor in forecasting a student's academic success is parental involvement (Anguiano, 2004). Active involvement, including homework, regular studying, and communication with teachers, is the key to motivation, adjustment, and achievement (Park & Kim, 2024; Walker et al., 2005). Liang et al. (2024) and Zhang et al. (2023) also argue that, in an EFL setting, home support can extend language learning and/or consolidate classroom teaching when learners have little or no access to the target language outside class time and away from school.

The study is grounded in Hoover-Dempsey and Sandler's (1995, 1997) Model of Parental Involvement, which attends to parents' perceptions and motivations for engagement in their child's educational experiences at the micro-level, including constructs such as parental role construction, self-efficacy, external invitations, and time/resources. Such influences would have implications for how much and how effectively parents are supported, meaning these might be aspects that function well in an EFL context, where such play at home could counterbalance lower real language exposure.

Some research has examined the positive impact of homework assistance, shared reading, and incidental use of English on vocabulary, reading comprehension, and L2 confidence (Al Murshidi et al., 2023; Otani, 2020). The new tools offered by technology are indeed beneficial, as parents can encourage learning through educational apps, online resources, and videos (Bang & Mackey, 2024; Tao & Xu, 2022). Yet this type occurs in the context of autonomy-supportive parenting, which fosters independent reflection on ideas, acknowledges learners' perspectives, and offers support adjusted to their needs (rather than being controlling), according to proponents of Self-Determination Theory (Deci & Ryan, 2000).

B. Socioeconomic Status and Learning Outcomes

Socioeconomic status (SES), including parental education, occupation, and family income, is among the most potent predictors of students' academic achievement (Zhang et al., 2020). Family income is the SES variable most likely to directly impact resources for learning, the quality of the home environment, and parental involvement. It has therefore been included in this study. For higher-income families who can afford to have their children receive tutoring, buy books and attraction media, digital tools, devices/apps or hands-on activities for learning games at home, this has entailed more structured days or an increased emphasis on the language of instruction for academic expectations (Ye et al., 2024).

From Bourdieu's (1986) perspective on cultural capital, income is not treated solely as an economic form of capital; it is also theorised as a mechanism for acquiring other forms of capital, including learned expertise, language skills, and access to cultural resources that facilitate learning. This capital is frequently inherited, perpetuating educational advantages. While parental involvement is an important mechanism through which SES influences achievement, it is influenced by economic factors. Families of higher SES are likely to be able to afford the resources and time required to support their children's schooling, whereas families of lower SES who would like to be engaged may experience financial limitations that diminish access and the quality of engagement (Andersen et al., 2020; Li et al., 2020).

SES is not deterministic. Many low-income families cultivate habits of learning and self-control that enable them to overcome some material poverty. Once their primary needs are satisfied, nonmaterial factors such as emotional support, engagement, and self-motivation affect progress. These mediating links are highly relevant to English language learning,

highlighting the importance of policies and interventions that provide economic support for efforts to promote parent involvement and learner motivation.

C. Learner Beliefs: Motivation and Self-Efficacy

In second language acquisition, learner beliefs, especially motivation and self-efficacy, are some of the key psychological variables believed to have a profound influence on success. These are internal forces that affect how learners filter tasks, maintain attempts to achieve them, control the strategies used while doing so, and respond to setbacks (Gardner et al., 1983; Dörnyei & Csizér, 1998). Especially in an EFL context, when students are not exposed to an authentic English language environment, motivational and efficacy beliefs should be particularly important for students' classroom engagement and related achievement (Zulfa & Zahidah, 2023).

Motivation refers to the internal processes that produce or maintain a behaviour for the purpose of attaining a goal. Gardner's (1985) socio-educational model differentiates between integrative and instrumental motivation. In practice, in most EFL contexts, instrumental motivation is believed to prevail (Brown, 2014). In line with this view, Self-Determination Theory (Deci & Ryan, 1985, 2000) distinguishes between intrinsic motivation, fueled by interest and enjoyment in a chosen activity, and extrinsic motivation, regulated by external pressures or rewards. Empirical studies have repeatedly found that intrinsic motivation is linked to better learning, greater persistence, and stronger English achievement (e.g., Chuane et al., 2023).

Self-efficacy, which is closely associated with motivation, refers to learners' beliefs in their ability to successfully carry out a given task (Bandura, 1997). High self-efficacy facilitates persistence, learning strategies, and bounce-back from failure; low efficacy may result in avoidance and underachievement (Schunk, 1990; Zimmerman, 2000). In EFL contexts, where opportunities for similar authentic exchanges are rare, self-efficacy is central to maintaining effort. Empirical evidence suggests that self-efficacy is a predictor of strategic behaviour and vocabulary performance (Akamatsu et al., 2019; Mizumoto, 2013).

Motivation and self-efficacy are circularly interconnected: motivation fuels the drive to learn, while self-efficacy increases students' confidence in their ability to succeed (Wang et al., 2013). Combined, they create a flow of commitment and achievement.

Parental involvement would also influence these belief structures. Using Self-Determination Theory and Expectancy-Value Theory (Eccles & Wigfield, 2002) as theoretical support, studies have demonstrated that autonomy-supportive, emotion-affirming parenting practices or cognitively challenging instructional strategies foster intrinsic motivation and self-efficacy, whereas controlling practices can undermine engagement (Deci & Ryan, 2000; Li et al., 2020). Techniques such as constructive feedback, goal setting, and cognitive scaffolding fuel language confidence and performance (Williams et al., 2017). In short, motivation and self-efficacy are strong predictors of English learning attainment and can serve as psychological mediators between parental involvement and academic achievement among primary school students.

