

## The Development of Academic English Language Learning Strategies and Academic Motivation among International University Students in Thailand

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Date Received: 19 April 2020

Revised: 26 August 2020

Accepted: 27 August 2020

### Abstract

The development of academic English language learning strategies is an issue that university students face in their academic journey. This development also is affected by academic motivation. In this study the relationship between language learning strategies and academic motivation was explored. Using a cross-sectional survey design, with a sample of 100 participants taken from an international university located in Thailand, analysis indicated that the participants were mostly neutral in their perceptions towards language learning strategies. Other findings were the lack of gender differences in academic motivation or language learning strategies. In addition, a correlational analysis showed a strong positive relationship between language learning strategies and academic motivation. A multiple regression analysis suggested that language learning strategies explained 63% of the variance of academic motivation. However, gender did not constitute a significant explanatory variable for academic motivation.

**Keywords:** *Language learning strategies, academic motivation, relationship, regression*

### Introduction

English is becoming the predominant language of instruction at the tertiary level. The ASEAN community also has acknowledged the need for implementing English programs at different educational levels (Kitjaroonchai, 2013). Thailand, as a leading educational hub in Southeast Asia, not only welcomes teaching and learning in English but also hosts a growing number of international universities (Michael, 2018). Many international students from neighboring nations come to pursue a degree in Thailand because it is financially viable and attractive. In this context, international programs in Thailand become culturally enriching, having students, teachers, and staff from different parts of the world who use English as the lingua franca to facilitate instruction and communication.

However, international university students coming to Thailand might face the challenges that consist of adjusting to the use of English as a medium of instruction and the lingua franca with other international students, while adjusting to university life in a new country (e.g., Gardner & Lau, 2019). To better understand how international students adjust to the challenges of adjusting linguistically and academically, several investigators have explored the relationship between learning English and academic motivation among college students (Lee & Bong, 2019; Li et al., 2016). In Thailand, while research has been conducted on language learning strategies and academic motivation among Thai students at different educational levels using a quantitative approach (Kakaew & Damnet, 2017; Pipattarasakul & Singhasiri, 2018; Vibulphol, 2016), few studies have looked at how international students in Thailand, who have English as their second language, perceived the use of language learning strategies. Huang's (2017) study represents the only known attempt. He examined how Chinese students used language learning strategies whilst studying in Thailand.

Broadly speaking, language learning strategies are tools used by students to acquire a language (Burns & Richards, 2018). Language learning strategies are relevant particularly to language learners who are still developing their proficiency. However, research suggests that many higher education students, who are non-native English speakers, show low levels of academic English proficiency even in their third or fourth year in international programs (Benzie, 2010). In addition, few studies have been completed in Thailand on the association between language learning strategies and academic motivation. Such work has documented the use of language learning strategies, but not in conjunction with the specific form of motivation discussed in this study, which is academic motivation. Therefore,

we sought to explore the relationship between language learning strategies and academic motivation among international university students in Thailand. Understanding how strategies for learning English are related to academic motivation may help teachers to guide students in the process of teaching content in a second language among college students in international universities.

The following questions were developed for this study:

1. What are the students' perception of their strategies for learning English and their academic motivation?
2. Is there a difference in language learning strategies and academic motivation based on gender?
3. What is the relationship of language learning strategies and gender to academic motivation?

## **Review of Literature**

### ***Language Learning Strategies (LLS)***

Thomas and Rose (2019) recognized that coming up with a definition for language learning strategies has not been easy among experts in the field of TESOL over the last few decades. However, scholars agree that language learning strategies refer to the actions learners employ to improve the development of their language (Cawagdan-Cuarto & Rivera, 2018). Burns and Richards (2018) stated that language learning strategies (LLS) are understood as "purposeful mental actions used by a learner to regulate his or her second or foreign language (L2) learning" (p. 81). Language learning strategies also are considered a means to facilitate the acquisition of language and the use of information learners received, stored, and recalled (Hardan, 2013).

