A CORRELATIONAL-COMPARATIVE STUDY OF MOTIVATION FOR LEARNING AND ACADEMIC ACHIEVEMENT IN ENGLISH AS A FOREIGN LANGUAGE CLASS HELD BY CHINESE MIDDLE SCHOOL STUDENTS

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Abstract: This study was aimed to determine whether there was a significant difference in motivation for learning (in terms of amotivation, extrinsic motivation, and intrinsic motivation) and relationship with academic achievement in English as a Foreign Language class (EFLC) among Grades 7, 8, and 9 students at No. 4 Middle School of Xinyu, China. The participants were students from Grade 7 (110), Grade 8 (105), and Grade 9 (109) enrolled in the target school during the academic year 2021-2022. This research employed the Academic Self-Regulation Questionnaire (SQR-A) and English subject's monthly tests for each grade as research instruments. The data analysis revealed that the level of motivation for learning in EFLC was slightly high for Grades 7 and 9 students, and high for Grade 8 students. Moreover, the level of academic achievement in EFLC was found to be excellent for Grade 7 students, a failure for Grade 8 ones, and moderate for Grade 9 students. Participants' academic achievement in EFLC was found to be significantly correlated to Grade 7 students' extrinsic motivation for learning in EFLC, and Grade 9 students' extrinsic and intrinsic motivation. Also, a significant difference in overall motivation for learning in EFLC was found between Grades 7 and 8 and Grades 8 and 9 students at the target school. Based on the research findings, recommendations for students, teachers, administrators, and future researchers are provided.

Keywords: Motivation, English Language Learning, Academic Achievement, Amotivation, Extrinsic Motivation, Intrinsic Motivation, Foreign Language Education.

1. INTRODUCTION

The concept of motivation refers to a person's will and internal desire that make them want to finish works or take part in tasks and activities, and hence it is concerned with all aspects of activation and intention (Ryan & Deci, 2000). Motivation can be driven by external contingencies and rewards (e.g., extrinsic motivation), or inner gratification (i.e., intrinsic motivation), or can be absent or lacking from a person's behavior (i.e., amotivation; Ryan & Deci, 2000). Individuals with

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a low motivation for learning a second or foreign language will find hard to achieve their language learning goals (Dörnyei & Ushioda, 2011). In fact, students who improve their motivation for learning English as a second or foreign language, are also able to easily improve their English academic achievement (Zhang, 2014). Therefore, motivation is one of the most important emotional factors driving English language learning (Dörnyei & Ushioda, 2011), and that affect the language learning process and the English academic achievement (Li & Liu, 2015).

In the Chinese education system, school work is very demanding for students, so they need a high level of motivation for learning in order to complete their works and achieve their language learning goals. If they improve their motivation for learning English, then they might be able to easily improve their English academic achievement as a result, because motivation for learning can promote students' study efficiency, resulting in a more effective study and a better performance in their examinations (Zhang, 2014).

In relation to motivation for learning in English as a foreign language class (EFLC), the researchers have observed some issues among Grades 7, 8 and 9 students learning in English as a foreign language class (EFLC) at No. 4 Middle School of Xinyu, China. The researchers have found that students often get lower scores in EFLC than in Mathematics, Chinese and other school subjects' classes; and some of students seem not being willing to read and study in EFLC. These are indicators of possibly having a low level of motivation for learning in EFLC.

For these aforementioned reasons, the researchers decided to conduct a correlational-comparative study to determine whether there was a significant relationship and difference of motivation for learning (in terms of amotivation, extrinsic motivation and intrinsic motivation) with academic achievement in English as a foreign language class (EFLC) held by Grades 7, 8 and 9 students at the target school.

Research Objectives

The following were the specific research objectives addressed by this study.

1. To determine the levels of motivation for learning in EFLC held by Grades 7, 8 and 9 students at No. 4 Middle School of Xinyu, China.

1.1 To determine the level of amotivation for learning in EFLC held by Grades 7, 8 and 9 students at No. 4 Middle School of Xinyu, China.

