

Effects of Multiple Intelligences Project on University Students' Motivation towards English Language Learning: A Case Study in Vietnam

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Abstract

This study examines the impact of applying the Multiple Intelligences Project on university students' English learning motivation. A quantitative research method was used in the research through multiple regression analysis. A total of 458 students from different universities in Vietnam participated in the study. The research results show that all of the four intelligences selected in the research model, including (1) Intrapersonal intelligence; (2) Bodily-Kinesthetic intelligence; (3) Musical intelligence; and (4) Naturalistic intelligence had a positive impact on students' motivation towards learning English, of which naturalistic intelligence had the greatest impact. On that basis, the study gives some suggestions for teaching and learning English with a view to improving students' learning motivation. The findings of the study contribute to both theoretical and practical aspects since they proved the importance of Multiple Intelligences theory as an educational theoretical framework, as well as the significance of its application in the teaching process. The results of the research will also form the basis for further research.

Keywords: extrinsic motivation, English learning, intrinsic motivation, MI project, university students

1. Introduction

There are numerous factors affecting second and foreign language learning, among which intelligence and motivation are highly influential parameters for learner's success. The former is referred to as the ability to acquire, apply knowledge and skills. The latter can be defined as the dynamically changing cumulative arousal in a person that initiates, directs, coordinates, amplifies, terminates, and evaluates the cognitive and motor processes whereby initial wishes and desires are selected, prioritized, operationalized and acted out (Dornyei & Otto, 1998, p. 65). It is well documented that each human individual possesses different types of intelligence that function in their own ways (Armstrong, 1994; Gardner, 1983; 1985; 2006). People may function well with some of these intelligences, but hardly anyone can operate effectively with all of them. From the educational perspective, motivation is associated with a state of cognitive and emotional arouse which encourages learners to pursue a course of action and devote both physical and mental effort to sustain the set goal (Williams & Burden, 1997). It is a combination of three main inner elements including attempt, desire plus favorable attitudes toward the language learning process (Gardner, 1985). In another work, Gardner (2006) argues that even though the individual language aptitude takes up a significant ratio in learning the target language, motivational factors can override the low level of a learner's language aptitude.

Research has shown a close relationship between intelligences and motivation (Chau, 2015; Le & Le, 2014; Le, 2017; Le & Tran, 2017). When studying the Multiple Intelligences Theory (MIT) initiated by Gardner (1983), we recognize that applying this theory in teaching English can help university students develop their potential and discover their favorite learning method that matches their ability. Traditionally, intelligence is believed to be an inherent attribute that cannot be changed through time, training, or experience. However, according to the MIT, human beings are capable of developing all kinds of intelligence to an appropriate level if they are properly encouraged, nurtured, and instructed. From the MIT perspective, a person who is not good at dancing can be a genius at building houses. Both activities are related to bodily-kinesthetic intelligence. In addition, Gardner (2009), after more than three decades of observing the applications of Multiple Intelligences theory in education, drew two key conclusions: (1) Educators, when applying theory, need to seriously consider the differences between individuals and design different educational approaches to

reach the optimal ability of learners. (2) Any subject, concept, or skill should be taught in various ways that can utilize different intelligences in the learners. Such a multi-dimensional approach can produce two great benefits: First, diversity in the approach to knowledge ensures that the teacher or curriculum can reach a wider range of learners; Second, a variety of approaches to knowledge provides learners with a more in-depth and comprehensive understanding of a problem. Gardner also contends that only those who are able to think about a problem in different ways can get a holistic view. Taking this approach, therefore, can enhance EFL students' motivation towards their English learning (Hajhashemi et al., 2018; Steve, 2020). Furthermore, previous research indicates that university students have diverse intelligence types (Le & Tran, 2017). There are students who may have superior intelligence in two or three types of intelligence. Accordingly, varying the modes of teaching might contribute to exploiting the learners' potentials that are currently hidden through the linguistics and mathematical doors (Sener & Cokcaliskan, 2018). This is the reason for carrying out the study to verify the hypotheses that the MI framework helps improve EFL students' intrinsic and extrinsic motivation towards learning English language at a higher education context in Vietnam. It aimed to answer the following research questions:

1. *Will Intrapersonal intelligence have positive effect on EFL university students' motivation to learn foreign languages in Vietnam?*
2. *Will Bodily-Kinesthetic intelligence have positive effect on EFL university students' motivation to learn foreign languages in Vietnam?*
3. *Will Musical intelligence have positive effect on EFL university students' motivation to learn foreign languages in Vietnam?*
4. *Will Naturalist intelligence have positive effect on EFL university students' motivation to learn foreign languages in Vietnam?*

2. Literature Review and Hypotheses

2.1 Literature Review

2.1.1 Multiple Intelligences Theory

Gardner (2006) stated in his theory that the meaning of the word "Intelligence" is to talk about the abilities of the mind in many different fields. The result of the research on the brain is one piece of supporting evidence for this theory. These studies have shown that those abilities correspond to different parts of the brain. Gardner's Multiple Intelligences Theory (1983) has had a significant impact on the American educational system, as well as the rest of the world. The theory of Multiple Intelligences presents a completely new concept of human ability, initially showing that there are seven types of intelligence with different levels in each one. They include logico-mathematical intelligence, spatial intelligence, bodily-kinesthetic intelligence, musical intelligence, intrapersonal intelligence, interpersonal intelligence and linguistic intelligence. Naturalist intelligence was added in 1997 and existentialist intelligence was discovered two years later. The characteristics of four chosen types of abilities are summarized as follow:

(1) ***Intrapersonal intelligence*** is the capacity to understand oneself and behave correctly based on that understanding. This type of intelligence includes the ability to have a clear picture of oneself (including strengths, limitations, and weaknesses). Those with intrapersonal intelligence have a full and correct awareness of their own moods, intentions, motives, temperaments, and desires, accompanied by self-restraint, self-control, and self-esteem. The frontal lobe is the center of intrapersonal intelligence.

(2) ***Bodily-Kinesthetic intelligence*** is the capacity to direct and control the body, using the whole body to express ideas and emotions. The capacity to manipulate objects with one's hands is the basic action of bodily-kinesthetic intelligence. This intelligence involves special bodily skills such as coordination of movements, balance, dexterity, muscular strength, flexibility and speed, as well as inductance, palpation, and manual diagnosis. Dancers, crafts people, or mime actors exhibit well-developed bodily kinesthetic intelligence.

(3) ***Musical intelligence*** is the capacity to be sensitive to systems of sound signals, to be able to discern pitches, melodies, rhythms, timbres, and tones, and to create musical products. Neural residence is concentrated in the right hemisphere, but not as much as in linguistic intelligence.

(4) ***Naturalist intelligence*** is the capacity to recognize patterns in nature, have a sense of balance and harmony in nature, and be sensitive to natural phenomena. The neural residence is the left parietal lobe. Self-study competence is part of autonomy in learning.

Since its inception, MIT has been favored by many educators as an educational framework as well as instructional tools.

The findings from those studies revealed that MIT has positive influence on a variety of students' learning aspects, including independent learning (Lopez & Patron, 2012), learners' self-efficacy (Moafian & Ebrahimi, 2015; Ahmadian & Ghasemi, 2017), positive behaviors in learners and learner autonomy (Armstrong, 2009; Campell & Campbell, 1999; Lazer, 1999). Other studies also showed that applying the Multiple Intelligences theory to the classroom opened a new gate and laid the foundation for a comprehensive human education (Perrin, 1990), developed and nurtured learners through diversification of instructions (Anderson, 2007), ensured a learner-centered approach (Gardner, 2000), created clear directions in life (Dunn, 1990), helped learners apply skills in the working environment (Armstrong, 1994; Gardner, 1999), contributed to the development of teachers' professional skills (Hoerr, 2000), and positively influenced learner outcomes (Armstrong, 2009; Beecher & Sweeny, 2008; Douglas et al., 2008; Tyler & Loventhal, 2011).

2.1.2 Motivation and Multiple Intelligences Theory

Motivation is associated with a student's willingness, need, desire, and obligation to participate and thrive in the learning process (Bomia et al., 1997), which is the effort required to successfully complete a specific task (Dubrin, 2008). In fact, psychological researchers have found that motivation plays a vital role in human activities. Motivation is an internal process that helps motivate, direct, and sustain continuous action (Murphy & Alexander, 2000; Pintrich, 2003; Schunk, 2000; Stipek, 2002). In other words, motivation is the factor that motivates people to act in order to satisfy a need. Motivation, along with cognition, personality, attitudes, and learning, is a fundamental psychological process and a very important element of behavior (Tella et al., 2007).