Some theories have been developed to understand language learning strategies in a better way. Phenomenography, besides being a well-accepted qualitative research technique, in recent years has become an important theory that seeks to explain how students go through the process of learning a second language by looking at the interaction between the population and the phenomenon (Chan, 2017). In this sense, the phenomenographic model also explores the learner's perceptions of acquiring a second language and how they affect or influence the content learned (Norberg et al., 2018; Polat, 2013). Another important theoretical framework is self-directed learning (SDL) theory, which sets the learner, neither the content nor the teacher, as the guide in the process of acquiring new knowledge by setting goals and monitoring their own learning pace (Manning, 2007; Tekkol & Demirel, 2018). This theory has been linked with the notion of independent learning at different educational levels, which raises some questions about needs versus interests on the students' side (Manning, 2007). There is an association between language learning strategies and self-directed learning theory, since the usage of technology and online training platforms in many educational institutions is a part of the students' learning experience (Lai et al., 2016). Based on the findings of prior studies and the theories that have been developed already, it is significant to consider if similar ideas hold in the Thai context.

Several sources show that language learning strategies are closely related to students' experiences and what they consider will be effective for them. A study conducted among university students in Mongolia indicated that using their mother tongue was the students' first strategy when trying to read, write, or speak in English (Zhao, 2019). College students elsewhere may be interested in listening to music in English, learning the correct pronunciation of words, and developing a richer vocabulary while adopting English as their second language (Bravo et al., 2017). According to research conducted by Nguyen and Terry (2017), students felt that memorizing, repeating, or completing grammar exercises were not effective strategies for acquiring English as a second language. However, speaking English seemed to be highly esteemed by students who were willing to communicate and learn from their mistakes (Oveis & Nosratinia, 2019). Each of the studies provide examples of language learning strategies that have been employed by students.

### ***Academic Motivation***

The relationship between language learning and academic motivation was established by Gardner and his associates (see meta-analysis by Masgoret & Gardner, 2003). Academic motivation is

conceived as an amalgam of personality dispositions, goals, and varying states of arousal (Campbell, 1973). Khalid Sawalha et al. (2017) considered motivation as one of the key factors affecting what students do and how well they do it. Utvaer and Haugan (2016) went a step further and stated that a human being can be externally and internally motivated, with the latter leading to acting or displaying certain behaviors.

There are several theories of motivation that have looked at motivation in general. For example, self-determination theory (Deci & Ryan, 2010) holds that individuals are in control of their “behavior and personality development” as they experience different “types of motivation” (Ryan & Deci, 2017, p. 3). Goal theory approaches the problem from a different perspective (Pintrich & Schunk, 2002). Its focus is on “the goals students pursue for their course or academic tasks, contrasting mastery goals and performance goals, which represents different reasons for engaging in a task and use different standards for defining success” (Senko, 2016, p. 75). In other words, in self-determination theory the attempt is to explain motivation from an individual perspective that gives no consideration to external intervention, while goal theory focuses on objectives or goals set by the individual. Both theories represent individualistic approaches that stress intrinsic motivation. Students who learn English in the academic context may experience these forms of motivation as they seek effective language learning strategies (Lee & Bong, 2019). However, none of these studies was completed in the context of mainland Southeast Asia.

Studies have shown that a variety of extrinsic and intrinsic factors may be relevant to students’ academic motivation. Rowell and Hong (2013) pointed out that school environment, teacher’s views, and values learned at home have an important influence on student motivation. This is supported by another study where it was found that the student-teacher relationship had a positive impact on academic motivation (Trolian et al., 2016). While these previous investigators concentrated their efforts on extrinsic motivational factors, Ross et al. (2016) indicated that intrinsic motivational factors, such as knowing how to find relevant information while reading, were closely related to academic motivation. In a study conducted by Khazaie and Mesbah (2014), they explored how motivational orientations in the academic setting were related to language learning strategies. They pointed out that extrinsic motivation was the most common motivational orientation, and social strategy the most frequently used language learning strategy.

An aspect that may be considered, especially in the context of language learning and academic motivation, is gender. Gender differences have been found to be related to motivation. One study found differences by gender among university students while another study found differences among adolescent girls of different ages (Bonneville-Roussy et al., 2017; Bugler et al., 2016). However, consensus does not exist on the role of gender and motivation, as shown in a meta-analysis undertaken by Turhan (2020). Given the comprehensive nature of meta-analysis, there was evidence that gender may not be a strong predictor of academic motivation.