1.2 To determine the level of extrinsic motivation for learning in EFLC held by Grades 7, 8 and 9 students at No. 4 Middle School of Xinyu, China.

1.3 To determine the level of intrinsic motivation for learning in EFLC held by Grades 7, 8 and 9 students at No. 4 Middle School of Xinyu, China.

2. To determine the levels of academic achievement in EFLC held by Grades 7, 8, and 9 students at No. 4 Middle School of Xinyu, China.

3. To determine whether there is a significant relationship of motivation for learning (in terms of amotivation, extrinsic motivation and intrinsic motivation) with academic achievement in EFLC among Grades 7, 8 and 9 students at No. 4 Middle School of Xinyu, China.

4. To determine whether there is a significant difference in motivation for learning in EFLC among Grades 7, 8 and 9 students at No. 4 Middle School of Xinyu, China.

2. THEORETICAL FRAMEWORK

This study was conducted based on the following supporting theory: the self-determination theory (Ryan & Deci, 2000).

Self-Determination Theory

The self-determination theory is a theoretical framework that suggests that students are more willing to focus on the interesting activities, developing their skills, and being part of social groups, according to the degree to which the motivations emanate from the self (i.e., are self-determined). Therefore, this theory works up with some key questions related to motivation: what people do and why they do it. By answering these questions, this theory identifies different types of motivations, and how these motivations will influence human behavior. According to this theory, motivation is categorized into amotivation, extrinsic motivation, and intrinsic motivation.

Amotivation. It refers to the state of lacking any intention to act, a non-motivated and non-regulated behavior (Ryan, 1995; Ryan & Deci, 2000). Amotivated students will not find any benefits from what they are going to do. Students learn English only because they know they need to learn. There will not have any reward of interesting when they are learning English.

Extrinsic Motivation. It refers to a form of motivation where actions are performed because of external constraints or reasons, such as a reward or a punishment (Ryan & Deci, 2000).

Intrinsic Motivation. This refers to a motivational state driven by the individual feelings, interest, and satisfaction that derive directly from participation (Deci & Ryan, 1985; Ryan & Deci, 2000). Students with intrinsic motivation will enjoy learning English and feel interesting with learning English. They want to participate in the activity, without being forced by any people. Intrinsic motivation is based on knowledge, accomplishment and stimulation, which will lead some positive affect on behaviors and outcomes (Ryan & Deci, 2000).

Conceptual Framework

Figure 1 depicts the conceptual framework of the study.

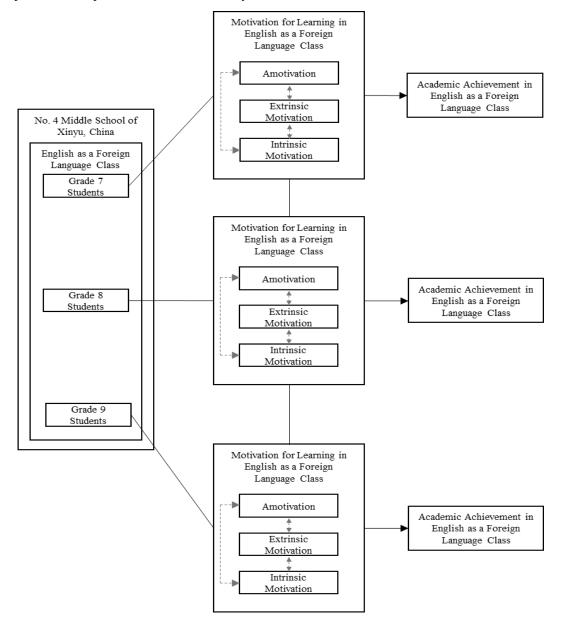


Figure 1: Conceptual Framework for the Current Study

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3. LITERATURE REVIEW

In this section, some previous studies related to the research variables addressed in this study are reviewed and summarized.

