

EXAMINING L2 MOTIVATIONAL SELF-SYSTEM AND ITS RELATIONSHIP WITH L2  
ACHIEVEMENT AMONG KOREAN EFL LEARNERS

A Dissertation

by

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## ABSTRACT

As English has become a global language, the learning of English has become prominent in non-native English-speaking countries. English is considered an essential qualification among college students in South Korea since the mastery of English is necessary for acculturation into a global society; it is especially important for job seeking. To achieve higher English language proficiency, English as a foreign language (EFL) learners in South Korea invest tremendous efforts into learning English including private tutoring and studying abroad. Research shows that language learning motivation is one of the factors that can influence or predict student's language achievement. In this dissertation, Korean EFL learners' motivations are measured with a validated questionnaire to confirm the predictive power of factors that could contribute towards L2 proficiency.

This dissertation consists of five chapters in a three-journal-article format. In the first chapter, the introduction of this dissertation is provided, including the statement of purpose, definitions of terms, limitations, and the significance of the study. Chapters 2, 3, and 4 are three individual journal-ready articles. More specifically, Chapter 2 is systematic review regarding current second language (L2) motivational instruments and their applications. In Chapter 3 I validate a Korean-language L2 motivation instrument translated into Korean from Dörnyei's L2 motivational self-system (L2MSS). Data was collected from 500 college students in South Korea who were asked to respond to a survey. The data were analyzed using Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA) for internal structure. In Chapter 4 I apply the validated instrument from Chapter 3 among Korean EFL college students and examine the relationships among L2 learning motivations, major, age, school year, gender, and language

learning experiences. Chapter 5 includes a conclusion and discussion based on the results of Chapters 3 and 4.

## DEDICATION

This dissertation is dedicated to my father who loves me unconditionally, my mother who sacrifices for me, and my brother who accompanies me.

It is also dedicated to my father in-law and mother in-law who are taking care of me as if I am their own daughter.

It is finally dedicated to my husband who always tolerates me whenever I said “No, I don’t have time for that”. This was impossible without all of their support.

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The data analyzed for Chapter 3 and 4 were guided by Professor Myeongsun Yoon. All other work conducted for the dissertation was completed by the student independently.

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## NOMENCLATURE

CFA	Confirmatory Factor Analysis
EFA	Exploratory Factor Analysis
EFL	English as a Foreign Language
ESL	English as a Second Language
FL	Foreign Language
GAS	Guided Autonomy Syllabus
IELTS	International English Language Testing System
L2MSS	L2 Motivational Self System
L2 learning	second/foreign language learning
L2 anxiety	second/foreign anxiety
L2 proficiency	second/foreign proficiency
L2 motivation	second/foreign motivation
PCA	Principal Component Analysis
SLA	Second Language Acquisition
SEM	Structural Equation Modeling
TL	Target Language
TOEIC	Test of English for International Communication
TOEFL	Test of English as a Foreign Language
WTC	Willingness to Communicate

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# CHAPTER I

## INTRODUCTION

English has become a global language and has been adopted for communication worldwide (McKay, 2003). It is provided among non-native English countries in preparation for college and career paths (McKay, 2002; Sawir, 2005). In South Korea, for example, the English language is not only a part of a compulsory curriculum in elementary school as mandated by the Ministry of Education; it is also a high-stakes subject as college students need to score high on standardized English tests (such as Test of English for International Communication [TOEIC]). Further, gaining a high score in TOEIC is one of the key factors to land a well-paid profession or be awarded a promotion (Jee & Kim, 2013).

English language proficiency plays a critical role in social advancement; it is indispensable for English as foreign language learners (EFLs) to practice and improve their English proficiency (Eom et al., 2017). Most of the major companies, public offices, and prestigious universities require applicants' English scores to evaluate their English proficiency and potential for future success. According to the reports from English educational company YoungBinMin (YBM) (2017), which officially coordinates the TOEIC tests in South Korea, approximately 650 companies in South Korea mandated TOEIC scores for applications. YBM (2017) also reported that 15 major government departments that are most sought by applicants (e.g., Police Department) and 120 major public offices across the nation (e.g., Nuclear Research Center) require TOEIC scores in these departments. Moreover, English test scores also important for graduate school admissions. According to YBM (2015), prestigious graduate schools require scores on standardized English test such as TOEIC, TOEFL, or IELTS while 100% of the law

schools ask TOEIC, TOEFL, and IELTS scores as part of the admission process. As a result, there are about 2,000,000 people taking TOEIC each year in South Korea (YBM, 2015).

### **Statement of the Problem**

Most college students in South Korea are challenged to learn English as a foreign language, regardless of the fact that they have spent 12 years in English classrooms from elementary to high school. As high as 40% of them also have invested in private tutoring to further improve their English skills (Korea Statistical Information Service, 2017). According to Korean Statistical Information Service (2017), about 366,930,000 Korean won (340,064 USD) was spent on middle school and high school students' private English learning during 2015. In addition, a large number of college students choose to study abroad to sharpen their English skills. Korea Statistical Information Service (2019) conducted a survey of 2,967,000 people who already graduated from college, and 6% of people indicated that they studied abroad during college years with a goal to improve their English proficiency.

Given these statistics, the critical role that English plays among Korean EFL learners' academic and social life is evident. Researchers have examined how factors such as L2 motivation and willingness to communicate can promote learners' English proficiency (e.g., Alshahrani, 2016; Lamb, 2012; Ryan, 2008; Taguchi et al, 2009). L2 motivation continues to be a central topic since it is one of the prominent factors for L2 achievement (Lai, 2013). As a result, research on L2 motivation has been increasing over the past decade, especially with an emphasis on learner's self-concept in their motivation (Chan, 2014).

However, researchers still indicate the cross-culture validity of L2 motivation instruments are in need of an Asian context since most of the current instruments have been designed in a western culture (Pitkethly & Lau, 2016). To enhance the quality of tertiary education, it is

important to understand students' motivations, so it is necessary to develop an instrument which is culturally appropriate and structurally sound (Tong et al., 2019). To address this, a psychologically sound and theory-driven instrument to measure L2 motivation among EFL learners is of particular interest and greatly needed.

### **Statement of Purpose**

As English continues to become global language, language learning is highly emphasized in many countries where English is not the language of instruction (McKay, 2002; Schneider, 2014). Taking South Korea as an example, English is one of the main subjects in the regular curriculum (Kang, 2008, 2012). However, many Korean students are still challenged in learning English. To examine and understand college EFL learners in South Korea, it is necessary to identify an appropriate and psychologically sound instrument to measure L2 motivation, validate it in Korean context, and apply to confirm the relationship of L2 motivational factors and L2 proficiency. Therefore, the purpose of this dissertation study is two-fold. First, I translated, adapted, and validated a Korean version of L2MSS (Dörnyei, 2005) on its internal structure. Second, in applying such an instrument, I further explored the predictive power of L2 motivational factors such as language learner's intended learning efforts, as measured by the three constructs from L2MSS on Korean EFL college students' L2 achievement.

### **Significance of the Study**

Findings from this study should provide guidance to researchers and practitioners on the cross-cultural transferability of a translated and validated instrument from Taguchi et al. (2009) in a Korean college context. I present an instrument with strong psychometric properties in students' native language to best capture their learning characteristics. Researchers interested in Korean students' L2 learning motivation can adopt this validated questionnaire to explore L2

motivation in a Korean context. Findings may also guide educators and teachers to observe their student's L2 motivation and its relationship with L2 achievement. Overall, this study will contribute to the understanding of current education for Korean college students' motivations toward English learning and how these students can be empowered to develop and improve their English language proficiency.

### **Structure of the Study**

This dissertation study consists of five chapters. Chapter 1 is an introduction and organization for the dissertation. In Chapter 2, I provide findings from a systematic review of literature which describes L2 motivation studies and instruments in relation to an EFL context in East Asia. In Chapter 3, I examine the psychological properties of a translated and adapted instrument measuring L2 motivation in a Korean context. In Chapter 4, I describe the application of the validated instrument and conduct path models to examine correlations among L2 motivational factors and L2 proficiency based on empirical data. Chapter 5 is a summary with broader application of this work.

### **Chapter 2: Journal Manuscript 1**

The first study, Chapter 2, is a systematic review. Systematic reviews “typically involve a detailed and comprehensive plan and search strategy derived a priori, with the goal of reducing bias by identifying, appraising, and synthesizing all relevant studies on a particular topic” (Uman, 2011). This is a synthesis critique of the literature related to the validation of L2 motivation instrument and exploration of L2 motivational factors and L2 achievement in East Asia. The search was conducted in following databases: (a) Education Source, (b) ERIC, (c) PsycINFO, (d) Psychology & Behavioral Science Collection, and (e) Linguistics & Language Behavior Abstracts (LLBA). As a result, I synthesized eight studies that met the pre-determined



criteria: Fukuda, Sakata, and Pope (2015), Lai (2013), Leis (2014), Liu and Park (2012), MacWhinnie and Mitchell (2017), Munezane (2014), Peng (2015), and Yang (2012). The research questions are: (a) Who are the participants in the studies that met inclusion/exclusion criteria?; (b) What are the L2 motivational factors that they are studied?; (c) What is the relationship among L2 motivational factors and between L2 motivation and L2 proficiency?; (d) What is the effect size among L2 motivational factors?; (e) What is the effect size of predictive power of L2 motivation to L2 proficiency?; (f) What instrument are used to measure L2 motivation in EFL context?; and (g) What are the psychometric properties of these instruments?

### **Chapter 3: Journal Manuscript 2**

In this study, the questionnaire of Taguchi et al. (2009) is translated and validated in a Korean context with college students. The questionnaire includes 16 factors and 140 items: criterion measures (10 items), ideal L2 self (10), ought-to L2 self (10), family influence (11), instrumentality-promotion (14), instrumentality-prevention (11), linguistic self-confidence (4), attitudes toward language learning (10), travel orientation (3), fear of assimilation (15), ethnocentrism (17), interest in the English language (4), English anxiety (10), integrativeness (3), cultural interest (4), and attitudes toward the L2 community (4). The primary research question is: “what is the internal structure of the Korean version of L2 motivation model?” The purpose of the validation of the questionnaire is to identify strong psychometric evidence of the instrument in a Korean context. To validate the questionnaire, first, EFA is used to confirm the items and factors loadings through STATA. CFA is then adopted for examining model fit.

### **Chapter 4: Journal Manuscript 3**

This chapter is a journal-ready manuscript which includes the application of the validated questionnaire from Chapter 3 to explore the relationship between L2 motivational factors and L2

proficiency. Structural equation modeling (SEM) was used to observe the full structure model and path analysis.

## **Chapter 5: Conclusion**

This chapter is a summary of findings of validation and path models from the previous chapters. This also includes suggestions for future research.

### **Limitations**

Since the study measures participant's L2 motivation and L2 proficiency, the other factors which may affect the L2 proficiency were not observed. Also, this study is limited to Korean college participants, which will not represent the other population in EFL context.

### **Delimitations**

The delimitation is that participants came from a wide range of universities, and thus, can be representative of the college students in South Korea.

### **Assumptions**

There is a hypothesized predictive power of L2 motivation on L2 learning outcome in an EFL context. Also, I assume that motivation is a static construct that does not change over time.

### **Definitions of Key Terms**

#### **English as a Foreign Language (EFL)**

Learning EFL is learning English in one's native culture with few immediate opportunities to use the language within the environment of that culture. So students are not exposed to any ready-made context for communication beyond their classrooms (Brown, 2007).

#### **English as a Second Language (ESL)**

Learning ESL is learning English within a culture where English is spoken natively. Students are able to access the classroom target language beyond their classroom (Brown, 2007).

## **L2 Motivational Self System (L2MSS)**

L2 Motivational Self System is a broad theory of L2 motivation which consists of three components: ideal L2 self, ought-to L2 self and L2 learning experience. This is based on self-discrepancy which postulates that “we are motivated to reach a condition where our self-concept matches our personally relevant self-guides” (Higgins, 1987, p.321). The components are focused on each individual learner’s self which was proposed to distinguish the learners’ selves (Dörnyei, 2005).

## **L2 Anxiety**

L2 anxiety is a negative emotional feeling that comes when a student is learning or using second/foreign language (MacIntyre, 1999). This may hinder the language learner’s ultimate learning.

## CHAPTER II

### L2 MOTIVATION INSTRUMENTS AND APPLICATION FOR COLLEGE LEVEL EFL LEARNERS IN EAST ASIA: A SYSTEMATIC REVIEW

#### **Introduction**

In the rapid globalization of culture, science, economy, and education in the 21<sup>st</sup> century, English has become a fundamental international communication tool (Liu & Park, 2012). With technology advancing and opportunities for global transportation increasing, English is considered as a global language (McKay, 2003). English has not been limited to only English-speaking countries; rather, people use English as a communication tool in order to interact across different languages and cultural boundaries (McKay, 2002). Following this trend, there is an increasing demand in learning English in many countries whose official languages are not English such as China, Japan, and Korea. These countries are categorized as English as a foreign language (EFL) contexts (Kachru & Nelson, 2006). In these in East Asian countries, English is a mandatory subject in the official curriculum of each country (Kim, 2009; MacWhinnie & Mitchell, 2017; Taguchi, Magid, & Papi, 2009).

Researchers have examined factors that can promote EFL learners' English proficiency (Alshahrani 2016; Lamb, 2012; Taguchi et al, 2009; Ryan, 2008). Among these factors, motivation in second language (L2) learning has drawn educators' attention (Moskovsky et al., 2016). L2 motivation is considered as one of the important factors in the process of foreign language learning since it can highly affect L2 learners' achievement (Lai, 2013). As a result, L2 motivation research has been increasing over the past decade, with an emphasis on a learner's self-concept in their motivation (Chan, 2014; Safdari, 2017). The changing trend has led

researchers to a socio-dynamic period in L2 motivation learning guided by Dörnyei's L2 Motivational Self System in an EFL context (Csizér & Kormos, 2009; Kormos & Kiddle, 2013).

However, limited research is available regarding the types of instruments used to measure L2 learning motivation, particularly the cross-cultural translation of instruments that were designed in a Western context. The purpose of this chapter is to conduct a systematic review of literature to examine L2 motivation instruments in an East Asian context where English is taught as a foreign language.

### **Theoretical Framework**

In the 1990s, language motivation theory shifted dramatically to micro-level analysis of learning motivations reflected in cognitive-situated and process-oriented terms (Dörnyei, 2014, Moskovsky, Racheva, Assulaimani, & Harkins, 2016). This body of theory focused on how L2 motivation affects language learning and language achievement. At this point, while Gardner's motivation theory has been questioned in EFL contexts because integrativeness motivation is sometimes hard to adapt in EFL context, Dörnyei's (2005) L2 motivational self-system (L2MSS) began to emerge (Kim, 2012). One of the prongs of Gardner's motivation theory, integrative motivation, suggested that language learners were motivated to learn target languages because they desired to be assimilated and become part of their target language community (Dörnyei, 2010). Kim (2012) also argued that integrative motivation was only suitable to L2 learners who are in a target language community or society. Similarly, Dörnyei (2010) insisted that integrative motivation from Gardner's theory was not applicable to language learners who are not exposed to a target language community. Therefore, Dörnyei (2005) proposed L2MSS theory which mainly consists of three motivational dimensions which can be applied to the EFL context: ideal L2 self, ought-to L2 self, and L2 learning experience. The ideal L2 self derives from individuals'

internal aspirations. On the other hand, ought-to L2 self is the reflection of what others expect for the person to be. This can be from a family or social connection. Finally, L2 learning experience concerns learner's language learning environment and experiences for certain situation where motivation is related (Dörnyei, 2005). Detailed explanations follow.

(a). Ideal L2 self is derived from internal individual's aspiration. Ideal L2 self is powerful component for motivation since it reduces the discrepancy between people's actual and ideal selves. This motivation is linked with intrinsic reason to learning language.

(b). Ought-to L2 self is the reflection of what others expect for a learner to be. To be specific, language learners should possess language as an obligation or responsibility in order to avoid negative outcomes. This also can be from family or social connection such as students not wanting to disappoint their parents. This is categorized as extrinsic reason.

(c). L2 learning experience concerns a learner's language learning environment and experiences for certain situation where motivation is related. This is connected to the influence of motivation related to the learning environment and students' individual learning experiences. (Dörnyei, 2005)

### **Approach for Systematic Review**

The purpose of this study is to systematically review the current instruments used in the literature to measure L2 motivation in an EFL context. To select and synthesize articles, I adopted the research synthesis process of Cooper et al. (2009).

Research synthesis is expanding and widely used in the social sciences (Polanin et al., 2017; Willians, 2012). It is defined as a conjunction of literature review characteristics, mostly used for integrating empirical studies for creating generalization (Cooper et al., 2009). Research synthesis is also interchangeably used as research review and systematic review in the social

science literature, but research synthesis includes a broad concept such as evaluative review of research to avoid confusion (Cooper et al., 2009). Unlike the general literature review which offers a descriptive account of other research, a research synthesis is the review of the units being synthesized (Bastian, Glasziou, & Chalmers, 2010). Since its first development by Feldman (1971), research synthesis has been widely used in psychology and education fields (Cooper et al., 2009). Through research synthesis, researchers can understand the idea which they could not find from a single research study due to a limitation of studies (Cooper et al., 2009). To be specific, Cooper (2007) suggested six stages of research synthesis: (1) defining the problem, (2) collecting the research evidence, (3) evaluating the correspondence between the methods and implementation of individual studies and the desired inferences of synthesis, (4) summarizing and integrating the evidence from individual studies, (5) interpreting the cumulative evidence, and (6) presenting the research synthesis methods and results.

### **Search Procedure**

To select the studies to be included in this review, I followed the research synthesis process based on the concept of Cooper et al. (2009) and screening phases recommended in the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) (Moher et al., 2009). I used the PRISMA protocol (Moher et al., 2015) and its accompanying eight steps: (a) eligibility criteria, (b) information sources, (c) search strategy, (d) study records: data management, selection process, and data collection process (e) data items, (f) outcomes, (g) risk of bias in individual studies, and (h) data synthesis (Moher et al., 2015). A flowchart is presented in Figure 1.

The articles in this review were collected from five databases: Education Source, ERIC, PsycINFO, Psychology & Behavioral Science Collection, and Linguistics and Language

Behavior Abstracts (LLBA). I developed my search terms based on what would be reflected in abstracts and titles. Search terms included “L2 motivational self-system,” “ideal and ought-to selves” (or “Ideal and ought-to L2 self”), “EFL,” and “college students” (or “university students” or “Undergraduate students”). The search range used was from January 1, 2002 to July 31, 2018 when Dörnyei and Csizér (2002) started to question the generalization of integrativeness and view L2 motivation as self-concept which is scoped down to individual concept. I then searched the terms in full texts within peer-reviewed journals. These searches yielded a total of 95 studies, in which 4 were duplicates, so 91 studies were selected for the screening stage.

### **Inclusion and Exclusion Criteria**

To narrow down to the related topic for the research, inclusion and exclusion criteria were applied. After inclusion and exclusion criteria were applied, 91 studies were then screened. The search for articles from the databases was conducted by using inclusion criteria. For the article to be selected, it had to

1. directly relate to the topic, i.e., those involved L2 motivation questionnaire validation or L2 motivation structure model
2. be published in a peer-reviewed journal;
3. be published in a journal that specializes in English language learning in EFL context;
4. have studied college level education;
5. be published between 2002-2018
6. include an instrument which collected the data quantitatively: and
7. have participants from East Asian countries.

After the extensive search of selected criteria, 95 articles were extracted based on the search terms, including 49 articles from Education Source, 41 articles from Linguistic and



Language Behavior Abstracts (LLBA), 2 articles from Education Resource Information Center (ERIC), 2 articles from PsyINFO, and 1 article from Psychology and Behavioral Science Collection. Four out of 95 were duplicate so they were removed. To find the articles to correspond to my research, exclusion criteria were used. Articles were excluded if they

1. included participants from K to 12;
2. studied participants in an English as a second language (ESL) context;
3. did not include quantitative methods to measure and analyze the data;
4. were book reviews;
5. were not related to the topic; or
6. included participants from countries from Europe, middle East Asia, or America;

### **Details of Study Coding Categories**

Articles were coded based on a thorough analysis of inclusion factors and five categorization: participants, L2 motivational factors, instrument, psychometrics of the instrument, and instrument application (L2 motivation relationship). First, factors related to participants included age/grade, number of participants, majors, and countries. Second, L2 motivational factors included which L2 motivational factors are included and how they related with their participants' L2 achievement. Third, instrument factors included the questionnaire or survey that they adopted to measure the participant's L2 motivational factors along with number of items that they adopted. Additionally, this code also included the instrument's written language and translation. Fourth, I coded psychometric information for the validation of the instrument in each of the studies. The study with construct validation included its statistical information while other studies reported its reliability. Lastly, the research was examined whether they provided L2 motivational factors relationships analysis and results or not.

## **Search Outcomes**

During the round of title, keywords, and abstract screening, twenty articles were excluded because they did not include college student participants (e.g. elementary or high school students); twelve articles were excluded because they were conducted in EFL context (e.g. learning Chinese or German); 5 articles were excluded because they were not related to L2 motivation (e.g. observation for teachers for L2 motivation), 5 articles were excluded because they did not include quantitative survey or questionnaire (e.g. interview), and 17 articles were excluded because they were not journal type articles (e.g. narrative reviews).

During the second round of screening of full-text content, 16 articles were excluded because their participants were not from East Asia, (e.g. Hungary); 3 articles were excluded because they did not include quantitative survey or questionnaire for measuring L2 motivation (e.g. vocabulary test), 2 articles were excluded because they were not related to L2 motivation (e.g. global trend), 1 article was excluded because it did not include college participants; 1 article was excluded because it was not conducted in an EFL context; and 1 article was excluded because it was not journal article (e.g. book review). At the end, eight articles were selected for in-depth review: Fukuda et al. (2015); Lai (2013); Leis, (2014); Liu and Park (2012), MacWhinnie and Mitchell (2017), Peng (2015), Munezane (2014), and Yang (2012).

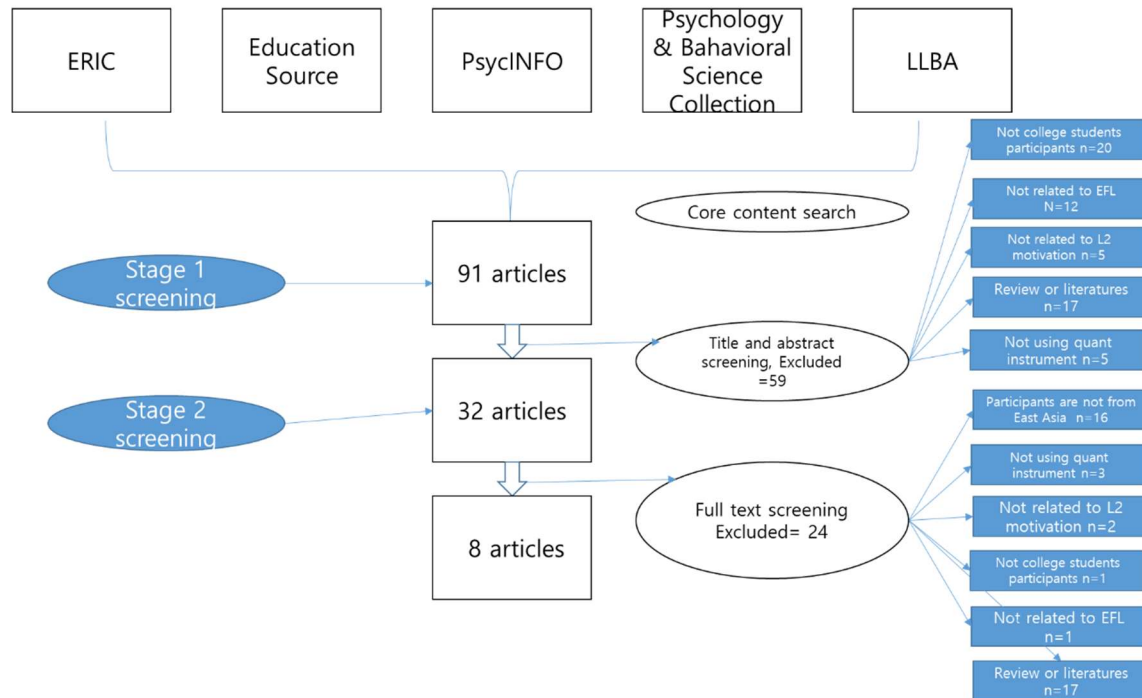


Figure 1. Systematic review flow chart.

### Research Questions

In this review, I attempted to address the following specific questions:

1. Who are the participants in the studies that met inclusion/exclusion criteria?
2. What are the L2 motivational factors that they are studied?
3. What is the relationship among L2 motivational factors and between L2 motivation and L2 proficiency?
4. What is the effect size among L2 motivational factors?
5. What is the effect size of predictive power of L2 motivation to L2 proficiency?
6. What instruments are used to measure L2 motivation in EFL context?
7. What are the psychometric properties of these instruments?

## **Findings of Selected Articles**

These studies provide empirical evidence on the relationship among L2 motivational factors in EFL context for college level students based on survey or experimental research. A summary of these articles can be found in Tables 1 and 2.

### **Participants**

All the participants from these eight articles were college students from East Asia, and half of the studies were conducted in Japan (Fukuda et al., 2015; Leis, 2014; MacWhinnie & Mitchell, 2017; Munezane, 2014). For example, Fukuda et al. (2015) included 45 university students who learned English as a foreign language as a treatment group, 32 students for control group 1, and 33 students for control group 2 to conduct research on the intervention of a restructured guided-autonomy syllabus to improve student's autonomy and motivation. These participants were all freshmen from humanities and science majors. Leis (2014) observed 28 Japanese university students who were studying to obtain a qualification to teach English at Japanese junior high schools. MacWhinnie and Mitchell (2017) examined 228 Japanese college students with ages between 18 and 21 from two universities in Japan. They were from different majors such as law, medicine, education, agriculture, life sciences, humanities, social science, science, and technology. Munezane (2014) collected data from 662 Japanese college students majoring in engineering, science, human arts, business, and other majors. The age ranges were between 18-23, and participants were freshmen and sophomores.

In addition to Japanese participants, three studies were conducted in Taiwan and China. Yang (2012) and Lai (2013) both included college English majors in their studies in Taipei. Lai (2013) included 267 college students (freshmen, sophomores, juniors, and seniors) who attended day and night schools of science and technology universities in Taiwan. Yang (2012) observed

108 undergraduate students whose majors were applied English in Taiwan, between 18-23 years of age. Peng (2015) observed 1013 students from China who were freshmen and sophomores from different majors such as architecture, engineering, law, mathematics, and history. Finally, there was only 1 study conducted in South Korea, i.e., Liu and Park (2012) studied motivational factors with 168 Korean college students from 15 different majors.

## **L2 Motivational Factors**

Among these eight articles, all except Fukuda et al. (2015) examined ideal L2 self and ought-to L2 self as motivational factors in their research. Ideal L2 self was found to be highly correlated to “willingness to communicate” (WTC) for college students (i.e., Liu & Park, 2012; Munezane, 2014). In addition, ideal L2 self affected students’ L2 anxiety (MacWhinnie & Mitchell, 2017; Peng, 2015) and can be predicted by learning experience, ought-to L2 self and international posture (Peng, 2015). On the other hand, ought-to self was shown as a strong predictor for foreign language anxiety (Peng, 2015); it is also correlated to students’ L2 usage of social networking services in class (Leis, 2014), willingness to communicate (Liu & Park, 2012), and students’ L2 learning anxiety (MacWhinnie & Mitchell, 2017).