On another note, there is a considerable body of research on academic motivation in the Asian context. Several studies have been conducted within the context of Asia, but not specifically in Thailand, where the relationship between academic motivation and language learning strategies has been examined. A study in Japan found that there was a difference in the language learning strategies of highly motivated students in contrast to students who were not highly motivated (Damayanti et al., 2018). In Indonesia, researchers found a relationship between learning strategies and motivation in the context of writing achievement (Nasihah & Cahyono, 2017). Lastly, studies conducted in China showed that language learning strategies mediated the relationship between motivation and language knowledge and that there were academic motivational differences between genders (You et al., 2016; Zhang et al., 2017).

Based on the review of literature, it can be surmised that language learning strategies are tools used by learners in the process of acquiring a new language. Academic motivation is a mix of attitudes that are affected by extrinsic and intrinsic factors. To better understand how international students adjust to a new language and a different academic setting, we sought to explore the association between language learning strategies and academic motivation.

## **Methodology**

### **Context and Participants**

The participants for this study were taken from an international university located in Thailand. Students from Myanmar, Vietnam, Indonesia, Cambodia, Malaysia, South Africa, China, and Thailand participated. Convenience sampling was employed to gather data from 100 participants who were part of the university's international program. Of all the participants, 57% were male and 43% female. Most of the participants were sophomore students (41%), followed by juniors, seniors, and freshmen—28%, 19%, and 11%, respectively. In terms of majors, Education students constituted the majority of the participants (32%). Business majors made up 27% of participants, while Religion, English, and Science students were more sparsely represented—24%, 16%, and 1%, respectively.

### **Research Design**

In this study a cross-sectional survey design was employed to collect data at a specific moment in time. This is a useful approach when there are limits to cost and the amount of time that can be spent conducting research. Teachers were asked to administer and collect the survey in different classrooms. The instrument was bisectional. The first section addressed the demographic information of the respondents, which included their class level, gender, and major. The second section consisted of 56 Likert-type items that measured the students' perception of language learning strategies and academic motivation. A five-point scale (1 = *strongly disagree*, 2 = *disagree*, 3 = *neutral*, 4 = *agree*, and 5 = *strongly agree*) was used to measure the two variables previously mentioned.

### **Language Learning Strategy Scale**

The language learning strategy scale was adopted from Habók and Magyar (2018). This scale evaluated a participant's experience and attitude when choosing strategies for learning English as a second language and thus provides insights into student perceptions in their use of language learning strategies. Sample items from this scale were "I use new English words I know in different ways" and "I notice if I am tense or nervous when I am studying or using English." The Cronbach alpha for this scale was .95.

### **Academic Motivation Scale**

The academic motivation scale was adopted from Pintrich and De Groot (1990). This scale assessed a participant's experience and attitude toward their academic journey and provided understanding into the level of engagement students had towards academic information. Sub-constructs measured in this scale included self-efficacy, intrinsic value, and test anxiety. Sample items included "I am sure I can do an excellent job on the problems and tasks assigned for this class," "It is important for me to learn what is being taught in this class," and "I worry a great deal about tests." The Cronbach alpha for this scale was .88.

### **Data Analysis**

Descriptive data were analyzed by the calculation of the mean and standard deviation for the observed variables in order to address research question one. A t-test was conducted to determine if there was a difference between language learning strategies and academic motivation based on gender in order to address research question two. Lastly, the correlation among the variables was calculated as well as performing a regression analysis to determine the strength of the association with academic motivation as the dependent variable and language learning strategies and gender as the independent variables in order to address research question three. Normality was checked through a visual inspection of histograms and plots.

### **Ethics**

The Internal Board Review Committee approved the research project. Every respondent that answered the survey did so voluntarily. Lastly, the process of data collection did not put the participants' physical or mental health at risk.

## Findings

Research question one addressed the perceptions of the participants. For language learning strategies, the respondents were mostly neutral about using English in their studies and daily life ( $M = 3.54, SD = 0.59, 95\%CI [3.41, 3.67]$ ). However, some items were scored on the boundary between "Neutral" and "Agree." For instance, the respondents tended to slightly agree with "I write notes, messages, letters, or reports in English" ( $M = 3.94, SD = 0.96, 95\%CI [3.72, 4.16]$ ). Moreover, in terms of listening skills, participants were somewhat positive about "[paying] attention when someone is speaking in English" ( $M = 3.89, SD = 0.93, 95\%CI [3.70, 4.08]$ ). Lastly, speaking skills seemed to be among the most valued, since the participants mildly agreed with the statement "I encourage myself to speak English even when I feel afraid of making a mistake" ( $M = 3.89, SD = 0.87, 95\%CI [3.70, 4.07]$ ).