Williams and Burden (1997) contended that motivation is influenced by two different factors, some are internal, which come from the learners, and the others are external, like other people's influence. Accordingly, motivation is divided into intrinsic and extrinsic depending on whether motivation stems more from inside or outside. As noted by Mahadi and Jafari (2012), intrinsic motivation is the eagerness and interest to do and take part in some certain activities because individuals feel that they are attractive and pleasant. Intrinsic motivation is proposed to be the most self-determined type of motivation (Deci & Ryan, 2012). When intrinsically motivated, an individual engages in a task because he/she finds the task enjoyable and pleasant. In other words, intrinsic motivation is related to the interest of learners' and their attitude to engage in an activity because that activity is enjoyable to do. For instance, learners' attention would be attracted by the caring and humorous teacher with a well-planned lesson, and learners would be interested and eager to attend the English classes.

A number of studies were carried out to find out the relationship between MIT and EFL learners' motivation (Cash, 2011, Hajhashemi et al., 2018; Steve, 2020). In addition, according to Dylan (2013) and Harmer (2007), EFL students developed their motivation when their teachers employed an MI-based instruction method. Meanwhile, Toure-Tillery and Fishbach (2014) found that motivation was one of the most influential factors when students' multiple aptitudes were taken into account through teaching process.

Although MIT has been applied in English language teaching in other settings, it is still in its infancy in Vietnamese context (Chau, 2015; Le & Le, 2014; Le & Tran, 2017; Tran & Le, 2015). These initial experimental studies mainly focused on the impacts of MIT activities and EFL students' speaking skills, autonomy and vocabulary learning. None of them paid attention to intrinsic and extrinsic motivation toward English language learning. This study is the first attempt to investigate the relationship between the two variables.

2.2 Research Hypotheses

Armstrong (2009) claimed that Multiple Intelligences theory has the potential to be utilized in learning languages since it provides the teaching process with many different approaches. Richard and Rogers (2001) also contended that this theory supports foreign language teachers by providing a variety of teaching strategies and approaches. Multiple Intelligences-oriented lessons inspire learners by enriching ways of acquiring word meanings (Morgan & Fonesca, 2004). These studies provide suggestions for how to apply each intelligence to enhance the effectiveness of foreign language teaching. In our study, the research hypotheses are based on the context of students at universities in Vietnam with an aim to find out how the application of Multiple Intelligences projects will affect students' motivation to learn English. The research hypotheses (H) are illustrated in Figure 1 below.

H1: Intrapersonal intelligence has positive effect on university students' intrinsic motivation to learn foreign languages in Vietnam

H2: Bodily-Kinesthetic intelligence has positive effect on university students' intrinsic motivation to learn foreign languages in Vietnam

H3: Musical intelligence has positive effect on university students' intrinsic motivation to learn foreign

languages in Vietnam

H4: Naturalist intelligence has positive effect on university students' intrinsic motivation to learn foreign languages in Vietnam

H5: Intrapersonal intelligence has positive effect on university students' extrinsic motivation to learn foreign languages in Vietnam

H6: Bodily-Kinesthetic intelligence has positive effect on university students' extrinsic motivation to learn foreign languages in Vietnam

H7: Musical intelligence has positive effect on university students' extrinsic motivation to learn foreign languages in Vietnam

H8: Naturalist intelligence has positive effect on university students' extrinsic motivation to learn foreign languages in Vietnam

