

Original article

## The Determinants of Students' English Language Learning Motivation: The Role of Attachment to School and Academic Self-efficacy

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### Abstract

This study aimed to assess the mediating role of academic self-efficacy in the relationship between students' attachment to school and their English language learning motivation. A correlational research design with a structural equation modeling approach was utilized. Participants included 126 male high-school first-graders selected through multi-phase clustered random sampling. The research instruments were the English Language Learning Motivation, Attachment to School, and Academic Self-efficacy questionnaires. The direct and indirect path analyses were conducted using structural equation modeling. Findings indicated a significant path coefficient between attachment to school and self-efficacy, as well as between self-efficacy and English language learning motivation ( $P < 0.001$ ). Attachment to school was a significant antecedent of academic self-efficacy, which in turn predicted English language learning motivation ( $P < 0.05$ ). The results also revealed that academic self-efficacy significantly mediated the relationship between attachment to school and English language learning motivation ( $P < 0.05$ ). The findings of this study can be beneficial for school counselors, educational psychologists, and teachers in developing strategies to reduce students' motivational challenges.

**Keywords:** English Language Learning Motivation, Academic Self-Efficacy, Attachment to School

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## INTRODUCTION

Motivation is a key factor that influences students' academic achievement and their sense of progress (Stevens et al., 2004). It is defined as an individual's inclination and the reasons behind their actions, encompassing components such as goal orientation, intrinsic and extrinsic satisfaction, beliefs about personal competence, and emotions.

Numerous variables are related to learning motivation, including stress, course performance (Wang et al., 2015), the perceived importance of learning, trust, interest, family support, autonomy, and teacher attention (Häfner et al., 2017; Teoh et al., 2010). Another variable that significantly impacts students' motivation is attachment to school (Bryan et al., 2012; McCormick et al., 2013; Maddox & Prinz, 2003).

Attachment to school is a concept that includes the students' experiences with the school, the respect they receive from teachers, their dedication to the school, their level of participation, and their commitment to its values and beliefs (Hirschi, 1969). Hirschi (1969) theorized that a strong attachment to social institutions like school can protect students from delinquency.

He identified four key components of social attachment: a) attachment to people such as parents and teachers, b) commitment to shared goals and activities, c) involvement in these activities, and d) belief in common norms. Following Hirschi's framework, Maddox and Prinz (2003) further developed the concept of school attachment as a multidimensional construct with four dimensions: devotion, commitment, involvement, and belief.

They specified that these features include devotion to the school itself, devotion to teachers and staff, commitment to school (both beliefs and behavior), and academic involvement. Regarding the link between attachment to school and English learning motivation, a study on preschool children found that the quality of the child-teacher relationship positively influenced a child's progress and perseverance in reading and math (McCormick et al., 2013).

Other research has shown that a sense of attachment and belonging to school is positively correlated with students' motivation and academic performance. Conversely, it is negatively correlated with indifference toward homework (Anderman, 2003; Anderman & Freeman, 2004; Freeman et al., 2007).

Another component linked to students' motivation is academic self-efficacy. Bandura (1997), who first introduced the concept of self-efficacy, defined academic self-efficacy as students' expectation of achieving academic success. He argued that students with a strong sense of self-efficacy tend to set high and ambitious goals and use more flexible problem-solving approaches.

Similarly, these students show more perseverance and diligence when facing problems and challenges compared to those who doubt their abilities (Kim et al., 2017). Research has also indicated a significant and positive relationship between self-efficacy and both the quality and degree of perseverance (Pintrich & Schrauben, 1992; Huang, 2016). Furthermore, self-efficacy is associated with deeper processing and higher cognitive involvement in learning (Pintrich & Schrauben, 1992).

Some researchers believe that individuals gather information to assess their own self-efficacy from four main sources: actual performance, vicarious experiences, social persuasion, and physiological states (Setiawan, 2014; Tams et al., 2017; Schunk & Pintrich, 2002; Farrell et al., 2016).

Regarding the relationship between academic self-efficacy and English learning motivation, a study by Skaalvik et al. (2015) examined the mediating role of math-related self-efficacy on the effect of students' previous progress in math on their learning motivation. The findings showed that self-efficacy is positively related to all motivation subscales, including intrinsic motivation, perseverance, diligence, and help-seeking behavior (Skaalvik et al, 2015).

Similarly, Collins (1982) argued that self-efficacy predicts motivation and achievement across different ability levels. This means that, for example, students with high, intermediate, and low math abilities are often found to have high, intermediate, and low self-efficacy in problem-solving, respectively.