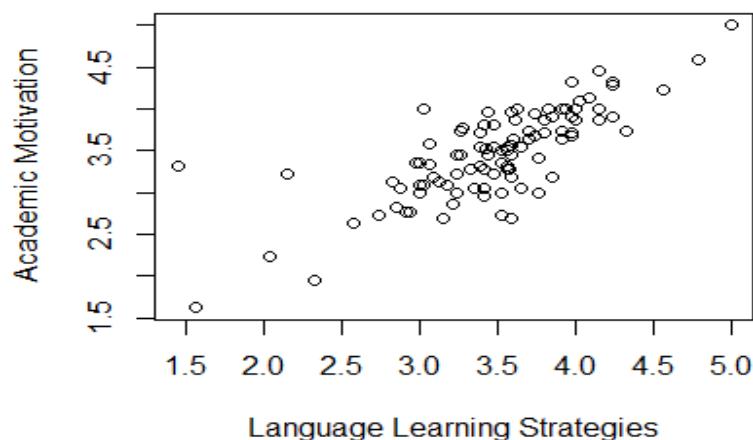
For academic motivation, the respondents indicated neutrality when it came to self-efficacy and intrinsic value ( $M = 3.51, SD = 0.55, 95\%CI [3.38, 3.63]$ ). Nevertheless, the participants disagreed with those statements that involved comparing themselves with others. For example, the respondents tended to be negative toward the statement "Compared with other students in this class I think I know a great deal about the subject" ( $M = 2.89, SD = 0.96, 95\%CI [2.67, 3.11]$ ). Interestingly, the participants slightly agreed with two statements that were related to intrinsic value. The first one was "It is important for me to learn what is being taught in this class" ( $M = 3.96, SD = 0.81, 95\%CI [3.77, 4.14]$ ) and the second one was "Understanding this subject is important to me" ( $M = 3.93, SD = 0.94, 95\%CI [3.72, 4.14]$ ).

In research question two, differences were addressed in the perceptions of participants based on gender. There was no difference for language learning strategies by gender;  $t (94) = -1.72, p = 0.08$ . Similarly, no difference was found for academic motivation by gender;  $t (89) = -0.45, p = 0.64$ . Table 1 provides the groups means by gender with the 95% confidence intervals provided.

**Table 1.** Groups Means by Gender

	Male	Female
Language Learning	3.53 [3.39–3.68]	3.43 [3.22–3.54]
Academic Motivation	3.50 [3.32–3.68]	3.45 [3.33–3.57]

A scatter plot was developed to illustrate the relationship between language learning strategies and academic motivation. Pearson Product Correlation was calculated for language learning strategies and academic motivation. This confirmed a strong positive relationship between the two variables ( $r = .78, n = 100, p < .01, 95\%CI [.69, .85]$ ). Figure 1 shows the scatter plot.



**Figure 1.** Scatter Plot of Language Learning Strategies and Academic Motivation

In research question three the association between language learning strategies, academic motivation, and gender was addressed. Multiple regression analysis was employed to explain the variance of academic motivation based on the independent variables of language learning strategies and gender. The results of the regression analysis indicated that the two independent variables explained 63% of the variance ( $r^2 = .63$ ,  $F(2, 94) = 79.44$ ,  $p < .001$ ). It was found that there was a strong positive relationship between academic motivation and language learning strategies ( $\beta = .76$ ,  $p < .001$ ). However, gender was not a significant explanatory variable for academic motivation ( $\beta = -.10$ ,  $p = .15$ ). Table 2 shows the results of the regression analysis.