D. The Current Study

The current study proposes a Structural Equation Model (SEM) to examine the relationships among family income, parental involvement, motivational beliefs, and English language learning achievement. Figure 1 illustrates the conceptual framework of the hypothesised relationships among variables.

H1: Parental involvement has a significant positive effect on students' motivation.

H2: Parental involvement has a significant positive effect on students' self-efficacy.

H3: Students' motivation has a significant positive effect on English learning achievement.

H4: Students' self-efficacy has a significant positive effect on English learning achievement.

H5: Family income has a significant positive effect on parental involvement.

H6: Home-based parental involvement (HBP) has a significant positive effect on parental involvement.

H7: Parental capacity (PC) has a significant positive effect on parental involvement.

The model assumes that increased family income can allow for more parental involvement, enabling access to educational resources, time, and learning support. But family income is not expected to have a direct impact on English learning achievement. Likely, its effects do not act directly on learners but rather mediate parental involvement and, in turn, promote students' motivational beliefs, such as motivation and self-efficacy. In this model, parental involvement is a contextual process that mediates the effects of SES resources on practices that support learning, and students' psychological orientations are proximal, explanatory predictors of achievement.

Informed by the social capital perspective, the parental involvement model, and motivational psychology, it aims to provide a comprehensive model of home resources, parental practices, and learners' internal beliefs regarding EFL learning among primary school students in China. Concurrently considering both direct and indirect relationships through Structural Equation Modelling (SEM), the study offers a more methodologically rigorous assessment of how socioeconomic and psychological determinants jointly influence academic achievement.

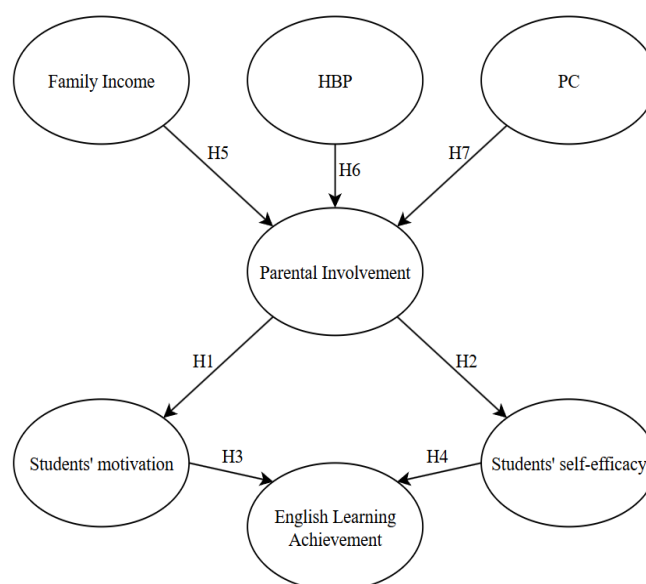


Figure 1. Conceptual Framework of the Hypothesised Relationships Among Variables

III. RESEARCH METHODOLOGY

A. Participants and Research Context

A quantitative, non-experimental research design was used in this study to investigate the structural relationships between parental involvement and learners' motivational beliefs (i.e., motivation and self-efficacy) in English learning achievement among primary school students. The analyses were primarily performed using structural equation modelling (SEM) because it is suitable for testing theory-driven models of relationships among multiple latent constructs and their direct and indirect effects (Kline, 2016). A quantitative design was chosen to increase generalisability and to provide strong statistical evidence for the suggested structural model.

The research was conducted in Northeast Thailand with Grade 6 students and their parents or legal guardians as the target participants. The total sample size for this study was 306 matched parent-student dyads, comprising 306 students and 1 adult respondent per household. In general, all students were enrolled in EFL courses, having studied English for approximately 5 years since Grade 1, with an estimated mean of 2 hours per week.

Participants were selected from schools in different socioeconomic strata and with varying academic performance using cluster sampling. This approach improved representativeness and external validity. Enrolment was voluntary, and informed consent was obtained from students and their parents. Students were eligible if they were in Grade 6 and had a parent or guardian who could complete the parent questionnaire.

B. Instruments

The main tool used in this study was a modified and validated questionnaire, based on Harnwongsa et al. (2026), developed to examine parental involvement, learners' motivational beliefs (motivation and self-efficacy), and English learning achievement in the Thai EFL context. The instrument development was rigorous, and the 2-step validation process, involving EFA and CFA, provided confidence in the new measure's strong construct validity and factorial invariance. Its use in the current research adds to conceptual alignment, methodological strength, and contextual relevance.

The survey was divided into 3 parts: (1) demographic data, (2) questions for parents, and (3) questions for students. All items remained in their validated versions to retain the integrity of a well-established measurement model and to ensure comparability with previous empirical findings. The first part contained demographic and contextual information, such as respondents' English GPA, gender, and family income. These covariates were included as control variables in the SEM analysis at the individual level and for their socioeconomic status. The second part included a 22-item parent questionnaire designed to assess parental involvement as a multidimensional construct. It consisted of three oblique factors: parent role construction, parent capacity, and home-based parent involvement. Items measured parents' attitudes and beliefs regarding their role in promoting English learning, their perceived time, confidence, and resources, as well as their engagement with specific home practices that support learning. On the one hand, the original validation study reported favourable content validity (IOC: .67-1.00) and strong internal consistency per subscale (Cronbach's $\alpha > .80$). Part 3 consisted of 19 items reflecting learners' motivational beliefs, including two latent factors: motivation and self-efficacy. The confirmed two-factor structure showed acceptable factor loadings, composite reliability, and fit indices (e.g., CFI and TLI $> .90$; RMSEA $< .08$), providing strong evidence of construct validity among Thai EFL students.