Additional motivational variables were also investigated to confirm their relationship to learning in these research projects including motivational factors such as amotivation, external regulation, introjected regulation, and identified regulation (Fukuda et al., 2015); intrinsic knowledge, intrinsic accomplishment, and intrinsic simulation (Fukuda et al., 2015; Lai, 2013); integrative orientation, , intrinsic motivation, external pressure, and travel orientation (Lai, 2013); L2 linguistic self-confidence (Munezane, 2014); attitudes, motivated behavior, family influence, international posture, and future self imagination (Liu & Park, 2012); willingness to communicate inside and outside classroom (Liu & Park, 2012; Peng, 2015; Munezane, 2013);

instrumentality (promotional and prevention) (Liu & Park, 2012; Lai, 2013); international posture (Liu & Park, 2012; Peng, 2015; Munezane, 2014); learning experiences (Leis, 2014; Peng, 2015; MacWhinnie & Mitchell, 2017); intended effort (MacWhinnie & Mitchell, 2017); and L2 anxiety (Peng, 2015; MacWhinnie & Mitchell, 2017; Munezane, 2013; Yang, 2012).

Seven out of eight studies explored the relationship among L2 motivational factors and other observable factors (i.e., Lai, 2013; Leis, 2014; Liu & Park, 2012; MacWhinnie & Mitchell, 2017; Peng, 2015; Munezane, 2014; Yang, 2012). For example, Lai (2013) concluded that their Taiwanese college students studied English for intrinsic, travel oriented, integrative oriented, and instrumental oriented motivation rather than external motivation. Lai (2013) also reported that ideal L2 self was highly correlated to intrinsic motivation, travel, integrative, and instrumental orientation while ought-to L2 self was correlated with external pressure. Liu and Park (2012) concluded that motivations in English language learning for Korean students was more instrumental oriented than for integrative reasons. Moreover, they found that ideal L2 self, ought-to L2 self, attitudes toward language learning, international posture, attitudes towards L2 community and future self image were highly associated with their willingness to communicate. MacWhinnie and Mitchell (2017) confirmed that ideal L2 self and L2 learning experiences are negatively correlated to L2 anxiety while ought-to L2 self is positively related to L2 anxiety. Similar to MacWhinnie and Mitchell (2017), Peng (2015) concluded that ideal L2 self and L2 learning experiences were negatively correlated with L2 anxiety while ought-to L2 self was positively related to L2 anxiety. Peng (2015) indicated that ideal L2 can be predicted by L2 learning experience and international posture. L2 willingness to communicate inside of classroom can be predicted by L2 learning experience, L2 anxiety, and international posture while WTC outside of classroom can be only predicted by international posture. Yang (2012)

found that the participants indicated high anxiety for their L2 learning. In addition, ideal L2 self, hours spent on English listening practice, preservation, and self perceived English proficiency contributed significantly to the prediction of anxiety. Munezane (2014) concluded that ideal L2 self is strongly correlated to L2 willingness to communicate. In addition, self- reported L2 willingness to communicate predicts actual L2 use in classroom.

### **L2 Motivational Factors and L2 Proficiency**

Three out of eight articles observed the relationship between L2 motivation and L2 proficiency (i.e., Liu & Park, 2012; Munezane, 2014; MacWhinnie & Mitchell, 2017). Liu and Park (2012) collected data from participants of their TOEIC scores and conducted Pearson's correlation between willingness to communication inside of class and L2 proficiency. They concluded that willingness to communicate inside of class is correlated to English proficiency. MacWhinnie and Mitchell (2017) examined ideal L2 self, L2 learning experience, intended effort and anxiety, and perceived L2 proficiency with regression analysis. Based on their results, ideal L2 self and L2 language learning are positive predictors of perceived English proficiency while intended effort and anxiety are negative predictors of perceived English proficiency. Munezane (2014) has results that linguistic self, ideal L2 self and integrativeness had weak correlations with L2 proficiency while willingness to communicate indicated medium correlation with L2 proficiency.

### **The Impacts Among L2 Motivational Factors**

One study investigated the impact of amotivation with a guided autonomy syllabus (GAS) course (Fukuda et al., 2015). They found that amotivation is correlated to GAS course ( $p < .05$ ,  $r = .07$ ,  $eta^2 = .07$ ). Other remaining studies included correlations among L2 motivations and L2 proficiency.

**1. Ideal L2 self.** Six out of eight studies investigated the correlations includes ideal L2 self (Lai, 2013; Leis, 2014; Liu & Park, 2012; Peng, 2015; MacWhinnie and Mitchell, 2017; Yang, 2012). From the study of Lai (2013), Ideal L2 self motivation was correlated to integrative factor (Pearson's  $r = .618$ , 95% CI [.54, .69]). Also, ideal L2 self was correlated to instrumental factor (Pearson's  $r = .569$ , 95% CI [.48, .64]) and ideal L2 self is highly correlated to travel orientation factor (Pearson's  $r = .635$ , 95% CI [.56, .70]). From the study of Leis (2014), the results indicated that ideal L2 self has medium effect size with metacognitive (Pearson's  $r = .58$ , 95% CI [.10, .84],  $r^2 = .34$ ). Liu and Park's (2012) results showed that ideal L2 self is correlated to WTC (Pearson's  $r = .251$ , 95% CI [.103, .388],  $r^2 = .063$ ). Peng (2015) reported that ideal L2 self is correlated to learning experience (Pearson's  $r = .62$ , 95% CI [.58, .65],  $r^2 = .38$ ) while it showed weak correlation with international posture (Pearson's  $r = .44$ , 95% CI [.39, .49],  $r^2 = .19$ ). Moreover, Peng (2015) also indicated that ideal L2 self has correlation with ought-toought-to L2 (Pearson's  $r = .28$ , 95% CI [.22, .33],  $r^2 = .08$ ), anxiety (Pearson's  $r = -.07$ , 95% CI [-.07, .05],  $r^2 = .0049$ ), WTC inside (Pearson's  $r = .28$ , 95% CI [.22, .33],  $r^2 = .08$ ), and WTC outside (Pearson's  $r = .10$ , 95% CI [.04, .16],  $r^2 = .01$ ).

Yang (2012) indicated that motivational factors such as ideal L2 self (Pearson's  $r = .24$ , 95% CI [.05, .41],  $r^2 = .10$ ), motivation to listening (Pearson's  $r = .24$ , 95% CI [.05, .41],  $r^2 = .05$ ), and motivation to speaking (Pearson's  $r = .21$ , 95% CI [.021, .38],  $r^2 = .044$ ) showed very weak correlation with anxiety. Lastly, MacWhinnie and Mitchell (2017) reported that ideal L2 self (Pearson's  $r = .52$ , 95% CI [.42, .60],  $r^2 = .27$ ) showed small to medium correlation with leaning experience, ought-toought-to L2 self (Pearson's  $r = .41$ , 95% CI [.29, .51],  $r^2 = .17$ ), anxiety (Pearson's  $r = -.21$ , 95% CI [-.33, -.08],  $r^2 = .04$ ), and intended (Pearson's  $r = .51$ , 95% CI [.41, .60],  $r^2 = .26$ ).



**2. Ought-to L2 self.** A total of six out of eight studies observed correlation with ought-to L2 self with other L2 motivational factors (Leis, 2014; Lai, 2013; Liu & Park, 2012; MacWhinnie & Mitchell, 2017; Peng, 2015; Yang, 2012). From the study of Leis (2014), the results indicated that ought-to L2 self is highly correlated to metacognitive (Pearson's  $r = .67$ , 95% CI [.24, .88],  $r^2=.45$ ). Lai (2013) reported that ought-to L2 self indicated small correlation with instrumental motivation (Pearson's  $r = .335$ , 95% CI [.22, .448],  $r^2=0.112$ ) and correlation with external motivation (Pearson's  $r = .581$ , 95% CI [.50, .66],  $r^2=.33$ ). Also, ought-to L2 self is correlated to WTC (Liu & Park, 2012), (Pearson's  $r = .188$ , 95% CI [.037, .33],  $r^2=.04$ ). Ought-to L2 self (Pearson's  $r = .431$ , 95% CI [.31, .53],  $r^2=.19$ ) showed small to medium correlation with leaning experience, anxiety (Pearson's  $r = .19$ , 95% CI [.06, .31],  $r^2=.04$ ), and intended effort (Pearson's  $r = .05$ , 95% CI [-.08, .17],  $r^2=.0025$ ) (MacWhinnie & Mitchell, 2017). Yang (2012) indicated that ought-to L2 self is related to anxiety (Pearson's  $r = .05$ , 95% CI [-.14, .237],  $r^2=0.0025$ ). Peng (2015) has results that ought-to L2 self is correlated to learning experience (Pearson's  $r = .20$ , 95% CI [.14, .25],  $r^2=.04$ ), international posture (Pearson's  $r = .07$ , 95% CI [.01, .13],  $r^2=.005$ ), L2 anxiety (Pearson's  $r = .25$ , 95% CI [.19, .31],  $r^2=.06$ ), WTC inside (Pearson's  $r = -.02$ , 95% CI [-.08, .04],  $r^2=.0004$ ), and WTC outside (Pearson's  $r = .02$ , 95% CI [-.04, .08],  $r^2=.0004$ ).

**3. Learning experience.** Three out of eight studies investigated the correlations included learning experience (Leis, 2014; MacWhinnie & Mitchell, 2017; Peng, 2015). From the study of Leis (2014), the results indicated that learning experience is highly correlated to metacognitive skills (Pearson's  $r = .71$ , 95% CI [.31, .90],  $r^2=.50$ ). Peng (2015) reported that learning experience has correlations with international postures (Pearson's  $r = .40$ , 95% CI [.35, .45],  $r^2=.16$ ), anxiety (Pearson's  $r = -.1$ , 95% CI [-.16, -.03],  $r^2=.01$ ), WTC outside (Pearson's  $r = .11$ ,

95% CI [.049, .17],  $r^2=.012$ ), and WTC inside of school (Pearson's  $r = .33$ , 95% CI [.27, .38],  $r^2=.10$ ). MacWhinnie and Mitchell (2017) indicated that ideal L2 self (Pearson's  $r = .52$ , 95% CI [.42, .60],  $r^2=.27$ ) and ought-to L2 self (Pearson's  $r = .431$ , 95% CI [.31, .53],  $r^2=.19$ ) showed small to medium correlation with leaning experience. In addition, MacWhinnie and Mitchell (2017) also shows that learning experience is correlated to anxiety (Pearson's  $r = -.097$ , 95% CI [-.22, .03],  $r^2=.0094$ ), and intended effort (Pearson's  $r = .7$ , 95% CI [.17, .40],  $r^2=.5$ ).

**4. Willingness to communicate.** Two out of eight studies explored the correlation between WTC and L2 motivational factors (Liu and Park, 2012; Peng, 2015). From the study of Liu and Park (2012), the results indicated that WTC inside of school showed small effect size on motivation (Pearson's  $r = .277$ , 95% CI [.13, .4],  $r^2=.076$ ) while WTC outside of school indicated small to medium effect size on motivation (Pearson's  $r = .449$ , 95% CI [.31, .56],  $r^2=.20$ ). Liu and Park (2012) also have results the correlations between willingness to communicate to attitudes (Pearson's  $r = .165$ , 95% CI [.014, .308],  $r^2=0.027$ ), future self (Pearson's  $r = .190$ , 95% CI [.04, .332],  $r^2=.04$ ), attitudes to L2 (Pearson's  $r = .24$ , 95% CI [.09, .38],  $r^2=0.058$ ), international posture (Pearson's  $r = .214$ , 95% CI [.065, .35],  $r^2=0.046$ ), family influence (Pearson's  $r = .104$ , 95% CI [-.049, .252],  $r^2=0.01$ ), promotional-instrumentality (Pearson's  $r = .015$ , 95% CI [-.014, .166],  $r^2=.000225$ ), preventional instrumentality (Pearson's  $r = .106$ , 95% CI [-.05, .25],  $r^2=.011$ ), and motivation (Pearson's  $r = .059$ , 95% CI [-.09, .209],  $r^2=0.0034$ ). Peng (2015) indicated that anxiety had weak correlation with WTC inside of school (Pearson's  $r = -.34$ , 95% CI [-.39, -.28],  $r^2=.12$ ), and international posture to WTC inside (Pearson's  $r = .29$ , 95% CI [.23, .35],  $r^2=.08$ ). Additionally, Peng (2015) has results of correlation between WTC and international posture (Pearson's  $r = .14$ , 95% CI

[.08, .20],  $r^2=.02$ ), anxiety (Pearson's  $r = -.11$ , 95% CI [-.17, -.05],  $r^2=.01$ ), and between WTC inside and WTC outside (Pearson's  $r = .1$ , 95% CI [.04, .16],  $r^2=.01$ ).

## 5. Other L2 motivational factors

Studies had other L2 motivational factors correlation results based on the research purpose (Lai, 2013; MacWhinnie & Mitchell, 2017; Munezane, 2014; Peng, 2015). According to the results from Lai (2013), integrative is correlated to instrumental (Pearson's  $r = .634$ , 95% CI [.56, .70],  $r^2=.401$ ), intrinsic motivation (Pearson's  $r = .699$ , 95% CI [.63, .76],  $r^2=.49$ ), and travel orientation (Pearson's  $r = .703$ , 95% CI [.64, .76],  $r^2=.49$ ). Also, instrumental is correlated to intrinsic motivation (Pearson's  $r = .595$ , 95% CI [.51, .67],  $r^2=.35$ ), and travel orientation (Pearson's  $r = .590$ , 95% CI [.51, .66],  $r^2=.35$ ). Lastly, intrinsic motivation is correlated to travel orientation (Pearson's  $r = .615$ , 95% CI [.53, .68],  $r^2=.38$ ) and external motivation with ought-to L2 self (Pearson's  $r = .581$ , 95% CI [.50, .66],  $r^2=.34$ ).

Peng (2015) found that international posture is correlated to anxiety (Pearson's  $r = -.30$ , 95% CI [-.355, -.243],  $r^2=.9$ ). Munezane (2014) indicated that there are correlations of L2 motivational factors with observed L2 use. Observed L2 use is correlated to WTC (Pearson's  $r = .511$ , 95% CI [.45, .57],  $r^2=.26$ ), self-confidence (Pearson's  $r = .339$ , 95% CI [.27, .41],  $r^2=.115$ ), ideal L2 self (Pearson's  $r = .40$ , 95% CI [.33, .46],  $r^2=.16$ ), international posture (Pearson's  $r = .48$ , 95% CI [.42, .54],  $r^2=.23$ ), ought-to L2 self (Pearson's  $r = .21$ , 95% CI [.11, .28],  $r^2=.04$ ), anxiety (Pearson's  $r = -.059$ , 95% CI [-.14, .02],  $r^2=.003$ ), integrativeness (Pearson's  $r = .38$ , 95% CI [.31, .44],  $r^2=.14$ ), and motivation (Pearson's  $r = .41$ , 95% CI [.34, .47],  $r^2=.17$ ).

**6. The L2 motivational factors' impacts on L2 proficiency.** Three out of eight studies correlated L2 motivational factors to their participants' L2 proficiencies (Liu & Park, 2012;

Munezane, 2014; MacWhinnie & Mitchell, 2017). From the study of Liu and Park (2012), the results indicated that WTC inside of school showed correlation to L2 proficiency (Pearson's  $r = .434$ , 95% CI [.30, .54],  $r^2 = .076$ ) while WTC outside did not show any significant correlation to L2 proficiency. Additionally, ought-to L2 self is correlated to proficiency (Pearson's  $r = .19$ , 95% CI [.06, .31],  $r^2 = .04$ ). Munezane (2014) indicated that linguistic self-confidence (Pearson's  $r = .339$ , 95% CI [.246, .42],  $r^2 = .12$ ), ideal L2 self (Pearson's  $r = .397$ , 95% CI [.309, .479],  $r^2 = .16$ ) and integrativeness (Pearson's  $r = .379$ , 95% CI [.289, .462],  $r^2 = .14$ ) had weak correlations with L2 proficiency while WTC (Pearson's  $r = .511$ , 95% CI [.43, .58],  $r^2 = .026$ ) showed close to medium correlation with L2 proficiency. MacWhinnie and Mitchell (2017) indicated that ideal L2 self (Pearson's  $r = .535$ , 95% CI [.44, .62],  $r^2 = .28$ ) and learning experience (Pearson's  $r = .40$ , 95% CI [.29, .50],  $r^2 = .16$ ) showed small to medium correlation with L2 proficiency. MacWhinnie and Mitchell (2017) indicated that anxiety is related to proficiency (Pearson's  $r = -.22$ , 95% CI [-.34, -.09],  $r^2 = .05$ ) and proficiency to intended effort (Pearson's  $r = .25$ , 95% CI [.12, .37],  $r^2 = .06$ ).

### **Instrument**

To focus on the studies conducted within an East Asia context, these studies adopted many questionnaires from previous studies. Fukuda et al. (2015) adopted 21 items from a Japanese translation by Honda and Sakyu (2004) which was originally from the Language Learning Orientation Scale developed by Noels, Pelletier and Vallerand (2000) and 15 items of Learning Climate Questionnaire (LCQ) from Williams, Grow, Freedman, Ryan, and Deci (1996). The LCQ was developed by the authors and studied as a pilot by 97 freshmen from English classes. Lai (2013) adopted 44 items of questionnaire from Chen (2010) for Taiwanese EFL learners which was developed for both English and Chinese and the questionnaire, in both

English and Chinese, was used. Leis (2014) included 21 items of questionnaire from Dörnyei and Taguchi (2010) for Japanese college students. In their study, the L2 motivational questionnaire was written in English and they conducted an English version of questionnaire to the participants. Liu and Park (2012) adopted 10 items from willingness to communicate inside of school, 12 items from willingness to communicate outside of school, and 42 items of L2 motivational questionnaires. Their questionnaires were originally developed and written in Korean by the researchers. To measure the L2 proficiency, TOEIC scores were collected. Peng (2015) adopted ideal L2 self (Ryan, 2009), ought-to L2 (Papi, 2010), learning experience (Papi, 2010), international posture (Yashima, 2002; 2009), L2 anxiety (Ryan, 2009), L2 WTC (Yashima, 2009), and L2 WTC inside and out (Peng, 2013). Those questionnaires were translated into Chinese by the author, and the Chinese version was given to participants. MacWhinnie and Mitchell (2017) adopted 13 items from motivational questionnaire from Aubrey (2014) and Papi (2010) which are ideal L2 self (4 items), ought-to L2 self (4), and L2 learning experience (5). The questionnaires were translated in Japanese and checked and rechecked by two professors who are native Japanese speakers. They also adopted 6 items for intended effort (Aubrey, 2014) and 6 items for anxiety (Papi, 2010) and collected self perceived English proficiency from students. Before they collected the data, they chose the items to avoid overlapped meaning and phrases of items for final questionnaire. Yang (2012) adopted 33 items of the foreign language classroom anxiety scale from Horwitz et al. (1986), 12 items of the L2 self questionnaire from Papi (2010), 16 items from the EFL student acculturation questionnaire from Dörnyei (2003) and Gilham (2000). Each questionnaire was translated into Chinese and back translated to avoid similar meaning of the items. In addition, they were piloted. Munezane (2014) adopted 6 ideal L2 self items from Ryan (2009); 6 L2 learning motivation items from

Gardner and Lambart (1972) and Dörnyei (1990) Yashima (2004); 9 items for international posture from Yashima et al., (2004); 5 items L2 learning anxiety from MacIntyre and Gardner (1994), Horwitz et al. (1986), and Ryan (2009); 5 items for L2 linguistic self-confidence from McCroskey and Richmond (1987), Dörnyei and Ushioda (2001), and Ryan (2009); 6 items of frequency of L2 communication from Yashima (2004); 6 items for ought-to L2 self from Taguchi et al. (2009), Ryan (2009), and Csizér and Kormos (2009); 4 items for integrativeness from Dörnyei and Ushioda (2001), Taguchi et al. (2009), and Ryan (2009); and 3 items were created for valuing of global English. An open-ended questionnaire was also provided for students to collect participants' individual opinions and interviews were conducted. The Japanese version of the questionnaires were used for the participants. Among these questionnaires, many questionnaires such as Dörnyei and Taguchi (2010), Kim (2009), Clément et al. (1994), Taguchi et al. (2009), Csizér and Kormos (2009), Papi (2010), Ryan (2009), Dörnyei and Taguchi (2011), and Dörnyei and Ushioda (2001) have been created and developed based on the L2 motivational self-system from Dörnyei. Among eight studies, seven studies—Leis (2014), Lai (2013), MacWhinnie and Mitchell (2017), Peng (2015), Munezane (2014) Liu and Park (2012), and Yang, (2012)—included questionnaire originated from Dörnyei's theory and study.

### **Psychometrics of the Instruments**

Regarding reliability of the instruments among these eight studies, all studies but Yang (2012) calculated Cronbach's  $\alpha$  as a reliability indicator. MacWhinnie and Mitchell (2017) reported that their Cronbach's  $\alpha$  showed excellent reliability for the data while the others reported acceptable reliability. Regarding validity of the instrument, five out of eight studies (Fukuda et al., 2015; Liu & Park, 2012; Munezane, 2014; Peng, 2015; Yang, 2012) conducted validation of the instrument that they adopted. Fukuda et al. (2015) reported content validity as

the three authors reviewed and deleted some of the items which they believe not culturally adapted in Japanese context. Also, for LCQ questionnaire, they piloted the study with 93 Japanese freshmen from their English classes. Liu and Park (2012) conducted principal component analysis (PCA) through SPSS to conduct construct validity for the 42 motivation items. For PCA, they processed with eigen values above 1, a scree plot, and interpretability of the rotated factors. Through this process, they could confirm there are 10 motivational factors. The results of their study adopted a Kaiser-Meyer-Olkin (KMO) test, and it showed the components were satisfactory (KMO test  $>.8$ ). Peng (2015) conducted a confirmatory factor analysis (CFA) for measurement model and a structural equation modeling (SEM) for full structural model to validate the instrument and confirm the model that they adopted. Peng (2015) used LISREL software to process their data and adopted maximum likelihood estimation. To check the measurement model, CFA, Peng (2015) indicated good fit for the data (CFI $>.9$ , SRMR $<.05$ , RMSEA $<.05$ ). The full structural model has marginal fit as well (CFI $>.9$ , SRMR $<.07$ , RMSEA $<.05$ ). To explore the relationship and effect among the variables, they adopted the direct and indirect effects.

In the study of Munezane (2014), data from 323 participants were used for instrument validation and data from 643 participants were used for application. Participants were Japanese, college student EFL learners. The instrument was translated into Japanese and a pilot study was conducted with 160 EFL learners who were native Japanese speakers. They adopted 4 Likert scale for the instrument. Firstly, Munezane (2014) adopted EFA through SPSS to explore the relationships between items and factors to examine how well the items loaded on non-hypothesized factors. The criteria for eigenvalue was set to 1, and the study used a scree test and oblique rotation. The results of the factor analysis were that there are two factors for willingness

to communicate—inside of school and outside of the school. Three items out of 11 items of willingness to communicate inside of school are not loaded on factor. After that, prior to the analysis, they calculated the outfit and infit to confirm whether their data was suitable for Rasch model analysis. Munezane (2014) analyzed the data at the item level basis using Rasch analysis through WINSTEPS software. The criteria was based on the item difficulty. For the reliability, they calculated person reliability index and item reliability index, set the criteria as .81 and the data showed to be highly reliable. To decide the final factors, they adopted PCA of Rasch analysis. Yang (2012) conducted EFA for construct validation.

Table 1

*Location, Time of Selected Studies Reviewed*

Index	Title	Author	Year	Country
1	The GAS that fuels motivation: Satisfying the need for relatedness in the Guided-Autonomy syllabus	Fukuda et al.	2015	Japan
2	The motivation of learners of English as a foreign language revisited	Lai	2013	Taiwan
3	Encouraging autonomy through the use of a social networking system	Leis	2014	Japan
4	L2 motivational self system, attitudes, and affect as predictors of L2 WTC: An imagined community perspective	Peng	2015	China
5	A study of Korean EFL learners' WTC and motivation	Liu and Park	2012	South Korea



Table 1 Continued

Index	Title	Author	Year	Country
6	English classroom reforms in Japan: A study of Japanese university EFL student anxiety and motivation	MacWhinnie and Mitchell	2017	Japan
7	Language anxiety, acculturation, and L2 self: A relational analysis in the Taiwanese cultural context	Yang	2012	Taiwan
8	A structural equation model and intervention study of individual differences, willingness to communicate, and L2 use in an EFL classroom	Munezane	2014	Japan

Table 2

*Description of Studies for L2 Motivational Self System*

Index	Research Design/Participant	Instrument	Factors items	Research results
1	Pre and post survey with GAS intervention. 45 university students from English course. Japanese EFL students	Language learning Orientation Scale Noels, Pelletier and Vallerand (2000) Learning Climate Questionnaire (LCQ) Williams, Grow, Freedman, Ryan and Deci (1996)	5 Likert scale questions from LLOS 20 questions from LCQ	<b>Reliability:</b> Cronbach's $\alpha$ <b>Content validity:</b> pre and post survey Restructured GAS improve student's L2 motivation

Table 2 Continued

Index	Research Design/Participant	Instrument	Factors items	Research results
2	Measurement 267 participants from University students in Taiwan from 1-4 years	Questionnaire from Chen (2010)	4 Likert scale 44 items	<b>Reliability:</b> Cronbach's $\alpha$ <b>Validity:</b> N/A participants study English for travel, instrumental and integrative orientation, intrinsic and ideal L2 self but not for external pressure.
3	SNS use in class and post survey. 28 Japanese college students for questionnaires	Questionnaire from Dörnyei and Taguchi (2010)	6 Likert scale 23 items	<b>Reliability:</b> Cronbach's $\alpha$ <b>Validity:</b> N/A Using SNS in class affect student's ought-to L2 self. Twitter had created a learning environment that students has to think carefully and change their habit
4	Measurement 1013 university students in China Freshmen and sophomores in all different majors	Questionnaires from Ryan (2009), Papi, (2010), Yashima, (2002), (2009), and Peng (2013).	6 Likert scale 43 items	<b>Reliability:</b> Cronbach's $\alpha$ <b>Construct validity:</b> CFA and SEM Ideal L2 self can be predicted by learning experience, ought- to self and international posture. Ideal L2 self is positive and ought-to L2 self has negative relationship on L2 anxiety. WTC inside of classroom can be predicted by L2 anxiety

Table 2 Continued

Index	Research Design/Participant	Instrument	Factors items	Research results
5	Measurement 168 Korean college students from all different majors	N/A	5 Likert scale WTC in the class: 10 items WTC outside class: 12 items motivation : 42 items	<b>Reliability:</b> Cronbach's $\alpha$ <b>Construct validity:</b> PCA Korean participants are instrumentally motivated than integrative. Motivation is correlated to WTC inside and outside. WTC inside is correlated to L2 proficiency but WTC outside is not. WTC is correlated to ideal L2 self, ought-to self, attitudes to learning English, international posture, attitudes to L2 community and future self image.
6	Measurement 228 Japanese university students from different majors	Aubrey (2014) Papi (2010)	7 Likert scale 38 items	<b>Reliability:</b> Cronbach's $\alpha$ <b>Validity:</b> N/A ideal L2 self and L2 learning experience is low anxiety, ought-to self have positive connection on anxiety. Good experience and sense of future selves were less anxious.