**Table 2.** Regression Results Using Academic Motivation as the Criterion

Predictor	<i>b</i>	<i>b</i> 95% CI [LL, UL]	<i>sr</i> <sup>2</sup>	<i>sr</i> <sup>2</sup> 95% CI [LL, UL]	Fit
(Intercept)	0.88**	[0.46, 1.30]			
Language Learning Strategies	0.76**	[0.64, 0.88]	.63	[.51, .74]	
Gender: Male	-0.10	[-0.25, 0.04]	.01	[-.01, .03]	
					$R^2 = .628^{**}$ 95% CI[.50,.70]

*Note.* A significant *b*-weight indicates the semi-partial correlation is also significant. *b* represents unstandardized regression weights. *sr*<sup>2</sup> represents the semi-partial correlation squared. *LL* and *UL* indicate the lower and upper limits of a confidence interval, respectively. \* indicates  $p < .05$ . \*\* indicates  $p < .01$ .

The results presented indicated that there was a strong relationship between language learning strategies and academic motivation. However, gender, in the context of this study, was not a significant factor. The discussion section will further explain the significance of these findings.

## Discussion

There are several findings worth emphasizing from this study. First, students tended to agree with statements that involved using language learning strategies when communicating with teachers and peers, writing notes to themselves or others, or simply listening to those speaking English around them when having dinner, playing soccer, or simply having a conversation with a new friend. This indicated the participants' desire to improve their language skills as they interacted with their environment, even though they may have been afraid of making a mistake, as one of the statements in the survey indicated. Previous researchers have highlighted the fact that English may be used actively outside the classroom where students make it a part of their extracurricular activities. Such a strategy benefits their learning of the English language (Bravo et al., 2017). This may explain why students who agreed with using language strategies were also more motivated, as they already had indicated a willingness to employ the language in order to learn it.

Second, no difference was found by gender either for language learning strategies or for academic motivation. This finding contrasts with those of Ross et al. (2016) and Khazaie and Mesbah (2014). Their research indicated a difference by gender for academic motivation and language learning strategies. The fact that the present study showed no difference by gender for academic motivation becomes all the more relevant in the educational arena since it does not align with several studies that support the educational psychological viewpoint that claims gender as a major factor that affects academic motivation and performance (Ghazvini & Khajehpour, 2011; Sander & Sanders, 2007; Veas et al., 2016). Perhaps, the culturally diverse nature of the sample chosen played an important role in bringing to light a different outcome from that of the studies cited above. The weakness of gender in terms of its association with academic motivation also has been confirmed by Turhan (2020).

Therefore, men and women may be motivated differently but in the context of learning a language, the overall amount of motivation is the same.

Third, there was a strong positive relationship between language learning strategies and academic motivation. This finding points to seeing language learning strategies as an influential factor for academic motivation. In other words, the more engaged students are in developing their speaking, reading, writing, and listening skills through effective strategies, the higher their academic motivation levels. Nguyen and Terry (2017) asserted that language learning strategies played a major role in the students' academic journey, which confirms the finding previously mentioned. This indicates that students may need to be motivated and/or given strategies for learning a language in order to enjoy academic success.

### **Recommendations and Conclusions**

Several recommendations can be given from this study in the context of international universities in Thailand. First, teachers might encourage the use of language learning strategies in the classroom and outside of it to keep their students academically motivated. For example, when coming across a new or difficult word for the students, educators may ask students to search for the word's meaning on the internet, deconstruct the word, and share the information with the rest of the class. Students might do the same when reading or participating in a conversation that they could not understand fully on account of an unknown word. Such an experience could help students find this learning strategy beneficial and also motivating, giving them a clearer understanding of the language content. Since many third and fourth year students have low levels of academic English proficiency in the context of international universities (Benzie, 2010), it is important that students work on the development of academic English language learning strategies by being more proactive when dealing with unknown terminologies. Such an approach is not only in agreement with the findings of prior studies but also supports the idea that teachers may guide students by asking them to find relevant strategies for enhancing their language learning (Khazaie & Mesbah, 2014; Thomas & Rose, 2019).

Second, students at the tertiary level could use language learning strategies in a more effective way if they evaluated their own work and focused on "correcting their own mistakes" (Cawagdan-Cuarto & Rivera, 2018, p. 151). After students realize, either by themselves or with the help of a teacher, that they are using a word improperly when speaking or writing, they could look for examples that showed the correct usage of the word and implement the discovery in future conversations or essays. This would enhance their understanding of the English language and show the value of language learning strategies. Finally, international university teachers could motivate and help their students by using technology as part of the language learning strategies available in the classroom, giving students the chance to work with online English laboratories that enhance their speaking, reading, and writing skills (Lai et al., 2016).