Gui (1985) conducted experimental and developmental psycholinguistics in different periods of research topics. Moreover, the study also examined the connections and interactions between motivation for learning in English as a foreign language class and psycholinguistics. This was one of the first studies conducted in China on motivation for learning. He found that the more motivation for learning English student have, the more interested they will be in learning English and learn it faster, especially for spoken English. He also developed and implemented different methods for students to learn English as a foreign language.

Link and Eamoraphan (2021) conducted a study to determine the effects of adult learners' motivation for learning in English as a foreign language and their instruction by single or multiple instructors. The participants were 67 adult-learners enrolled in private English as a foreign language course during the period of April to July 2020 at Geos Language Centre, Thailand. The research found that there was no significant difference in the gain in motivation for learning in English as a foreign language between adult learners who studied with a single instructor and adult learners who studied with multiple instructors over a six-week period of study.

Patthira and Eamoraphan (2014) conducted a study to determine the difference in intrinsic motivation and extrinsic motivation to learn English between one public school and one private school in Prawate District, Bangkok, Thailand. The participants were 486 Grade 4 to Grade 6 students from the target schools. The research found that there was a significant difference in intrinsic motivation between the public school and private school. Moreover, there was a significant difference in extrinsic motivation between the students enrolled in the public and private school.

Becirovic (2017) conducted a study to determine how gender influenced motivation and achievement in learning English as a foreign language. The research sample consisted of 185 students aged 10 (Grade 5), 14 (Grade 9) and 18 (Grade 12), from elementary and high schools in Sarajevo, Bosnia and Herzegovina. The research revealed that there was a significant correlation between achievement and motivation in learning English as a foreign language. Also, the study found evidence of how the adoption of the most effective approaches in motivating students to learning and teaching English as a foreign language can be highly beneficial for teachers, parents and students.

4. METHODOLOGY/PROCEDURE

In this section, details on the study's population, sample and research instruments are provided.

Population and Sample

A population sample of 324 high school students of Grades 7 (110), 8 (105), and 9 (109) at No. 4 Middle School of Xinyu, China, during the first semester of the academic year of 2021-2022, participated in this study.

Research Instruments

This study was conducted using the following research instruments: the Academic Self-Regulation Questionnaire and the participants' English subject's monthly test.

Academic Self-Regulation Questionnaire. In order to measure the students' level of motivation for learning in EFLC, the researchers administered the Academic Self-Regulation Questionnaire (see Table 1), which was adopted from Lin (2011). The scale was used 6-point Likert scale, ranging from 1 (*strongly disagree*) to 6 (*strongly agree*). The questionnaire was comprised of 28 items, measuring participants' amotivation (Items 19-23), extrinsic motivation (Items 1-13, Items 24-28), and intrinsic motivation (Items 14-18). The mean scores from the Likert scale ratings were interpreted using a continuum from "very low" to "very high".

Item No.	Item statement
1	I try to do well in school because I'm supposed to do.
2	I try to do well in school because what I have learned in class will help me in the future.
3	I try to do well in school because what I have learned will one part of my life.
4	I try to do well in school because what I have learned is same as what I want.
5	I try to do well in school because I want to use the knowledge in the future.
6	I try to study English in school because my parents want me to.
7	I try to do well in school because I want to graduate.
8	I try to do well in school because I can feel pressure from parents and teachers.
9	I try to do well in school because others think it is very important.
10	If I don't do well in school, I will feel guilty and ashamed.
11	I should spend time in studying knowledge.
12	If I don't do well in school, I will feel guilty to my parents and teachers.
13	I learn the knowledge and skills in the class because I think I have to do it, otherwise it will disturb me.
14	I try to do well in school because I can feel progress from the knowledge and skills I have learned.
15	I learn the knowledge and skills in the class because I feel fun.
16	I learn the knowledge and skills in the class because I can learn new knowledge and skills and I can feel fun.
17	I answer questions in the class because I feel satisfaction.
18	I learn new knowledge and skills of my subject because I can feel fun from what I have learned.
19	I don't think what I have learned now will make me successful in the future.
20	I don't know what to do in the future after I learn all the knowledge and skills.
21	I feel that it is meaningless for me to study in school.
22	I always ask myself: "I seem can't learn the knowledge and skills that I should.
23	I think I won't get and progress and improve in the future.
24	I work hard in class because I really want to learn well.
25	I work hard in class because I think it is important.
26	I want to spend time in studying because I think it worth.
27	I want to spend time in studying because I think I will use that in my daily life.
28	I want to spend time in studying because I think it will help me in the future.