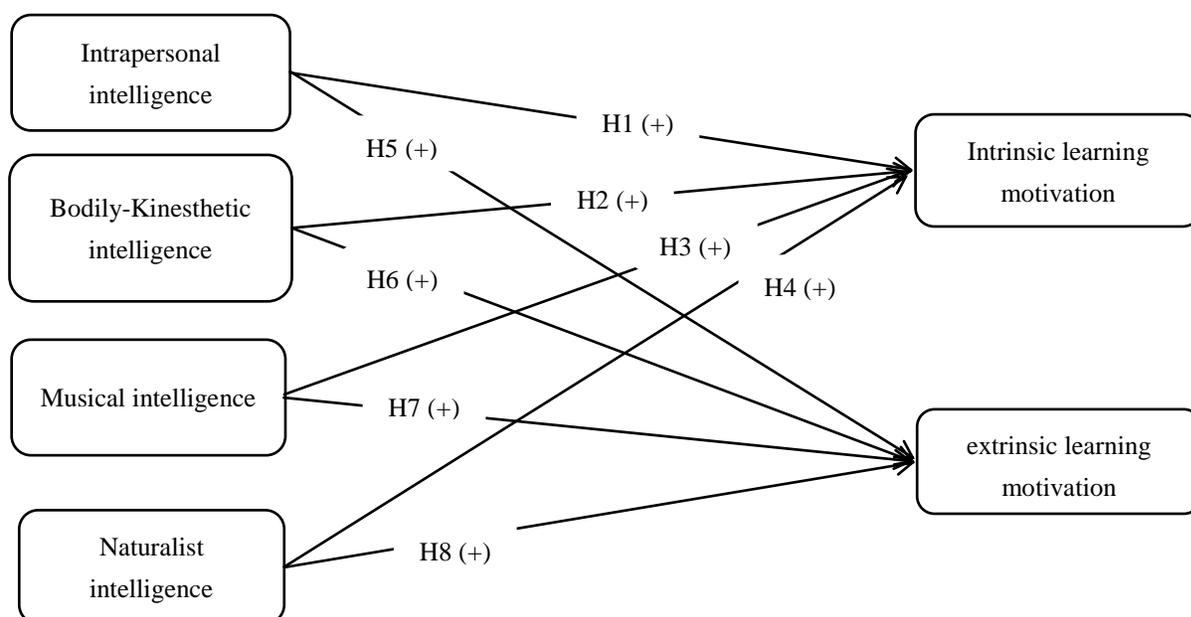


Figure 1. Research model

3. Research Methods

3.1 Research Scale

On the basis of the theoretical overview and related literature review, the article proposes a research model with independent variables as intelligence types, including: (1) Intrapersonal intelligence; (2) Bodily-kinesthetic intelligence; (3) Musical intelligence; and (4) Naturalist intelligence. Dependent variables are learning intrinsic motivation and learning extrinsic motivation. In this research, a five-point Likert scale was used (strongly agree, agree, moderate, disagree, and strongly disagree). Indicators for measuring variables were applied with adjustments in accordance with the characteristics of the previous studies' samples.

Table 1. Measurement scales

No.	Variables	Abbreviations	Observation	Measurement scale
1	Intrapersonal intelligence	II	10	McKenzie (1999)
2	Bodily-kinesthetic intelligence	BI	6	McKenzie (1999)
3	Musical intelligence	MI	9	McKenzie (1999)
4	Naturalist intelligence	NI	8	McKenzie (1999)
5	Learning motivation	LM	7	Stee and Porter (1983)

3.2 Research Sample

The study was carried out at different universities in Vietnam. The research sample was selected by the non-probability sampling method which is a convenient sampling method with relative stratification according to the

universities in the North, Center, and South of Vietnam. University students were identified as the subjects of the study.

The sample size was 458. The data collection process was conducted in two ways: online and face-to-face. The number of online questionnaires collected was 287, and the number of usable questionnaires was 261. In the latter way, the total number of questionnaires which were delivered to the respondents were 350, the number of questionnaires collected was 244, and the number of usable questionnaires was 197. Therefore, the total number of valid questionnaires for analysis was 458. According to the study by Hair et al. (1998) on the expected sample size, the minimum sample size was five times greater than the total number of observable variables. The research scale, which included 458 samples, satisfies the analysis requirements. The data was collected from August 2021 to December 2021.

3.3 Data Processing

A quantitative method was used in the research, and the data was processed by SPSS software. First, the research verified the reliability of measurement scales with Cronbach's coefficient Alpha ≥ 0.7 and corrected item-total correlation ≥ 0.3 . Second, the value of measurement scales was measured through analyzing exploratory factor analysis (EFA) in which the factor loading > 0.5 . The method of factor extraction was Varimax rotation. Third, the measurement scales were re-verified by Cronbach's coefficient Alpha after removing inappropriate indicators. Fourth, it came to correlation analysis and multiple regression. The study investigated the effects of the Multiple Intelligences project and the choices of 4 intelligences (intrapersonal, bodily-kinesthetic, musical, and naturalist) on university students' motivation and self-study competence towards learning foreign languages, forming 2 regression equations.

$$(1) \text{ Learning motivation} = \beta_0 + \beta_1 * \text{II} + \beta_2 * \text{BI} + \beta_3 * \text{MI} + \beta_4 * \text{NI}$$

$$(2) \text{ Learning competence} = \alpha_0 + \alpha_1 * \text{NI} + \alpha_2 * \text{BI} + \alpha_3 * \text{MI} + \alpha_4 * \text{NI}$$

Eventually, descriptive statistical analysis was conducted to determine the average value of the factors included in the model.