The purpose of this study was to explore the relationship between language learning strategies and academic motivation. The relationship between language learning strategies and academic motivation was positive and strong. The most important contribution of this study is that language learning strategies is a primary explanatory variable of academic motivation. In this sense, teachers at international universities can know that language learning strategies are closely connected to academic motivation, which is something that should encourage them to share effective strategies for learning English with their students.

### **Limitations and Future Research**

The fact that this study was correlational in nature leads to accepting it lacks the ability to establish any cause-and-effect relationship between the independent and dependent variables present in the model. Another limitation would be that the results came from a sample taken from one university. Therefore, it is critical to understand that generalizability is restrained to a context similar to that undertaken in this study. On the other hand, future studies could explore whether students from

different backgrounds residing in the same learning environment share the same language learning strategies and/or levels of motivation.

With regard to further study, it would be valuable to explore not only the relationship between language learning strategies and academic motivation but to also check whether students from different backgrounds and residing in the same learning environment used the same language learning strategies and/or exhibited the same level of motivation. In this sense, looking at the association among different subsamples coming from different cultures may give teachers and students at the tertiary level relevant insights about how second language content can be taught and learned at international universities while considering the particular background of the students.

## References

Benzie, H. J. (2010). Graduating as a 'native speaker': International students and English language proficiency in higher education. *Higher Education Research & Development*, 29(4), 447–459. <https://doi.org/10.1080/07294361003598824>

Bonneville-Roussy, A., Evans, P., Verner-Filion, J., Vallerand, R. J., & Bouffard, T. (2017). Motivation and coping with the stress of assessment: Gender differences in outcomes for university students. *Contemporary Educational Psychology*, 48, 28–42. <https://doi.org/10.1016/j.cedpsych.2016.08.003>

Bravo, J. C., Intriago, E. A., Holguín, J. V., Garzon, G. M., & Arcia, L. O. (2017). Motivation and autonomy in learning English as foreign language: A case study of Ecuadorian college students. *English Language Teaching*, 10(2), 100–113.

Bugler, M., McGeown, S., & Clair-Thompson, H. S. (2016). An investigation of gender and age differences in academic motivation and classroom behaviour in adolescents. *Educational Psychology*, 36(7), 1196–1218. <https://doi.org/10.1080/01443410.2015.1035697>

Burns, A., & Richards, J. C. (2018). *The Cambridge guide to learning English as a second language*. Cambridge University Press.

Campbell, E. M. (1973). A conceptualization of academic motivation and its implications for classroom teachers. *Australian Journal of Education*, 17(3), 276–288. <https://doi.org/10.1177/000494417301700305>

Cawagdan-Cuarto, H. C., & Rivera, E. E. (2018). Influence of language learning strategies to the English proficiency test performance of college students. *JPAIR Multidisciplinary Research*, 32(1), 149–163. <https://doi.org/10.7719/jpair.v32i1.580>

Chan, M. L. (2017). A phenomenographic study of medical students' strategies in learning English. *Educational Research International*, 6(4), 20–28.

Damayanti, L., Sibuea, A. M., & Murad, A. (2018, December). *The effect of learning strategies and motivation of Japanese language learning towards Japanese's learning outcomes* [Paper presentation]. The 3rd Annual International Seminar on Transformative Education and Educational Leadership (AISTEEL 2018) (pp. 192–195). Atlantis Press. <https://doi.org/10.2991/aistee-18.2018.41>

Deci, E. L., & Ryan, R. M. (2010). Self-determination. In *the Corsini encyclopedia of psychology* (pp. 1–2). <https://doi.org/10.1002/9780470479216.corpsy0834>

Gardner, D., & Lau, K. (2019). One international university, two perspectives: The role of English as a lingua franca as perceived by Mainland and Hong Kong Chinese students. *Compare: A Journal of Comparative and International Education*, 49(2), 192–210.