 Table 1: Items in the Academic Self-Regulation Questionnaire

English Subject's Monthly Test. Academic achievement in EFLC was measured based on the grade earned by Grades 7, 8, and 9 students at No. 4 Middle School of Xinyu, China, on the English subject's monthly test. The scores were interpreted as follows: excellent (108-120); good (96-197); moderate (84-95); pass (72-83); and failure (0-71).

Research Findings

The research findings obtained from the data collection and analysis follows, presented by research objective.

Findings From Research Objective 1

Table 2 shows the overall mean scores, standard deviations and interpretations of the level of motivation, and its subscales, held by the Grades 7, 8 and 9 students at No. 4 Middle School of Xinyu, China, who participated in this study.

Table 2: Mean Scores, Standard Deviations and Interpretations of the Motivation for Learning in EFLC and Its
Subscales for the Participants in This Study

Variable	Grade	Grade 7		Grade	Grade 8			Grade 9		
	М	SD	Ι	М	SD	Ι	М	SD	Ι	
Motivation for learning in EFLC	3.90	1.38	SH	4.58	1.18	Н	3.74	1.57	SH	
Amotivation	2.18	1.49	L	4.14	1.43	SH	2.80	1.49	SL	
Extrinsic motivation	4.16	1.36	SH	4.66	1.14	Н	3.89	1.66	SH	
Intrinsic motivation	4.72	1.32	Н	4.75	1.02	Н	4.13	1.32	SH	

Note. I stands for "Interpretation"; SH stands for "Slightly high"; H stands for "High"; SL stands for "Slightly low"; L stands for "Low".

Findings From Research Objective 2

Table 3 shows the findings regarding overall mean scores, standard deviations, and interpretations of Grades 7, 8, and 9 students' academic achievement in English as a foreign language class from the English subject's monthly test.

Table 3: Overall Mean Scores, Standard Deviations, and Interpretations of Grades 7, 8, and 9 Students' Academic Achievement in English as a Foreign Language Class From the English Subject's Monthly Test

Grade	Ν	Minimum	Maximum	М	SD	Interpretation
7	110	50	120	113.7	9.89	Excellent
8	105	13	108	65.7	20.79	Failure
9	109	50	119	93.2	15.55	Moderate

Findings From Research Objective 3

Table 4 below indicates the results of the correlational analysis performed between the motivation for learning (in terms of its three subscales) and academic achievement in EFLC of Grades 7, 8, and 9 students at No. 4 Middle School of Xinyu, China.

Table 4: Correlational Analysis Between Motivation for Learning (in Terms of Amotivation, Extrinsic Motivation and Intrinsic Motivation) and Academic Achievement in English as a Foreign Language Class of Grades 7, 8, and 9 Students at No. 4 Middle School of Xinyu, China

Variables	Grade 7			Grade 8			Grade 9		
	1	2	3	1	2	3	1	2	3
1. Amotivation	_			_					
2. Extrinsic motivation	32* (.001)	_		.31* (.001)	_		12 (.232)	_	
3. Intrinsic motivation	31* (.001)	.58* (<.001)	_	.13 (.174)	.77* (<.001)	_	32* (.001	.60* (<.001)	_
4. Academic achievement	03 (.742)	.23* (.016)	.17 (.080)	40* (<.001)	.04 (.657)	.06 (.558)	.14 (.138)	.26* (.006)	.35* (<.001)
$r^2 \times 100\%$		5.29%		16.00%				6.76%	12.25%
$R R^2 imes 100\%$.27* 7.29%		

Note. *denotes a statistically significant relationship (statistical significance level set at p = .05, two tailed). *p*-values appear within parentheses below the correlation coefficients.