Finally, academic self-efficacy is also related to attachment to school (Sahaghi et al., 2015; Hashemi et al., 2015; Hirao, 2011).

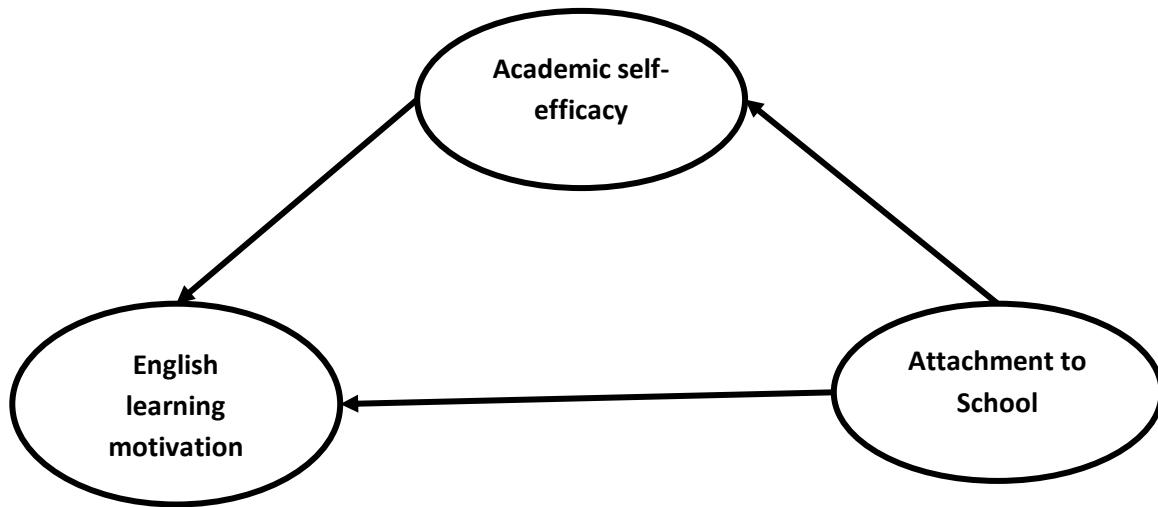
Research studies have shown that social factors can either inhibit or facilitate an individual's progress. For example, a sense of being accepted by society and belonging to a school or a group can directly impact self-efficacy (Vieno et al., 2007).

Similarly, the sense of attachment and belonging to school can account for one-quarter of the variance in self-efficacy. This suggests that as opportunities for student participation in school increase, self-efficacy also improves (Kia-Keating & Ellis, 2007).

In summary, a review of the literature indicates that attachment to school and academic self-efficacy are not only important determinants of students' motivation to learn English but are also mutually related. It is hypothesized that attachment to school may indirectly affect students' motivation by influencing their academic self-efficacy.

Given the theoretical and research-based literature on these components, it is evident that examining the direct and indirect relationships between the three variables—attachment to school, academic self-efficacy, and English learning motivation—within a structural model can provide

important insights into their interrelationships. Therefore, this study aims to investigate these direct and indirect relationships within a structural model (see Figure 1).



**Figure 1.** The suggested model in this study

## METHOD

### Participants

The statistical population for this study included 200 male high school first-grade students in the fourth municipal district of Qom, Iran. The city is located 125 kilometers south of Tehran. Based on Morgan's table, a sample of 126 students was selected using a multi-phase clustered random sampling method.

To this end, three schools were randomly selected from the fourth municipal district, and from each of these schools, three classes were chosen as the sample. All students in the selected classes were asked to read the questionnaire items carefully and respond based on their thoughts, feelings, and attitudes, while trying to leave no item unanswered. Before the questionnaire, a statement guaranteed the confidentiality of their responses, assured them of the researchers' discretion, and informed them of their right to withdraw from the study at any time. Both oral and written consent were obtained from the participants.

The final sample of 126 male high-school students completed the questionnaires on attachment to school, academic self-efficacy, and English language learning motivation. The age of the participants ranged from 13 to 16 years ( $M = 14.3$ ,  $SD = 0.74$ ).

## **Measurement**

To measure motivation to learn English, the scale developed by Ardasheva, Tong, and Tretter (2012) was used. This instrument measures three subscales: intrinsic motivation, introjected regulation, and external regulation.