Table 2 Continued

Ind	Research Design/Participant	Instrument	Factors items	Research results
7	Measurement 108 college students from Taiwan English majors from freshman to senior	The foreign language classroom anxiety scale, Horwitz et al. (1986), The L2 self questionnaire Papi (2010), The EFL student acculturation questionnaire Dörnyei (2003), and Gilham (2000)	5 Likert. 59 items	<b>Reliability:</b> N/A <b>Validity:</b> N/A ideal L2 self, preservation, self-perceived English proficiency and hours spent on English listening comprehension practice are predictors of FL anxiety. Increase to resist TL culture, increase level of FL anxiety. Ought-to is not a strong predictor
8	Measurement 373 core Japanese university students. Freshman and sophomore science and human arts. 289 participants added for SEM	Ryan (2009) Gardner and Lambart (1972), Dörnyei (1990) Yashima et al. (2004) MacIntyre and Gardner (1994) Horwitz et al. (1986) McCroskey and Richmond (1987) Taguchi et al. (2009), Csizér and Kormos (2009) Dörnyei and Ushioda (2001)	6 Likert 73 items	<b>Reliability:</b> Cronbach's $\alpha$ <b>Validity:</b> Rasch analysis, EFA, CFA, SEM ideal L2 self is strongly correlated on L2 WTC. Self reported L2 WTC predicts actual L2 use in classroom

## Discussion

In this section, I discuss the findings of my systematic review. First of all, among the studies that have been reviewed in this paper, not all of these research projects were conducted to validate the adopted instrument. Based on this systematic reviews, 50 % of the articles (4 out of 8) did not conduct instrument validation. Among the four articles that conducted validation of their instrument, one article, Fukuda et al., (2015), only reported content validity, but not construct validity. Overall, only three studies—Liu and Park (2012), Peng (2015), and Munezane (2014)—have construct validation for the questionnaires that they adopted in their research. The study of Liu and Park (2012) explored 168 Korean EFL learners from colleges. They developed their own instrument written in Korean and validated the instrument by using PCA through SPSS. They confirmed 10 L2 motivational factors among 42 items. Peng (2015) conducted research to observe 1013 freshmen and sophomores from college in China who are EFL learners. They adopted questionnaires from Ryan (2009), Papi (2010), Yashima, (2002, 2009) and Peng (2013) and translated them into Chinese. To validate the questionnaire, they used CFA through LISREL, and it indicated satisfactory goodness of fit ( $CFA > .9$ ,  $SRMR < .05$ ,  $RMSEA < .05$ ). Munezane (2014) examined 662 Japanese EFL learners who were freshmen and sophomores in college. They adopted questionnaires from Ryan (2009), Gardner and Lambert (1972), Dörnyei (1990), Yashima et al., (2004), MacIntyre and Gardner (1994), Horwitz et al. (1986), Ryan (2009), McCroskey and Richmond (1987), Dörnyei and Ushioda (2001), Ryan (2009), Taguchi et al. (2009), Ryan (2009), and Csizér and Kormos (2009), and translated them into Japanese and did a pilot study. To validate the questionnaire, the study used PCA Rasch analysis through WINSTEPS and EFA through SPSS. In the end, they found there were 10 factors for their questionnaire. Even though the questionnaires that they adopted had been validated in other

studies, it was necessary that they validate the instrument for their own research since the participants and models were different from each other.

Second, Leis (2014), MacWhinnie and Mitchell (2017), Peng (2015), Munezane (2014), and Yang (2012), which adopted instrument originated from Dörnyei (2010), included too few L2 motivational factors for confirming the relationship of the factors. It is questionable how the researchers fully observed and confirmed the relationship of L2 motivational factors of their participants by only adopting small L2 motivational factors. Dörnyei (2010) provided 16 grouped items for the instrument which are designed based on the L2 motivational factors such as criterion measure, ideal L2 self, ought-to L2 self, family influence, instrumentality (promotional and prevention), linguistic self-confidence, attitudes on English language learning, travel orientation, fear of assimilation, ethnocentrism, interest in the language, anxiety, integrativeness, cultural interest, and attitudes on L2 community. However, five studies among eight studies (Leis, 2014; MacWhinnie & Mitchell, 2017; Peng, 2015; Munezane, 2014; Yang, 2012) included questionnaires originating from Dörnyei's theory, but all the studies include two to six factors in their study such as main components (e.g. ideal L2 self and ought-to L2 self).

Finally, three studies (Liu & Park, 2012; Munezane, 2014; MacWhinnie & Mitchell, 2017) out of eight studies confirmed a relation between the L2 motivation factor and L2 proficiency. The other five articles did not observe L2 motivation and L2 achievement of their participants, rather they just observed the relationship among L2 motivational factors. However, other studies conducted their research to confirm the relationship or predictive power of motivational factors and L2 achievement since the ultimate goal of L2 learning related studies is how their research can contribute to or help the student's overall L2 learning such as L2 learning curriculum, L2 learning student's attitudes, L2 learning instruction, etc. (Ellis, 1994; Ellis, 2000;

Gardner, 1985; Csizér & Kormos, 2009). That fact notwithstanding, L2 achievement is one type of measurement, confirmation, or guideline to determine whether a student's L2 learning process has been going well. Likewise, the fundamental goal of observing student's L2 motivation is because it is potentially related or can be predictive for the student's L2 achievement which is one of the methods used to confirm student's overall L2 learning.

### **Suggestions for Future Researchers**

The purpose of this systematic review is to observe which instruments have been adopted for validating and confirming L2 motivational factors among college level students and to explore the applications of the instruments. For future research, I recommend that researchers adopt more L2 motivational factors to confirm the relationship of student's L2 motivation. Further, more studies of L2 motivation related to L2 achievement are needed to provide better guidance of overall L2 learning.

CHAPTER III  
A CROSS CULTURAL ADAPTATION AND VALIDATION OF L2 MOTIVATION  
INSTRUMENT IN SOUTH KOREA

**Introduction**

Since English has rapidly become a global language (Nunan, 2012), English language learning has become more emphasized in countries like South Korea. Park (2009) indicated that English learning in Korea has become a so-called ‘English fever’ phenomena. This cultural shift explains why South Korean parents put tremendous effort, time, and money on educating their children, especially in English. This change is true not only of parents but also for adult L2 learners as well. In fact, English proficiency is highly important to meet the social requirements, especially for job seeking (Eom et al., 2017; Jee & Kim, 2013). To be specific, most college students in Korea are expected to learn English as a foreign language in spite of spending 12 years of English subject provided by their regular school curriculum; between elementary and high school, as high as 40% of them have also received private tutoring or attended afterschool private institutions (Korea Statistical Information Service, 2017).

With this strong emphasis on English language learning, motivation is considered one of the key factors in L2 learning process for EFL learners (Ghanizadeh & Rostami, 2015). Dörnyei (2005) indicated that motivation was one of the different individual features which could lead L2 learners learning the target language and stimulate them to be involved in learning process. Moreover, SLA researchers have focused on L2 motivation since it seems related to L2 learner’s effort, persisting of language learning, and their L2 learning outcome (Meechai, 1998). Thus, L2



researchers agree that L2 motivation played key roles on overall L2 learning (Csizér & Dörnyei, 2005).

For that reason, Tong et al. (2019) indicates that understanding students' motivation and strategies in language learning is important for observing the students' L2 learning process and will provide guidance on how to improve the quality of language education. However, many instruments that measure learning motivation or similar constructs were developed in English and validated in an English-speaking setting, and the cross-cultural transferability of these instruments have not been fully addressed to be administered to learners whose native language is not English and who study in a non-English setting (Tong et al., 2019). Therefore, there is a need for a solid instrument which is culturally and structurally appropriate to measure language learner's motivation in their native language. In this study I translated L2 motivational questionnaire (Taguchi et al., 2009) into Korean and back-translated to ensure translation equivalence. I then examined the internal structure of the Korean version of the instrument and investigated the L2 motivational model and its predictive power on L2 proficiency.

In line with Tong et al. (2019), researchers validated L2 motivation instrument for measuring L2 learners' language learning process (Kormos & Csizér, 2008; Dörnyei, 2010; Lee and Lee, 2012; Munezane, 2014). However, little research validated the L2 learning motivation instrument in a Korean context. Therefore, the purpose of this research is to translate and validate L2 learning motivation instrument which is culturally and structurally adapted to a Korean context to measure the L2 learning motivation.

### **Theoretical Framework**

From the end of 1990s, a process-oriented period emerged which emphasized the stages of motivation based on language learning process individually (Dörnyei, 2005). Dörnyei (2005)

also argued that language learning is a lengthy process which may induce multiple motivational phases for each student. Dörnyei and Ottó (1998) proposed L2 motivation process model which includes pre-actional stage, actional stage and post-actional stage. The point of this process is that people are influenced by different stages, and their motivational mindsets can be changed according to the stage (Dörnyei, 2005).

During this phase, Dörnyei (2005) presented his thoughts that language learning is part of an individual's personal core process rather than a generic school subject to learn. Dörnyei critiqued that Gardner's integrative orientation in that it was not applicable to all language learners and could not provide consistent statistical results of relationships among factors through empirical studies. He further questioned the applicability of Gardner's integrative motivation theory to the English as a foreign language (EFL) context where language learners are not exposed to the target language community. Dörnyei further explained that Gardner's theory was based on empirical data collected from a Canadian context where French was another official language. Thus, the theory of integrative motivation does not fit to other countries or communities where language learners are not exposed to the target language communities.

Other researchers have also re-evaluated Gardner's theory (Kim, 2012; McClelland, 2000; Dörnyei & Csizér, 2002). Kim (2012) stated that Gardner's integrativeness did not show any empirical power for predicting L2 proficiency for Korean students who learn English as a foreign language. Likewise, McClelland (2000) insisted that there is some difficulty in adopting integrative theory to other non-English native countries since their communities are different from the native English countries. Dörnyei and Csizér (2002) concluded that researcher should reinterpret the meaning of integrative motivation in a broader way without contradicting the original concept of Gardner's.

Having questions about Gardner's integrative motivation theory, Dörnyei (2005) indicated that an integrative disposition of positive interpersonal perspectives towards a target community and a desire for joining the cultural group could contribute to language learning. However, Dörnyei defines this notion as learner's self-concept rather than putting it in a social context. He believed that one of the components from his theory, ideal L2 self, covers the broad range of integrativeness within self-concept.

### **L2 Motivational and Self-System (L2MSS)**

Dörnyei (2005), therefore, proposed three motivation constructs from his L2 motivational self-system concept (L2MSS) which can be applied to the EFL context: ideal L2 self (L2 specific facet of one's ideal self, ought-to L2 self (the attributes that one believes one ought-to possess, i.e., various duties, obligations, or responsibilities) in order to avoid possible negative outcomes, and L2 learning experience, (situation-specific motives related to the immediate learning environment and experience). Dörnyei (2005) believed that one of the components from his theory, ideal L2 self, covers the broad range of integrativeness within self-concept.

## **Literature Review of Instruments Measuring L2 Motivation**

### **Previous Studies of Instrument Validation on L2 Motivation**

Teimouri (2017) studied L2 motivation and behaviors among Iranian junior and senior high school within L2 motivational self-system frame from Dörnyei. The study adopted Principal Component Analysis (PCA) and Cronbach's  $\alpha$  to validate the instrument adopted from other studies (Taguchi et al, 2009; Lockwood et al., 2005). In their results, ought-to L2 self is divided into two factors which are ought-to L2 self own and ought-to L2 self others due to students' emotional reaction on their part of L2 learning. Aouri and Zerhouni (2017) investigated the relationship between language learning strategies and language learning motivation. Aouri and

Zerhouni (2017) adapted instruments from AMTB (Attitude and Motivation Test Battery) of Gardner (2004), MSLQ (Motivated Strategies for Learning Questionnaire) of Pintrich et al. (1991), and Schmidt and Watanabe (2001) for L2 motivation. This study validated the instrument through Cronbach's  $\alpha$  and internal consistency reliability and both reached a high coefficient ( $=.92$ ) and reliability ( $=.89$ ). Lamb (2012) explored L2 motivation among Indonesian EFL learners. Lamb (2012) conducted a survey with an instrument from Ryan (2009) which drew from the instrument by Dörnyei et al. (2006). However, they excluded ought-to L2 self and teacher influence for their final model due to low reliability. Madkhali (2016) adopted an instrument from Islam et al. (2013), Magid (2011), Meechai (2010), and Ryan (2008) to examine the motivational factors from Saudi Arabian EFL learners in U.S. Madkhali (2016) validated the instrument with Cronbach's  $\alpha$  coefficient. Papi and Teimouri (2012) adopted instrument from Dörnyei et al. (2006) for a Hungarian study to observe the main components (ideal L2 self, ought-to L2 self and attitudes.) of L2 motivational self-system of secondary high school, high school and university level of Iranian EFL learners.

To scope into L2 motivation instrument validation studies in Korean context, Kim and Kim (2014) explored perceptual learning styles, L2 learning motivation, and English proficiency in Korean context. To conduct the study, 2239 Korean EFL learners from grade 3 to 12 participated. Questionnaires were adopted from Cohen and Oxford (2001), Kinsella (1995), and Al-Shehri (2009). The questionnaire entailed 7 factors; visual style (7), auditory style (7), kinesthetic style (7), imaginative capacity (5), ideal L2 self (7), motivated behavior (15) and English proficiency. They adopted Cronbach's  $\alpha$  for reliability. The original version of the questionnaire were developed in English, and the questions were translated into Korean. For content validity, two experienced elementary school teachers reviewed the questionnaire and

modified it according to the level of students, and the researchers conducted a pilot study as well. SPSS and AMOS were used for data analysis. Through the CFA, they concluded that perceptual learning styles indicated satisfactory goodness of fit which indicated they are intercorrelated with discriminant validity ( $CFI > .9$ ,  $SRMR < .5$ ,  $RMSEA < .5$ ). Through the EFA, they observed the perceptual learning styles, imagination, ideal L2 self, motivated behavior and English proficiency.

Kim and Kim (2016) studied L2 learners' resilience and its relationship with motivated behavior and language proficiency in English language learning. A total of 1620 secondary school participants were drawn from 11 schools in South Korea. They adopted 26 items from Shin, Kim, and Kim (2009) for resilience and 5 items from Taguchi et al. (2009) for motivated behavior and self-reported proficiency. Kim and Kim (2017) analyzed the data through varimax EFA, internal consistency reliability, CFA, and regression analysis. They found five factors for resilience through the EFA and a well-established measurement model through the CFA. According to their results, one of the factors from resilience (persistence) had the highest correlations with motivated behavior and English proficiency.

Lee and Lo (2017) investigated the relationship among classroom language choice, student's motivation of language learning, and proficiency. They conducted L2 motivation research with a validated instrument. A total of 366 college students from South Korea participated in the study. The items from questionnaire were adopted from other studies (Kim, 2012; Macaro & Lee, 2013; Rolin-Ianziti & Varshney, 2008; Thompson & Erdil-Moody, 2016). The questionnaire was studied as a pilot to 18 students. Those items are five Likert scale items. For L2 proficiency, they collected data from the speaking test of an English course and TOEIC scores. Through SPSS, EFA was conducted to determine four factors: attitudes toward English-

only, attitudes toward classroom code-switching, ideal L2 self, and ought-to L2 self. Cronbach's  $\alpha$  was used (>.6) The final item included ideal L2 self (6), L2 ought-to self-(5), attitudes toward classroom codeswitching (4), and attitudes toward English only (3)

### **Cross Cultural Translation and Adaptation of L2 Motivational Self System Questionnaire (Taguchi, Magid, & Papi, 2009)**

Among L2 motivation instruments, many previous researchers adapted questionnaires from Taguchi et al. (2009) since it is well-designed for an EFL context (e.g., Roshandel et al., 2018; Ueki & Takeuchi, 2013; Moskovsky et al., 2016; Aubrey, 2014; Kong et al., 2018; Safdari, 2017; Liu & Thompson, 2018). The questionnaire of Taguchi et al. (2009) has been widely used and cited (507 times on Google scholar as of September 2019). Moskovsky et al. (2016) also used Taguchi et al. (2009), Ryan (2008), and Gardner (2004) to examine the relationship of L2 motivational self-system and L2 proficiency of Saudi L2 learners. The participants were 360 college English majors. The instrument that was adopted from this research included 47 items measuring four factors: ideal L2 self, ought-to L2 self, language learning experience and intended effort. The researchers conducted factor loading analysis with oblimin rotation and Kaiser normalization to validate the instrument prior to application, and it indicated items loaded on each factors as designed. Aubrey (2014) adapted an instrument from Taguchi et al. (2009) to explore the relationship of L2 motivation among 202 Japanese college students. It was longitudinal study and compared the attitudes and motivation before the semester and after. The instrument in this study consisted of 36 items measuring motivated learning behavior, ideal L2 self, ought-to L2 self L2 learning experience, and international posture. The study validated the instrument through Rasch analysis and Cronbach's  $\alpha$  coefficient. This validated instrument has been used for SEM for further research (Aubrey, 2014).

Kong et al. (2018) included items on internal posture items from Yashima (2002), competitiveness from Kim (2010), and L2 motivation from Taguchi et al. (2009). Kong et al. (2018) explored the L2 learning motivation between Commonly Taught Language (CTL) and Less Commonly Taught Language (NCTL). There were 1296 Korean university students who learned English and Chinese for CTL and Spanish and Arabic for NCTL. For instrument validation, they explored ideal L2 self, ought-to L2 self, international posture, competitiveness, attitude, and effort with 37 items on their questionnaire. The study adopted factor loading and construct reliability which showed to be a good measurement model.

Safdari (2017) validated the four factors from the Dörnyei's study which are intended effort, ideal L2 self, ought-to L2 self, and attitude to language learning in Iranian context. The study conducted validation of the L2 motivation self system questionnaire through CFA. 318 Persian EFL learners were administered the questionnaire from Taguchi et al. (2009) and Chan (2014). Participants were from private language institutes in Iran whose ages were between 17 and 41. The author did not change any of the 51 items. The questionnaire consisted of 7 factors: intended effort (10), ideal L2 self (10), ought-to L2 self (10), attitude to language learning (6), visual sensory style (5), auditory sensory style (5), and imagery capacity (5). To confirm the validity and reliability, the data was analyzed through SPSS and AMOS. The data was subjected to a maximum likelihood CFA. They concluded that all the items are well loaded on each factor (FLE >.6, Factor Loading Estimate). Moreover, the results indicated that it had reasonable fit (CFA>.9, RMSEA<.08). Cronbach's  $\alpha$  was used for reliability and all of the findings indicated that the instrument was highly reliable ( $\alpha$ >.8). Overall, the study concluded that the questionnaire was well established in terms of validity and reliability.

## **Rationale of Adopting the Instrument of Taguchi et al. (2009) for the Research**

Among these instruments, the questionnaire from Taguchi et al. (2009) was adopted in this study for instrument validation and application in Korean college EFL context. The rationale to translate and adopt this instrument is that, first of all, the questionnaire of Taguchi et al. (2009) was designed based on the Dörnyei's L2 motivation theory (Taguchi et al., 2009) which is the frame that this study adopted. Dörnyei also reflected major elements of the L2MSS theory as well as other interconnected variables that affect L2 motivation (Safdari; 2017). When Taguchi et al. (2009) created and developed the questionnaires, they followed the frame of Dörnyei (2003) and the Hungarian study from Dörnyei (2002) (Taguchi, Magid, & Papi, 2009). Taguchi et al. (2009) replicated the study of Dörnyei et al., (2006) study with Japanese, Iranian, and Chinese students who learned English as a foreign language. They also explain that the main questionnaires were from the study of Dörnyei et al., (2006) and some of items were newly added. Since the instrument had been validated and developed for three different countries, given the cultural similarities between Japan, China, and Korea, the questionnaire of Taguchi et al. (2009) had a potential to be applied in the Korean context' as well.

Moreover, many researchers argued that Dörnyei's L2 motivation is widely applied since it is based on micro perspective (Taguchi et al., 2009; Kong et al, 2018; Safdari, 2017). Roshandel et al. (2018) stated that Dörnyei's L2 motivational self system brought different concept of L2 motivation compared to Gardner. Kim (2012) also argued that Gardner's instrumentality and integrativeness theory did not indicate the powerful predictors for Korean EFL student's English proficiency. Rather, the factors from Dörnyei's questionnaire and theory are shown to be significant predictors for Korean EFL learner's English proficiency through his research. Additionally, Kong et al. (2018) indicated that Gardner's integrative theory failed to



fully reflect language learner's community in general. Instead, they argue that Dörnyei's theory is well fit to the EFL learners who do not have any opportunities to be involved in a target language community. Safdari (2017) indicated that Gardner's (1985) Attitude/Motivation Test Battery (AMTB) has been most widely used instrument in the past based on the socio-dynamic view. However, the paradigm of L2 motivation perspectives has changed, L2 motivational self system has been shed light on as it is more self system and individual focused design.

Additionally, as Lanvers (2017) summarized, the questionnaire of Taguchi et al. (2009) is based on the theory of L2 motivational self-system which was inspired by Markus' and Nurius' (1986) self-discrepancy theory. Self-discrepancy postulates that "we are motivated to reach a condition where our self-concept matches our personally relevant self-guides" (Higgins, 1987, p. 321). Dörnyei (2005) also indicates that when he proposed L2 motivational theory, the components are focused on each individual learner's self by arguing that Gardner's theory is more focused on social context. This model was proposed to distinguish the learner's selves which have factors of ideal L2 self and ought-to self (Lanvers, 2017). This led to the questionnaire being suitable for the purpose of this research since it is for survey the student's individual self motivational factors.

### **Rationale to Validate the Instrument in a Korean Context**

Since the instrument had been validated and developed for three different countries, the questionnaire of Taguchi et al. (2009) has a potential to be applied in the Korean context' as well. As many researchers have studied L2 motivation in their L2 language learning context, the questionnaire has been translated and adopted in many languages such as Hungarian (Dörnyei & Csizér, 2002), Chinese (You & Dörnyei 2016), Japanese, (Dörnyei & Ushioda, 2009), and Farsi (Safdari, 2017). However, it has not been fully adopted and validated in a Korean context.

Firstly, this research includes some of the items from Taguchi et al. (2009) which were not translated and validated from other previous research. The hypothesized model from this research includes some factors that the previous researches did not include for validation from the original questionnaire of Taguchi et al. (2009). Originally, the questionnaires of Taguchi et al. (2009) includes 16 variables: intended effort, ideal L2 self, ought-to L2 self, parental encouragement, instrumentality promotion, instrumentality prevention, linguistic self-confidence, attitudes toward learning English, travel orientation, fear of assimilation, ethnocentrism, interest in the English language, English anxiety, integrativeness, cultural interest, and attitudes toward L2 community. In case of the previous research, for example, Kim (2012) explored the motivational self-system among Korean EFL elementary, junior high and high school students with using instrument from Kim (2011) and Taguchi et al. (2009). Kim (2012) adopted 9 factors out of 16 factors from the original questionnaire for his study: ideal L2 self, ought-to L2 self, instrumentality promotion, instrumentality prevention, integrativeness, family influence, attitudes to learning language, attitude to L2 communities, and cultural interest. His study checked for internal consistency of the motivational construct but did not validate the instrument in a Korean context. Also, Kong et al. (2018) included ideal L2 self, ought-to L2 self, attitudes, and intended efforts from the questionnaires of Taguchi et al. (2009) to confirm their model. In their research, however, they did not include all items from each factor either. To be specific, they choose 4 items out of 10 from ideal L2 self, 3 out of 14 from attitudes, 5 out of 10 from ought-to L2 self, and 2 out of 10 from intended effort. Thus, these items were not validated in other research papers.

Second, the participants of this research have a different background compared to previous research. In this research, the population is targeted as Korean college students who

learned English as a foreign language. So the participants of my research are college students from Korea. Additionally, the participants range widely from different regions, not only Seoul (capital) but also other area such as the Busan, Kyunggi, Jeonju, Chungchungbuk, and Chungchungnam Province. However, the participants from the studies (Kim, 2012; Kim, 2009) range from elementary students to high school students in Korea. The participants of these studies (Kim, 2012; Kim, 2009; Kong et al., 2018) are collected from metropolitan areas (Seoul and Kyunggi province). The results of validation can be different since the participants from the studies are different.

Lastly, the other previous research did not conduct construct validation such as EFA, CFA or SEM for their translated instrument for Korean EFL learners. Kim (2009) conducted research to examine the relationship between perceptual learning style and learner's motivational factors, but he did not conduct any construct validation on their research. The instrument has been pilot studied which is considered as content validity. However, Kim (2009) did not conduct any construct validity for the instrument. Similarly, Kim (2012) observed 9 motivational factors from Gardner (1985) and Dörnyei (2009), but he did not examine the instrument for construct validation using factor analysis. Kong et al. (2018) included ideal L2 self, ought-to L2 self, intended efforts and attitudes factors from Taguchi et al. (2009) and did factor analysis for validation but these were not complete sets of items from each factors. Kim and Kim (2017) adopted five items from instrument of Taguchi et al (2009) which is about motivated behaviors and validated through varimax EFA and CFA. However, they only adopted five items from the original instrument of Taguchi et al. (2009) for their instrument validation with varimax EFA and CFA.

### **Background of Instrument from Dörnyei (2010) and Taguchi et al. (2009)**

Among researchers who started to conduct study to explore the validation and application of L2 motivation factors (Gardner, 1985; Clément, 1986), Dörnyei is one of them who started L2 motivation research in a Hungarian context (Dörnyei, 1990). In addition, one of his research team explored the L2 motivation factors with instrument validation with 301 participants whose age were 17-18. These participants were secondary school students in Budapest, Hungary in 1993 (Clément, Dörnyei, & Noels, 1994). For the instrument, they adopted six Likert scale questionnaire from the previous research (Clément, 1986; Dörnyei 1990). The 11 constructs in the questionnaire were used which were orientation (27 items), attitude toward learning English(5), attitude toward the British(5), attitude toward the Americans(5), English use anxiety(4), English class anxiety(5), satisfaction(1), perceived group cohesion(8), need for achievement(4), motivational intensity(4), and desired English proficiency. The questionnaire are translated and adapted into Hungarian. To validate the instrument, they adopted EFA through the SPSS and maximum-likelihood extraction with Oblimin rotation, scree test and eigen values

To extent the study of L2 motivation in Hungarian context, Dörnyei et al. (2006) explored the relationship of L2 motivation and attitudes in Hungary. A total of 13,391 of 13 to 14 year old participants were involved collected in 1993, 1999 and 2004. Those participants were grouped by their target language learning which were English, German, French, Italian and Russian. They adopted regional stratification from Hungary. For the instrument, the 5 Likert scale of Language Disposition Questionnaire was designed and developed by Dörnyei helped by Clément. It was piloted in 1992 by 199 students in order to change the wording of several items. The questionnaire is divided by 4 main section with 37 items: items concerning the five target

language, items concerning the six target language communities, and items were not specific to a particular L2 and background question. For the instrument validation, EFA was used for factor analysis which includes Maximum likelihood extraction. They used Cronbach's  $\alpha$  for reliability. For measurement model analysis, the Dörnyei's study grouped the latent variables of three items and conducted CFA. They had CFA of self-confidence and milieu and indicated satisfactory goodness of fit (CFI=.997, RMSEA = .06). They also had CFA results of vitality, attitudes toward L2 community, and cultural interest and it also has satisfactory goodness of fit (CFI=.99, RMSEA=.04). The CFA of integrativeness and instrumentality had goodness of fit (CFI=.99, RMSEA=0.05). The research of Dörnyei et al. (2006) shows the results with final factors; vitality of L2 community, instrumentality, L2 choice, integrativeness, attitudes toward L2, cultural interest, self-confidence, and milieu.