4. Results

4.1 The Reliability of the Measurement Scales

The result of analyzing Cronbach's Alpha shows the reliability of the measurement scales as the Cronbach's coefficients Alpha of all variables were > 0.7 . However, NI5 had the Cronbach's coefficient Alpha if Item Deleted at 0.830, which was larger than the Cronbach's coefficient Alpha of II at 0.808. MI8 had a Cronbach's coefficient Alpha of 0.798, which was larger than the Cronbach's coefficient Alpha of MI at 0.783. Therefore, in order to increase the relevance of the measurement scales, the study only reported two indicators, NI5 and MI8.

Table 2. Evaluate the reliability of the measurement scales through Cronbach's coefficient Alpha

No.	Variables	Abbreviations	Cronbach's coefficient Alpha
1	Intrapersonal intelligence	II	0.830
2	Bodily-kinesthetic intelligence	BI	0.735
3	Musical intelligence	MI	0.798
4	Naturalist intelligence	NI	0.739
5	Learning motivation	LM	0.829

4.2 EFA Analysis

After verifying the reliability of the measurement scales, the study carried out exploratory factor analysis (EFA) for both the independent and dependent variables. In terms of independent ones, the analysis process was conducted twice, in which factor loadings were both greater than 0.5. This implies the appropriate correlation between observable variables (indicators) and selected factors in the model. However, in the first analysis, the indicators MI1 and NI8 were excluded because "convergent validity" is not guaranteed on the same factor. The results from the second analysis showed that the remaining data were eligible for analysis as they all had factor loadings > 0.5 and satisfied two conditions: "convergent validity" (observable variables converge to the same factor) and "discriminant validity" (observable variables belonging to one factor are distinguishable from another).

English learning intrinsic motivation and English learning extrinsic motivation were considered as dependent

variables. The results of the analysis demonstrated that the KMO coefficient was 0.908 (>0.5), the Sig of Bartlett's test was 0.000 (<0.05), total variance explained was 58,307% (>50%). At the same time, the indicators of learning motivation were grouped into a single group, ensuring the "convergent validity " of the measurement scale.

Table 3. Results of the EFA analysis for independent variables

EFA analysis	KMO	P-value	AVE	Factor loading	Conclusion
The first	0.869	0.000	59.121	All greater than 0.5	MI1 and NI8 were excluded
The second	0.872	0.000	56.829	All greater than 0.5	Analysis requirements are met

4.3 Pearson's Correlation Coefficient

The results of the correlation analysis showed that all the independent variables had an impact on the dependent variables. At the same time, there was a fairly close relationship between the variables (the Sig. (2-tailed) < 0.05). Therefore, to ensure accuracy, it is necessary to carefully consider the role of the independent variables in the multiple linear regression model by considering the impact degree of each independent variable on the dependent variable.

Table 4. Correlation coefficient of the variables in the model

Variable	LM	NI	BI	MI	NI
Learning intrinsic motivation	0.562**	0.249**	0.320**	0.341**	0.337**
Learning extrinsic motivation		0.297**	0.356**	0.369**	0.322**
Intrapersonal intelligence			0.255**	0.411**	0.144**
Bodily-kinesthetic intelligence				0.298**	0.322**
Musical intelligence					0.285**
Naturalist intelligence					

4.4 Regression Model Analysis

4.4.1 Multiple Intelligences Project and University Students' English Learning Intrinsic Motivation

The results of regression analysis show that the Sig. of all variables were all smaller than 0.05, and standardized Beta coefficients were all positive. This means the independent variables all had a positive impact on the dependent variable- learning motivation. Hence, the hypotheses H1, H2, H3 and H4 were accepted. This result was in line with the studies of Armstrong (2009); Richard and Rogers (2001); Morgan and Fonesca (2004), etc.