Participants self-reported their level of agreement on a 5-point Likert scale (from “completely disagree” to “completely agree”) for each of the 12 items. Ardasheva et al. (2012) reported a reliability of 0.8 using Cronbach's Alpha. For validity, they used exploratory factor analysis, which yielded a KMO index of 0.85, indicating sampling adequacy.

Principal component analysis with Promax rotation revealed three components. Confirmatory factor analysis (CFA) using structural equation modeling (SEM) showed that the scale had acceptable validity, with indices CFI = 0.95, GFI = 0.96, SRMR = 0.039, and RMSEA = 0.047. In the present study, the reliability was assessed using Cronbach's Alpha and the Spearman-Brown prophecy formula, which yielded coefficients of 0.8 and 0.78, respectively. Exploratory and confirmatory factor analyses were used to evaluate the validity of the questionnaire.

The exploratory factor analysis and principal component analysis showed a sampling adequacy value of 0.84. Additionally, the Kaiser-Meyer-Olkin (KMO) and Bartlett's Test of Sphericity,  $\chi^2(66) = 505.65$ ,  $p < 0.001$ , suggested the adequacy of the data for factor analysis. Based on the results of the confirmatory factor analysis (CFA) in AMOS, the fit indices were as follows: GFI = 0.95, AGFI = 0.89, IFI = 0.90, TLI = 0.85,  $\chi^2 = 1.75$ , and RMSEA = 0.078. These values indicate a desirable model fit for the questionnaire. All items showed positive and significant correlations with their principal factors ( $p < 0.001$ ).

### **The Attachment to School Scale (Rezayi-Sharif et al., 2014):**

This scale, developed by Rezayi-Sharif, Hedjazi, Ghazi-Tabatabayi, and Ezheyi in 2014, measures six subscales: teacher attachment, school attachment, employee attachment, involvement in school, and belief in and commitment to school. Participants rated their agreement on a 5-point Likert scale ranging from "never" to "always."

Using exploratory factor analysis (EFA) with principal component rotation, Rezayi-Sharif et al. (2014) reported a KMO value of 0.93 and a significant Bartlett's test of sphericity ( $\chi^2 = 15073.799$ ,  $p < .001$ ). Their analysis revealed six subscales, indicating acceptable validity. The researchers also reported the following fit indices from confirmatory factor analysis (CFA): Comparative Fit Index (CFI) = 0.96, Adjusted Goodness of Fit (AGFI) = 0.85, Goodness of Fit Index (GFI) = 0.87, and Root Mean Square Error of Approximation (RMSEA) = 0.05.

In the current study, the Cronbach's Alpha was 0.92, and the internal consistency using the Spearman-Brown prophecy formula was 0.86. Exploratory and confirmatory factor analyses were used to assess the questionnaire's validity. The EFA results from principal components analysis showed a sampling adequacy index of 0.85. Additionally, Bartlett's Test of Sphericity yielded a Chi-Square value of 15093, which was significant at the 0.001 level with 2 degrees of freedom. These statistics confirmed the adequacy of the sample.

Furthermore, based on the confirmatory factor analysis results from the AMOS software, the model demonstrated a good fit to the data with the following indices: GFI = 0.90, AGFI = 0.87, TLI = 0.83, IFI = 0.87,  $\chi^2 = 3.25$ , and RMSEA = 0.06. All items showed a positive and significant correlation with their principal factors ( $p < .001$ ).

#### **The Academic Self-Efficacy Questionnaire (Jinks & Morgan, 1999):**

This questionnaire was devised in 1999 by Jinks and Morgan to assess students' academic self-efficacy. This 30-item, self-report scale measures three subscales: texture, talent, and effort. Participants rated their agreement with each item on a 4-point Likert scale, ranging from "completely agree" to "completely disagree."

Jinks and Morgan (1999) reported a reliability of 0.80 for this scale using Cronbach's Alpha. In Iran, Karimzadeh (2006) confirmed the validity of the questionnaire using factor analysis, reporting factor loadings of 0.66, 0.65, and 0.60 for the talent, effort, and texture subscales, respectively. In the current study, the Cronbach's Alpha for the total questionnaire and for the texture, talent, and effort subscales were found to be 0.86, 0.81, 0.85, and 0.79, respectively.

#### **Statistical Analysis**

Structural equation modeling (SEM) was used to assess the fit of the proposed model, and the bootstrap method was applied for indirect path analysis.

### **FINDINGS**

Descriptive statistics (mean and standard deviation) and inferential statistics (Pearson's correlation and structural equation modeling) were used to analyze the data. The results are presented below.