There are other studies which adopted Dörnyei's questionnaire for validating the L2 motivation instrument (Kim, 2009; Cheng & Dörnyei, 2007; You & Dörnyei, 2016). Among these, Taguchi et al. (2009) conducted research in three different countries' contexts—Japan, China, and Iran. In the study of Taguchi et al. (2009), a total of 5000 participants were observed. The age range was between 18 to 43 for Japanese, 11 to 53 for Chinese, and 12 to 44 for Iranian students. For the questionnaire, they adopted and developed the main components of the questionnaire from Dörnyei's study (Dörnyei et al., 2006). The researchers translated and adapted the questionnaire into Japanese, Chinese, and Farsi for each countries' students. Other items were adopted from previous research (Clément & Baker, 2001; Dörnyei, 2001; Gardner, 1985, Noels et al., 2000 or newly designed by the authors. They first started to develop a Japanese version, and this work was followed by the Chinese and Iranian versions. All of the questionnaires were pilot studied in their country context. The total number of items from

Japanese and Chinese was 67 items while it is 76 items for the Iranian version. Ten factors were used for the study; criterion measures, ideal L2 self, ought-to L2 self, family influence, instrumentality-promotion, instrumentality-prevention, attitudes to learning English, attitudes to L2 community, cultural interest, and integrativeness. Through SPSS, the researchers used correlation for the variables. While they validated the measurement model, they combined attitudes to L2 community and cultural interest due to the problem of discrimination in these factors. Moreover, it was hard to separate family influence and ought-to L2 self, they chose ought-to L2 self instead of family influence. By observing the goodness of fit, they modified the measurement models to fit the data.

In sum, since a large number of items and factors were not included in previous research, the instrument for this research should be translated in Korean and validated. Additionally, the target population is different from the previous research populations, so the results of the instrument's validation could be different.

### **L2 Motivation Questionnaire from Dörnyei (2010) and Taguchi et al. (2009)**

The purpose of the questionnaire from Dörnyei (2010) and Taguchi et al. (2009) was to measure the L2 learner's language learning motivation in 16 domains: 16 factors with 140 items for Japanese, Chinese, and Iranian contexts; criterion measures (10 items), ideal L2 self (10), ought-to L2 self (10), family influence (11), instrumentality-promotion (14), instrumentality-prevention (11), linguistic self confidence (4), attitudes toward language learning (10), travel orientation (3), fear of assimilation (15), ethnocentrism (17), interest in the English language (4), English anxiety (10), integrativeness (3), cultural interest (4), and attitudes toward L2 community (4). The 16 domains and sample questions are provided below.

(1) Criterion measures asks about the L2 learner's effort to learn L2 language.

(e.g. I would like to spend lots of time studying English.)

(2) Ideal L2 self refers to ‘L2-specific facet of one’s ideal self’ (Dörnyei, 2005, p106)

(e.g. I can imagine a situation where I am speaking English with foreigners.)

(3) Ought-to L2 self asks ‘the attributes that one believe one ought-to possess (i.e. various duties, obligations, or responsibilities) in order to avoid possible negative outcomes’

(Dörnyei, 2005, p.106).

(e.g., Studying English is important to me because other people will respect me more if I have a knowledge of English.)

(4) Family influence measures the student’s belief about their family’s role, or influence.

(e.g., My parents encourage me to study English in my free time.)

(5) Instrumentality-promotion measures the motivation from personal goals in order to be successful on their career or statuses.

(e.g. Studying English can be important to me because I think it will someday be useful in getting a good job.)

(6) Instrumentality-prevention measures the L2 learner’s thought about their obligation to avoid their failure for their future career or statuses.

(e.g., I have to learn English because without passing the English course, I cannot get my degree)

(7) Attitudes on learning English asks the L2 learner’s motives or interest about their language learning.

(e.g. I always look forward to English classes)

(8) Attitudes to L2 community refers the L2 learner’s motives or interest about the target language’s related community or society.

(e.g. Do you like the people who live in English-speaking countries?)

(9) Cultural interest asks the learner's interest of the target language culture.

(e.g. Do you like the music of English-speaking countries (e.g., pop music?).)

(10) Integrativeness measures the L2 learner's attitude for their target language society whether they are willing to join.

(e.g. How much do you like English?)

(11) Travel orientation asks whether L2 learners want to learn target language for traveling purpose.

(e.g. Studying English is important to me because without English I won't be able to travel a lot.)

(12) Fear of assimilation refers the L2 learner's mind or thoughts about their identity or concern the society that they belong by learning L2 language

(e.g. Because of the influence of the English-speaking countries, I think the morals of Korean people are becoming worse.)

(13) Ethnocentrism asks L2 learners attitudes of the influence of target language culture to their native language culture.

(e.g. Most other cultures are backwards compared to my Korean culture.)

(14) Interest in the English language asks the L2 learner's interest or attitudes toward their target language.

(e.g. I find the difference between Korean vocabulary and English vocabulary interesting )

(15) English anxiety measures whether L2 learners feel afraid of learning L2 language.

(e.g. If I met an English native speaker, I would feel nervous)



(16) Linguistic self-confidence asks student's opinion of their confidence of learning L2 language.

(e.g. I am sure I will be able to write in English comfortably if I continue studying.)

### **Purpose of Research**

The purpose of this research is to translate and validate the questionnaire from Taguchi et al. (2009) in a Korean context, especially with Korean college students. Through this research, I intend to examine whether the translated instrument is appropriate to measure college students' L2 motivation in South Korea. Further, if approved as psychometrically sound, this instrument can be applied in a similar context to measure EFL learners' motivation and to examine the relationship between L2 motivation and proficiency, and therefore, to guide research in how to improve these learners' English proficiency.

### **Method**

#### **Participants and Data collection**

It is recommended to observe 500 participants when the questionnaire has more than 70 items for minimizing the error (Yuan, Yang, & Jiang, 2017). For statistically consistent results, more than 500 college student participants were drawn to validate the instrument and test the model. In this research, a total of 1459 college students whose first language is Korean and who learn English as a foreign language in South Korea participated. Among them, data from 86 participants were eliminated due to the following reason: outlier, partial answering, not targeted participants, and random answering. Thus, the final sample included 1373 participants.

To avoid bias of certain local characteristics and students' L2 proficiency, nine universities in diverse locations were selected in South Korea: Kongju National University, Choongbuk National University, Han-Yang University, Busan National University, Inha

University, Inha Technical University, Jeonbuk National University, Myungji University, and Yonsei University. Four universities are national universities and the others are private. All are four-year college except one which is a two-year college. By the time of their admission into college, these students have received regular English courses from elementary to high school since those are mandatory for all students in South Korea. This means that participants have most likely been learning English as a foreign language for 6 hours per a week for 6 years in middle and high school level and 45 minutes per a week for 6 years in elementary level. More than that, all of the universities offer English classes such as English conversation 101 or English writing. The participant's majors were diverse: science, education, linguistics, business, tour translation, law, nursing school, engineer, flight service, tourism, psychology, liberal arts, and health.

To collect the data, approval from IRB was necessary. After receiving approval from IRB, I contacted the professors in South Korea to receive permission. Those professors who agree with this study provided access to their students for the survey. The participation of students in the study was voluntary.

### **Process of Translation/ Pilot Study**

Regarding the validation of instrument, the English version of the questionnaire from Taguchi et al. (2009) was translated into Korean by the author, which was then back-translated by a professional English-Korean translator. After that, two native Korean-speakers who are pursuing doctoral degree at an English-speaking institutions reviewed the questionnaire for content validity. A pilot study was also conducted with 15 Korean university students to read through the translation and provide feedback on the questionnaire regarding any ambiguity. During this time, four factors (linguistic confidence, ethnocentrism, fear of assimilation, and interest in the English language) were discarded and some items were modified or eliminated

based on cultural differences, interest of this research, and appropriateness to Korean translation. This method was also adopted by You and Dörnyei (2016) when they translated and validated the instrument from English to Chinese for their Chinese college students who learned English as a foreign language.

### **Instrumentation**

The instrument that was translated and validated in this study is the questionnaire from Taguchi et al. (2009). The original instrument that had been adopted by Taguchi et al. (2009) had 16 factors with 140 items for a Japanese, Chinese, and Iranian context; criterion measures (10 items), ideal L2 self (10), ought-to L2 self (10), family influence (11), instrumentality-promotion (14), instrumentality-prevention (11), linguistic self-confidence (4), attitudes toward language learning (10), travel orientation (3), fear of assimilation (15), ethnocentrism (17), interest in the English language (4), English anxiety (10), integrativeness (3), cultural interest (4), and attitudes toward L2 community (4).

The questionnaire that this research used and adopted had six questions that captured the participant's background such as gender, age, year of school, major, English proficiency, and study abroad experience. The scale is 5-point Likert scale: strongly disagree, disagree, normal, agree, and strongly agree. For measuring L2 learning motivation, however, 4 out of 16 factors were removed from the original version of questionnaire through the content validation and pilot study: ethnocentrism, fear of assimilation, self-confidence, and interest in the English language. Ethnocentrism was eliminated because it was not an identified factor when Dörnyei (2010) developed the questionnaire and it was irrelevant in our study. I decided to remove the fear of assimilation factor after content validation. The content experts that I consulted agreed that it was both irrelevant and not a suitable question for the purpose of the study. In addition, both

self-confidence and interest in the English language factors contained similar questions and intended effort and attitudes on language learning. Furthermore, some of items from the remaining factors were removed during the pilot study. The instrument contained a total of 12 L2 motivational factors with 76 items adopted and validated; intended effort (10 items), ideal L2 self (10), ought-to L2 self (10), family influence (10 items) instrumentality-promotion (14), instrumentality-prevention (11), attitudes toward language learning (5), attitudes toward L2 community (4), cultural interest (4), integrativeness (3), travel orientation (3), and English anxiety (10).

### **Data Collecting Procedure**

The 76-item questionnaire was administered during December 2018. The researcher visited each school and explained the research and rules of participation verbally before starting the classes. It took about 15 minutes for the participants to fill out the questionnaire in paper format. Data were then entered into an Excel spreadsheet.

### **Data Analysis**

Exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) were adopted to validate the translated instrument. EFA was appropriate to identify the underlying structure among measured variables (Noris & Lecavalier, 2009). Mplus software program was used to analyze the data. Among the 1373 participants, data from 300 participants were randomly chosen for EFA and the remaining were used for CFA. According to Cabrera-Nguyen (2010) and Winter et al. (2009), the minimum of EFA participants is more than 146 when it has 11 factors with 76 items. To have consistent statistical results, I used 300 for EFA.

CFA is one of the analytical approaches of structural equation modeling (SEM), which allows researchers to examine the fit between the data and hypothesized model as well as the

modification indices to improve the model for a better fit (Furr & Bacharach, 2014; Weston & Gore Jr, 2006). CFA is multivariate statistical procedure which allows researchers to confirm the hypothetical model through parameter estimates, fit indices, and measurement invariance. (Weston & Gore, 2006). Generally, SRMR and RMSEA should be lower than 0.08 while GFI, NFI and CFI should be higher than 0.9 to indicate acceptable goodness of fit (Byrne, 1998). Thus, CFA is appropriate to facilitate hypothesized-model testing, comparison, and improvement (Bishop & Hertenstein, 2004). CFA has been used in research conducted in EFL context. Safdari (2017) evaluated the construct validity of a L2MSS questionnaire which measured Persian-speaking EFL learners' motivational attributes. The data were subjected to CFA. The estimates of the parameters from L2MSS model indicated a good fit, and the author claimed that L2MSS is a valid instrument for EFL learners. Also, Kim and Kim (2017) conducted CFA for their factor analysis to validate participants' resilience in Korean context. They identified five factors which were perceived happiness, empathy, sociability, persistence, and self-regulation. For reliability, Cronbach's  $\alpha$  was used. The reliability of each factor was calculated.

## **Results**

A total of 1373 students were drawn from nine universities from South Korea. The number of female participants was slightly larger than male participants. The age range was between 19 to 34. The demographic details are described in Table 3. Due to the geographical reason, the researcher were able to collect the data from one major of several schools.

Table 3

*Descriptive Statistics*

School	Gender			Age		Year of school				Study abroad	
	Total	M	F	Range	Mean	1	2	3	4	En	Non En
1	628	223	405	19-34	26.5	47	247	207	127	62	8
2	88	72	16	20-27	23.5	0	20	67	1	9	0
3	28	18	10	19-25	22	9	7	5	7	8	0
4	61	44	17	19-26	22.5	56	1	3	1	4	0
5	63	51	12	20-30	25	0	51	11	1	5	1
6	18	8	10	20-26	23	0	16	0	2	3	1
7	62	37	25	20-28	24	1	24	18	19	6	3
8	254	122	132	20-30	25	5	45	103	101	29	17
9	171	20	151	19-26	22.5	158	13	0	0	25	6
<b>Total</b>	<b>1373</b>	<b>595</b>	<b>778</b>	<b>19-34</b>	<b>26.5</b>	<b>273</b>	<b>424</b>	<b>414</b>	<b>259</b>	<b>151</b>	<b>36</b>

Table 4

*Descriptive Statistics of Schools and Majors*

School	1	2	3	4	5	6	7	8	9	10	11	total
1	195	24	24	55	42	68	58	29	133	0	0	628
2	0	0	0	0	0	0	0	0	0	88	0	88
3	28	0	0	0	0	0	0	0	0	0	0	28
4	0	0	0	0	0	0	0	0	0	61	0	61
5	0	0	0	0	0	0	0	0	0	63	0	63
6	18	0	0	0	0	0	0	0	0	0	0	18
7	30	0	2	15	6	0	1	0	1	7	0	62
8	26	1	2	207	12	0	4	0	0	2	0	254
9	0	0	0	0	82	0	0	0	0	0	89	171
total	297	25	28	277	142	68	63	29	134	221	89	1373

Vertical number: school

Horizontal number: majors

Major 1: Science; 2: English education. 3: Education 4. Liberal arts 5. Business 6. Tour translation 7. English literacy 8. Law 9. Medical related 10. Engineer 11. Flight service

### **EFA to generate L2 motivation**

EFA was conducted through Mplus with oblique rotation. Three hundred participants were randomly chosen from the total participants to conduct EFA. Since the instrument measuring the 12 factors with 76 items, the researcher input the 12 factors and 76 items which were hypothesized to belong to each factor. According to Tabachnick and Fidell (2007), the

cutoff value is 0.3, so the items were removed from the factors if the value was under 0.3 because their loadings power were too small to support. The missing data has been analyzed with software, and maximum likelihood estimation was adopted. Table 5 offers the result of EFA.

As a result, one out of 12 factors was not identified and some items were loaded in a different factor from original questionnaire or eliminated. Integrativeness was not identified from this model. There were three items (71, 72, and 73) which were not loaded on integrativeness. These items indicated low factor loading ( $<.3$ ) or scattered randomly to other factors.

Moreover, some items are eliminated on factors due to their small value (Item 2, 7, 38, 40, 41, 43, 44, and 71). In addition, even the items that were loaded on other factors with value larger than 0.3 were removed if they neither theoretically nor content structurally made sense (item 8, 50, and 73). For example, item 8 (Compared to my classmates, I think I study English relatively hard) is loaded on attitudes on L2 language learning which was originally loaded on intended effort. Item 50 (Studying English is important to me, because I would feel ashamed if I got bad grades in English) is loaded on ought-to L2 self which are from instrumentation-prevention.

Furthermore, if the item is loaded on more than one factor, the item is only chosen to one factor which shows the highest value under the theoretical rationale (item 31, 64, and 70). To be specific, item 31 (Being successful in English is important to me so that I can please my parents/relatives) was originally loaded on family factor. However, this item was loaded on both ought-to L2 self and family factors in my model. Item 70 is originally from anxiety but double loaded both on anxiety and ought to L2 self. However, 70 is theoretically from anxiety question and has higher value on anxiety, it stays on anxiety factor. Lastly, some of items were removed if



the items were scattered randomly on several factors (Item 30, 33, 36, and 39) since it is hard to tell which factor they actually measure.

Table 5

*Factor Loading Results for Exploratory Factor Analysis*

Item	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11
1	.40										
3	.54										
4	.86										
5	.78										
6	.67										
9		.44									
10		.57									
11		.86									
12		.94									
13		.96									
14		.85									
15		.92									
16			.51								
17			.71								
18			.69								
19			.70								
20			.92								
21			.87								

Table 5 Continued

Item	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11
22			.88								
31			.61								
51			.61								
24				.76							
25				.74							
26				.96							
27				.81							
28				.77							
29				.56							
32				.28							
23					.50						
34					.72						
35					.76						
37					.49						
42					.36						
49					.39						
52						.89					
53						.86					
54						.95					
55						.80					
56						.72					

Table 5 Continued

Item	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11
57						.45					
45							.86				
46							.97				
47							.91				
48							.54				
66								.83			
67								.80			
68								.98			
69								.96			
70								.62			
58									.51		
59									.87		
60									.82		
61									.79		
72									.37		
62										.69	
63										.72	
64										.60	
65										.77	
74											.73
75											.87

Table 5 Continued

Item	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11
76											.80

**CFA to generate L2 motivation model**

The L2 motivation model with 11 factors and 61 items were then subjected to CFA. I used Mplus software with maximum-likelihood estimation. To CFA included data from 1,017 participants. Model fit indexes were examined. Goodness of fit index (GFI) and comparative fit index (CFI) were calculated. These indexes ranged from 0 to 1 where 0 means no fit and 1 means perfect fit (Safdari, 2017). Value with larger than .90 is considered as good fit (Hu & Bentler, 1999). Next, the root mean square error of approximation (RMSEA) and standardized root mean square residual (SRMR) were also evaluated. Both RMSEA and SRMR smaller than .05 are a good indicator of model (Hu & Bentler, 1999; Byrne, 1998).

However, results from CFA showed that the model fit of these 61 items was unsatisfactory. See Table 6.

Table 6

*Fit Indices of L2 Motivation on Scales of L2MSS Questionnaire (61 Items, 11 Factors)*

Fit statistics	Chi square	DF	CFI	SRMR	RMSEA
L2 motivations	6441.94	1714	0.87	0.06	0.05

Based on the fit indices, CFI is smaller than .9, SRMR is larger than .05 and RMSEA is .05 which is marginally acceptable. To improve model fit, modification indices (MI) were examined. MI generated by Mplus provided a suggestion to improve the fit of the model, and a relatively high MI value indicated a need to make modification for measurement model through

the CFA (MacCallum, Roznowski, & Necowitz, 1992). Based on MI, the following changes were made.

First, items 9, 72 and 48 showed inconsistent loading in modification. Item 72 belongs to attitudes on community which was identified in EFA procedure but suggested to be added on instrumentation-promotional factor. Likewise, item 48 which originally belonged to instrumentation-prevention factor was suggested to be loaded on instrumentation-promotion factor. These results did not seem to be consistent for constructing model nor seem sound theoretically and structurally. In addition, the standardized factor loadings of these items were relatively small as compared to other items loading on each factor. Thus, these items were removed.

Second, modification indices found that items 29 and 58 have issue on inconsistent factor loading. This caused problems due to the translation between original items to Korean context. Unlike other items from family influence, item 29 (My parents/family believe(s) that I must study English to be an educated person) asks parent's opinion which is passive connotation to the participants. Other items from family influence asks the participant's opinion towards the parent (e.g., item 31: Being successful in English is important to me so that I can please my parents/relatives.). In the case of item 58 (Do you like to travel to English-speaking countries), it asks itself both attitudes on L2 community and travel orientation. Also modification was found that this item can be loaded on travel factor instead of attitudes on L2 community. Due to the ambiguity of its meaning, these items were deleted.

Finally, I found that there is dual meaning on item 32 based on cultural context of Korea. The item 32 has been suggested in both ought-to L2 self and family influence on a result of local fit. Originally item 32 (I must study English to avoid being punished by my parents/relatives)

was loaded on family influence. However, it is sometimes hard to differentiate the motivation between ought-to L2 self and family influence since many Korean students are likely to feel pressure from their parents to study L2 for their academic or future career. Additionally, item 32 showed a small coefficient based on standardized model results relatively compared to other items loaded on each factors. Thus, this item was removed. Overall, the final version of instrument had 11 factors and 55 items. Table 7 shows a summary of the indices for the final model from CFA. Overall, the results turned out to be satisfactory. Table 8 is coefficient table of CFA, indicating solid construct of measurement model.

Table 7

*Fit Indices of L2 Motivation on Scales of Revised L2MSS Questionnaire*

Fit statistics	Chi square	DF	CFI	SRMR	RMSEA
L2 motivations	4209.16	1372	0.92	0.05	0.04

Table 8

*Coefficient of final CFA result*

	Intended effort	Ideal L2	Ought- to L2	Family	Instru(pro)	Attitudes on language	Instru (Pre)	Anxiety	Attitudes on community	Cultural	Travel
Cronbach's	.85	.92	.88	.85	.80	.91	.84	.89	.92	.83	.86
$\alpha$											
1	.50										
3	.73										
4	.84										
5	.77										
6	.80										
10		.72									
11		.85									
12		.85									
13		.80									
14		.80									
15		.79									
16			.52								
17			.67								
18			.67								
19			.67								

Table 8 Continued

	Intended effort	Ideal L2	Ought- to L2	Family	Instru(pro)	Attitudes on language	Instru (Pre)	Anxiety	Attitudes on community	Cultural	Travel
20			.78								
21			.74								
22			.76								
31			.67								
51			.61								
24				.73							
25				.69							
26				.86							
27				.74							
28				.68							
23					.60						
34					.65						
35					.73						
37					.71						
42					.74						
49					.67						
52						.71					
53						.79					
54						.89					



Table 8 Continued

	Intended effort	Ideal L2	Ought- to L2	Family	Instru(pro)	Attitudes on language	Instru (Pre)	Anxiety	Attitudes on community	Cultural	Travel
55						.89					
56						.79					
57						.68					
45							.75				
46							.89				
47							.80				
66								.73			
67								.85			
68								.90			
69								.84			
70								.56			
59									.88		
60									.94		
61									.84		
62										.80	
63										.75	
64										.69	
65										.71	
74											.85

Table 8 Continued

	Intended effort	Ideal L2	Ought- to L2	Family	Instru(pro)	Attitudes on language	Instru (Pre)	Anxiety	Attitudes on community	Cultural	Travel
75											.76
76											.81

Table 9

*Correlation Matrix CFI*

	Intend	Ideal	ought	family	instrPro	attlang	instrPre	Anx	Attcom	Cul	Trave
Intended											
Ideal	.65										
ought	.23	.22									
family	.28	.28	.49								
InstrPro	.35	.29	.61	.33							
Attlang	.63	.63	.18	.26	.16						
InstrPre	.01	.02	.44	.30	.40	-.06					
Anxie	-.18	-.28	.19	-.07	.21	-.31	.28				
Attcom	.49	.58	.20	.25	.25	.55	.01	-.26			
Cul	.45	.55	.13	.19	.23	.53	0	-.24	.70		
Travel	.47	.54	.30	.28	.44	.43	.11	-.08	.58	.51	

## Discussion

The purpose of this study was to translate and validate the instrument from Taguchi et al. (2009) questionnaire measuring motivational factors of L2 learners in a Korean context. In this validation study, several adaptations were identified. First, one of the major findings is all factors

were identified except integrativeness. The items from integrativeness did not show any factor loading on any factor. Item 71 from integrativeness was not loaded on any factor while item 72 and 73 were loaded on attitude on L2 community and attitude on L2 language, respectively. Previous research (e.g., Dörnyei, 2010) also indicated that integrativeness did not reach the threshold in their item consistency analysis. Moreover, integrativeness had discrimination problems with Ideal L2 self as a result from Taguchi et al. (2009). Theoretically, Dörnyei (2005,) proposed alternative framework, termed L2 motivational self system, that suggested that integrativeness was not appropriate for foreign language context by questioning of Gardner's integrativeness theory of L2 learning motivation. Previous researchers (Kim, 2012; Kong et al., 2018) also insisted that Gardner's integrativeness is hardly adaptable in a foreign language culture since it is more suitable for language learning within target language community. With this statistical and previous research supports, the integrativeness factor was deleted from this research.

Second, we found that adjustment in translation and cultural adaptation in Korean context are much needed because participants may understand the translated questions in a different way due to the linguistic and cultural differences between Korean and English. Cross loading and dual loading were detected in this study, likely due to ambiguity or cultural difference. For example, item 58 (Do you like to travel to English-speaking countries) asks both attitudes on L2 community and travel orientation. Originally, this question is intended to ask whether participants are interested in traveling "L2 country." However, participants can perceive this question with focusing on "traveling" L2 country because they are learning L2 language for traveling purpose. The questions containing nuance, which is culturally embedded, can be

perceived differently by Korean students. Some items have to be moved to another factor or deleted due to an adjustment to the Korean context.

Previous research also involved translation and/or cultural adaptation adjustment problem in EFL context because of their native language characteristics (Tong et al., 2019; Dörnyei, 2010). One of the results from Tong et al. (2019) found that two items were loaded onto one factor in their MSLQ-CAL research due to the double negation sentence which is common in Chinese language characteristic. When Dörnyei (2010) developed the questionnaire of Taguchi et al. (2009), he developed the questionnaire for Iranian and Chinese contexts followed by a Japanese version. Dörnyei (2010) says that even though they translated the items from the original version of questionnaire into Japanese, Chinese, and Farsi, it was necessary to modify or rewrite the items due to the different social milieu and the participant's learning environment adaptation. Thus, it was unavoidable to adjust the items to load on different factors or delete them to make suitable for a Korean context.

Lastly, we found that items from family and ought-to L2 self were cross loaded. This means that it is hard to differentiate motivational origin between family influence and ought-to L2 self. From the results of EFA, item 31 (Being successful in English is important to me so that I can please my parents/relatives) is theoretically loaded on family factor. However, this item is loaded on both ought-to L2 self and family factors in my model. Similar to this, CFA modification also provided that item 32 (I must study English to avoid being punished by my parents/relatives) could be loaded on both family and ought-to L2 self factors. This can be explained by the Korean culture and the way that most of the student's extrinsic motivation can be derived from their parent's wish or command (Liu & Park, 2012). To have a high salary job or be successful in their academic career, students and their parents from Korea put an emphasis on

learning in hoped that students will enter prestigious universities (Jang, 2004; Zeng, 1995). It is reported that students from South Korea perceive their parents' role for educating them as both encouragement and pressure (Moris, 2013). Hence, it is hard to differentiate between students' outsources motivation and parent's pressure in Korea because students connect their motivation pressure with parent's desire. This has been shown in similar results with Taguchi et al. (2009). Based on their statistical results, they combined ought-to L2 self with family influence factor because ought-to L2 self refers to friend, colleagues, and family at the same time. Taguchi et al. (2009) indicated that Chinese students were forced to study by their parents to have better jobs and salary. However, in this study, we still keep family influence and ought-to L2 self separate since other items are loaded in their original factors with high value and identified through EFA even though some items were cross loaded.

### **Limitation**

The questionnaire that I adopted includes 12 factors, and 11 factors were identified and used for measurement model. This study did not cover the other L2 motivational factors such as willingness to communicate. For further studies, researchers may include other L2 motivational factors that have not been covered in this study. In addition, this questionnaire has been validated in a Korean EFL college context. This measurement model may only adaptable for college students. Future researchers may observe other participants such as high school students with validated questionnaire from this research to examine the L2 motivational measurement model.

### **Conclusion and Implication**

Through this research, the L2 motivational questionnaire from Taguchi et al. (2009) is translated and validated into a Korean context. The author validated the questionnaire by translating and back-translating from English into Korean and doing a pilot study. A total of

1373 Korean college students were examined, 300 participants for EFA and 1073 participants for CFA. Through the EFA, the questionnaire has been used to identify the 11 L2 motivational factors whereas CFA confirmed the measurement model. The findings in this chapter imply that integrativeness is one of the L2 motivational factors that has be considered carefully for future researchers who will study L2 motivation in EFL context. Additionally, Chapter 3 provides the validated L2 motivation questionnaire in Korean context which can be used for future researchers who will measure L2 motivation in a Korean context.