As shown in Table 4, a significant, weak multiple correlation among motivation for learning and academic achievement in EFLC was obtained only for Grade 9 students, R = .27, F(2, 321) = 12.98, p < .001. The multiple coefficient of determination obtained, $R^2 = .08$, indicates that the combination of the independent variables (extrinsic and intrinsic motivation for learning in EFLC) accounts for 8% of the variance of the dependent variable (academic achievement in EFLC).

Findings From Research Objective 4

Table 5 below indicates the results of the one-way ANOVA test performed to compare Grades 7, 8, and 9 students' motivation for learning in EFLC at No. 4 Middle School of Xinyu, China.

Table 5: Results of the One-Way ANOVA and Scheffe's Post-Hoc Test Comparing Grades 7, 8, and 9 Students' Motivation for Learning in English as a Foreign Language Class at No. 4 Middle School of Xinyu, China

Grade	Mean diffe	rence		dfs	F	р	
	Grade 7	Grade 8	Grade 9	Between groups	Within groups	_	
7	_			2	321	60.16	< .001
8	.68* (< .001)	_					
9	16 (.128)	85* (<.001)	_				
Ν	110	105	109				
М	3.90	4.58	3.74				
SD	1.38	1.43	1.57				

Note. * denotes a statistically significant difference from the Scheffe's post hoc multiple comparison test (statistical significance level set at p = .05, two-tailed). *p*-values appear within parentheses under the mean difference values.

5. DISCUSSION

In this section, a discussion of the research findings from the current study is provided, by relating such findings with the ones reported by previous research studies.

Motivation for Learning in English as a Foreign Language Class

The results of the current study revealed that the level of motivation for learning in EFLC held by Grades 7 and 9 students at No. 4 Middle School of Xinyu, China, was found to be slightly high, while it was found to be high for Grade 8 students at the target school. This result is in line with the one reported by Suryasa et al. (2017), who conducted a study on 30 students from Pritchard English Academy in Bali, Indonesia. Moreover, Patthira and Eamoraphan (2014) also reported a partially high level of motivation for learning in English as a foreign language class in Bangkok on Grades 4, 5, and 6 students.

One of the findings from this study revealed that the level of Grade 7 and Grade 9 students' amotivation for learning in EFLC at No. 4 Middle School of Xinyu, China, were interpreted as a low or slightly low level; while the level of Grade 8 students' amotivation for learning in EFLC was interpreted as a slightly high. These results are in line with ones reported by Yli-Piipari et al. (2009), who found that 429 Grade 6 students from Finland had low levels of amotivation in relation to their need to accept physical education.

Another finding of this study indicated that the Grades 7, 8, and 9 students' extrinsic motivation for learning in EFLC had a slightly high or high level. These results are in line with one reported by Pattira and Eamoraphan (2014), who found a high level of extrinsic motivation for learning in EFLC held by Grades 4, 5, and 6 students from one public and one private school in Prawate District, Bangkok, Thailand. However, the results from the current study are slightly different to the ones of Hayenga and Corpus (2010), who reported a low level of Grades 6, 7, and 8 students' motivation in response to extrinsic motivation with students' achievement in a middle school in Portland, Oregon, United States.

One of findings in this current study revealed that the Grades 7, 8, and 9 students had a high level of intrinsic motivation for learning in EFLC. Similarly, Pattira and Eamoraphan (2014) also pointed out that the levels of intrinsic motivation to learn English were high for Grades 4 to 6 students from a public and a private school in Prawate District, Bangkok.