**Table 1.** Descriptive Statistics

Variables	M	SD	Min	Max
School bonding	119.67	29.41	56	187
Academic self-efficacy	57.45	10.43	30	120
EL Motivation	49.64	8.03	12	60

**Table 2.** Correlation Matrix Among the Study Variables

	School bonding	Academic self-efficacy	EL Motivation
School bonding		0.47**	0.28**
Academic self-efficacy	0.47**		0.38**
EL Motivation	0.28**	0.38**	

Note. Correlation is significant at the 0.01 level (2-tailed).

As shown in Table 2, a positive and significant correlation was found between attachment to school and both academic self-efficacy and English language learning motivation ( $p < 0.01$ ). Additionally, a significant and positive relationship existed between academic self-efficacy and English language learning motivation ( $p < 0.01$ ).

Structural equation modeling was used to assess the goodness of fit for the proposed model. The structural fit indices are presented in Table 3.

**Table 3.** Structural Fit Indices for the Proposed Model

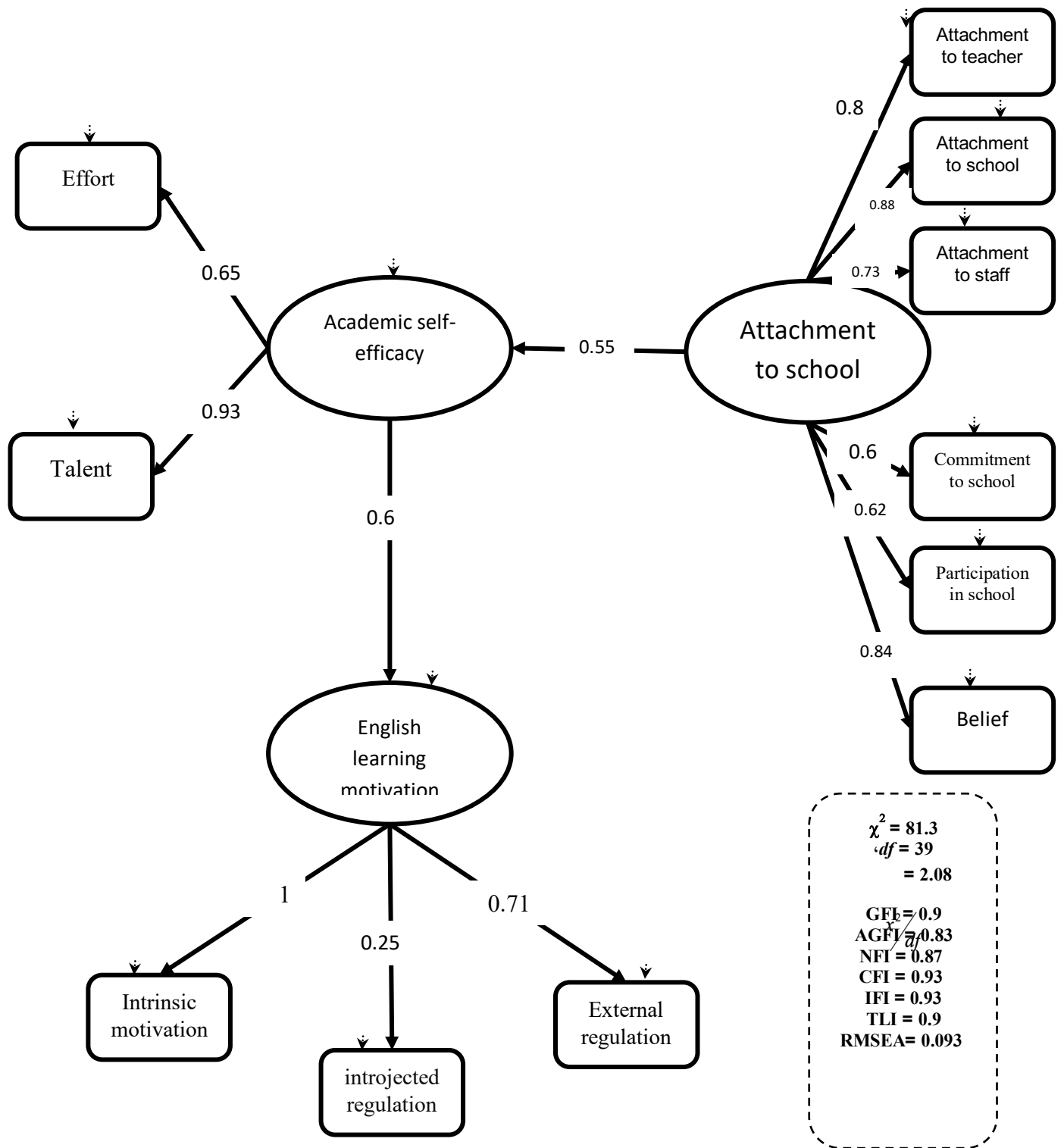
Direct paths	Beta	T	Standard Deviation	Level of significance
Attachment to School to Self-efficacy	0.54	4.19	0.475	0.001
Self-efficacy to English learning motivation	0.52	3.49	0.076	0.001
Attachment to school to English Learning motivation	0.11	0.9	0.273	0.364