Ghazvini, S. D., & Khajehpour, M. (2011). Gender differences in factors affecting academic performance of high school students. *Procedia - Social and Behavioral Sciences*, 15, 1040–1045. <https://doi.org/10.1016/j.sbspro.2011.03.236>

Habók, A., & Magyar, A. (2018). Validation of a self-regulated foreign language learning strategy questionnaire through multidimensional modelling. *Frontiers in Psychology*, 9, 1–11. <https://doi.org/10.3389/fpsyg.2018.01388>

Hardan, A. A. (2013). Language learning strategies: A general overview. *Procedia - Social and Behavioral Sciences*, 106, 1712–1726. <https://doi.org/10.1016/j.sbspro.2013.12.194>

Huang, Z. (2017). Second language learning strategies (LLSs) used by Chinese students at Assumption University, Thailand: An ecological perspective. *Rangsit Journal of Educational Studies*, 4(1), 1–2. <https://doi.org/10.14456/RJES.2017.1>

Kakaew, J., & Damnet, A. (2017). Learning strategies model to enhance Thai undergraduate students' self-efficacy beliefs in EIL textual reading performance. *Advances in Language and Literary Studies*, 8(6), 19–27. <https://doi.org/10.7575/aiac.all.v.8n.6p.19>

Khazaie, Z. M., & Mesbah, Z. (2014). The relationship between extrinsic vs. intrinsic motivation and strategic use of language of Iranian intermediate EFL learners. *Theory and Practice in Language Studies*, 4(1), 99–109. <https://doi.org/10.4304/tpls.4.1.99-109>

Kitjaroonchai, N. (2013). Motivation toward English language learning of students in secondary and high schools in education service area office 4, Saraburi province, Thailand. *International Journal of Language and Linguistics*, 1(1), 22. <https://doi.org/10.11648/j.ijll.20130101.14>

Lai, C., Shum, M., & Tian, Y. (2016). Enhancing learners' self-directed use of technology for language learning: The effectiveness of an online training platform. *Computer Assisted Language Learning*, 29(1), 40–60. <https://doi.org/10.1080/09588221.2014.889714>

Lee, M., & Bong, M. (2019). Relevance of goal theories to language learning research. *System*, 86, 102122. <https://doi.org/10.1016/j.system.2019.102122>

Li, M., Yu, L., Qin, Y., Lu, P., & Zhang, X. (2016). College student academic motivation and engagement in the college English course. *Theory and Practice in Language Studies*, 6(9), 1767–1773. <https://doi.org/10.17507/tpls.0609.07>

Manning, G. (2007). Self-directed learning: A key component of adult learning theory. *Business and Public Administration Studies*, 2(2), 104–115.

Masgoret, A. M., & Gardner, R. C. (2003). Attitudes, motivation, and second language learning: A meta-analysis of studies conducted by Gardner and associates. *Language learning*, 53(S1), 167–210.

Michael, R. (2018). Education in Thailand. *WENR World Education News + Reviews*. <https://wenr.wes.org/2018/02/education-in-thailand-2>

Nasihah, M., & Cahyono, B. (2017). Language learning strategies, motivation, and writing achievement of Indonesian EFL students. *Arab World English Journal*, 8(1). <https://dx.doi.org/10.2139/ssrn.2945905>

Nguyen, H., & Terry, D. R. (2017). English learning strategies among EFL learners: A narrative approach. *IAFOR Journal of Language Learning*, 3(1). <https://doi.org/10.22492/ijll.3.1.01>

Norberg, C., Vikström, A., & Kirby, E. P. (2018). Secondary school students' understanding of and strategies for vocabulary acquisition: A phenomenographic approach to language learning. *Journal of Language Teaching and Research*, 9(5), 895–904. <https://doi.org/10.17507/jltr.0905.02>

Oveisi, M., & Nosratinia, M. (2019). The relationship among EFL learners' self-directed learning, resilience, and willingness to communicate. *Journal of Language and Translation*, 9(4), 77–91.

Pintrich, P. R., & De Groot, E. V. (1990). Motivational and self-regulated learning components of classroom academic performance. *Journal of Educational Psychology*, 82(1), 33–40.

Pintrich, P. R., & Schunk, D. H. (2002). *Motivation in education: Theory, research, and applications*. Merrill.