CHAPTER IV  
EXAMINING L2 MOTIVATION AND L2 PROFICIENCY AMONG KOREAN EFL  
COLLEGE STUDENTS

**Introduction**

As learning English becomes important in non-English speaking countries, researchers would like to identify important factors which affect student's L2 achievement (Lai, 2013). English language learning has been highly popularized in Korea since professional and academic English skills are important for college level students in this country (Lee & Lee, 2018). Within this, L2 motivation has been considered as one of the important factors which affects L2 proficiency (Moskovsky et al., 2016; Lai, 2013 ). Further, motivation has been extensively studied in second language learning (Gardner, 2010, Gardner, & Lambert, 1959, Ellis, 2000, Csizér & Dörnyei, 2005); it has been considered as one of the prominent predictors for language learning. For example, motivation played a significant role on language learners' behavior and was associated with learners' academic achievement (Ellis, 1994; Ellis, 2000). Gardner (1985) also explained the positive effects of desiring learning a language. He indicated that language learning motivation is a crucial factor which is directly related to academic achievement. Csizér and Kormos' (2009) study of secondary and university students in Hungary supported that language learning experience is one of the most important determinants for the amount of effort students dedicate to their L2 learning.

These findings led a large body of research on L2 motivation over the decade (Dörnyei, 2005), especially, on the relationship among language learners' L2 motivational factors (e.g., Lai, 2013; Leis, 2014; Liu & Park, 2012; MacWhinnie & Mitchell, 2017; Munezane, 2014; Peng,

2015; Yang, 2012). In addition, researchers have described the L2 motivational model or theoretical concept that Kormos and Csizér (2008) previously adopted. Overall, recent studies explored L2 motivation factors and as a result; they proposed a model of L2 motivation (Kim, 2012; Lee & Lo, 2017; Taguchi, Magid, & Papi, 2009; Munezane, 2014).

However, few of the studies conducted research about L2 motivation and L2 proficiency in a Korean context, especially among Korean college students. Thus, observing L2 motivation within quantitative study is necessary to explore the L2 motivation relationships and to predict the L2 proficiency in Korean context.

## **Theoretical Framework**

### **Second Language Learning Motivation**

According to Dörnyei (2005), the evolution of L2 motivation can be divided into three phases: the social psychology period, the cognitive-situated period, and the process-oriented period. I will explain them in the following section.

**The social psychology period.** The root of the L2 motivation research started from social psychologists, Gardner and Lambert, working in Canada (Dörnyei, 2005). There are Francophones and Anglophones in Canada where second language as a mediating factors between this ethnolinguistic communities. Gardner's research approach opened the social psychological research that student's attitudes toward their target language are one of the aspects that determine whether they are successful in language learning (Gardner, 1985). This led the initial motivation of the social psychological period (1959-1990). Language motivation is characterized based on macro level analysis and in a social context (Dörnyei, 2005). Individual L2 motivation decided their behaviors towards cultural aspects and second language acquisition which determined their success in language learning (Gardner & Lambart, 1959). Language



learning is influenced by a range of socio-cultural factors and research suggests that language learning would depend upon the attitudes towards other cultural aspects, orientation, and motivation of learning (Gardner & Lambart, 1972). Gardner (1985), one of the founders of L2 motivation research, defined L2 motivation as “the extent to which an individual works or strives to learn the language because of a desire to do so and the satisfaction experiences in this activity” (p. 10). Gardner (2010) further concluded that motivation played important role on L2 learning, and there are many factors that could affect students’ learning motivation. .

Moreover, Gardner (1985) proposed the socio-educational model of L2 acquisition. This model consisted of three factors influencing the language learning and language proficiency which are integrativeness, attitudes toward the learning situation, and motivation. In this theory, he distinguished motivation orientation into instrumental motivation and integrative motivation. Instrumental motivation is about the utilitarian orientation of students (academic and career related). Integrative motivation, on the other hand, is about the desire that language learners know more about the target language group or different people from a different community. This motivation is socially and culturally oriented for language learners.

**The cognitive-situated period and the process-oriented period.** Since the 1990s, the trend of education was shifted to cognitive perspectives in society; the social psychologist started to focus on actual learning situation by microperspective (Dörnyei, 2005). With this, language motivation theory has been shifted dramatically to micro-level analysis of motivation reflected by cognitive-situated and process-oriented terms (Dörnyei, 2014, Moscovsky, Racheva, Assulaimani, & Harkins, 2016). Dörnyei (2005) explained the characteristics of cognitive-situated period that the macro-perspective of L2 motivation has been narrowed down as a microlevel of L2 motivation. During this period, L2 motivation research has been conducted

based on situated analysis with actual learning. Dörnyei (2005) elaborated that L2 motivation from each student has shown different results according to their learning situation, classroom environment, and teaching styles. Specifically, Dörnyei (2005) provided three main theories prevailed during this period which are self-determination theory, language attributions and task motivation.

First, self-determination theory refers to human motivation and tendency that related to people's inherent and innate psychological needs which entails intrinsic motivation and extrinsic motivation (Ryan & Deci, 2000). Intrinsic motivation is defined as "the doing of an activity for its inherent satisfactions rather than for some separable consequence" (Ryan & Deci, 2000, p.56). Motivation of the human behavior is derived from inner fun or challenge rather than out sources. Similarly, Noels (2003) proposed intrinsic reasons for motivation, inherent from the language learning process such as language learning is fun, engaging and challenging. On the other hand, extrinsic motivation contrasts with intrinsic motivation. On one hand, extrinsic motivation is found when people perform an activity for its instrumental value (Ryan & Deci, 2000). This theory represents that human behavior comes from the different motivation originated from self-autonomy and social context (Ryan & Deci, 2000). Noels (2003) says that extrinsic reasons are from external and internalized pressures.

During this period, attribution theory was also proposed which connected learners' past experiences with their future achievement by causal attributions (Dörnyei, 2005; Weiner, 1992) Williams and Burden (1999) confirmed through their research that attribution played significant role on shaping student's motivation as well as that attribution can be derived from a student's cultural back ground.

Lastly, Dörnyei (2002) explained that task motivation was quite complex since task behaviors require actional context. Engaging in a task activity is connected to the motivation within actional context (Dörnyei, 2002). Student's motivational mindsets can be different depending on the task given. Additionally, each task may excite student motivation on a different level (Dörnyei, 2005). Egbert (2003) illustrated dimension of the task motivation that task offers participant's attention and concentration to complete the task goal, participants may find the task itself intrinsically interesting and participants will detect a sense of control during the processing of a task.

Dörnyei (2005) questioned Gardner's L2 motivation theory, especially on the integrative concept; he provided L2 motivational self system (L2MSS) which include three main constructs of ideal L2 self, Ought-to L2 self, and learning experiences.

1. Ideal L2 self, referring to the L2 specific facet of one's ideal self: If the person we would like to become speaks an L2, the ideal L2 self is a powerful motivator to learn the L2 because of the desire to reduce the discrepancy between our actual and ideal selves. This dimension is related to Noels' integrative category and the third cluster formed of Ushioda's motivational facets.
2. Ought-to L2 self, referring to the attributes that one believes one ought-to possess (i.e., various duties, obligations, or responsibilities) in order to avoid possible negative outcomes. This dimension corresponds to Higgins' ought self and thus is more an extrinsic (i.e., less internalized) type of instrumental motive and also corresponds to the extrinsic constituents in both Noels' and Ushioda's taxonomies.
3. L2 learning experience, which concerns situation-specific motives related to the immediate learning environment and experience. Although Csizér and Dörnyei's (2005) study only concerned generalized (i.e., non-situation-specific) motives and therefore did not offer

information about this dimension, past research conducted in the spirit of the situated approach described earlier has provided ample evidence of the pervasive influence of executive motives related to the immediate learning environment and experience. This dimension corresponds to Noels' intrinsic category and the first cluster formed of Ushioda's motivational facets. (Dörnyei, 2005, p106)

## **Literature Review**

### **Application of the Instrument in L2MSS Basis**

Researchers have examined the correlation among L2 motivation factors in EFL context (Taguchi, Magid, & Papi, 2009; Ryan, 2008; Meechai, 1998). For example, Liu and Thompson (2018) explored Chinese EFL learner's motivational profiles and its relationship with L2 proficiency within L2MSS framework. They observed 468 Chinese college students from tertiary institutions to compare the English major and non-English major groups. To measure the student's motivation, they adopted a questionnaire of 20 items from Dörnyei and Taguchi (2010) and 11 items were created by internally. They observed three factors; ideal L2 self, ought-to L2 self, and anti-ought- to L2 self for motivation, and self-reported scores were collected for L2 proficiency. Using one-way ANOVA and multiple regression analysis, they concluded that ideal L2 self is the most powerful among three factors. In addition, ideal L2 self and anti-ought-to selves indicated positive contribution to L2 proficiency while ought-to L2 self had a negative influence on L2 proficiency.

Yashima et al. (2017) investigated L2 motivation and L2 proficiency in a Japanese context based on L2MSS theory. They observed 2,631 freshmen from different majors in colleges located in Japan that adopted the TOEFL-ITP test as a L2 proficiency. The study used a questionnaire which adopted items from Sakui and Gaies (1999), Ryan (2009), and Taguchi et al.

(2009). The study included five motivation factors: communication orientation, grammar-translation orientation, ideal L2 self, ought-to L2 self, and intended effort. Through the SEM analysis, they could confirm the L2 motivational model with its predictive power of L2 proficiency. Especially, ideal L2 and ought-to L2 self affected intended effort which had a high impact on L2 proficiency.

Subekti (2018) tested L2 motivational relationships among ideal L2 self, ought-to L2 self, and L2 learning experience in an Indonesian context. They observed 56 Indonesian college students who attended English academic purpose (EAP) classes. The study adopted a 27-item questionnaire adapted from Taguchi et al. (2009). According to their results (linear regression analysis), L2MSS and L2 achievement did not show a consistent relationship with L2 achievement. Additionally, ideal L2 self and L2 leaning experience are not predictors for L2 achievement. Moreover, ought-to L2 self is negatively correlated to L2 achievement.

Furthermore, based on the Dörnyei's model (2005), Taguchi et al. (2009) examined the model to validate and investigate the causal relationship using SEM among Japanese, Chinese, and Iranian EFL students. Participants in this research included 1586 Japanese, 1328 Chinese, and 2029 Iranian students whose ages were between 11 to 53. The questionnaire was employed from the original design of Dörnyei (2003) and Dörnyei et al. (2006). They translated the original questionnaire to Japanese, Chinese, and Persian version and did a pilot study for cultural adaptation. For motivational variables, they chose 10 factors: criterion measures, ideal L2 self, ought-to L2 self, family influence, instrumentality promotion, instrumentality-prevention, attitudes to learning English, attitudes to L2 community, cultural interest, and integrativeness. For SEM, only university students from three countries were analyzed. The CFI and SEM shows that their goodness of fit indicates that the model is adequate. One of the major findings was that

Japanese students showed different ideal L2 self compared to Chinese and Iranian students. Additionally, the ideal L2 self predicts criterion measures indirectly for Japanese and Iranian students whereas it predicts more directly for the Chinese context. Overall, they confirmed that the model fits well on three countries by showing similar patterns and supporting the L2 motivational self system.

Other researchers conducted their research about L2 motivational factors in an EFL context with different participant's background (Ghanizadeh & Rostami, 2015; Papi, 2010). To be specific, Ghanizadeh and Rostami (2015) observed the motivational factors in public and private school settings. Ghanizadeh and Rostami (2015) validated Dörnyei's L2 motivational self-system model from Iranian EFL learners based on their language learning between private and public school settings. Specifically, participants were distinguished in two settings, the first setting was 413 public high school and secondary school EFL learners, and the other setting was 492 EFL learners from private language institute. All of the participants were asked to answer the questionnaire of Papi (2010) which was a Persian version of Dörnyei's instrument. The data has been analyzed with SEM and showed the good fit for private context of Iran. They found out that instrumentality promotion is a strong predictor for ideal L2 self. Additionally, they found a relationship linking ideal L2 self to attitudes and intended effort as well as ought-to L2 self on intended effort. The impact of instrumentality prevention on ought-to L2 self was verified.

Papi (2010) tested a L2MSS model in an Iranian context. The study observed 1,011 Iranian high school students who learned English as a foreign language. They adopted questionnaire from Dörnyei (2003) and Dörnyei et al. (2006) and some items were created by their own. They observed five factors: ideal L2 self, ought-to L2 self, English learning experience, intended effort, and English anxiety. With SEM analysis, they found that ideal L2

self and L2 learning experience are negatively affect L2 anxiety while ought-to L2 self increases the L2 anxiety. From their final model, ideal L2 self and ought-to L2 self affect learning experience, English anxiety and intended effort. Also, intended effort was influenced by English anxiety.

### **Measuring L2 Motivation in a Korean Context**

To narrow down the previous research which are related to this study, some previous research provides L2 motivational studies conducted in a Korean context using L2 motivational instrument (Kim, 2009; Yang & Kim, 2011; Liu and Park, 2012; Kim & Kim, 2014). Kim (2009) aimed to explore Korean EFL learners' learning style on L2 motivational self-system frame. Kim (2009) examined 974 Korean elementary school students who learn English as a foreign language. For measuring the students' learning style and motivation, the study adopted Al-Shehri's (2009) and Cohen and Oxford (2001). He observed student's perceptual learning styles (visual, auditory, and kinesthetic), imagination, ideal L2 self, and motivated behaviors through correlations and regression analysis. The research found that visual and auditory preferences were significantly correlated with other variables. Moreover, female students preferred auditory and visual learning styles while male students preferred kinesthetic learning style. All of the learning styles with ideal L2 self in this research were predictors of Korean student's motivated behavior. On the other hand, Yang and Kim (2011) had different results compared to the research of Kim (2009). Unlike Kim (2009), Yang and Kim (2011) concluded that perceptual learning styles were not meaningful predictors of motivated L2 behavior while ideal L2 self and motivated L2 behaviors were highly correlated with visual and auditory learning styles. They observed perceptual learning styles (visual, auditory, and kinesthetic), ideal L2 self and motivated L2 behaviors of Chinese, Japanese, Korean, and Swedish high school students.

Furthermore, this research confirmed that Swedish students indicated the highest ideal L2 self among the participants with emphasis that socially-imposed L2 community play an important role in the developing the ideal L2 self for students.

### **L2 Motivational Factors to Observe**

The motivational variables were chosen based on the process from Chapter 3: translate/back translation, pilot study, content validation, and construct validation. From the results on validation of the questionnaire, 11 motivational factors and L2 proficiency were chosen to be observed. The following 11 motivational factors were chosen: intended effort, ideal L2 self, ought-to L2 self, family influence, instrumentality-promotion, instrumentality-prevention, L2 anxiety, attitudes toward L2 language learning, attitudes toward L2 community, travel orientation, and culture interest. For the L2 proficiency, TOEIC scores were collected from the participants.

### **L2 Motivational Factors**

**Intended effort.** This factor measures the L2 learner's intended efforts toward L2 learning (Taguchi et al., 2009). Ideal L2 self can predict better on learner's intended efforts than integrativeness (Meechai, 1998; Alqahtani, 2018; Taguchi et al., 2009; Papi, 2010). Taguchi et al. (2009) conducted SEM in an Iranian, Japanese, and Chinese context, and it indicates well established paths among intended effort, ideal L2 self, attitudes on language learning, and ought-to L2 self. Intended effort has high correlation with ideal L2 self (Madkhali, 2016; Ryan, 2008) and ought-to L2 self (Papi, 2010). Intended effort is also influenced by attitudes on language learning (Alqahtani, 2018; Taguchi et al., 2009) and has high correlation with attitudes on language learning (Ryan, 2008).



**Ideal L2 self.** Dörnyei (2006) incorporated integrativeness to ideal L2 self, which broadly covers the self-motivation of language learners. Ghanizadeh and Rostami (2015) confirmed that the model does not show good fit on a public setting while it does show good fit on a private setting. In detail, predictive role of attitudes to L2 culture in ideal L2 self was confirmed in a private school setting model. Moreover, instrumentality promotion is a strong predictor of ideal L2 self in private setting even though it did not predict as well in a public setting. Similarly, Taguchi et al. (2009) has concluded that ideal L2 self is influenced by attitudes on community, and instrumentality promotion from their study. Other studies showed strong correlations among instrumentality promotion, attitudes toward language learning, and ideal L2 self (Madkhali, 2016; Roshandel et al., 2018)

**Ought-to L2 self.** Ought-to L2 self measures the attribute that individual should possess such as duties, obligations, or responsibilities (Dörnyei, 2005). Ghanizadeh and Rostami (2015) found the relations from instrumentality prevention to ought-to L2 self was confirmed in the public school setting while it was not in private school setting. Ought-to L2 self is influenced by instrumentality prevention and family influence (Taguchi et al., 2009).

**Family influence.** Family influence measures the active and passive parental roles from the language learner's perspectives. These questions ask whether and how much their family are involved in their language learning process, motivation, and inspiration. Family influence has strong correlation with ought-to L2 self (Madkhali, 2016).

**Instrumentality-promotion.** This measures the regulation of individual goals to become successful with high L2 proficiency for future academic career or find better job (Taguchi et al., 2009). High correlations has been found between instrumentality promotion and intended effort (Roshandel et al., 2018).

**Instrumentality-prevention.** This scale measures the multi-dimensional nature of instrumentality such as career prospects and educational significance of using English (Ryan, 2008). This is oriented from individual duties and obligations, especially passing tests not failing for their academic career.

**Anxiety.** The items from anxiety ask the attitudes or minds of L2 learners' how they are afraid of learning L2 language or usage. MacWhinnie and Mitchell (2017) adopted a regression model to find the relationship between anxiety, ideal L2 self, ought-to self, learning experience, and L2 proficiency in a Japanese context. The results show that anxiety has been negatively correlated with ideal L2 self and positive relations with ought-to L2 self (MacWhinnie & Mitchell, 2017; Madkhali, 2016). Other studies also indicated that anxiety has correlated to ought-to L2 self (Algahtani, 2018; Papi, 2010). Algahtani (2018) conducted a study to evaluate the relationship between English language learning motivation and anxiety with SEM analysis in a Saudi Arabian context. Moreover, studies found that anxiety has negative relations with language leaning attitude (Jain & Sidhu, 2013; Chun et al, 2017). Jain and Sidhu (2013) conducted correlation research among Malaysian university students, and it turned out that anxiety has negative impact on attitudes and motivation. Chun et al. (2017) studies English learning anxiety and student's achievement in English medium instruction with Korean undergraduate students through SEM. Their work concluded that anxiety affects student's attitudes negatively. Wu and Lin (2014) found through regression analysis that instrumentality motivation was negatively related to anxiety in motivation and willingness to communication study in a Taiwanese context. Similarly, instrumentality promotion has a high correlation with anxiety (Madkhali, 2016). However, Taylan (2017) found that anxiety did not correlate to other language learning motivation in Turkish university students. Likewise, Yang (2012) conducted

research with Taiwanese undergraduate students by adopting regression coefficients and found that ought-to L2 self is not a significant predictor of anxiety.

**Attitudes on L2 language learning.** This item was used to assess the learner's attitudes to the process of the language learning and degree how they enjoy language learning experience (Ryan, 2008). Lee and Lo (2017) concluded that high score on the ideal L2 self showed high correlation with English-only learning approach. Additionally, ideal L2 self predicted attitudes toward classroom rather than L2 proficiency. L2 proficiency did not show strong correlation with attitudes toward classroom language choice.

**Attitudes on L2 community.** The items from attitudes on L2 community asked the L2 learner about their dispositions, attitudes, and thoughts about the target language community.

**Travel orientation.** Travel orientation was designed to assess the prospects of travel abroad as a reason for L2 learning and within this context, travel is more than pursuing recreational adventure but includes personal improvement and engagement with other people (Ryan, 2008). Travel is highly related to intrinsic motivation (Noels et al., 2003; Lai, 2013). Yashima (2002) indicates Japanese EF learners think that English itself is one of the keys to connect Japanese EF learners to other countries. Lai (2013) concluded that the participants from the study learned English for travel, instrumental, integrative reasons, and intrinsic motivation which shows to be highly correlated to ideal L2 self. Lai (2013) found that when participants learn English and have good English skills, their skills will lead them to travel around the world which ultimately make them successful in their career. Additionally, he insisted that ideal L2 self is a powerful light to guide EF learners in globalized world.

**Cultural interest.** Cultural interest refers the appreciation of cultural media related to the L2 community and media such as films, TV programs, magazines and pop music. (Dörnyei &

Ciszér, 2002). As participants direct contact with the L2 community is not common, indirect contact (i.e., books, films, magazines) can affect the L2 learner's attitudes to the language and the L2 community (Ryan, 2008). Since students have the opportunity to learn of the life and behaviors, thoughts, values, and norm of the target language community, cultural interest is important to language learners (Ho, 1998). This may motivate L2 learners to travel or meet foreign friends (Ho, 1998). Cultural interest is highly correlated to attitudes toward L2 community (Madkhali, 2016).

### **Predictive Power of Motivational Factors on L2 Proficiency**

Studies explored the relationship between L2 motivational factors and L2 proficiency and indicated that L2 motivational factors had predictive power of L2 proficiency. (Kim, 2012; Kim et al, 2017; Kim, 2011; Yashima et al., 2017; Fengge, 2013; Liu & Thompson, 2018; Liu & Park, 2012; Munezane, 2014). Among them, some studies (Kim, 2012; Kim et al, 2017; Yashima et al., 2017; Fengge, 2013; Liu & Thompson, 2018; Munezane, 2014) included L2 motivational factors related to L2MSS theory and indicated that ideal L2 self and intended effort predict the L2 proficiency.

To be specific, Kim (2012) studied the relationship between ideal L2 self and motivated behavior in Korean context; they adopted the questionnaires from Al-Shehri's (2009). For the language proficiency, their final exam scores were drawn. From their study, the researchers concluded that there were significant correlations between visual, auditory styles, imagination, ideal L2 self, and motivated behaviors and L2 proficiency. For the elementary school students, ideal L2 self is the most power prediction for their L2 proficiency while motivated behavior is the most significant predictor affect L2 proficiency for high school students.

Kim and Kim (2014) conducted research to understand the structural relationship between perceptual learning studies, English learning motivation, and L2 proficiency. The participants were 2239 Korean EFL students from grade 3 to 12. Kim and Kim (2014) developed a five-point Likert scale questionnaire for perceptual learning styles and motivational variables which includes visual, auditory, and kinesthetic styles modified from Cohen and Oxford (2001) and adopted from Al-Shehri (2009). Through correlation and a SEM analysis, they found out that visual and auditory styles affect L2 proficiency mediated by ideal L2 self, imagination, and motivated behaviors. For elementary and high school students, ideal L2 self highly affected their L2 proficiency. Similarly, Kim and Kim (2011) explored the perceptual learning styles, ideal L2self on motivated L2 behavior and L2 proficiency. They observed 495 Korean secondary school students. With similar results to Kim and Kim (2014) and using correlation and regression analysis, higher levels of motivated L2 behavior would result in better L2 scores in exams.

Kim et al. (2017) examined the relationships among L2 learning motivation, demotivation, resilience and L2 proficiency of undergraduate EFL students in South Korea. They observed 869 undergraduate EFL students from two universities and collected their college scholastic ability test (CSAT) for L2 proficiency. They measured ideal L2 self, ought-to L2 self, promotion, prevention, family influence, academic challenge, and awareness of importance for L2 motivation adopted from Dörnyei (2009), Higgins (1998), and Kim (2012). Through the SEM, L2 proficiency was explained by instrumental motivation such as “seeking a good job.’

Kim (2011) concluded that intrinsic motivation and avoidance were significantly related to L2 reading proficiency through the correlation. The study observed 259 Korean EFL college students for relationships of L2 learning motivation and L2 reading proficiency. To measure L2 motivation, they adopted items from other studies (Wigfield & Guthrie, 1997; Mori, 2002;;

Vallerand et al., 1992; Yamashita, 2004, 2007) while they drew the L2 proficiency scores of student's midterm and final scores from their English reading class.

Liu and Park (2012) observed 168 Korean EFL college students to examine their L2 motivation and its correlations with L2 proficiency. TOEIC scores, willingness to communicate in the classroom/ outside classroom, and motivation for English language learning were collected. Through a Pearson correlation, they found that willingness to communicate in the classroom is significantly correlated with English proficiency. Similarly, Munezane (2014) has results that willingness to communicate affected L2 use. The study observed 662 Japanese EFL college students and explored the relationship of L2 motivational factors and its achievement through SEM.

Yashima et al. (2017) found that the path from intended effort to TOEFL-ITP score is statistically significant through SEM. They surveyed 2631 freshmen from Japan who took TOEFL-ITP test and conducted SEM to analyze the data. They concluded that ideal L2 self and ought-to L2 self affected overall intended effort and had significant relationship to L2 proficiency.

Likewise, Fengge (2013) and Liu and Thompson (2018) also has conclusion that ideal L2 self is a powerful predictor for L2 proficiency. Fengge (2013) investigated the path among the L2 motivational self system and their L2 proficiency level. A total of 956 participants filled out the questionnaire in China and the data analyzed by regression and SEM. For higher level students, they concluded that ideal L2 self is the strongest predictor for L2 proficiency. Liu and Thompson (2018) observed that L2 motivational factors and its predictive power of EFL learner's proficiency. They concluded ideal L2 self is the most powerful predictor for L2

proficiency through multiple regressions analysis. For the study, a total of 468 Chinese EFL students were participated in China.

However, other studies concluded that they could not find the predictive power of L2 motivational factors for L2 proficiency based on their results (Moskovsky et al., 2016; Lee & Lo, 2017). Moskovsky et al. (2016) explored L2 motivational relationships and L2 proficiency from Saudi learners who learned English as a foreign language. A total of 360 undergraduate students participated in the study. For L2 motivation measures, they adopted items from Taguchi et al. (2009), Ryan (2008), and Gardner (2004). For measuring the language proficiency, they used International English Language Testing System (IELTS) which is a nation-wide standardized test. According to their results, L2 proficiency was influenced by negative L2 learning experience, intended learning behavior, and ideal L2 self through the multiple regression. However, they could not find a relationship between ideal L2 self and L2 proficiency through correlation. Rather, they concluded that ideal L2 self accounted for learner's attitudes toward language learning.

Similarly, Lee and Lo (2017) could not find the predictive power of L2 motivation toward L2 proficiency. They observed 366 undergraduate students in South Korea to explore attitudes of language learning, L2 motivation, and L2 proficiency. Through the correlation analysis, they concluded that ideal L2 self is a strong predictor of attitudes of language learning rather than L2 proficiency.

### **Purpose of Research**

L2 motivational relationships and their predictive power of L2 proficiency from previous research has been discussed in the literature review. However, not many of these studies were conducted to observe L2 motivational relationships with predictive power with L2 proficiency in

a Korean college context within L2MSS theory. Thus, the purpose of the study is to explore the predictive power of students' L2 motivational factors towards L2 proficiency. Firstly, path analysis of L2 motivational factors is conducted in a Korean context to observe the path model. Relationship between L2 motivational factors and L2 proficiency is confirmed by using the validated instrument from Chapter 3. The model fit of structure model is analyzed as well as path analysis through structural equation modeling (SEM). The hypothesized models are formed based on the previous literatures reviewed above. There are two hypothesized models in this research: L2 motivation in a Korean context model and L2 motivation/L2 proficiency in a Korean context model. These models are provided in Figure 2 and Figure 3.