All provided items used a 5-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree). The questionnaire was translated forward and backwards to achieve linguistic and conceptual equivalence. These processes provide evidence that the instrument has strong psychometric properties and is methodologically appropriate for replication in this SEM analysis.

C. Data Collection Procedure

Data were collected from primary schools in northeastern Thailand during the second semester of the 2025 academic year. Variability in socioeconomic and cultural contexts was addressed through a cluster sampling procedure. Official permission was granted by the Office of the Basic Education Commission (OBEC) and subsequently by the schools' principals. The University Research Ethics Committee approved the study, and informed consent from both parents and students was obtained before data collection.

Participants were parents and Grade 6 students. The Thai version of the questionnaire was used for both groups. Parents were asked to complete a questionnaire measuring family income, parental involvement, and parental capacity. The students completed a questionnaire on their motivational beliefs (motivation and self-efficacy). English achievement data were from schools' English test scores.

Data were collected to reduce missing responses. As before, student questionnaires were completed in monitored classroom environments, and parent questionnaires were returned in sealed envelopes to protect confidentiality. A total of 306 matched student-parent dyads (response rate > 90%) were included. Data screening for missing values, outliers, and normality was conducted before analyses were computed in SPSS and AMOS for Structural Equation Modelling.

D. Data Analysis

Among the 321 completed questionnaires, 15 were rejected due to missing or incomplete information, leaving a final sample of 306 matched parent-student pairs. Data were analysed using a two-step structural equation modelling (SEM) approach in SPSS and AMOS (Version 29). This process entailed verifying the measurement model first and then examining the hypothesised structural links among family income, parental involvement, motivational beliefs (i.e., motivation and self-efficacy), and English learning achievement.

Before analysis, the dataset was examined for missing values, multivariate outliers, and normality. With descriptive statistics (means, standard deviations, skewnesses, and kurtoses), acceptable data distribution properties for SEM were confirmed. Pearson correlations were performed to investigate initial relationships between variables. The CFA, which was used to assess construct validity, suggested partial support for the instrument's structure. Goodness of model fit was determined throughout several indices, using the χ^2 statistic, χ^2/df , Comparative Fit Index (CFI), Tucker-Lewis Index (TLI), root mean square error of approximation (RMSEA) and standardised root mean residual (SRMR), as recommended by Hu and Bentler (1999). Reliability was assessed using Cronbach's alpha and Composite Reliability (CR), and convergent and discriminant validity were assessed using Average Variance Extracted (AVE) and inter-construct comparisons.

Once acceptable measurement properties were achieved, the structural model was estimated. Standardised path coefficients (β), direct and indirect effects and their statistical significance were presented. We tested mediation effects using bootstrapping with 5,000 resamples to produce bias-corrected bootstrap confidence intervals, thereby obtaining more robust estimates of indirect effects.

IV. RESULTS

A. Model Fit Evaluation

The hypothesised structural equation model tested the relationships among family income, parental involvement, students' motivational beliefs (motivation and self-efficacy), and English learning achievement. The model demonstrated a good fit to the observed data. As shown in Table 1, the chi-square statistic was non-significant, $\chi^2(85) = 103.078$, $p = .089$, suggesting an adequate model fit. Additional fit indices confirmed the robustness of the model: CMIN/DF = 1.213, GFI = 0.958, and RMSEA = 0.026, all of which met or exceeded the recommended thresholds (Kline, 2016). These results collectively indicate that the proposed model represents the observed relationships well.

TABLE 1
MODEL FIT EVALUATION

Fit Index	Value	Acceptable Threshold (Kline, 2016)
Chi-square (χ^2)	103.078, ns ($p = .089$)	$P > 0.05$
Degrees of Freedom	85	-
CMIN/DF	1.213	< 3.00
GFI	0.958	≥ 0.90
RMSEA	0.026	< 0.05

B. Effects of Parental Involvement, Family Income and Students' Motivational Beliefs on English Learning Achievement

The standardised path coefficients for the direct, indirect, and total effects are displayed in Figure 1. Consistent with the prediction, Parent involvement had a significant positive direct effect on self-efficacy ($\beta = 0.49, p < .001$) and a moderate but weaker effect on motivation ($\beta = 0.23, p < .05$). These findings suggest that parental involvement increases learners' self-belief in their abilities to learn English and their motivation, with a greater effect on students' confidence transferring. However, the direct impact of parent involvement on English achievement was not significant ($\beta = 0.10, p > .05$), suggesting that students' motivational beliefs mediate this effect.

Family income strongly predicted parental involvement ($\beta = .46, p < .001$), which is consistent with the notion that socioeconomic resources afford parents opportunities to be more involved in their children's education. (indirect effects of family income on motivation ($\beta = 0.11, p < .05$) and self-efficacy ($\beta = 0.23, p < .05$) but significantly showed a mediated effect ($\beta = 0.10, p < .01$), showing that its effect on achievement is entirely mediated by parental involvement and students' motivational beliefs.

For both motivational beliefs, motivation and self-efficacy, there were highly significant direct effects on English achievement with $\beta = 0.22 (p < .01)$ and $\beta = 0.20 (p < .01)$, respectively. These findings highlight the importance of psychological mechanisms in linking parental and socioeconomic support to achievement. The mediation model indicates complete mediation, in which family income and parental involvement did not predict English achievement directly; however, they indirectly positively predicted learners' motivational beliefs.

The measurement model also demonstrated good psychometric properties. Factor loadings for the parental involvement factors were quite high, especially item 12 of PC (Beta = 1.234) and item 10 of PC (Beta = 1.212). At the 0.05 probability level, the items were good predictors of the dimension. Error variances, such as e25 (S3) = 0.555 and e27 (S5) = 0.577, indicate that about 44-45% of the variance in these items was due to the underlying variable 'self-efficacy'. Some items (e.g., e38 (S16)) had larger error variances, but these were within acceptable bounds. These findings provide evidence of the validity and reliability of the model's constructs.