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The Relationship of Students' Motivation for Learning and Academic Achievement in EFLC

The data analysis from the current study showed that the Grade 7 students' extrinsic motivation for learning in EFLC was found to be significantly, positively and weakly correlated with their academic achievement in EFLC; the Grade 8 students' extrinsic motivation for learning in EFLC was found to be significantly, negatively and moderately strongly correlated with their academic achievement in EFLC; a significant , and a strong multiple correlation among motivation for learning in English as a foreign language class (in terms of extrinsic motivation and intrinsic motivation) and academic achievement in EFLC was found. The result of this study is conflicting with Beciovic's (2017) findings, which stated that there is a statistically significant correlation between achievement and motivation in EFLC for Grades 5, 9, and 12 students from Sarajevo, Bosnia and Herzegovina. Moreover, a study with Li and Pan (2009) found that there was a significantly and positively relationship between motivation and achievement in English major from Qingdao Agricultural University, China. However, the current study's findings are slightly different with the ones of Wong (1982), who found that there was no significant relationship between their English achievement and motivational and attitudinal variables in a group of 50 bilingual Chinese American adolescents from San Francisco, California, United States.

The Comparison of Students' Motivation for Learning in EFLC

From the data analysis (see Table 5), a significant difference in overall motivation for learning in EFLC was found between Grades 7 and 8 students at the target school. The post-hoc analysis also indicated that the overall motivation for learning in EFLC was significantly higher in Grade 8 students than in Grade 7 ones, as well as in Grade 8 students than in Grade 9 ones. However, no significant difference in motivation for learning in EFLC was found between Grades 7 and 9 students at the target school.

The results of this study are slightly different to those by Meethongkhow and Forhad (2021), who stated that there was a significant difference in motivation for learning English as a foreign language held by Grade 2 students learning under game-based learning method and teacher-centered method at a demonstration school in Bangkok, Thailand. Also, the findings of the current study are similar to those reported by Shell and Lynch (2018), who also showed that there was no significant difference in motivation for learning English as a foreign language, according to the preferences for instructional strategies, between Grade 9-12 students in Pan-Asia International School, Bangkok, Thailand.

6. RECOMMENDATIONS

Based on the findings of this study, the following recommendations are provided for students, instructors and future researchers.

Recommendations for Students

The findings of this study revealed that the overall level of motivation for learning in EFLC of Grade 8 students at the target school it was found to be high, while for Grades 7 and 9 students it was found to be slightly high. Therefore, for these Grades 7 and 9 students, the findings of the study would help them to raise awareness of the particular aspects they need to improve their own level of motivation, from the statements of each of the items in the Academic Self-Regulation Questionnaire. For some students, the results from this study will help them understand their strengths and weaknesses in learning English as a foreign language class, then get success in the future, in case they feel confused about connecting their future life and job with learning English (e.g., "I don't think what I have learned now will make me successful in the future" [Item 19], and "I don't know what to do in the future after I learn all the knowledge and skills" [Item 20]).

Recommendations for Instructors

The researchers believe that the English language teachers of the target school must increase the level of their students' motivation for learning in EFLC, possibly using the results from the current study to design more effective instructional strategies. For example, EFLC teachers may foster student understanding about what English can do for their future jobs or future life, based on the results obtained from Item 20 of the Academic Self-Regulation Questionnaire ("I don't know what to do in the future after I learn all the knowledge and skills" [Item 20]). Also, EFLC teachers may help students to ease their English learning anxiety, providing support and encouragement to avoid them to feel guilty or shame if they

cannot get a high score in the examination ("If I don't do well in school, I will feel guilty and ashamed" [Item 10]). For those students who will feel guilty and shame with low score in examination, teachers should point out in the class that score does not mean everything in their study, do not over stress about the result and focus on the process. Also, teachers should encourage them in the class. As a result, students will have more motivation and learn (Ryan & Deci, 2000).

Recommendations for Future Researchers

The data of this study was collected only focusing on the Grade 7, 8, and 9 levels from one school in China. Future researchers can conduct studies on a wider range of grade levels and increase the sample size of schools, in order to improve the power of the study and make the results more generalizable. Moreover, future researchers may focus on other factors that might influence students' academic achievement in language learning (e.g., attitudes, desires, gender, and interests; Gardner, 2010; Yeung et al., 2011), since the motivational variables addressed in this study only accounted for a percentage of the variance of the participants' academic achievement in EFLC ranging from 5.29% to 16%.