The research questions are as follows:

1. What is the relationship among L2 motivational factors among college students in Korean context?
2. What are the structural relationships among L2 motivational factors and L2 proficiency?



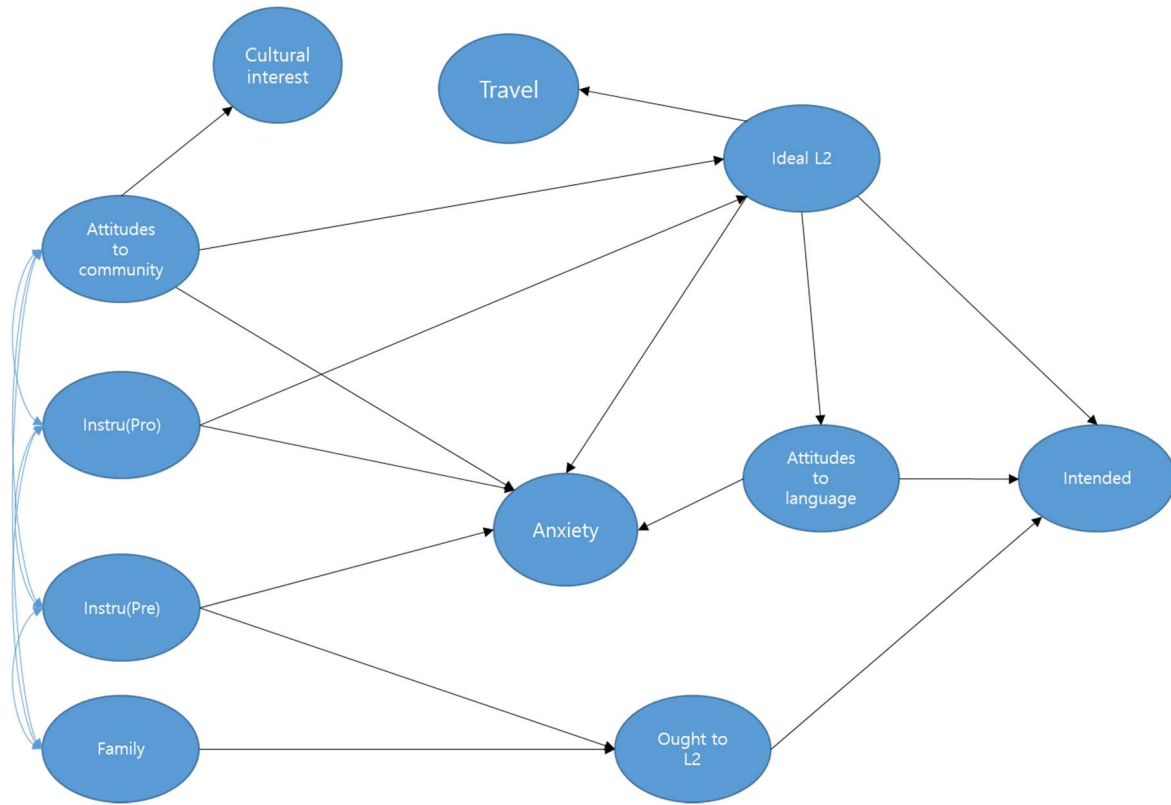


Figure 2. Hypothesized model 1: Structural model on L2 motivation.

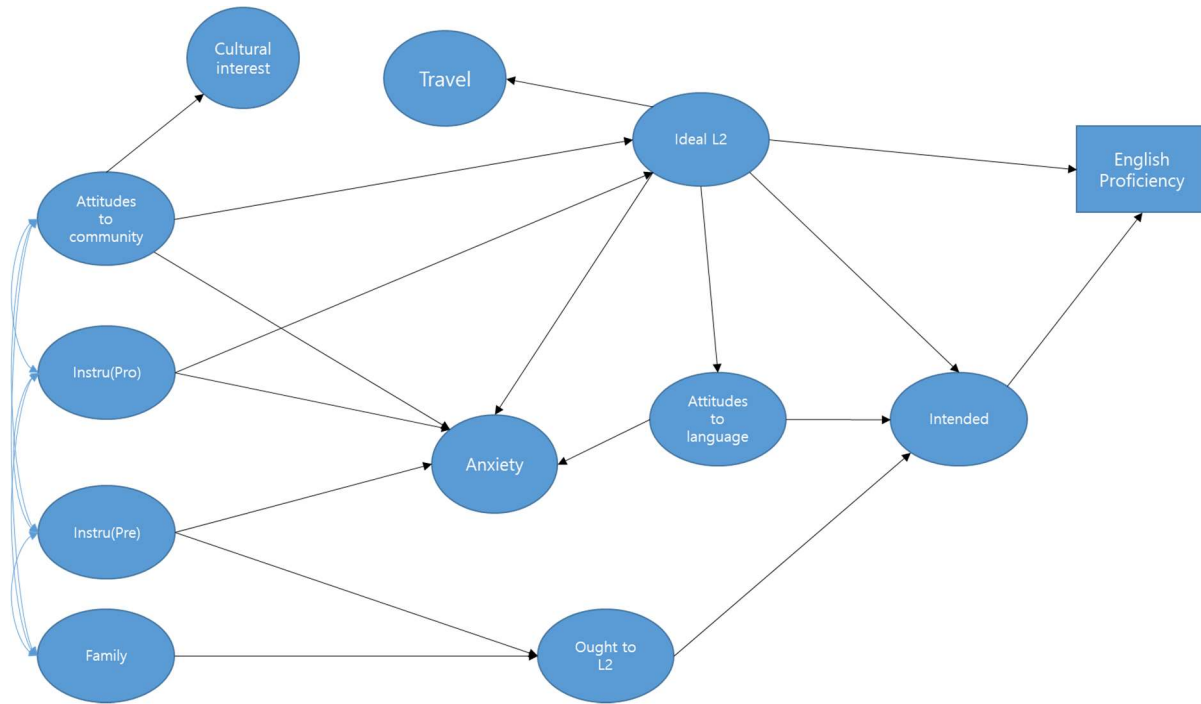


Figure 3. Hypothesized model 2: L2 motivation and achievement.

## Method

### Participants

A total of 1459 college students whose first language is Korean and who learn English as a foreign language in South Korea participated. Among them, 86 participants were eliminated due to the following reasons: outlier, partial answering, not targeted participants, and random answering. Thus, for the final data, 1373 participants were drawn. For the demographic information, of the 1373 participants, there were 273 freshmen, 424 sophomores, 414 juniors, and 259 seniors with ages ranging from 19-34. Among the final data, 595 participants were male and 778 were female.

The whole sample (n=1373) was used for analyzing the structure model for L2 motivational factors in a Korean context. Out of 1373, 905 answered that they have TOEIC score

for their English proficiency test. Therefore, 905 people were used to observe the structure model of L2 motivation and L2 proficiency.

To avoid bias of certain local characteristics and students' L2 proficiency, nine universities in diverse locations were selected in South Korea: Kongju National University, Choongbuk National University, Han-Yang University, Busan National University, Inha University, Inha Technical University, Jeonbuk National University, Myungji University, and Yonsei University. Four universities are national universities and the others are private. All of the universities provide four-year courses of study except one. Inha Technical University provides two-year courses of study. By the time of their admission into college, these students had received regular English courses from elementary to high school as these requirements are mandatory for all students in South Korea. This means that on average, they have been learning English as a foreign language for 6 hours per a week for 6 years in middle and high school level and 45 minutes per a week for 6 years in elementary level. More than that, all of the universities offer English classes such as English conversation 101 or English writing. The participants' majors are diverse: science, education, linguistics, business, tour translation, law, nursing school, engineer, flight service, tourism, psychology, liberal arts and health.

To collect the data, approval from IRB was necessary. After receiving approval from IRB, I contacted the professors in South Korea prior to conducting a survey to receive permission. Professors who agreed to participate in the study provided access to their students for the survey. Participation from the students was voluntary.

### **Data Collection**

Under the IRB approval, the researcher visited each school onsite and collected the data during December 2018. The researcher explained how to participate verbally before starting the

each class. The participants were asked to fill out the six background questions and 76 items for L2 learning motivation. It took 20 minutes to explain the research and how to participate and 15 minutes for the participants to fill out the questionnaire. The questionnaires were collected after the participants completed to fill out.

### **Data Analysis**

To observe the relationship among the L2 motivational factors and L2 proficiency, SEM was adopted to observe the structure models through MPlus software. MPlus software is widely used for most common applications (Hancock & Mueller, 2010). SEM allows researchers to not only analyze latent factors by relating them with observed variables but also investigate the relationships of paths between latent variable (Kong et al., 2018). The main purpose of this chapter is to confirm the structural model and explore the predictive power among L2 motivational factors and its relationship with L2 proficiency. For L2 motivational factor, the translated and validated Korean version of questionnaire of Taguchi et al. (2009) was used. For L2 proficiency, TOEIC scores were collected and adapted for the participants' L2 proficiency. Based on the observation, missing data was random and Mplus took care of the missing data with full information maximum likelihood (FIML). I replaced missing data with a period. For parameter estimation, maximum likelihood was adopted.

Structural Equation Modeling (SEM) is one of model that commonly adopted statistical models for analysis of variance, analysis of covariance, multiple regression, factor analysis, and path analysis (Bowen & Guo, 2011). For social work researchers, SEM is frequently adopted to analyze the data that contains regressions analysis or factor analysis. (Ecob & Cuttance, 1987). SEM is consist of two parts: measurement model and structure model (Kunnan, 1998). As the measurement model has been explored in Chapter 3, the structure model is investigated in this

chapter. The ultimate purpose of SEM analysis is to confirm the hypotheses that the researcher has about the variables (Bowen & Guo, 2011). The hypotheses consist of structural parameters such as factor loadings and regression paths (Bowen & Guo, 2011). SEM models are provided in a path diagram which is a theoretical and statistical relationship among latent variables and indicator variables (Bowen & Guo, 2011).

To evaluate the model, fit indices should be reported once estimated (Western & Gore, 2006). The fit evaluation is necessary in terms of (a) significance and power of estimated paths, (b) variances of endogenous observed and latent variables, and (c) how well the final model fits (Western & Gore, 2006). For the fit indices, CFI values above .9, RMSEA <.06, and SRMR<.08 would be acceptable (Western & Gore, 2006).

To examine the model of L2 motivational factors and L2 proficiency, TOEIC scores have been drawn from the participants. From background questions, they were asked to write their English scores of TOEIC, TOEFL, or IELTS if they have one. Among the total population, 905 participants indicated that they have one of the scores. TOEFL and IELTS scores were converted to TOEIC score based on the standardized score chart from ETS (2019). Thus, for the L2 proficiency, TOEIC scores were used and 905 participants were analyzed to test the hypothesized model of L2 motivation and L2 proficiency. The listwise deletion approach is recommended if the amount of missing data is less than 5% of the complete data set (McKnight, McKnight, Sidani, & Figueredo, 2007; Tabachnick & Fidell, 2001).

### **Results-L2 Motivation in Korean Context**

The first research question is “Which is the relationship among L2 motivational factors among college students in Korean context?” In order to examine the structural relationships

among L2 motivation factors, structural equation modeling was conducted to inspect the hypothesized model.

### Descriptive Statistics

The hypothesized model is converged at once. For measurement model, Chapter 3 validated that the instrument has been well-established and has a good fit. Table 10 indicates the CFA fit indices. For variable validity and reliability, Chapter 3 includes the results.

Table 10

#### *Descriptive Statistics of Participants*

School	Gender			Age		Year of school				Study abroad	
	Total	M	F	Range	Mean	1	2	3	4	En	Non En
1	628	223	405	19-34	26.5	47	247	207	127	62	8
2	88	72	16	20-27	23.5	0	20	67	1	9	0
3	28	18	10	19-25	22	9	7	5	7	8	0
4	61	44	17	19-26	22.5	56	1	3	1	4	0
5	63	51	12	20-30	25	0	51	11	1	5	1
6	18	8	10	20-26	23	0	16	0	2	3	1
7	62	37	25	20-28	24	1	24	18	19	6	3
8	254	122	132	20-30	25	5	45	103	101	29	17
9	171	20	151	19-26	22.5	158	13	0	0	25	6
Total	1373	595	778	19-34	26.5	273	424	414	259	151	36

Table 11

*Descriptive Statistics of L2 Motivational Factors*

	Mean	SD	Min	Max	Skewness	Kurtosis
Intended	3.55	.78	1	5	-.43	3.35
Ideal	3.28	.95	1	5	-.23	2.58
Ought	2.6	.82	1	5	.06	2.60
family	2.46	.92	1	5	.17	2.36
InstrPro	3.65	.77	1	5	-.66	3.70
Attlang	2.91	.91	1	5	.02	2.70
InstrPre	2.88	1.06	1	5	-.13	2.33
Anx	3.20	.94	1	5	-.22	2.59
Attcom	3.66	.93	1	5	-.36	2.93
Culture	3.57	.85	1	5	-.38	3.19
Travel	3.58	.95	1	5	-.55	3.00

Table 12

*Descriptive Statistics of Schools and Majors*

School	1	2	3	4	5	6	7	8	9	10	11	Total
1	195	24	24	55	42	68	58	29	133	0	0	628
2	0	0	0	0	0	0	0	0	0	88	0	88
3	28	0	0	0	0	0	0	0	0	0	0	28
4	0	0	0	0	0	0	0	0	0	61	0	61
5	0	0	0	0	0	0	0	0	0	63	0	63
6	18	0	0	0	0	0	0	0	0	0	0	18
7	30	0	2	15	6	0	1	0	1	7	0	62
8	26	1	2	207	12	0	4	0	0	2	0	254
9	0	0	0	0	82	0	0	0	0	0	89	171
Total	297	25	28	277	142	68	63	29	134	221	89	1373

Vertical number: school

Horizontal number: majors

Major 1: Science; 2: English education. 3: Education 4. Liberal arts 5. Business 6. Tour translation 7. English literacy 8. Law 9. Medical related 10. Engineer 11. Flight service

The researcher visited classes on campuses located in South Korea and collected the data. This is the reason that some universities have students from only one major. Schools 2, 3, 4, 5, and 6 were only visited once, so only certain majors students had the chance to participate.



## Structural Equation Modeling Analysis of L2 motivation

With 1373 participants, L2 motivational factors were observed through SEM. This includes 11 L2 motivational factors: ideal L2 self, ought-to L2 self, intended effort, anxiety, instrumentality promotion, instrumentality prevention, attitudes toward language learning, attitudes toward L2 community, travel orientation, cultural interest, and family influence. Through the Mplus software, fit indices were examined. However, the fit of the model was unsatisfactory. See Table 13.

Table 13

*Hypothesized SEM Result- Fit Indices of L2 Motivation Factors*

Fit statistics	Chi square	DF	CFI	SRMR	RMSEA
L2 motivations	5984.195	1406	0.9	0.08	0.05

This marginal fit of the model leads the researcher to observe the modification indices that Mplus software provided. The fit indices showed marginal fit for the model (CFI < .9, SRMR > .05 and RMSEA = .05). To improve the model fit, modification indices (MI) were examined. MI generated by Mplus provided suggestions to improve the fit of the model, and relatively high MI value indicated that the instrument needed to be modified (MacCallum, Roznowski, & Necowitz, 1992). Based on MI, the following changes were made.

First of all, the modification has made to change the path between ideal L2 self and travel orientation based on the modification index. From the hypothesis model, travel orientation is tentatively influenced by ideal L2 self. This is because few studies have explored the relationship between travel orientation and other motivation factors, so it does not have any clear supports for path analysis. Only one study was found (Noels et al., 2003) that it has results that traveling is highly associated to intrinsic motivation. Through the structural model in this research, however,

it indicates that ideal L2 self is significantly influenced by travel orientation. Thus, this path has been changed in its direction.

Second, instrumentality of promotion is suggested as one of the predictors for ought-to L2 self through modification. In hypothesized model, instrumentality prevention and family influence are the factors affect ought-to L2 self. However, in this study, the statistical results suggest that instrumentality of promotion is one of the strongest predictors for ought-to L2 self with significant  $p$  value. So the path of ought-to L2 self on instrumentality of promotion was added.

Lastly, cultural interest has been added to attitudes toward language learning. Attitudes toward language learning has been influenced only by ideal L2 self. From this research, cultural interest can be one of the predictors for attitudes toward language learning at the same time. These changes made substantial changes in the fit, enhanced the current theory, and showed a significant coefficient for parameter estimation, so these were taken.

With the modifications of the model, the fit indices are acceptable and show good fit overall. Table 14 shows the fit indices of result from L2 motivation model. CFI indicated that the model met the criteria ( $CFI > .9$ ). Both RMSEA and SRMR reach the criteria too ( $SRMR < .08$ ,  $RMSEA < .05$ ). Figure 4 shows the final model of L2 motivation.

Chi-square statistics, Bayesian Information Criterion (BIC), root mean square residual, and comparative fit index (CFI) are reported. Chi-square is statistically significant ( $p < .001$ ). To examine the differences between hypothesized model and final model, Bayesian Information Criterion (BIC) is adopted to compare the two models. Based on the result, hypothesized model BIC(187215.86) is larger than final model BIC (186310.74). The differences are large enough

based on the criteria from study (>10) (Kass & Raftery, 1995) to indicate that final model is more suitable for Korean context.

Table 14

*The Final Model of SEM of L2 Motivation Model in a Korean Context*

Fit statistics	Chi square	DF	CFI	SRMR	RMSEA
L2 motivations	5021.27	1398	0.92	0.06	0.04

Table 15

*Correlation Matrix of L2 Motivation Factors*

	Inten	Ideal	ought	Famil	Inspro	Atlang	inspre	anx	atcom	cul	tra
Inten	1										
Ideal	.65	1									
Ought	.21	.19	1								
Fami	.18	.20	.47	1							
Inspro	.25	.31	.60	.33	1						
Atlang	.63	.61	.13	.15	.21	1					
Inspre	.06	.04	.47	.28	.37	.01	1				
Anx	-.21	-.26	.14	.04	.18	-.30	.25	1			
Atcom	.45	.59	.18	.25	.29	.52	-.02	-.25	1		
Cul	.38	.41	.13	.17	.20	.54	-.02	-.21	.69	1	
trav	.39	.54	.28	.28	.44	.39	.1	-.11	.58	.4	1

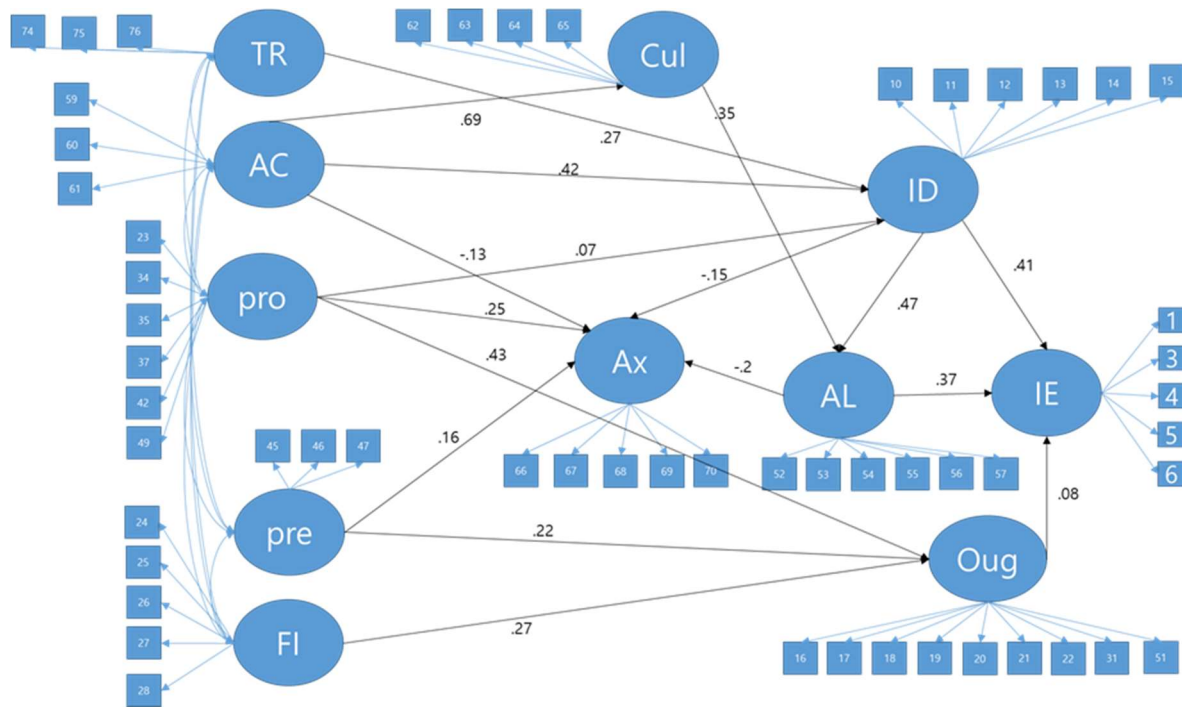


Figure 4. Final SEM model of L2 motivation. (IE- Intended effort; ID- Ideal L2 self; OUG- ought-to L2 self; Fi- family influence; Pro- Instrumentality-Promotion; AL-Attitudes toward language learning; Pre- Instrumentality-Prevention; Ax- Anxiety; AC- Attitudes toward L2 community; Cul- Cultural interest; TR- Travel orientation.)

### Parameter Estimation

First, ideal L2 self is influenced by attitudes toward L2 community, instrumentality promotion, and travel orientation ( $\gamma=.42, .07, \text{ and } .27$ , respectively). 41.3% of the variance of ideal L2 self is explained by travel orientation, attitudes toward L2 community, and instrumentality promotion. One of the new findings from this research is that travel orientation is found to be one of the predictors of ideal L2 self. From this research, I can find the predictive power of travel orientation toward ideal L2 self. On average, one standard deviation increase on travel would result .27 standard deviation increase in ideal L2 self. Additionally, attitudes toward L2 community and instrumentality promotion are the predictors of the ideal L2 with significant statistical support ( $p<0.05$ ).

Moreover, instrumentality promotion is one of the predictors for ought-to L2 self along with instrumentality prevention and family influence. To be specific, instrumentality promotion indicates higher predictor ( $\gamma=.43, p < .001$ ) for ought-to L2 self than instrumentality prevention ( $\gamma=.22, p < .001$ ) and family influence ( $\gamma=.27, p < .001$ ). Both instrumentality promotion and prevention and family influence explain 48.1% of the variances of ought-to L2 self.

Third, intended effort is influenced by ideal L2 self, ought-to L2 self and attitudes toward language learning ( $\beta=.41, \beta=.08, \beta=.37, p < .001$ ). Among them, ideal L2-self indicated the highest value of parameter toward intended effort. Ideal L2 self, ought-to L2 self, and attitudes toward language can explain 51.7% of the variances of intended effort.

Attitudes towards language learning are influenced by ideal L2 self ( $\beta=.47, p < .001$ ), and cultural interest has been found as one of the predictors for attitudes toward language learning along with ideal L2 self. ( $p < .001$ ). 47.5% of the variance of attitudes towards language learning are explained by the ideal L2 self and cultural interest.

Fourth, anxiety has positive relations with both instrumentality promotion and prevention while negative relations with attitudes toward language, attitudes toward community and ideal L2 self. Increasing on instrumentality would result increase on anxiety ( $\gamma = .16, \gamma = .25$ , respectively). However, attitudes toward language, attitudes toward community and ideal L2 self would have an inversely proportional result with student's anxiety ( $\beta = -.2, \gamma = -.13$ , and  $\beta = -.15$ , respectively). This means that attitudes toward language, attitudes toward community, and ideal L2 self have negative effects on anxiety. 21.3% of the variance of anxiety are explained by instrumentality promotion, instrumentality prevention, attitudes toward L2 community, attitudes toward language learning and ideal L2 self which shows small values compared to the others.

Attitudes toward L2 community affects cultural interest. The parameter value is .7 ( $p < .001$ ) which is the highest path parameter among paths from L2 motivation in a Korean context. Also, attitudes toward L2 community can explain 47.8% of the variances of cultural interest.

### **Indirect Effect**

Overall, anxiety decreases 0.274 standard deviation by every standard deviation increases in the attitudes toward L2 community. There are statistically significant mediation effects (-0.149,  $p < .001$ ) by ideal L2 self, attitudes toward language and culture interest between anxiety and attcom. The anxiety increases .23 standard deviation by every standard deviation increase in instrumentality promotion. There are mediation effects between anxiety and instrumentality promotion which are ideal L2 self and attitudes toward language, a total indirect effect of -.02. This is one of the more interesting finding from mediator effect from this research which means ideal L2 self and attitudes towards language learning would decrease the level of anxiety from the students while instrumentality promotion increases that of anxiety. Attitudes toward L2 language learning is a mediator between anxiety and ideal L2 self and between ideal L2 self and intended effort, a total indirect effect of -.09 and .17, respectively.

### **Result- L2 Motivation and L2 Proficiency in a Korean Context**

The second research question is “What are the structural relationships among L2 motivational factors and L2 proficiency? To examine the structural relationship, SEM was conducted to test the hypothesized model. Descriptive statistics are presented in Table 16.

Table 16

*Descriptive Statistics of Participants*

School	Gender			Age	Mean	Year of school				Study abroad	
	Total	M	F	Range		1	2	3	4	En	Non En
1	421	259	162	20-29	24.5	18	166	140	97	56	6
2	73	16	57	20-26	23	0	12	60	1	8	0
3	7	1	6	20-25	22.5	0	3	1	3	3	0
4	11	2	9	20-25	22.5	0	9	1	1	2	0
5	45	7	38	20-26	23	0	37	8	0	4	0
6	9	8	1	20-26	23	0	8	0	1	2	1
7	40	12	28	20-28	24	1	15	11	13	3	2
8	154	67	87	20-30	25	0	14	54	86	23	16
9	145	130	15	19-26	22.5	135	10	0	0	20	4
Total	905	502	403	19-30	23.5	166	263	275	201	119	29

Table 17

*Descriptive Statistics of Schools and Majors*

School	1	2	3	4	5	6	7	8	9	10	11	Total
1	137	15	15	27	21	45	38	17	106	0	0	421
2	0	0	0	0	0	0	0	0	0	73	0	73
3	7	0	0	0	0	0	0	0	0	0	0	7
4	0	0	0	0	0	0	0	0	0	11	0	11
5	0	0	0	0	0	0	0	0	0	45	0	45
6	9	0	0	0	0	0	0	0	0	0	0	9
7	18	0	2	11	4	0	1	0	1	4	0	40
8	18	0	0	125	7	0	3	0	0	1	0	154
9	0	0	0	0	63	0	0	0	0	0	82	145
Total	189	15	17	163	95	45	41	17	107	103	82	905

Vertical number: school

Horizontal number: majors

Major 1: Science; 2: English education. 3: Education 4. Liberal arts 5. Business 6. Tour translation 7. English literacy 8. Law 9. Medical related 10. Engineer 11. Flight service



Table 18

*Descriptive Statistics of L2 Motivational Factors and L2 Proficiency*

	Mean	SD	Min	Max	Skewness	Kurtosis
TOEIC	695.81	178.75	100	990	-.50	2.42
Intended	3.59	.79	1	5	-.53	3.54
Ideal	3.32	.97	1	5	-.31	2.61
Ought	2.58	.84	1	5	.08	2.53
family	2.45	.93	1	5	.17	2.35
InstrPro	3.66	.78	1	5	-.69	3.78
Attlang	2.97	.93	1	5	-.002	2.67
InstrPre	2.79	1.07	1	5	-.06	2.25
Anx	3.12	.95	1	5	-.20	2.56
Attcom	3.70	.93	1	5	-.44	3.02
Culture	3.62	.86	1	5	-.51	3.37
Travel	3.61	.96	1	5	-.60	3.08

**SEM of L2 motivation and L2 proficiency**

Among 1373 participants, 905 students reported that they have TOEIC scores. Thus, a total of 905 students were examined to analyze the relationships between L2 motivations and L2 proficiency through SEM. This includes 11 L2 motivational factors and TOEIC scores: ideal L2 self, ought-to L2 self, intended effort, anxiety, instrumentality promotion, instrumentality prevention, attitudes toward language learning, attitudes toward L2 community, travel

orientation, cultural interest, and family influence. Through the Mplus software, fit indices were examined. However, the fit of the model was unsatisfactory. See Table 19.