Besides, the analysis results also found that the highest standardized coefficient among the independent variables was 0.214. This concludes that naturalist intelligence had the greatest impact on university students' learning motivation. The other variables affected in the order as Musical intelligence with a standardized regression coefficient of 0.189, Bodily-kinesthetic intelligence of 0.170 and Intrapersonal intelligence of 0.098. The regression equation was obtained:

$$\text{Learning motivation} = 1.259 + 0.105*II + 0.162*BI + 0.189*MI + 0.231*NI$$

Table 5. Regression analysis results of factors affecting students' English learning intrinsic motivation

No.	Independent variables	Coefficient	Standardized Beta coefficient	Sig.	VIF
	(Constants)	1.259		0.000	
1	Intrapersonal intelligence	0.105	0.098	0.035	1.232
2	Bodily-kinesthetic intelligence	0.162	0.170	0.000	1.203
3	Musical intelligence	0.189	0.189	0.000	1.316
4	Naturalist intelligence	0.231	0.214	0.000	1.166

The coefficient of determination (R²) was 0.464. This means independent variables affected 46.4% of the change of the dependent variable (Learning motivation).

4.4.2 Multiple Intelligences Project and University Students' English Learning Extrinsic Motivation

The results of regression analysis on the impact of intelligence types on students' English learning extrinsic motivation show that the Sig. of all variables were all smaller than 0.05, and standardized Beta coefficients were all positive. This means the independent variables all had a positive impact on the dependent variable- self-study competence. Therefore, the hypotheses H5, H6, H7 and H8 were confirmed. This result was consistent with the studies of Anderson (2007); Cash (2011); Armstrong (2009); Beecher & Sweeny (2008); Douglas et al. (2008); Bas (2012), etc.

Besides, the analysis results also found that Bodily- kinesthetic intelligence had the strongest impact on university

students' English learning extrinsic motivation with the highest standardized coefficient of 0.203. The other variables affected in the order as Musical intelligence with a standardized regression coefficient of 0.201, Naturalist intelligence of 0.179 and Intrapersonal intelligence of 0.137. The regression equation is obtained:

$$\text{Learning motivation} = 1.259 + 0.105 * \text{II} + 0.162 * \text{BI} + 0.189 * \text{MI} + 0.231 * \text{NI}$$

Table 6. Regression analysis results of factors affecting students' English learning extrinsic motivation

No.	Independent variables	Coefficient	Standardized Beta coefficient	Sig.	VIF
	(Constants)	0.533		0.045	
1	Intrapersonal intelligence	0.176	0.137	0.003	1.232
2	Bodily-kinesthetic intelligence	0.232	0.203	0.000	1.203
3	Musical intelligence	0.241	0.201	0.000	1.316
4	Naturalist intelligence	0.231	0.179	0.000	1.166

The coefficient of determination (R^2) was 0.495, indicating an effect of 49.5% of the change of independent variables on the dependent variable (Self-study competence).

Other tests show that the regression hypothesis was not violated. There was no multicollinearity in the results of testing the models since the variance inflation factors (VIF) of all variables were smaller than 2. The Sig-value of the F-test was $0.000 < 0.05$. At the time, the Durbin – Watson coefficient was 1.863 in the first model and was 1.709 in the second model, proving that the model had no autocorrelation. In addition, the Sig-values of the rank correlation between the standardized residual (ABSRES) and the independent variables were all greater than 0.05 in both models, so there was no heteroscedasticity. These results demonstrate the relevance of the model and research data.

Therefore, the research results show a significant impact of MI projects on university students' motivation to learn English. All of the four intelligences selected for investigation, including Intrapersonal, Bodily-kinesthetic, Musical intelligence, Naturalist intelligence intelligences, had positive influences on students' motivation. These are the contributions of this study and they can serve a basis for further in-depth research.

4.5 Data Descriptive Statistics

To determine the average value of the factors included in the model, a data descriptive statistics was conducted. The results show that students' learning motivation to study foreign languages at universities in Vietnam was assessed at a rather high degree, with the highest average value of all factors at 3.6659. This indicates students currently have a passion for learning foreign languages, and the learning needs are also high as they desire to develop their own capabilities so that they can adapt to the trend of global integration after graduation. In addition to learning incentive policies at universities, appropriate orientations have positive effects on students' learning motivation. In addition, students' musical intelligence is at a low level, with the lowest average value of all the factors in the model at 3.3787. This also truly reflects the current situation that the vast majority of students have a limited ability to perceive sounds. However, according to previous studies, music is one of the important factors affecting human capacity and intelligence. Therefore, using teaching methods that stimulate learners' curiosity and passion for music also needs to be researched, applied and developed.