As shown in Table 3, the path coefficients between attachment to school and academic self-efficacy were significant ( $p < 0.001$ ). The path from academic self-efficacy to English learning motivation was also significant ( $p < 0.001$ ). However, the direct path from attachment to school to English learning motivation was not significant ( $p > 0.05$ ). Consequently, this non-significant path was removed, and the model was re-specified and re-analyzed for fit.

**Table 4.** Structural Fit Indices After Omitting the Non-Significant Path

Direct paths	Beta	T	Standard Deviation	Level of significance
Attachment to school to academic self-efficacy	0.55	4.9	0.476	0.001
academic self-efficacy to English Learning motivation	0.6	5.13	0.061	0.001

As shown in Table 4, the path from attachment to school to academic self-efficacy was significant ( $p < 0.001$ ). Similarly, the path from academic self-efficacy to English language learning motivation was also significant ( $p < 0.001$ ). These findings indicate that no further modification of the proposed model was necessary.



**Figure 2.** The coefficients of the standard path and the Goodness of Fit indices for the Study model



As shown in Figure 2, the fit indices of the proposed model indicate a strong and acceptable fit with the data. The goodness of fit indices were as follows:  $\chi^2 (39) = [\text{value}]$ ,  $p < .05$ ; relative chi-square ( $\chi^2/\text{df}$ ) = [value]; GFI = 0.90; AGFI = 0.83; NFI = 0.87; CFI = 0.93; IFI = 0.93; TLI = 0.90; and RMSEA = 0.093.

The bootstrap test was employed to investigate the mediating role of academic self-efficacy in the relationship between attachment to school and English language learning motivation. The results revealed a significant indirect path from attachment to school to English language learning motivation via academic self-efficacy ( $p < 0.01$ ). These findings confirm that academic self-efficacy plays a significant mediating role in this relationship.

### **DISCUSSION and CONCLUSION**

The primary goal of this study was to investigate the mediating role of academic self-efficacy in the relationship between students' attachment to school and English language learning motivation. The results of the Pearson's correlation analysis indicated a positive correlation between all three variables: attachment to school, academic self-efficacy, and English language learning motivation. These findings are consistent with previous research on the relationships among these constructs (Anderman, 2003; Anderman & Freeman, 2004; Freeman, Anderman, & Jensen, 2007; Kim et al., 2017; Skaalvik et al., 2015; Kia-Keating & Ellis, 2007).

These relationships can be explained by arguing that attachment to school positively influences students' academic self-efficacy, which in turn has a positive effect on their English language learning motivation. Consequently, higher levels of academic self-efficacy lead to increased motivation to learn English.

This perspective is supported by Kia-Keating & Ellis (2007), who suggest that adolescents with a stronger sense of attachment, commitment, involvement, and belief in their school demonstrate higher levels of self-efficacy. In essence, a strong attachment to school signifies a student's sense of social acceptance and belonging. This feeling, developed within a social institution, can positively influence an individual's belief in their personal competencies.

Another argument concerning this finding is that students' academic self-efficacy may be compromised if they perceive their involvement in school-related assignments and activities as unfruitful, or if they feel they lack appropriate peer interaction in collaborative activities. Consequently, instead of relying on interventionist programs, implementing measures to improve supportive, friendly, and constructive interactions among students could lead to significant increases in their academic self-efficacy (Hirao, 2011).

One of the key findings of this study was the significant path from academic self-efficacy to English language learning motivation. A student's motivational structure is predicted differently by

individual self-efficacy and teacher support. When an individual is engaged in a demanding task, self-efficacy is a strong predictor of motivation and perseverance, whereas teacher support is a strong predictor of help-seeking behavior. These findings highlight the multifaceted nature of motivational structures in an educational context.