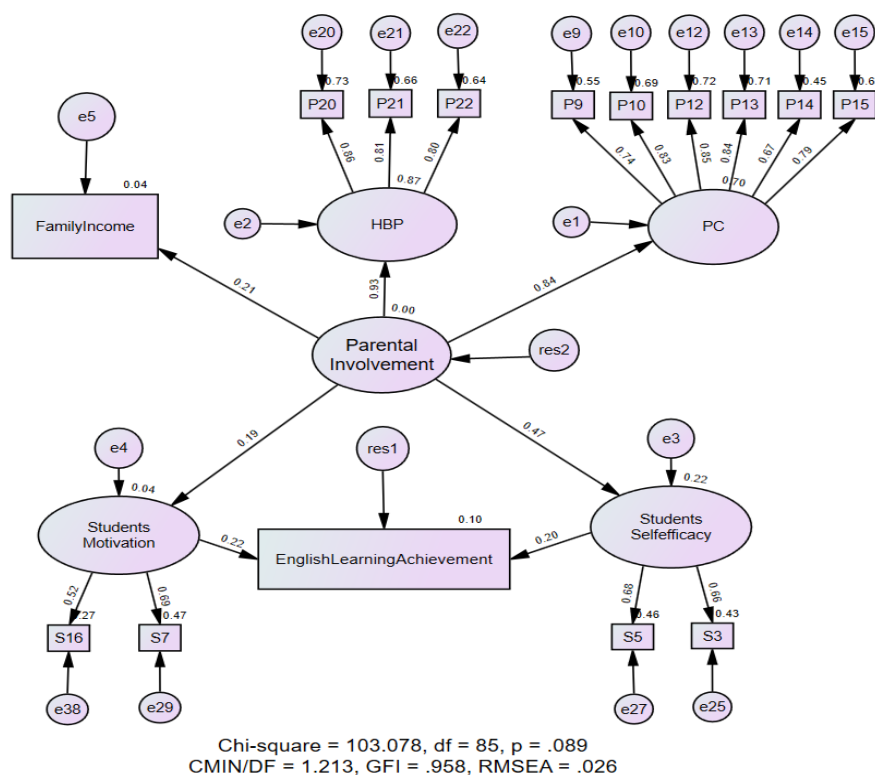


Figure 2. Standardised Path Coefficients in SEM Model

As shown in Table 2, greater parental involvement was a significant predictor of each component of students' motivational beliefs. It was found to have a small positive effect on motivation ($\beta = 0.195, p < .05$) and self-efficacy ($\beta = 0.467, p < .05$) or parents' engagement ($\beta = 0.10, p < .05$) affected English learning achievement directly, indicating that their effect is mainly exerted through motivation beliefs.

A significant mediation pathway was supported in the indirect effects analysis. The indirect effects of family income on motivation were significant ($\beta = 0.11, p < .026$) and self-efficacy ($\beta = .23, p < .001$) via its impact on parental involvement. Likewise, it had an indirect effect on English attainment ($\beta = .10, p = .01$) through the two indirect pathways from parental involvement $\rightarrow$ motivation/self-efficacy $\rightarrow$ achievement.

Parent involvement also had a significant indirect effect on English achievement ($\beta = 0.19, p < .01$) through students' motivation and self-efficacy. The sum of the effects showed that although parental involvement and family income are

not direct predictors of achievement, their combined influence through indirect routes is significant both statistically and practically.

The simultaneous occurrence of significant indirect effects and non-significant direct effects involving both family income and parental involvement on achievement provides evidence for full mediation. In this model, family external factors (i.e., both economic resources and parental involvement) influence English learning achievement exclusively through their effects on students' motivational beliefs. This result emphasises the importance of motivation and self-efficacy as mediators between family background and parental behaviours on the one hand, and academic achievement on the other.

Both measurement sections demonstrated strong psychometric properties. Parental involvement items, particularly PC item 12 ($\beta = 1.234$) and PC item 10 ($\beta = 1.212$), showed high standardised factor loadings, indicating strong construct representation. The self-efficacy indicators accounted for a large percentage of variance, as indicated by the error variances: $e25 (S3) = 0.555$ and $e27 (S5) = 0.577$, which together explain approximately 44-45% of the variance, a value acceptable for educational measures. While some items, such as $e38 (S16)$, had higher error variances, all indicators met acceptable reliability levels.

The SEM results support the hypothesised model and identify pathways through which family background and parental involvement influence English learning outcomes. Based on this study, interventions designed to enhance achievement in EFL contexts should give greater attention to motivation and self-efficacy as psychological mechanisms through which external support is translated into academic performance.

TABLE 2
STANDARDISED REGRESSION WEIGHTS

Hypothesis	Path	Standardised coefficients	P-value
H1	Parental Involvement $\rightarrow$ Students' Motivation	0.195	0.026
H2	Parental Involvement $\rightarrow$ Students' Self-Efficacy	0.467	***
H3	Students' Motivation $\rightarrow$ English Learning Achievement	0.221	0.024
H4	Students' Self-Efficacy $\rightarrow$ English Learning Achievement	0.201	0.007
H5	Family Income $\rightarrow$ Parental Involvement	0.209	0.001
H6	HBP $\rightarrow$ Parental Involvement	0.933	***
H7	PC $\rightarrow$ Parental Involvement	0.837	***

V. DISCUSSION

A. Parental Involvement and Learner Motivation and Self-Efficacy

The present findings indicate that parental involvement has a greater impact on students' self-efficacy than on motivation, and that it does not directly result in English learning achievement. These results are in line with the existing theoretical and inductive studies. The strong association between parental involvement and self-efficacy is consistent with Bandura's (1997) Social Cognitive Theory, which suggests that efficacy beliefs are developed through social persuasion, emotional encouragement, modelling, and structured opportunities to perform successfully. Provide parental academic support, instil confidence in their children's abilities, and create supportive home learning environments that enhance children's sense of competence. Previous studies have also found parental support to be a strong predictor of students' academic self-efficacy and learning-related confidence (Zimmerman, 2000).