Table 19

*Hypothesized SEM Result- Fit Indices of L2 Motivation Factors and L2 Proficiency*

Fit statistics	Chi square	DF	CFI	SRMR	RMSEA
L2 motivations/proficiency	4436.560	1451	0.9	0.08	0.05

This marginal fit of the model leads the researcher to observe the modification indices that Mplus software provided. The fit indices showed marginal fit for the model (CFI < .95, SRMR > .05 and RMSEA = .05). To improve the model fit better, modification indices (MI) were examined. MI generated by Mplus provide suggestion to improve the fit of the model, and relatively high MI value indicates that there need to make modification (MacCallum, Roznowski, & Necowitz, 1992). Based on MI, the following changes were made.

First of all, the path direction has been changed between ideal L2 self and travel orientation based on the modification index. From the hypothesis model, travel orientation is tentatively influenced by ideal L2 self. This is because few studies explored the relationship between travel orientation and other motivation factors so it does not have any clear supports for path analysis. Only one study was found (Noels et al., 2003) that has results that suggest traveling is highly associated to intrinsic motivation. Through this structural model in this research, however, it indicates that travel orientation predicts ideal L2 self with significant relations. Thus, this path direction has been changed.

Second, instrumentality of promotion is suggested as one of the predictor for ought-to L2 self through modification. In the hypothesized model, instrumentality prevention and family

influence are factors that affect ought-to L2 self. However, in this study, the statistical results suggest that not only instrumentality prevention and family influence are the predictors, but also instrumentality of promotion is one of the strongest predictor for ought-to L2 self with significant p value. So the path of ought-to L2 self on instrumentality of promotion was added.

Third, unlike the final model of L2 motivation, instrumentality-promotion does not affect ideal L2 self on the final model of L2 motivation and L2 proficiency. There was no MI suggestion in L2 motivation model. However, in the model of L2 motivation and L2 proficiency, the MI value of this path was relatively higher than other MI values as and has no significant p value. Thus, the path between instrumentality-promotion to ideal L2 self has removed from the model.

Fourth, cultural interest has been added to attitudes toward language learning. Attitudes toward language learning has been influenced only by ideal L2 self. From this research, cultural interest can be one of the predictor for attitudes toward language learning at the same time. Those changes made substantial changes in the fit, enhanced the current theory, and showed significant coefficient for parameter estimation, so they were taken.

Lastly, intended effort is not a significant predictor for L2 proficiency. P value of the path from intended effort to L2 proficiency is not statistically significant. That means that intended effort is not a significant predictor for L2 proficiency. Thus, this path has been removed from the model of L2 motivation and L2 proficiency.

With these modifications of the model, the fit indices are well established and show good fit, overall. Table 20 shows the fit indices of result from L2 motivation model. CFI indicated that the model met the criteria ( $CFI > .9$ ). Both RMSEA and SRMR reach the criteria too ( $SRMR < .08$ ,  $RMSEA < .05$ ). Figure 5 shows the final model of L2 motivation.

Chi-square statistics, Bayesian Information Criterion (BIC), root mean square residual, and comparative fit index (CFI) are reported. Chi-square is statistically significant ( $p < .001$ ). Hypothesized model and final model are non-nested, Bayesian Information Criterion (BIC) was adopted to compare the model. Based on the result, hypothesized model BIC (136483) is larger than final model BIC (136155.394). The differences are large enough (327.606) based on the criteria from study ( $>10$ ) (Kass & Raftery, 1995) to indicate that final model is more suitable for a Korean context.

Table 20

*SEM Result- Fit Indices of L2 Motivation Factors/L2 Proficiency*

Fit statistics	Chi square	DF	CFI	SRMR	RMSEA
L2 motivations	4102.15	1450	0.91	0.06	0.04

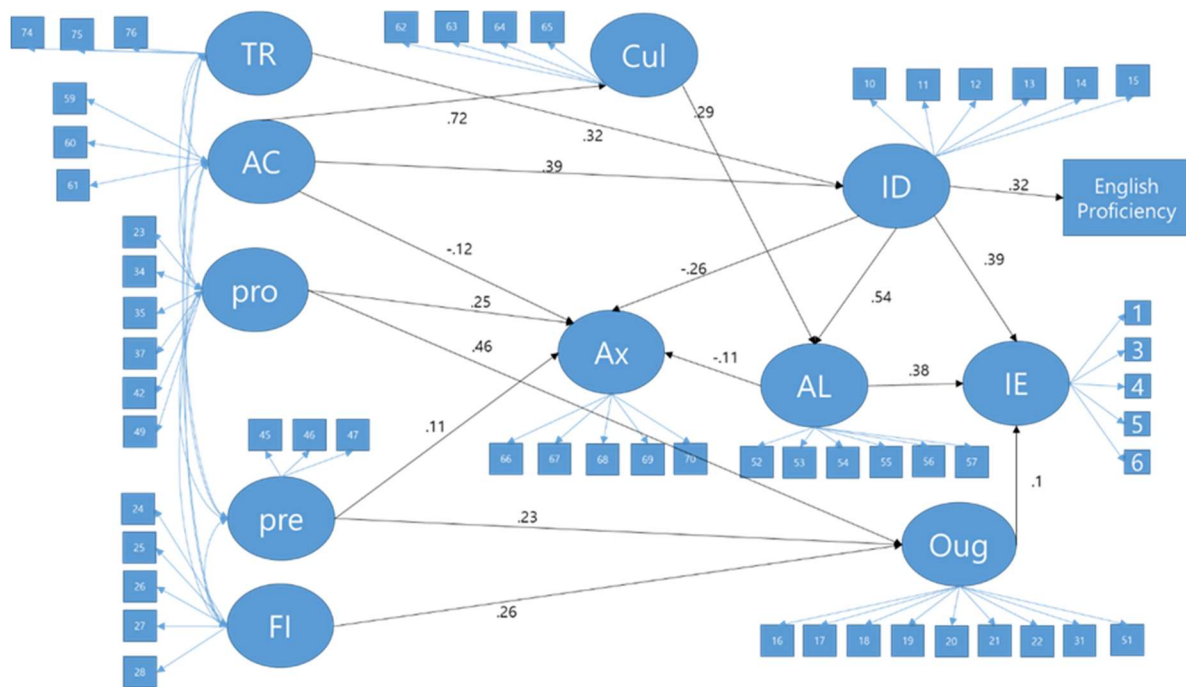


Figure 5. Final SEM model of L2 motivation and L2 proficiency. (IE- Intended effort; ID- Ideal L2 self; Oug- ought-to L2 self; Fi- family influence; Pro- Instrumentality-Promotion; AL- Attitudes toward language learning; Pre- Instrumentality-Prevention; Ax- Anxiety; AC- Attitudes toward L2 community; Cul- Cultural interest; TR- Travel orientation.)

Table 21

*Correlation Matrix of L2 Motivation Factors and L2 Proficiency*

	1	2	3	4	5	6	7	8	9	10	11	12
1. Inten	1											
2. Ideal	.66	1										
3. Ought	.23	.20	1									
4. Fami	.19	.20	.5	1								
5. Inspro	.26	.30	.63	.35	1							
6. Atlang	.65	.66	.14	.16	.22	1						
7. Inspre	.06	.02	.48	.32	.35	.004	1					
8. Anx	-.22	-.32	.12	.02	.16	-.29	.20	1				
9. Atcom	.44	.58	.18	.25	.27	.52	-.04	-.27	1			
10. Cul	.37	.42	.13	.18	.19	.52	-.03	-.21	.72	1		
11. trav	.40	.56	.28	.27	.43	.42	.06	-.14	.56	.40	1	
12. Toeic	.21	.32	.06	.06	.09	.21	.007	-.23	.18	.13	.18	1

All the paths were significant at  $p < .001$  except two: TOEIC on intended effort and ideal L2 self on instrumentality promotion ( $ps > .05$ ). The new findings from this research is that ideal L2 self is the only predictor for L2 proficiency in the L2 motivation and L2 proficiency model ( $\beta = .32$ ). Theoretically, the hypothesized model showed that TOEIC is influenced by intended effort and ideal L2 self. However, in a Korean context, it turns out that only ideal L2 self shows significant path toward L2 proficiency. Ten percent of the variances of L2 proficiency is explained by ideal L2 self. The other notable finding is that instrumentality promotion does not affect ideal L2 self unlike the result of L2 motivational factors model. Thus, in this model, ideal

L2 self is influenced by attitudes toward L2 community and travel orientation ( $\gamma=.39$ ,  $\gamma=.32$ , respectively). 42.2% of the variance of ideal L2 self is explained by travel orientation and attitudes toward L2 community.

Ought-to L2 self is influenced by instrumentality promotion the most ( $\gamma=.46$ ), instrumentality prevention and family influence ( $\gamma=.23$ ,  $\gamma=.26$ ). All of the instrumentality (promotion and prevention) and family influence explain 53% of the variances of ought-to L2 self. Intended effort is affected by ideal L2 self and attitudes toward language learning and merely from ought-to L2 self ( $\beta=.39$ ,  $\beta=.38$ ,  $\beta=.1$ ). Ideal L2 self, ought-to L2 self, and attitudes toward language can explain 52.1% of the variances of intended effort. Ideal L2 self and cultural interest affect attitudes toward L2 language ( $\beta=.54$ ,  $\beta=.29$ ). 50.5% of the variance of attitudes towards language learning are explained by the ideal L2 self and cultural interest. With similar results from SEM of L2 motivation factors, anxiety has positive relations with instrumentality promotion and prevention while it is negatively affected by attitudes toward L2 language, attitudes toward L2 community, and ideal L2 self ( $\gamma=.11$ ,  $\gamma=.25$ ,  $\beta =-.11$ ,  $\gamma=-.12$ ,  $\beta=-.26$ ). 20.5% of the variance of anxiety are explained by instrumentality promotion, instrumentality prevention, attitudes toward L2 community, attitudes toward language learning, and ideal L2 self which shows small values compared to the others. Cultural interest on attitudes toward L2 community indicated the most powerful predictor among all the paths ( $\beta=.72$ ). Attitudes toward L2 community can explain 51.6% of the variances of cultural interest.

### **Indirect Effect**

First, anxiety decreases 0.27 standard deviation by every standard deviation increase in the attitudes toward L2 community. There are statistically significant mediation effects ( $-0.14$ ,  $p <.001$ ) by ideal L2 self, attitudes toward language, and culture interest between anxiety and

attitudes towards L2 community. Attitudes toward L2 language learning is a mediator between anxiety and ideal L2 self and between ideal L2 self and intended effort, a total indirect effect of -.31 and .59, respectively.

### **Discussion**

The research question of this chapter were to (a) examine the full structure model of L2 motivational factors among Korean EFL college students, and (b) examine the full structure model of L2 motivational factors and L2 proficiency.

The findings of this study confirmed the two models which are among L2 motivational factors and L2 motivational factors/L2 proficiency which were previously hypothesized. Cultural interest is influenced by attitudes toward L2 community. This is because the questions that attitudes toward L2 community asks regarding the preferences of the target language country which is highly related to the participants' interests of the target language culture. This result is similar to the previous study (Madkhali, 2016) that attitudes toward L2 community is highly correlated to cultural interest. Madkhali (2016) observed Saudi college students who learned English as a foreign language and they concluded the attitudes toward L2 community is highly correlated to cultural interest through the correlation analysis. Intended effort is influenced by attitudes towards language, ideal L2 self and ought-to L2 self. Previous researchers (Madkhali, 2016; Ryan, 2008; Papi, 2010; Alqahtani, 2018; Taguchi et al., 2009) have had similar results to this. According to previous research, Madkhali (2016) concluded that intended effort is highly correlated to the other factors such as ideal L2 self, cultural interest, attitudes toward L2 community, family influence, instrumentality promotion and prevention, attitudes toward L2 language, and travel orientation through the correlation analysis. Compared to Madkhali (2016), this study indicated that intended effort has found to be influenced by ideal L2 self, ought-to L2



self, and attitudes toward L2 language due to the differences of participants' characteristics and statistical analysis. The findings from this study corresponds to Taguchi et al. (2009) which examined East Asian participants, Chinese and Japanese, and analyzed through SEM that intended effort is predicted by ideal L2 self, attitudes toward language learning and ought-to L2 self. Anxiety is the one factor which is influenced by the most factors over other L2 motivational factors which are ideal L2 self, attitudes towards L2 language, attitudes toward L2 community, instrumentality promotion, and prevention. This result is in line with many previous studies (MacWhinnie & Mitchell, 2017; Algahtani, 2018; Papi, 2010; Jain & Sidhu, 2013; Chun et al, 2017; Wu & Lin, 2014; Madkhali, 2016). Anxiety is the most significant negative indicator alongside ideal L2 self, attitudes toward language learning, instrumentality, promotion (Madkhali, 2016; Papi, 2010), attitudes toward L2 language and community (Jain & Sidhu, 2013; Chun, 2017), and instrumentality motivation (Wu & Lin, 2014). In this study, anxiety is negatively influenced by attitudes toward L2 language, attitudes toward L2 community and ideal L2 self. From the results of this study, it can be interpreted that students motivation and their overall attitudes and ideal L2 self would decrease their anxiety level. This is also interpreted in the previous study (Madkhali, 2016; Papi, 2010; Jain & Sidhu, 2013) that anxiety has a negative relationship with other L2 motivational factors. Overall, the structure model from this result is well established with significant parameter estimation as well as good fit index.

However, in this research, there are also newly identified paths in the model different from what was hypothesized. First of all, previous research (e.g., Clément & Kruidenier, 1983; Noels et al, 2000), did not examine any causal relationship between travel and other L2 motivational factors, although travel is highly correlated with more self-determined forms of motivation (Noels et al., 2003). Clément and Kruidenier (1983) reported that travel is inter-

correlated with intrinsic motivation. However, in this study, travel orientation was found to be one of the predictors for ideal L2 self. This is similar to results from Lai (2013) that travel orientation is highly correlated with ideal L2 self. Lai (2013) concluded that travel orientation indicated high correlations with ideal L2 self, but in this study, it has causal relationship that travel is one of the predictor for ideal L2 self. This can be interpreted that L2 learners are motivated to learn language because they want to travel to the other countries. According to Statistics Korea (2019), the travelers in Korea in 2009 was approximately 9,500,000 while it increased to 28,696,000 in 2018. Compare to 2017, there was an 8% increase in the number of travelers in 2018. These statistics shows that Koreans who travel outside of South Korea have consistently increased, and that can explain that travel is an important factor to South Koreans

Second, attitudes towards language learning are not only influenced by ideal L2 self, but also influenced by cultural interest which is newly identified through the SEM analysis. From the hypothesized model, attitudes toward L2 language is influenced by ideal L2 self. This model had similar results with Lee and Lo (2017) that attitudes toward L2 language is influenced by ideal L2 self through the regression analysis. In addition, Taguchi et al. (2009) supports that attitudes toward L2 language is influenced by ideal L2 self from SEM analysis. However, in this study, the researcher found that cultural interest is one of the predictors for attitudes towards language learning. This can be interpreted that Korean college students are interested in other countries' cultures, so they are motivated to learn other languages. As an example, Lee (2008) studied whether American soap operas affect Korean high school and junior high school students' English-speaking motivation and speaking skills, and it concluded that students from South Korea has positive attitudes toward language learning after they watched American soap operas.

Third, a new path from instrumentality-promotion to ought-to L2 self is identified through the SEM analysis. From the hypothesized model, ought-to L2 self is predicted by instrumentality prevention and family influence. This is supported by Taguchi et al. (2009) that instrumentality prevention and family influence are the predictors of ought-to L2 self, and this is shown in an East Asian context that students learning are usually influenced by their family (Lockwood et al., 2005). Liu and Park (2012) also argued a similar concept in a Korean context, that student's extrinsic motivation is usually derived from their parents' wish or demands. In addition to that, ought-to L2 self is influenced by instrumentality both promotion and prevention. To support this concept, Bailey (1986) suggested motivational dichotomies. There is extrinsic and instrumental motivation from the concept of motivational dichotomies, about "external power wants L2 learner to learn L2." (Brown, 2007). The theory suggests that extrinsic motivation can be explained by instrumentality, overall.

Fourth, in the model of L2 motivation and L2 proficiency, L2 proficiency is influenced by student's ideal L2 self. Unlike the hypothesized model, intended effort is not identified as a predictor for L2 proficiency. Previous studies have different conclusions of L2 motivation and its predictive power on L2 proficiency. Some previous studies (Yang & Kim, 2011; Kim & Kim, 2011; Moskovsky et al., 2016) could not find a relationship between L2 motivation and L2 proficiency from their studies. Moskovsky et al. (2016) conducted research of Saudi learners of English as a foreign language, but they could not find the correlation between L2 motivations and L2 proficiency. On the other hand, other researchers have concluded that L2 proficiency is influenced by ideal L2 self and L2 learning experience (Lamb, 2012), ideal L2 self (Fengge, 2013; Kim, 2012) or intended effort (Yashima et al., 2017). Kim and Kim (2017) explored secondary school students' motivation and its predictive power to L2 proficiency which

concludes that ideal L2 self is the most predictive power on L2 proficiency. On the other hand, Kim et al. (2017) had different conclusions when they examined Korean EFL college students that their L2 proficiency is mostly instrumental oriented. However, this research has opposite results from Kim et al. (2017) who suggest that Korean EFL college students' L2 proficiency is predicted by ideal L2 self since intended effort does not show a significant p value. This means that Korean EFL college student are more driven into ideal L2 motivation which has predicative power of their L2 proficiency. The finding from this research highly support the predicative power of ideal L2 self toward L2 proficiency that student's ideal L2 self motivation is important to their L2 language proficiency.

Lastly, unlike the model of L2 motivation, instrumentality promotion is not a predictor for ideal L2 self in the model of L2 motivation and L2 proficiency. Previously, ideal L2 self is influenced by attitudes toward L2 community, instrumentality promotion, and travel orientation in the L2 motivation model. It is supported by studies from Ghanizadeh and Rostami (2015), Taguchi et al. (2009), Madkhali (2016) and Roshandel et al. (2018). Madkhali (2016) has conclusion that ideal L2 self is highly correlated to attitudes toward L2 community, instrumentality-promotion, and travel orientation. The SEM analysis from Taguchi et al. (2009) also indicated that instrumentality-promotion and attitudes toward L2 community are predictors for ideal L2 self. However, the path from instrumentality-promotion to ideal L2 self is not statistically significant according to the SEM analysis of L2 motivation and L2 proficiency.

### **Limitation and Recommendation**

This research explored 11 L2 motivational factors and its predictive power to L2 proficiency. From the result, one of the L2 motivational factor, ideal L2 self, indicated that it predicts L2 proficiency. Thus, this research provides the full structure model of 11 L2

motivational factors and L2 proficiency. However, there should be other motivational factors that will also affect L2 proficiency which were not covered in this research. For future studies, researchers can adopt other L2 motivational factors and L2 achievement scores to build the structure model. Moreover, future studies can also build up the L2 motivation model by adding other L2 motivation factors to the structure model from this study to observe its predictive power to L2 proficiency.

Moreover, future researchers can compare the L2 motivation by groups, ages and year of schools. Student's motivation can be different by groups and their overall goal of the academic year. This will provide the details of Korean student's motivation based on their background and status.

For additional findings, there are statistically significant mediators in the L2 motivational model were found. One of the findings is that ideal L2 self and attitudes toward language learning are the mediators between anxiety and instrumentality promotion. The results indicated that these mediators reduce the level anxiety in Korean context. Ideal L2 self, attitudes toward language and cultural interest are the mediators between anxiety and attitudes towards L2 community. Attitudes toward L2 language is the mediator between anxiety and ideal L2 self and between ideal L2 self and intended effort. For the future research, researchers may examine the mediators as important factors for its predictive power to L2 proficiency.

### **Conclusion**

By using the validated questionnaire from Chapter 3, I explored the L2 motivational model and its predictive power to L2 proficiency through SEM. Based on the results from the analysis, full structure models were identified in models of L2 motivation and L2 motivation/proficiency. Three new paths were added on hypothesized L2 motivational models:

Travel orientation to ideal L2 self, cultural interest to attitudes toward language learning, and instrumentality-promotion to ought-to L2 self. From the L2 motivation/L2 proficiency model, three paths were added on and two paths were removed from hypothesized model: travel orientation to ideal L2 self, cultural interest to attitudes toward language learning, and instrumentality-promotion to ought-to L2 self were added while intended effort to L2 proficiency and instrumentality-promotion to ideal L2 self were removed. Among 11 L2 motivational factors, ideal L2 self is the only factor which predicts L2 proficiency. Overall, I conclude that L2 motivational factors has predictive power to L2 proficiency.

## CHAPTER V

### CONCLUSION

There are five chapters in this dissertation about the L2 motivation and L2 proficiency among Korean college students in Dörnyei's L2MSS theory. Chapter 1 provided an overview of the dissertation with an introduction. Chapter 2 was a systematic literature review of the L2 motivation and L2 proficiency research in EFL context. In Chapter 3, the translation and validation of the instrument from Taguchi et al. (2009) into a Korean language and Korean context was explored through EFA and CFA analysis. Chapter 4 provided L2 motivational relationships and L2 motivation/proficiency causal relationship through SEM among Korean college EFL learners with the validated instrument from Chapter 3. The data had been collected from South Korea. In Chapter 5, the findings from the previous chapters are summarized and synthesized.

Chapter 1 included research background, the research significance, research purpose, and Chapter 2, 3, and 4 are potential journal-ready articles. The relationships among the chapters are that Chapter 1 started the significance of the topic and guidance of the dissertation overview while Chapter 2 was a systematic literature review of L2 motivation/L2 proficiency in EFL context. Chapter 3 addressed L2 motivation instrument validation in a Korean context which was adopted and used for Chapter 4 which measured the L2 motivation and explored the L2 motivation/L2 proficiency model among Korean EFL learners. Overall, Chapter 5 synthesizes Chapter 1 to Chapter 4.

In Chapter 2, the researcher provided systematic literature review of L2 motivation in EFL context, especially in East Asia. Through the five data bases such as ERIC, Education

Source, PsycINFO, LLBA, and Psychology & Behavioral science collection, the researcher adopted best evidence method and PRISMA protocol to screen and select the articles with inclusion and exclusion criteria. A total of eight articles were selected to observe the instruments, psychometrics of instrument, L2 motivational factors, and the relationship of L2 motivational factors and L2 proficiency that the researchers provided in their research. Chapter 2 observed and synthesized the selected instrument and how researchers adopted it in previous studies in an EFL context.

In Chapter 3, the researchers translated and validated the questionnaire originally from Taguchi et al. (2009) which was written in English into a Korean context. The author used translation and back translation methods and validated the content with experts in this area. A total of 1,373 Korean college students participated in answering the questionnaire. Using EFA and CFA analysis, the instrument identified the L2 motivation factors, its correlation, and fit index. Through the EFA, 11 L2 motivational factors are identified. The findings in Chapter 3 indicated that integrativeness was not identified among L2 motivational system in a Korean context. To observe the relationship between Chapter 3 and Chapter 4, Chapter 3 validated the instrument and confirmed the measurement model while Chapter 4 used the questionnaire validated in Chapter 3 and explored the structure model of L2 motivation and its predictive power of L2 proficiency in a Korean context.

In Chapter 4, the author examined the structure model of L2 motivation and L2motivaion/L2 proficiency in a Korean context with the validated questionnaire from Chapter 3. This has been screened in Chapter 2, but not many studies conducted L2 motivation in Korean context with Korean college EFL learners. With SEM analysis, L2 motivation model and its predictive power was found. From the results, one of the L2 motivation, ideal L2 self, is the only



factors that have predictive power of L2 proficiency with a good fit of the final model. The findings in Chapter 4 were synthesized and added in Chapter 5.

In Chapter 5, the author summarized and synthesized the significance and findings from all the chapters. Overall, Chapter 5 is a summary that describes the process value of the dissertation. At the end, the author provides implication and limitation as well.

### **Summary of Study Significance**

The author searched five data bases and found eight studies which met the inclusive and exclusive criterion and observed them in systematic literature reviews in Chapter 2. By adopting a best evidence method, I systematically analyzed eight studies about L2 motivational factors, instrument to measure L2 motivation, psychometrics of the instrument, analysis method, and its power to L2 proficiency. This made me interested in area of L2 motivation in an EFL context, especially in a Korean context by using a questionnaire validated originally by Taguchi et al. (2009) to have more accurate and concise measuring. The findings provided the previous reviews about the instrument validity with an L2 motivation structure model in a Korean context using statistical analysis.

In Chapter 3, one of the L2 motivational questionnaire from Chapter 2 was chosen to be translated and validated in a Korean context. This questionnaire is originally from Taguchi et al. (2009) which was developed in L2MSS concept based from Dörnyei. Chapter 3 described what kind of questionnaires were used in other previous L2 motivation research within cross cultural context and gave rationale for translating and validating the L2 motivational questionnaire developed in English into Korean and explored the process by which it was validated. Moreover, I indicated the background and details of the questionnaire from Taguchi et al. (2009). I described details of translation/back translation process, pilot study and content validation to

choose the L2 motivational factors to identify. The data had been collected from Korea and the participants were Korean college students who learned English as a foreign language. For the data analysis, EFA and CFA were conducted to observe L2 motivation identification and a measurement model. The results led me to choose the L2 motivation factors which were identified and its goodness of fit to examine the further research in Chapter 4. This translated and validated Korean version of L2 motivation instrument will be provided to the future researchers who want to measure the L2 motivation among Korean EFL learners.

In Chapter 4, using the validated instrument from Chapter 3, I explored the L2 motivation model and its predictive power to L2 proficiency with adopting SEM for full structure model. Based on the previous research, I set the hypothesized models of L2 motivation and L2 motivation/L2 proficiency with identified L2 motivation variables from Chapter 3. Through SEM analysis, the L2 motivation model was modified and indicated goodness of fit. In addition, with modified L2 motivation model, I examined L2 motivation/proficiency model with TOEIC scores from the students. Observing a full structure model, I verified the L2 motivation and its predictive power to L2 proficiency among Korean college EFL students.

### **Summary of the Key Findings**

In Chapter 2 , through the systematic literature review, I found that eight studies conducted research in EFL context in East Asia but not included Korean context. The results of this chapter indicated a) ideal L2 self and ought-to L2 self factors are frequently observed for L2 motivation studies and its correlation or causal relationships with other L2 motivation factors such as willingness to communicate, L2 anxiety etc.; b) three (Liu & Park, 2012; Munezane, 2014; MacWhinnie & Mitchell, 2017) out of eight studies conducted found relationships between L2 motivation and L2 proficiency in willingness to communicate, self-confidence, and

ideal L2 self indicated correlations with L2 proficiency; c) all the studies adopted items from many different instruments to explore the L2 motivation factors, and they validated their instruments; d) to analyze the data, they adopted many statistical method such as PCA, EFA, CFA, SEM and IRT. However, too few factors were validated and examined within Dörnyei's L2MSS theory, and none of the research was conducted in a Korean, this made me explore L2 motivation and its predictive power to L2 proficiency in a Korean context.