Overall, it appears that both the enjoyment of working with mathematics (intrinsic motivation) and the perseverance to face challenges are initially dependent on a student's perceived merit (Skaalvik et al., 2015). Bandura (2006) also argued that a belief in one's personal abilities determines whether one views tasks and assignments as desirable or unhelpful. A student with low self-efficacy is more likely to give up when faced with problems. Similarly, a student's interest in and motivation to learn English and their refusal to give up in the face of challenges can be a sign of their strong belief in their academic abilities.

Finally, the results showed that academic self-efficacy plays a mediating role between attachment to school and English language learning motivation. This can be explained by arguing that the sense of belonging to school is a significant factor contributing to positive emotional experiences. Students who feel a strong sense of belonging and enjoy school are often reported to have high levels of academic self-efficacy in the classroom.

On the one hand, a student's perception that schoolwork, activities, and peer interactions related to school are futile can lead to a drop in their academic self-efficacy (Hashemi et al., 2015). On the other hand, in line with Bandura (1997), individuals with a strong belief in their self-efficacy are less hesitant about their abilities. They show more effort, diligence, and higher levels of motivation when performing tasks.

Consequently, a student's attachment and devotion to school, by fostering a belief in their personal abilities (i.e., academic self-efficacy), can have a strong impact on their English language learning motivation. In other words, individuals who develop a strong sense of attachment, belonging, and dedication to their school are more likely to exhibit higher motivation and achieve academic success. This is because the pleasure derived from belonging and being attached to school can trigger positive emotions. Students who experience these feelings of pleasure and satisfaction often achieve higher levels of self-efficacy in academic settings (Hashemi et al., 2015).

Furthermore, an individual's perception that schoolwork and related activities are futile can lead to a decrease in their sense of self-efficacy. Similarly, using encouragement and collaborative learning can increase students' academic self-efficacy. Positive classroom behavior and expanded social networks positively influence students' motivation and academic progress (Hashemi et al., 2015). According to Bandura, higher self-efficacy does not lead to an individual avoiding responsibilities.

Instead, they show more diligence, work harder on tasks and projects, and demonstrate greater dedication and perseverance when facing problems and challenges.

Bandura also noted that individuals with strong self-efficacy beliefs show less hesitation and greater diligence and persistence in completing tasks. Consequently, when faced with responsibilities, they are less likely to experience "cold feet," neglect, or shortcuts. According to Bandura, those who are more inclined to engage in new situations are individuals who have been successful in previous similar situations; they actively seek out challenging tasks. Conversely, people who avoid challenging tasks tend to underestimate their abilities to solve problems, which can lead to task avoidance and a decrease in motivation (Bandura, 1997).

In summary, this study provides a deeper insight into the relationship between attachment to school, academic self-efficacy, and English language learning motivation. It clarifies the mechanisms and nature of the influence that attachment to school exerts on students' self-efficacy and its subsequent indirect impact on their English learning motivation. This may have far-reaching implications for school counselors, educational psychologists, teachers, and all parties involved in addressing students' low motivation and academic self-efficacy in English language learning.

This research also highlights the specific structure of the relationship between attachment to school and English language learning motivation, a topic not extensively explored in previous research. A review of the literature reveals that most studies in this area have focused on higher education. By examining pre-university students, this study provides evidence supporting the external value of attachment to school and English language learning motivation through the mediating role of academic self-efficacy. This structural understanding can inform the development of effective psychological interventions aimed at increasing English language learning motivation and academic self-efficacy. Like any other study, this research has some limitations.

This study has several limitations. First, data was collected exclusively through self-report, which presents a challenge in controlling for the effects of social desirability. To address this, future research should consider using multiple assessment methods.

Second, the sample was limited to first-grade high school students in Qom, Iran, which restricts the generalizability of the findings. Future studies could expand the sample to include other grade levels and both genders to improve external validity. Third, the sample size of 161 students is relatively small for structural equation modeling, which may have impacted the statistical power of the analysis.

Finally, this study described the relationships between variables but did not establish causality. To gain a more profound understanding of the causal relationships among attachment to school, self-efficacy, and English language learning motivation, experimental studies are recommended. For future

work, it is also suggested that researchers explore interventions designed to increase students' school attachment and examine their effects on motivation and academic self-efficacy.

A final recommendation is to consider the circumstances of students with specific learning disabilities, who make up approximately 4% of the student population. Future research could investigate how the variables examined in this study might apply to this specific group.

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