Table 7. Results of data descriptive statistics

Variable	N	Minimum	Maximum	Mean	Std. Deviation
Intrapersonal intelligence	458	2.00	5.00	3.5944	0.58241
Bodily-kinesthetic intelligence	458	1.17	5.00	3.5728	0.65511
Musical intelligence	458	1.57	5.00	3.3787	0.62381
Naturalist intelligence	458	1.86	5.00	3.5125	0.57954
Learning motivation	458	1.29	5.00	3.6659	0.62533
Learner autonomy	458	1.17	5.00	3.6172	0.74713
Valid N (listwise)	458				

5. Discussion

The study aims to build a model and examine the impact of applying the Multi-Intelligences Project on university students' English learning motivation. The research results showed that all of the four intelligences selected in the research model, including (1) Intrapersonal intelligence; (2) Bodily-Kinesthetic intelligence; (3) Musical intelligence; and (4) Naturalistic intelligence, had a positive impact on both students' intrinsic and extrinsic motivation towards learning foreign languages. In terms of intrinsic learning motivation, naturalistic intelligence had the greatest influence. The results concur with the previous findings (Cash, 2011; Dylan, 2013; Hajhashemi et al., 2018). One of

the reasons might have resulted from the way the MI Projects were designed and implemented. In traditional classrooms, EFL students usually sat in a room and worked with their partners to produce their products. Meanwhile, in MI projects, they were asked to do all the activities outside of the classrooms, and they could choose any outdoor places to complete their tasks. Regarding extrinsic motivation, the study found that Bodily-kinesthetic intelligence had the highest influence. The finding is consistent with Harmer (2007), Toure-Tillery & Fishbach (2014) and Steve (2020). It can be explained by the fact that the MI project could exploit more potentials among the participants. More creativity and more competitions, which were mostly limited in traditional classes, were required during the completion of the projects. Moreover, the participants were given the freedom to finish their tasks in their favorite ways, which might favor the activeness of Bodily-kinesthetic groups. In short, all the hypotheses were verified and showed that the MI framework in English language teaching affected positively on EFL university students' intrinsic and extrinsic motivation towards learning English. The motivation might stem from the (1) diversity in the approach to knowledge which ensures that the teacher or curriculum can reach a wider range of learners; (2) the variety of approaches to knowledge, which provides learners with a more in-depth and comprehensive understanding of a problem.

6. Conclusions and Recommendations

The study was conducted to examine the impact of the MI projects on EFL university students' motivation. The findings indicated positive influence of the MI projects on the students' intrinsic and extrinsic motivation. Accordingly, the study contributes significantly to the body of both theoretical and practical aspects in the related fields since they prove the importance of Multiple Intelligences theory as well as the meaning of its application in the teaching process to promote students' learning motivation. Based on the results, the researcher recommends some suggestions for teaching and learning foreign languages in order to improve self-study competence for university students as follows:

First, there are different types of intelligence with various degrees of development that exist in each student and in every classroom. Therefore, those who create curricula and textbooks need to take into account the diversity of people's abilities so that their products can reach different audiences. In the process of teaching and learning foreign languages, teachers need to constantly change their approaches to problems in order to explore more potential in their classrooms.

Secondly, the study found that students still heavily depend on textbooks and teachers in their learning process. A suggestion for this issue is that teachers need to introduce their students to numerous external sources, such as verified learning materials on the Internet or university clubs which support them in enhancing communicative skills and confidence.

Thirdly, the Multiple Intelligences project also supports students in becoming more active in their learning. The above findings imply that learners can become more active in their learning if teachers make requests that stimulate their curiosity and creativity and provide timely feedback on their products. Group work also plays an important role in the positive change of students and should be more widely applied.

Fourth, the study also makes assessment recommendations. The paper examination seems only suitable for students who have strong intrapersonal intelligence; otherwise, others are disadvantaged. Thus, the evaluation process needs to be enriched, the assessment should be enhanced, and both quantitative and qualitative measures should be applied in order to create equal opportunities for students to demonstrate their intelligence and strengths.

The study, however, has some limitations. The multidimensional method described above is difficult to apply to many survey subjects successfully, especially in a university environment where students' autonomy and independence are always encouraged and respected. At the same time, the research has not specifically mentioned the linguistic corpus that the Multiple Intelligences project affects. The research also proposes applying the model to different disciplines, and the content of the model can be flexibly changed to suit the characteristics of each discipline. Any application of the Multiple Intelligences project requires training in theory and practice.

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