Pipattarasakul, P., & Singhasiri, W. (2018). Metastrategies employed by science and engineering EFL learners in a speaking task. *The Journal of AsiaTEFL*, 15(1), 66–81. <https://doi.org/10.18823/asiatefl.2018.15.1.5.66>

Polat, B. (2013). Experiencing language: Phenomenography and second language acquisition. *Language Awareness*, 22(2). <https://www.tandfonline.com/doi/abs/10.1080/09658416.2012.658811>

Ross, M., Perkins, H., & Bodey, K. (2016). Academic motivation and information literacy self-efficacy: The importance of a simple desire to know. *Library & Information Science Research*, 38(1), 2–9. <https://doi.org/10.1016/j.lisr.2016.01.002>

Rowell, L., & Hong, E. (2013). Academic motivation: Concepts, strategies, and counseling approaches. *Professional School Counseling*, 16, 158–171. <https://doi.org/10.5330/PSC.n.2013-16.158>

Ryan, R. M., & Deci, E. L. (2017). *Self-determination theory: Basic psychological needs in motivation, development, and wellness*. Guilford Press.

Sander, P., & Sanders, L. (2007). Gender, psychology students and higher education. *Psychology Learning & Teaching*, 6(1), 33–36. <https://doi.org/10.2304/plat.2007.6.1.33>

Sawalha, K., Ali, M. A., Sawalha, A., Ko, H., Abdelli, I., Shawish, S. E., & Hussien, A. (2017). Factors influencing academic motivation among UOS medical students. *Journal of Health Science*, 5, 177–180. <https://doi.org/10.17265/2328-7136/2017.04.004>

Senko, C. (2016). Achievement goal theory: A story of early promises, eventual discords, and future possibilities. In K. R. Wentzel & D. B. Miele (Eds.), *Handbook of Motivation at School* (pp. 75–95). Routledge.

Tekkol, İ. A., & Demirel, M. (2018). An investigation of self-directed learning skills of undergraduate students. *Frontiers in Psychology*, 9. <https://doi.org/10.3389/fpsyg.2018.02324>

Thomas, D. (2019). Segmentation of tertiary non-native English speaking students' language learning strategies. *ABAC Journal*, 39(1). <http://www.assumptionjournal.au.edu/index.php/abacjournal/article/view/3730>

Thomas, N., & Rose, H. (2019). Do language learning strategies need to be self-directed? Disentangling strategies from self-regulated learning. *TESOL Quarterly*, 53(1), 248–257.  
<https://doi.org/10.1002/tesq.473>

Trolian, T. L., Jach, E. A., Hanson, J. M., & Pascarella, E. T. (2016). Influencing academic motivation: The effects of student–faculty interaction. *Journal of College Student Development*, 57(7), 810–826.  
<https://doi.org/10.1353/csd.2016.0080>

Turhan, N. S. (2020). Gender differences in academic motivation: A meta-analysis. *International Journal of Psychology and Educational Studies*, 7(2), 211–224.

Utvær, B. K. S., & Haugan, G. (2016). The academic motivation scale: Dimensionality, reliability, and construct validity among vocational students. *Nordic Journal of Vocational Education and Training*, 6(2), 17–45.  
<https://doi.org/10.3384/njvet.2242-458X.166217>

Veas, A., Gilar, R., & Miñano, P. (2016). The influence of gender, intellectual ability, academic self-concept, self-regulation, learning strategies, popularity and parent involvement in early adolescence. *International Journal of Information and Education Technology*, 6(8), 591–597.  
<https://doi.org/10.7763/IJIET.2016.V6.757>

Vibulphol, J. (2016). Students' motivation and learning and teachers' motivational strategies in English classrooms in Thailand. *English Language Teaching*, 9(4), 64–75. <https://doi.org/10.5539/elt.v9n4p64>

You, C., Dörnyei, Z., & Csizér, K. (2016). Motivation, vision, and gender: A survey of learners of English in China. *Language Learning*, 66(1), 94–123. <https://doi.org/10.1111/lang.12140>

Zhang, Y., Lin, C.-H., Zhang, D., & Choi, Y. (2017). Motivation, strategy, and English as a foreign language vocabulary learning: A structural equation modelling study. *British Journal of Educational Psychology*, 87(1), 57–74. <https://doi.org/10.1111/bjep.12135>

Zhao, X. (2019). A study on English learning strategies used by Mongolian university students. In C. Huang, J. Wang, & Han, Y (Eds.), *The 4th International Conference on Humanities Science, Management and Education Technology (HSMET 2019)* (pp. 506–511). Atlantis Press. <https://doi.org/10.2991/hsmet-19.2019.94>