The relatively lower impact of parental involvement on motivation is also consistent with previous studies. Consistent with the tenets of SDT and EVT (Eccles & Wigfield, 2002; Ryan & Deci, 2000), motivation is a product of interacting influences, including perceptions of competence, task value, autonomy support, peer relations, and classroom climate. In EFL learning environments where opportunities to be exposed to English are constrained to formal classroom settings, educators and peers may exert comparable influences on L2 learners' motivational orientations. Therefore, although parent support makes a positive contribution to motivation, the effect is likely diffused across broader context-level factors.

The lack of a main effect of parental involvement on English achievement is consistent with previous results indicating that parental involvement does not have a universal effect on academic outcomes (Fan & Chen, 2001; Hill & Tyson, 2009). Instead, recent models of the role of parental involvement postulate that the impact is not direct but rather operates indirectly through student-level mechanisms proximal to parental influence, such as efficacy, motivation, and self-regulation. The current SEM findings argue that learners' psychological beliefs serve as essential mediating mechanisms between family context and academic achievement. In a broader context, the results extend the discussion by elucidating how parental involvement operates in Thai primary EFL contexts. Its effect is most evident in students' confidence, with a moderate influence on motivation and achievement through these internal psychological mechanisms.

B. Family Income and Parental Involvement

The strong positive relationship between family income and parental involvement is consistent with resource theory explanations of socioeconomic status disparities in education. Familial income acts to provide material resources (e.g., books, tools for digital communication, tutoring), flexible time organisation between home and school (e.g., high-quality

day care or extracurricular activities such as chess club or independent study) and the norms about learning at home. These structural benefits help students have more consistent, higher-quality, academically supportive home environments (Hill & Tyson, 2009; Sheridan et al., 2022). Furthermore, building on Bourdieu's (1986) theory of cultural capital, families with higher socioeconomic status (SES) are more likely to be familiar with school norms and expectations, have the confidence to communicate with their children's teachers, and have high educational aspirations for their children that contribute to effective parental engagement practices (Lareau, 2011). More recent empirical evidence continues to show that SES is positively associated with how often parents are involved in academic activities (Boonk et al., 2018) and with the quality of parental involvement, particularly in literacy- and language-related activities (Sheridan et al., 2022).

Yet, the lack of a direct link between family income and English learning achievement in this study also suggests that socioeconomic privilege does not automatically equate with enhanced academic outcomes. Instead, following an ecological and process-oriented approach (Bronfenbrenner, 1995), the context-specific processes through which families employ their resources, such as structured home learning environments, academic socialisation, and emotional support, seem to contribute to achievement as more proximal causes. Recent research also finds that the effects of SES on academic outcomes are mostly mediated by mechanisms such as parental or home cognitive stimulation and students' motivation (Vadivel et al., 2023).

These findings have significant implications for EFL educational equity. Policy interventions must not only target financial assistance but also empower families, especially those of lower income, with down-to-earth methods to promote their children's English learning. There is evidence that programs such as parent mentoring, culturally responsive engagement models, and school-based training can enhance more substantive parental involvement regardless of social class (Sheridan et al., 2022). By increasing parents' ability to turn resources into proximal, supportive learning practices, schools can help promote the motivational and self-efficacy beliefs that ultimately drive students' English achievement.

C. Mediating Role of Motivational Beliefs

This mediation analysis provides strong empirical evidence that learners' motivational beliefs mediate the relationship between family influences and student achievement. In the current research, motivation and self-efficacy had significant positive effects on ELA, whereas the direct effect of parental involvement on learning achievement was not significant. This pattern reflects a complete mediation mechanism, meaning that parental involvement affects academic achievement indirectly by enhancing students' internal psychological resources. In short, parental involvement is related to children's academic achievement through positive outcomes such as self-efficacy and motivation, rather than through direct effects on learning.

These findings are theoretically consistent with Social Cognitive Theory (Bandura, 1997), which emphasises self-efficacy as a core determinant of effort, persistence, and performance. Students who have confidence in their ability to succeed are more likely to take on challenging tasks, use effective strategies, and persist in the face of difficulty. The findings are also consistent with Self-Determination Theory (Ryan & Deci, 2020), which emphasises the need to support autonomy and competence to promote intrinsic motivation and continuance. Positive motivational processes that are supported can indirectly benefit a variety of positive academic endpoints (e.g., Parenting practices such as encouragement, structured guidance, and emotional support communication were found to facilitate these motivational processes).

Educationally, the findings highlight the centrality of student agency in transforming environmental support into success. Thus, effective family engagement programs must not only focus on monitoring behaviour but also on promoting motivational beliefs. Autonomous, supportive, effort-focused, and setting high but feasible expectations may also lead to a stronger sense of ability and internal motivation among learners. By addressing these psychological mediators, parent involvement in the school becomes more developmentally relevant and is more likely to lead to longer-term improvements in English language learning achievement.