REFERENCES

- [1] Bećirović, S. (2017). The relationship between gender, motivation and achievement in learning English as a foreign language. *European Journal of Contemporary Education*, 6(2), 210-220.
- [2] Deci, E. L., & Ryan, R. M. (1985). Intrinsic motivation and self-determination in human behavior. Plenum Press.
- [3] Deci, E. L., & Ryan, R. M. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68-78.
- [4] Dörnyei, Z., & Ushioda, E. (2011). *Teaching and researching motivation* (2nd ed.). Pearson.
- [5] Gardner, R. C. (2010). Motivation and second language acquisition: The socio-educational model. Peter Lang.
- [6] Gui, S. C. (1991). *Psychological analysis of English learning among the Chinese students*. Hunan Education Publishing House.
- [7] Hayenga, A. O., & Corpus, J. H. (2010). Profiles of intrinsic and extrinsic motivations: A person-centered approach to motivation and achievement in middle school. *Motivation and Emotion*, *34*(4), 371-383.
- [8] Li, J. Y., & Liu, P. H. (2015). *Research on foreign language learning motivation from 2004 to 2013 in China: Review and reflection.* Foreign Language World.
- [9] Link, S. W., & Eamoraphan, S. (2021). A comparative study of adult learners' motivation for learning English as a foreign language according to their instruction by single or multiple instructors at Geos Language Centre, Thailand. *Scholar: Human Sciences*, 13(2), 332-346.
- [10] Li, P., & Pan, G. (2009). The relationship between motivation and achievement: A survey of the study motivation of English majors in Qingdao Agricultural University. *English Language Teaching*, 2(1), 123-128.
- [11] Meethongkhow, T., & Forhad, Z. A. (2021). A comparative study of Grade 2 students' motivation for learning English as a foreign language under game-based learning method and teacher-centered learning method at a demonstration school, Bangkok, Thailand. *Scholar: Human Sciences*, *13*(2), 388-404.
- [12] Patthira, I., & Eamoraphan, S. (2014). A comparison of students' motivation for learning English as a foreign language in selected public and private schools in Bangkok, Thailand. *Scholar: Human Science*, 6(1), 15-19.
- [13] Ryan, R. M. (1995). Psychological needs and the facilitation of integrative processes. *Journal of Personality*, 63, 397-427.
- [14] Shell, M. B., & Lynch, R. (2018). A comparative study of students' motivation for learning English as a foreign language and their preferences for instructional strategies in Grades 9-12 at Pan-Asia International School, Bangkok, Thailand. Scholar: Human Sciences, 10(2), 59-73.
- [15] Suryasa, W., Prayoga, I. G. P. A., & Werdistira, I. (2017). An analysis of students' motivation toward English learning as second language among students in Pritchard English Academy (PEACE). *International Journal of Social Sciences and Humanities*, 1(2), 43-50.

- [16] Wong, M. J. (1982). The role of attitudes and motivation in second language acquisition among adolescent native Chinese speakers in the U.S. [Unpublished doctoral dissertation]. University of San Francisco, California, United States.
- [17] Yeung, A. S., Lau, S., & Nie, Y. (2011). Primary and secondary students' motivation in learning English: Grade and gender differences. *Contemporary Educational Psychology*, *36*(3), 246-256.
- [18] Yli-Piipari, S., Watt, A., Jaakkola, T., Liukkonen, J., & Nurmi, J. E. (2009). Relationships between physical education students' motivational profiles, enjoyment, state anxiety, and self-reported physical activity. *Journal of Sports Science & Medicine*, 8(3), 327-336.
- [19] Zhang, Y. (2014). *The application for learning motivation theory in Geography class* [Unpublished doctoral dissertation]. Shandong Normal University. http://cdmd.cnki.com.cn/Article/CDMD-10445-1014192166.htm