D. The Structural Relationships Among Parental Involvement, Family Income, Motivational Beliefs, and English Learning Achievement

The structural model offers robust empirical evidence for a coherent sequence among family income, parental involvement, expectancies, and values regarding English language achievement. This hypothesised chain, Family Income → Parental Involvement → Motivational Beliefs → Achievement, highlights the pathway through which socioeconomic resources operate indirectly through family involvement and the psychological functioning of students. In this sense, greater family income may contribute to higher levels of parental involvement (instrumental and supportive), thereby enhancing students' motivation and self-efficacy and leading to better English learning outcomes. This sequential directional model is congruent with Bronfenbrenner's ecological systems theory, which emphasises the cumulative effect of contextual and family-level variables on child development through proximal processes, and Hoover-Dempsey and Sandler's parental involvement model, which emphasises how parental actions influence student achievement through learner characteristics.

The strong correlation between motivation and self-efficacy ($r = 0.58$) also indicates that although the constructs are separate dimensions of learner psychology, with motivation reflecting goal orientation and effort, and self-efficacy reflecting perceived competence, they are closely related to each other. This relation aligns with studies showing that students who believe in their ability are more inclined to set goals, make efforts, and remain invested learners, and that

motivated learners tend to develop higher confidence due to successful learning experiences (Schunk & DiBenedetto, 2020; Usher & Pajares, 2008).

Of the two, only motivation emerged as a significant predictor of English achievement, indicating that motivation and self-efficacy predict achievement in English independently and complement each other as proximal determinants of performance. These results indicate that interventions should target both constructs. Successful intervention may involve scaffolded learning support to develop mastery experiences, supportive and autonomy-endorsing feedback to develop self-efficacy, and task-related goal setting that builds the value of a task and its intrinsic interest. To sustain engagement and achieve equitable English language achievement, especially among students from economically diverse backgrounds, schools can build in cognitive, affective, and contextual supports.

VI. CONCLUSION

This study examined the interrelationships between family income, parental involvement (PI), student motivational beliefs, and English language learning achievement (ELL) in primary schools using Structural Equation Modelling. The results thus suggest that family income and parental involvement have no direct impact on English achievement but are entirely mediated by student motivation and self-efficacy. Family income positively affected parental involvement, which, in turn, further enhanced learners' motivational beliefs. These constructs emerged as the strongest and most consistent predictors of English attainment.

In theory, the study contributes to further development of knowledge by integrating both external (socioeconomic and parental) and internal (motivational) factors into a coherent explanatory framework. Findings support the conclusion that SES resources and parenting practices influence academic achievement behaviour largely through their effects on learners' psychological dispositions. This result is consistent with expectancy-value and self-efficacy theories, in that perceptions of factors affecting L2 learning value both beliefs about the meaning of learning English and students' perceived capacity to perform as major mediators between family context and achievement.

From a practical standpoint, the results highlight the need to foster substantive parent engagement at home. Schools need to go beyond encouraging general parental involvement and offer manageable, active opportunities for parents to be involved, such as hands-on home-learning games or family literacy nights, as well as regular communication between the home and school. And perhaps most importantly, while family income supports the time spent involved, economic means alone are not enough. The effectiveness of educational practices is premised on how families convert resources into supportive learning conduct. As a result, programs seeking equity must first empower parents through workshops, take-home learning materials, and culturally relevant engagement.

The mediating influence of motivation and self-efficacy further underscores the significant role of teachers in fulfilling their professional obligations. Classroom practices that support goal setting, scaffolded instruction, formative feedback, and a supportive learning environment can enhance ESL learners' confidence and intrinsic motivation to learn English. Combining a motivational pedagogy within the school environment with active parental support creates a synergistic learning environment that sustains success.

Several limitations should be acknowledged. Causal inference cannot be drawn from the cross-sectional nature of the study, and longitudinal research is recommended to investigate developmental trajectories. The use of self-reported measures can introduce bias; future research should use multiple data sources. Generalisability is limited by the size of a sample drawn from a single context, and replication in culturally heterogeneous settings is needed. Finally, achievement was assessed using school grades; the inclusion of standardised proficiency measures would enhance future research.

This study shows that improving English achievement is a multi-pronged task that involves socioeconomic support, encouraging parents' active participation, and fostering students' motivational beliefs. This type of coherent plan is a promising approach to sustainable and fair development in English-language education.

ACKNOWLEDGEMENTS

This research project was financially supported by Mahasarakham University.

REFERENCES

- [1] Akamatsu, D., Nakaya, M., & Koizumi, R. (2019). Effects of Metacognitive Strategies on the Self-Regulated Learning Process: The Mediating Effects of Self-Efficacy. *Behavioral Sciences*, 9(12), 128. <https://doi.org/10.3390/bs9120128>
- [2] Al Murshidi, G., Daoud, S., Al Derei, R., Alhamidi, H., Jabir, W., & Sayed, N. (2023). Parental involvement in English as foreign language learners' education: Challenges and solutions in a post pandemic era. *International Journal of Educational Research Open*, 5, 100297. <https://doi.org/10.1016/j.ijedro.2023.100297>
- [3] Andersen, S. C., Gregersen, M. K., Nielsen, H. S., & Thomsen, M. K. (2020). Parent involvement, socioeconomic status, and reading performance. *Scandinavian Journal of Educational Research*, 65(7), 1279-1294. <https://doi.org/10.1080/00313831.2020.1840429>
- [4] Anguiano, R. P. V. (2004). Families and Schools: The Effect of Parental Involvement on High School Completion: The Effect of Parental Involvement on High School Completion. *Journal of Family Issues*, 25(1), 61-85. <https://doi.org/10.1177/0192513X03256805>
- [5] Bandura, A. (1997). *Self-efficacy: The exercise of control*. W. H. Freeman/Times Books/Henry Holt & Co.

- [6] Bang, H. J., & Mackey, A. (2024). Chinese parents' involvement in their young children's app-based language learning. *Language Teaching for Young Learners*, 7(1), 106-130. <https://doi.org/10.1075/ltyl.00052.ban>
- [7] Boonk, L. M., Gijssels, H. J. M., Ritzen, H., & Brand-Gruwel, S. (2018). A review of the relationship between parental involvement indicators and academic achievement. *Educational Research Review*, 24, 10-30. <https://doi.org/10.1016/J.EDUREV.2018.02.001>
- [8] Bourdieu, P. (1986). The forms of capital. In J. Richardson (Ed.), *Handbook of theory and research for the sociology of education* (pp. 241-258). Greenwood.
- [9] Bronfenbrenner, U. (1995). Developmental Ecology through Space and Time: A Future Perspective. In *Examining Lives in Context: Perspectives on the Ecology of Human Development* (pp. 619-648). American Psychological Association. <https://doi.org/10.1037/10176-018>
- [10] Brown, H. D. (2014). *Principles of Language Learning and Teaching* (6th ed.). Pearson Education.
- [11] Chuane, Q., Shukor, S. S., Yuehong, T., & Xiaofen, Z. (2023). The relationship between motivation and English language test performance among secondary vocational schools' students in China. *Studies in English Language and Education*, 10(1), 280-302. <https://doi.org/10.24815/siele.v10i1.25741>
- [12] Deci, E. L., & Ryan, R. M. (1985). *Intrinsic Motivation and Self-Determination in Human Behavior*. Plenum Press. <http://dx.doi.org/10.1007/978-1-4899-2271-7>
- [13] Deci, E. L., & Ryan, R. M. (2000). The "What" and "Why" of Goal Pursuits: Human Needs and the Self-Determination of Behavior. *Psychological Inquiry*, 11(4), 227-268. https://doi.org/10.1207/S15327965PLI1104_01
- [14] Dörnyei, Z., & Ushioda, E. (2011). *Teaching and Researching: Motivation* (2nd ed.). Routledge. <https://doi.org/10.4324/9781315833750>
- [15] Dörnyei, Z., & Csizér, K. (1998). Ten commandments for motivating language learners: results of an empirical study. *Language Teaching Research*, 2(3), 203-229. <https://doi.org/10.1177/136216889800200303>
- [16] Eccles, J. S., & Wigfield, A. (2002). Motivational beliefs, values, and goals. *Annual Review of Psychology*, 53(1), 109-132. <https://doi.org/10.1146/annurev.psych.53.100901.135153>
- [17] Epstein, J. L. (2018). School, family, and community partnerships in teachers' professional work. *Journal of Education for Teaching*, 44(3), 397-406. <https://doi.org/10.1080/02607476.2018.1465669>
- [18] Fan, X., & Chen, M. (2001). Parental involvement and students' academic achievement: A meta-analysis. *Educational Psychology Review*, 13(1), 1-22. <https://doi.org/10.1023/A:1009048817385>
- [19] Gardner, R. C., Lalonde, R. N., & Pierson, R. (1983). The socio-educational model of second language acquisition: An investigation using LISREL causal modeling. *Journal of Language and Social Psychology*, 2(1), 1-15. <https://doi.org/10.1177/0261927X8300200101>
- [20] Gardner, R. C. (1985). *Social psychology and second language learning: The role of attitude and motivation*. Edward Arnold.
- [21] Harnwongs, P., Sukying, A., & Hannapha, P. (2026). Validating the measurement model of parental involvement, motivational beliefs, and English learning achievement: An EFA and CFA approach. *Journal of Language Teaching and Research*, 17(1), 364-375. <https://doi.org/10.17507/jltr.1701.36>
- [22] Hill, N. E., & Tyson, D. F. (2009). Parental involvement in middle school: A meta-analytic assessment of the strategies that promote achievement. *Developmental Psychology*, 45(3), 740-763. <https://doi.org/10.1037/a0015362>
- [23] Hoover-Dempsey, K. V., & Sandler, H. M. (1995). Parental involvement in children's education: Why does it make a difference? *Teachers College Record*, 97(2), 310-331. <https://doi.org/10.1177/016146819509700202>
- [24] Hoover-Dempsey, K. V., & Sandler, H. M. (1997). Why do parents become involved in their children's education? *Review of Educational Research*, 67(1), 3-42. <https://doi.org/10.3102/00346543067001003>
- [25] Hu, L.-t., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6(1), 1-55. <https://doi.org/10.1080/10705519909540118>
- [26] Kline, R. B. (2016). *Principles and practice of structural equation modeling* (4th ed.). The Guilford Press.
- [27] Lareau, A. (2011). *Unequal Childhoods: Class, Race, and Family Life* (2nd ed.). University of California Press.
- [28] Li, X., Yang, H., Wang, H., & Jia, J. (2020). Family socioeconomic status and home-based parental involvement: A mediation analysis of parental attitudes and expectations. *Children and Youth Services Review*, 116, 105111. <https://doi.org/10.1016/j.childyouth.2020.105111>
- [29] Liang, C., Zhou, N., & Yu, S. (2024). Parental involvement and children's L2 learning motivation and engagement: A person-centered approach. *Language Teaching Research*. <https://doi.org/10.1177/13621688241279392>
- [30] Mizumoto, A. (2013). Effects of self-regulated vocabulary learning process on self-efficacy. *Innovation in Language Learning and Teaching*, 7(3), 253-265. <https://doi.org/10.1080/17501229.2013.836206>
- [31] Otani, M. (2020). Parental involvement and academic achievement among elementary and middle school students. *Asia Pacific Education Review*, 21(1), 1-25. <https://doi.org/10.1007/s12564-019-09614-z>
- [32] Park, G.-R., & Kim, J. (2024). Parental involvement and academic achievement of adolescents: The mediating roles of school adjustment. *School Psychology International*, 45(4), 447-462. <https://doi.org/10.1177/01430343231207134>
- [33] Ryan, R. M., & Deci, E. L. (2020). Intrinsic and extrinsic motivation from a self-determination theory perspective: Definitions, theory, practices, and future directions. *Contemporary Educational Psychology*, 61, Article 101860. <https://doi.org/10.1016/j.cedpsych.2020.101860>
- [34] Schunk, D. H. (1990). Goal setting and self-efficacy during self-regulated learning. *Educational Psychologist*, 25(1), 71-86. https://doi.org/10.1207/s15326985ep2501_6
- [35] Schunk, D. H., & DiBenedetto, M. K. (2020). Motivation and Social Cognitive Theory. *Contemporary Educational Psychology*, 60, Article 101832. <https://doi.org/10.1016/j.cedpsych.2019.101832>
- [36] Sheridan, S. M., Knoche, L. L., & Boise, C. (2022). Getting Ready: A Relationship-Based Approach to Parent Engagement in Early Childhood Education Settings. In K. L. Bierman & S. M. Sheridan (Eds.), *Family-School Partnerships During the Early School Years*. Springer. https://doi.org/10.1007/978-3-030-74617-9_2

- [37] Sirin, S. R. (2005). Socioeconomic status and academic achievement: A meta-analytic review of research. *Review of Educational Research*, 75(3), 417-453. <https://doi.org/10.3102/00346543075003417>
- [38] Tao, J., & Xu, Y. (2022). Parental support for young learners' online learning of English in a Chinese primary school. *System*, 105, 102718. <https://doi.org/10.1016/j.system.2021.102718>
- [39] Usher, E. L., & Pajares, F. (2008). Self-efficacy for self-regulated learning: A validation study. *Educational and Psychological Measurement*, 68(3), 443-463. <https://doi.org/10.1177/0013164407308475>
- [40] Vadivel, B., Alam, S., Nikpoo, I., & Ajanil, B. (2023). The impact of low socioeconomic background on a child's educational achievements. *Education Research International*, 2023, Article 6565088. <https://doi.org/10.1155/2023/6565088>
- [41] Walker, J. M. T., Wilkins, A. S., Dallaire, J. R., Sandler, H. M., & Hoover-Dempsey, K. V. (2005). Parental involvement: Model revision through scale development. *The Elementary School Journal*, 106(2), 85-104. <https://doi.org/10.1086/499193>
- [42] Wang, C., Kim, D. H., Bong, M., & Ahn, H. S. (2013). Examining measurement properties of an English Self-Efficacy scale for English language learners in Korea. *International Journal of Educational Research*, 59, 24-34. <https://doi.org/10.1016/j.ijer.2013.02.004>
- [43] Williams, K., Swift, J., Williams, H., & Van Daal, V. (2017). Raising children's self-efficacy through parental involvement in homework. *Educational Research*, 59(3), 316-334. <https://doi.org/10.1080/00131881.2017.1344558>
- [44] Ye, W., Ye, Y., & Wu, M. (2024). More time or more money? A longitudinal examination of parental involvement in shaping academic success of China's left-behind children from 2010 to 2020. *Children and Youth Services Review*, 166, 107983. <https://doi.org/10.1016/j.childyouth.2024.107983>
- [45] Zhang, F., Jiang, Y., Ming, H., Ren, Y., Wang, L., & Huang, S. (2020). Family socioeconomic status and children's academic achievement: The different roles of parental academic involvement and subjective social mobility. *British Journal of Educational Psychology*, 90(2), 256-272. <https://doi.org/10.1111/bjep.12374>
- [46] Zhang, S. Z., Inoue, T., Cao, G., Li, L., & Georgiou, G. K. (2023). Unpacking the Effects of Parents on Their Children's Emergent Literacy Skills and Word Reading: Evidence from Urban and Rural Settings in China. *Scientific Studies of Reading*, 27(4), 355-374. <https://doi.org/10.1080/10888438.2023.2169147>
- [47] Zimmerman, B. J. (2000). Attaining self-regulation: A social cognitive perspective. In M. Boekaerts, P. R. Pintrich, & M. Zeidner (Eds.), *Handbook of self-regulation* (pp. 13-39). Academic Press. <https://doi.org/10.1016/B978-012109890-2/50031-7>
- [48] Zulfa, V., & Zahidah, A. N. (2023). Analysis of student motivation of English learning as a second language. *International Education Trend Issues*, 1(3), 165-170. <https://doi.org/10.56442/ieti.v1i3.202>

Peewara Harnwongsa is a lecturer in English Education at the Faculty of Education, Ubon Ratchathani University, Thailand. She is currently pursuing her PhD in English Language Teaching (ELT), where her research focuses on willingness to communicate (WTC), motivational beliefs, and vocabulary knowledge in EFL contexts. Her broader academic interests encompass second language acquisition (SLA), pragmatics, communication strategies, and learner psychology, reflecting her commitment to advancing English language learning and teaching. Her email is peewara.h@ubu.ac.th

Apisak Sukying (PhD) is an assistant professor and the Director of the PhD Program in English Language Teaching (ELT) at the Faculty of Humanities and Social Sciences, Mahasarakham University, Thailand. He earned his PhD in TESOL from the University of Sydney, Australia. His research interests include L2 vocabulary acquisition and development, L2 vocabulary assessment, SLA, ELT research, learner strategies, and academic writing. His email is apisak.s@msu.ac.th