In Chapter 3, the researcher conducted EFA and CFA analysis. Through the EFA, the factors and items were identified. Among 12 factors, 11 factors were identified and 15 items were deleted due to the low loadings and multi-cross loadings. With these factors and items, CFA was adopted to observe the measurement model and goodness of fit.

One of the major findings is that 11 factors were identified: intended effort, ideal L2 self, ought-to L2 self, family influence, attitudes toward language learning, attitudes toward L2 community, instrumentality-promotion, instrumentality-prevention, L2 anxiety, travel orientation and cultural interest. However, integrativeness was not identified. Second, some modifications were made to the questionnaire based on software indicating good fit (CFI=.92, SRMR=.05, RMSEA=.04) Third, translation and cultural adaptation into a Korean context needed to be adjusted for instrument validation. Some questions included nuance which culturally and linguistically could be differently perceived to Korean students. Lastly, family influence and ought-to L2 self were hard to differentiate in a Korean context. This is because Korean students usually have external motivation from parents' wish and forces. Overall, a validated instrument were developed for further L2 motivation research in Korean context.

In Chapter 4, two full structure models were examined: L2 motivation model and L2 motivation/L2 proficiency model. Through the SEM analysis, both models were observed with

fit indices. Both models indicated good fit (L2 motivation: CFI= .92, SRMR=.06 RMSEA=.04, L2 motivation/L2 proficiency: CFI=.91, SRMR= .06 RMSEA=.04). One of the major findings was that ideal L2 self affect the student's L2 proficiency. This indicates that L2 motivational factor has predictive power to examine their L2 proficiency. Second, travel orientation was found to be one of the predictors for ideal L2 self. Third, ought-to L2 self is influenced by instrumentality (promotion and prevention). This is supported by the motivational dichotomies from Bailey (1986). I also found statistically significant mediators in the L2 motivational model: ideal L2 self and attitudes toward language learning. These results provided that these mediators reduce the level of anxiety in a Korean context.

Overall, the full structure models of L2 motivation and L2 motivation/ L2 proficiency established models with good fit indices.

### **Limitation**

One limitation of this research is that literature reviews of the previous studies for the guideline of this research can be limited on information. The systematic literature review followed the systematic synthesis standard procedure proposed by Cooper (2007) to increase the rigor of this dissertation. Even though the systematic synthesis is considered a widely used and widely adopted searching method through several databases, the findings must be limited to the overall research quality of this method.

Another limitation of this research is that some schools only include students from one or two majors from their schools. The researcher collected data in 9 schools in South Korea, and 1373 Korean EFL learners participated. Even though the overall participants consist of many kinds of majors from different schools, some schools include participants from only one or two

majors from that school. This limitation stems from geographical limitations in that the researcher can only access participants who are willing to participate voluntarily.

Finally, not all the L2 motivational factors were examined. Through the pilot study, content validation, and translation/back translation method, only 12 factors were chosen for this research. However, other previous research included other L2 motivational factors such as language self-confidence, ethnocentrism, etc. This can be considered a limitation of this study because the researcher could not examine all of the L2 motivation factors in Korean context. Further research that studies L2 motivation in a Korean context may explore the possibilities of observing more L2 motivation factors in the future.

### **Implications and Recommendations**

From the findings of the systematic literature reviews, not many studies conducted L2 motivation studies within a Korean context in Dörnyei's L2MSS theory. Even though there are studies conducted on L2 motivation in EFL context from East Asian countries, they did not cover all the L2 motivation factors observed with SEM analysis. Since the self-study concept with statistical analysis has been readily used, educators may want to focus on individual level of L2 motivation-related research in the future.

My study provides a translated and validated Korean version of L2 motivation questionnaire of Taguchi et al. (2009). This questionnaire had been through translation and back translation into Korean and English, content validity, a pilot study, and measurement model analysis to be fully validated and modified into a Korean context. This L2 motivation questionnaire can be used for future educators or researchers who would like to measure the L2 motivation in a Korean context for further research or classroom observation.

This study implies that the questionnaire should be developed and modified according to the target population culture and linguistic characteristics. During EFA and CFA generation from this research, I found that there were items that were cross loaded due to the meaning confusion, so the questionnaire needed to be modified. This process suggests to the future researchers who would like to validate a questionnaire for their target population or context should be aware that questionnaires should be adequately modified and reframed to fit the research purpose and cultural/linguistic context.

This dissertation, like previous research, also showed that L2 motivation model and L2motivaion/proficiency model in a Korean context can be different from other models in different context. Even though I adopted the same L2 motivational factors to observe, models from a Korean context were different from other research. This implies that the L2 motivational models can be different depending on the participant's cultural background, target language, or population social norms. For the future researchers, it should be necessary for researchers to observe the L2 motivational structure model if their populations are different than the ones involved in this study since cultural differences and linguistic characteristics can differently affect the L2 learner's motivation.

Lastly, this dissertation provides a base line of L2 motivational and L2 motivation/L2 proficiency model in a Korean context. This can be a startup guideline for future researchers who hope to study populations based on the models that I provide. In other words, other researchers who would like to add more L2 motivational factors or other teaching methods in a Korean context may use the process or models that this dissertation provides. Additionally, this validation process can be a reference for the other L2 motivational studies. Future researchers

who would like to validate an instrument in their target population may start their research using this dissertation as an example.

## REFERENCES

- Alshahrani, A. A. (2016). L2 motivational self- system among Arab EFL learners: Saudi perspective. *International Journal of Applied Linguistics and English Literature*, 5, 145-152.
- Al-Shehri, A. H. (2009). Motivation and vision: The relation between the ideal L2 self, imagination and visual style. In Z. Dörnyei, & E. Ushioda (Eds.), *Motivation, language identity and the L2 self* (pp. 164-171). Bristol, UK: Multilingual Matters.
- Alqahtani, A. F. (2018). English language learning motivation and English language learning anxiety in Saudi military cadets: A structural equation modeling approach. *Arab World English Journal*, 9(3), 45-60.
- Aouri, Z. E., & Zerhouni, B. (2017). Motivation and language learning strategies used by Moroccan university EFL science students: A correlational study. *Arab World English Journal*, 8(2), 52-73.
- Aubrey, S. (2014). Development of the L2 motivational self system: English at a University in Japan. *JALT Journal*, 36(2), 153–174.
- Bailey, K. (1986). Class lecture. Monterey Institute of International Studies.
- Bastian, H., Glasziou, P., & Chalmers, I. (2010). Seventy-five trials and eleven systematic reviews a day: How will we ever keep up? *PLoS Medicine*, 7(9), e1000326.  
doi:10.1371/journal.pmed.1000326
- Bishop, D. I., & Hertenstein, M. J. (2004). A confirmatory factor analysis of the structure of temperament questionnaire. *Educational and Psychological Measurement*, 64(6), 1-11.



- Bowen, N. K., & Guo, S. (2011). *Structural equation modeling: Structural equation modeling*. USA: Oxford University Press.
- Brown, H. D. (2007). *Principle of language learning and teaching*. White Plains, NY: Pearson Education.
- Byrne, B. M. (1998). *Multivariate applications book series. Structural equation modeling with LISREL, PRELIS, and SIMPLIS: Basic concepts, applications, and programming*. Mahwah, NJ, US: Lawrence Erlbaum Associates Publishers.
- Cabrera-Nguyen, P. (2010). Author guidelines for reporting scale development and validation results in the journal of the society for social work and research. *Journal of the Society for Social Work and Research*, 1(2), 99-103.
- Chan, L. (2014). Effects of an imagery training strategy on Chinese university students' possible second language selves and learning experiences. In K. Csizér & M. Magid (Eds.), *The impact of self-concept on language learning* (357-376). Bristol: Multilingual Matters.
- Chen, S. A. (2010). *Using Mixed Methods to Explore L2 Motivation: A Study of Senior High School English Learners in Taiwan* (Unpublished doctoral dissertation). Warwick University, Coventry, UK.
- Cheng, H.-F., & Dörnyei, Z. (2007). The use of motivational strategies in language instruction: The case of EFL teaching in Taiwan. *Innovation in Language Learning and Teaching*, 1(1), 153-174
- Chun, S., Kim, H., Park, C., McDonald, K., Ha, O. S., Kim, D. L., & Lee, S. M. (2017). South Korean students' responses to English-medium instruction courses. *Social Behavior and Personality*, 45(6), 951-966.

- Clément, R. (1986). Second language proficiency and acculturation: An investigation of the effects of language status and individual characteristics. *Journal of Language & Social Psychology, 5*, 271-290.
- Clément, R., Dörnyei, Z., & Noels, K. (1994). Motivation, self-confidence and group cohesion in the foreign language classroom. *Language Learning, 44*, 417-448.
- Clément, R., & Kruidenier, B. G. (1983). Orientations in second language acquisition: I. The effects of ethnicity, milieu and target language on their emergence. *Language Learning, 33*, 272–291.
- Clément, R., & Baker, S.C. (2001) Measuring social aspects of L2 acquisition and use: Social characteristics and administration (Technical Report). Ottawa: School of Psychology, University of Ottawa.
- Cohen, A., & Oxford, R. L. (2001). Learning style survey for young learners. Minneapolis, MN: Center for Advanced Research on Language Acquisition. University of Minnesota.  
Retrieved from <http://www.tc.umn.edu/~adcohen/publications.html#strategies>.
- Cooper, H., Hedges, L. V., & Valentine, J. C. (2009). The handbook of research synthesis and meta-analysis. New York: Russell Sage Foundation.
- Cooper (2007) Evaluating and Interpreting Research Synthesis in Adult Learning and Literacy. Boston, Mass. : National College Transition Network, New England Literacy Resource Center/World Education, Inc.
- Csizér, K., & Dörnyei, Z. (2005). The internal structure of language learning motivation and its relationship with language choice and learning effort. *The Modern Language Journal 89*, 19-36.

- Csizér, K., & Kormos, J. (2009). Learning experiences, selves and motivated learning behavior: A comparative analysis of structural models for Hungarian secondary and university learners of English. In Z. Dörnyei & E. Ushioda (Eds.), *Motivation, language identity and the L2 self* (pp. 98-119). Bristol, England: Multilingual Matters.
- Dörnyei, Z. (1990). Conceptualizing motivation in foreign language learning. *Language Learning, 40*, 46-78. doi: 10.1111/j.1467-1770.1990.tb00954.x
- Dörnyei, Z. (2001) *Teaching and Researching Motivation*. Harlow: Longman.
- Dörnyei, Z. (2002). The motivational basis of language learning tasks. In P. Robinson (Ed.), *Individual differences in second language acquisition* (pp.137-158). Amsterdam: John Benjamins.
- Dörnyei, Z. (2003) *Questionnaires in Second Language Research: Construction, Administration, and Processing*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Dörnyei, Z. (2005). *The psychology of the language learner: Individual differences in second language acquisition*. Mahwah, NJ: Erlbaum
- Dörnyei, Z. (2009). The L2 motivational self system. In Z. Dörnyei & E. Ushioda (Eds.), *Motivation, language identity and the L2 self* (pp. 9-42). Bristol, UK: Multilingual Matters
- Dörnyei, Z. (2010). Researching motivation: From integrativeness to the ideal L2 self. In S. Hunston & D. Oakey (Eds.), *Introducing applied linguistics: Concepts and skills* (pp. 74–83). New York: Routledge/Taylor & Francis.
- Dörnyei, Z. (2014). Researching complex dynamic systems: 'Retrodictive qualitative modelling' in the language classroom. *Language Teaching, 47*(1), 80-91.

- Dörnyei, Z., & Csizér, K. (2002). Some dynamics of language attitudes and motivation: Results of a longitudinal nationwide survey. *Applied Linguistics*, 23, 421-462.
- Dörnyei, Z., Csizér, K., & Németh, N. (2006). *Motivation, language attitudes and globalization: A Hungarian perspective*. Clevedon, England: Multilingual Matters.
- Dörnyei, Z., & Taguchi, T. (2009). *Questionnaires in second language research: Construction, administration and processing*. London: Routledge.
- Dörnyei, Z., & Taguchi, T. (2010). *Questionnaires in second language Research: Construction, administration, and processing (2nd ed.)*. New York: Routledge.
- Dörnyei, Z., & Ottó, I. (1998). Motivation in action: A process model of L2 motivation. *Working Papers in Applied Linguistics (Thames Valley University, London)*, 4, 43-69.
- Dörnyei, Z., & Taguchi, T. (2010). *Questionnaires in second language research: Construction, administration, and processing*. New York: Routledge
- Dörnyei, Z., & Ushioda, E. (Eds.). (2009). *Motivation, language identity and the L2 self*. Bristol: Multilingual Matters.
- Dörnyei, Z., & Ushioda, E. (2001). *Teaching and researching motivation*. London, England: Longman.
- Ecob, R., & Cuttance, P. (1987). An overview of structural equation modeling In P. Cuttance & R. Ecob (Eds.), *Structural equation modeling by example: Application in educational, sociological, and behavioral research* (pp.9-23). New York: Cambridge University Press.
- Ellis, R. (1994). *The study of Second Language Acquisition*. Oxford: Oxford University Press.
- Ellis, R. (2000). *Second Language Acquisition*. Oxford: Oxford University Press.
- Egbert, J. (2003). A study of flow theory in the foreign language classroom. *Modern Language Journal*, 87(4), 499-518

- Eom, M., Lang, Y., & Xie, C. (2017). Chinese and Korean college students' perceptions of standardized English tests. *The Asian Journal of Applied Linguistics*, 4, 117-128.
- ETS (n.d.). Compare TOEFL scores. Retrieved from <https://www.ets.org/toefl/institutions/scores/compare/>
- Feldman, K. A. (1971). Measuring college environments: Some uses of path analysis. *American Educational Research Association*, 8(1), 51-70.
- Fengge, L. (2013). Study of L2 learning motivation based on L2 motivational self system. *Chinese Journal of Applied Linguistics*, 36(2), 270-286.
- Furr, R. M., & Bacharach, V. R. (2014). *Psychometrics : An introduction*. (second edition). Los Angeles : SAGE, 2014]; Second edition. Retrieved from <http://p2048-lib-ezproxy.tamu.edu/ezproxy.library.tamu.edu/login?url=http://search.ebscohost.com/ezproxy.library.tamu.edu/login.aspx?direct=true&db=cat03318a&AN=tamug.4697136&site=eds-live>
- Fukuda, S. T., Sakata, H., & Pope, C. J. (2015). The GAS that fuels motivation: Satisfying the need for relatedness in the Guided-Autonomy Syllabus. *Electronic Journal of Foreign Language Teaching*. 12(2), 219-237.
- Gardner, R. C. (1985). *Social Psychology and Second Language Learning: The Role of Attitudes and Motivation*. London: Edward Arnold.
- Gardner, R. C. (2010). *Motivation and second language acquisition : The socio-educational model*. New York : NY. Retrieved from <http://p2048-lib-ezproxy.tamu.edu/ezproxy.library.tamu.edu/login?url=http://search.ebscohost.com/ezproxy.library.tamu.edu/login.aspx?direct=true&db=cat03318a&AN=tamug.3814524&site=eds-live>

- Gardner, R. C., & Lambert, W. E. (1959). Motivational variables in second-language acquisition. *Canadian Journal of Psychology, 13*, 266-272. Retrieved from <http://p2048-lib-ezproxy.tamu.edu/ezproxy.library.tamu.edu/login?url=http://search.ebscohost.com/ezproxy.library.tamu.edu/login.aspx?direct=true&db=eric&AN=ED031968&site=eds-live>
- Gardner, R. C., & Lambert, W. E. (1972). *Attitudes and motivation in second language learning*. Rowley, MA: Newbury House.
- Gardner, R. C. (2004). Attitude/Motivation Test Battery: International AMTB Research Project.
- Gay, L. R., Mills, G. E., & Airasian, P. (2012). *Educational Research: Competencies for analysis and applications*. Upper Saddle River, NJ: Pearson.
- Ghanizadeh, A. & Rostami, S. (2015). A Dörnyei-inspired study on second language motivation: A cross-comparison analysis in public and private contexts. *Psychological studies, 60*(3), 292-301.
- Gilham, B. (2000). *Developing a questionnaire*. London, UK: Continuum.
- Hancock, G. R., & Mueller, R. O. (2010). *The reviewer's guide to quantitative methods in the social sciences*. New York, NY: Routledge.
- Higgins, E. T. (1987). Self-discrepancy: A theory relating self and affect. *Psychological Review, 94*(3), 319-340.
- Higgins, E. T. (1998). Promotion and prevention: Regulatory focus as a motivational principle. *Advances in Experimental Social Psychology, 30*, 1-46.
- Ho, M. (1998). Culture studies and motivation in foreign and second language learning in Taiwan. *Language Culture and Curriculum, 11*, 165-182.

- Honda, K., & Sakyu, M. (2004). A study of the relationship between intrinsic/extrinsic motivation and Japanese EFL Learners' proficiency. *Kyoka Kyoikugaku Ronshu*, Osaka University of Education Research Association, 3, 37–48.
- Horwitz, E. K., Horwitz, M. B., & Cope, J. (1986). Foreign language classroom anxiety. *The Modern Language Journal*, 70(2), 125–132
- Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6, 1-55.
- Islam, M., Lamb, M., & Chambers, G. (2013). The L2 motivational self system and national interest: A Pakistani perspective. *System*, 41(2), 231-244. doi.org/10.1016/j.system.2013.01.025
- Jain, Y., & Sidhu, G. K. (2013). Relationship between anxiety, attitude and motivation of tertiary students in learning English as a second language. *Procedia-Social and Behavioral Sciences*, 90, 114-123.
- Jang, S. (2004). Hakryeokseongchio'ui Gyegeupbyeol, Seongbyeol Chai [The difference of educational degree among class and gender]. *Korean Journal of Sociology*, 38(1), 51-75.
- Jee, S., & Kim, H. (2013). Understanding English learners preparing for TOEIC and their information technology usage practices in Korea. *International Journal of Multimedia and Ubiquitous Engineering*, 8, 93-104.
- Kachru, Y., & Nelson, C. L. (2006). *World Englishes in Asian Contexts*. Hong Kong: Hong Kong University Press.
- Kang, H. (2008). Teaching in two languages: Elementary English programs in Korea. In D. Seran & J. Hardman (Eds.), *Global English Language Teacher Education: Praxis and Possibility* (pp.131–143). Alexandria, VA: TESOL Inc.

- Kang, H. (2012). English-Only Instruction at Korean Universities: Help or Hindrance to Higher Learning? *English Today* 28 (1): 29–34. doi:10.1017/S0266078411000654
- Kass, R. E., & Raftery, A. E. (1995), "Bayes Factors", *Journal of the American Statistical Association*, 90 (430): 773–795, doi:10.2307/2291091, ISSN 0162-1459, JSTOR 2291091.
- Kim, T. (2009). Korean elementary school students' perceptual learning style, ideal L2 self, and motivated behavior. *Korean Journal of English Language and Linguistics*, 9(3), 461-485.
- Kim, T. (2010). Ideal L2 self and sensitization in L2 learning motivation: A case study of two Korean ESL students. *Korean Journal of English Language and Linguistics*, 10(2), 321-351.
- Kim, T. (2012). The L2 motivational self system of Korean EFL students: Cross-grade survey analysis. *English teaching*, 67(1), 29-56.
- Kim, Y. K., & Kim, T. Y. (2011). The effect of Korean secondary school students' perceptual learning styles and ideal L2 self on motivated L2 behavior and English proficiency. *Korean Journal of English Language and Linguistics*, 11, 21–42.
- Kim, T., & Kim, Y. (2014). A structural model for perceptual learning styles, the ideal L2 self, motivated behavior, and English proficiency. *System*, 46, 14-27.
- Kim, T., & Kim, Y. (2016). The impact of resilience on L2 learners' motivated behavior and proficiency in L2 learning. *Educational Studies*, 43(1), 1-15.
- Kim, T., Kim, Y., & Kim, J. (2017). Structural relationship between L2 learning (De) motivation, resilience, and L2 proficiency among Korean college students. *Asia-Pacific Edu Res*, 26(6), 397-406.



- Kim, K. J. (2011). Reading motivation in two languages: An examination of EFL college students in Korea. *Read Writ*, 24, 861-881.
- Kinsella, K. (1995). Perceptual learning preferences survey. In J. M. Reid (Ed.), *Learning styles in the ESL/EFL classroom* (pp. 221e238). Boston: Heinle and Heinle.
- Kong, J. H., Han, J. E., Kim, S. Park, H., Kim, Y. S., & Park, H. (2018). L2 Motivational Self System, international posture and competitiveness of Korean CTL and LCTL college learners: A structural equation modeling approach. *System*, 72, 178-189.
- Korean Statistical Information Service (2017). *Private education expenditure survey 2016*. Retrieved from <http://kosis.kr/search/search.do> (file:///C:/Users/tetis/Downloads/%E2%85%A0.%20%EB%B3%B4%EA%B3%A0%EC%84%9C%20%EB%B3%B8%EB%AC%B8\_0901.pdf)
- Korean Statistical Information Service (2019). Retrieved from [http://kosis.kr/statHtml/statHtml.do?orgId=101&tblId=DT\\_1DE9050S&vw\\_cd=MT\\_ZITILE&list\\_id=B1A\\_18&seqNo=&lang\\_mode=ko&language=kor&obj\\_var\\_id=&itm\\_id=&conn\\_path=MT\\_ZITILE](http://kosis.kr/statHtml/statHtml.do?orgId=101&tblId=DT_1DE9050S&vw_cd=MT_ZITILE&list_id=B1A_18&seqNo=&lang_mode=ko&language=kor&obj_var_id=&itm_id=&conn_path=MT_ZITILE)
- Kormos, J., & Csizér, K. (2008). Age-Related differences in the motivation of learning English as a foreign language: Attitudes, selves, and motivated learning behavior. *Language Learning*, 58(2) 327-355.
- Kormos, J., & Kiddle, T. (2013). The role of socio-economic factors in motivation to learn English as a foreign language: The case of Chile. *System*, 41, 399-412.
- Kunnan, A. J. (1998). An introduction to structural equation modelling for language assessment research. *Language Testing*, 15, 295–332.

- Lai, H. T. (2013). The motivation of learners of English as a foreign language revisited. *International Education Studies*, 6(10), 90-101.
- Lamb, M. (2012). A self-system perspective on young adolescents' motivation to learn English in urban and rural settings. *Language Learning*, 62(4), 997-1023.
- Lanvers, U. (2017). Language learning motivation, global English and study modes: A comparative study. *The Language Learning Journal*, 45(2), 220-244.
- Lee, J. H., & Lo, Y. Y. (2017). An exploratory study on the relationships between attitudes toward classroom language choice, motivation, and proficiency of EFL learners. *System*, 67, 121-131.
- Lee, K., & Lee, H. (2018). Korean graduate students' self-perceptions of English skills and needs in an English-medium instruction context. *Journal of Multilingual and Multicultural Development*, 39(8), 715-728. DOI: 10.1080/01434632.2018.1438442
- Lee, H., & Lee, J. (2012). Who gets the best grades at top universities? An exploratory analysis of institution-wide interviews with the highest achievers at a top Korean university. *Asia Pacific Educ*, 13, 665-676.
- Leis, A. (2014). Encouraging autonomy through the use of a social networking system. *The JALT Call Journal*, 10(1), 69-80.
- Liu, Y. & Park, H. (2012). A Study of Korean EFL Learners' WTC and Motivation. *Journal of Pan-Pacific Association of Applied Linguistics*, 16(2), 35-58.
- Liu, Y., & Thompson, A. D. (2018). Language learning motivation in China: An exploration of the L2MSS and psychological reactance. *System*, 72, 37-48

- Lockwood, P., Marshall, T.C. and Sadler, P. (2005) Promoting success or preventing failure: Cultural differences in motivation by positive and negative role models. *Personality and Social Psychology Bulletin* 31 (3), 379\_392
- Macintyre, P. D. (1999). Language anxiety: a review of the research for language teachers. In D. J. Young (Ed.), *Affect in foreign language and second language teaching: A practical guide to creating a low-anxiety classroom atmosphere* (pp. 24-45). Boston: Mc Graw-Hill
- Macaro, E., & Lee, J. H. (2013). Teacher language background, codeswitching, and English-only instruction: Does age make a difference to learners' attitudes? *TESOL Quarterly*, 47(4), 717-742.
- MacCallum, R. C., Roznowski, M., & Necowitz, L. B. (1992). Model modifications in covariance structure analysis: The problem of capitalization on chance. *Psychological Bulletin*, 111, 490-504.
- MacIntyre, P. D., & Gardner R. C. (1994). The subtle effects of language anxiety on cognitive processing in the second language. *Language Learning*, 44, 283-305. doi: 10.1111/j.1467-1770.1994.tb01103
- MacWhinnie, S. G., & Mitchell, C. (2017). English classroom reforms in Japan: A study of Japanese university EFL student anxiety and motivation. *Language Education*, 2(7), 1-13.
- Madkhali, A. (2016). A study of the L2 motivational self- system in an ESL intensive context among Saudi Arabian students. Retrieved from Culminating Projects English.
- Magid, M. (2011). *A validation and application of the L2 motivational self system among Chinese learners of English* (Doctoral dissertation). University of Nottingham. (11971).

- Markus, H., & Nurius, P. (1986). Possible selves. *American Psychologist*, 41, 954–69.
- McClelland, N. (2000). Goal orientation in Japanese college students learning EFL. In S. Cornwell & P. Robinson (Eds.), *Individual differences in foreign language learning: Effects of aptitude, intelligence, and motivation* (pp.99-115). Tokyo: Japan Association for Language Teaching.
- McCroskey, J. C., & Richmond, V. P. (1987). Willingness to communicate and interpersonal communication. In J. C. McCroskey & J. A. Daly (Eds.), *Personality and interpersonal communication* (pp. 129-156). Newbury Park, CA: Sage.
- McKay, S. (2002). *Teaching English as an international language: Rethinking goals and approaches*. Oxford: Oxford University Press.
- McKnight, P. E., McKnight, K. M., Sidani, S., & Figueredo, A. J. (2007). *Missing data: A gentle introduction*. New York, NY: Guilford Press.
- Meechai, A. K. (1998). *An investigation of the internal motivational structure of ESL students at the community college*. (Doctoral dissertation). Retrieved from PROQUEST. (3404386)
- Meechai, A. K. (2010). An investigation of the internal motivational structure of ESL students at the community college. Retrieved from ProQuest Dissertation & Theses Global.
- Moskovsky, C., Racheva, S., Assulaimani, T., Harkins, J. (2016). The L2 motivational self system and L2 achievement: A study of Saudi EFL learners. *The Modern Language Journal*, 100, 641-654.
- Moris, A. (2013). Affective variables, parental involvement and competence among South Korean high school learners of English. *Studies in Second Language Learning and Teaching*, 3, 13-45.

- Mori, S. (2002). Redefining motivation to read in a foreign language. *Reading in a Foreign Language, 14*(2), 91–110.
- Moher D, Liberati A, Tetzlaff J, Altman DG, The PRISMA Group (2009) Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement. *PLoS Med* 6(7): e1000097. <https://doi.org/10.1371/journal.pmed.1000097>
- Moher, D., Shamseer, L., Clarke, M., Chersi, D., Liberati, A., Petticrew, M., Shekelle, P., Stewart, L. A., Prisma-P Group. (2015). Preferred reporting items for systematic review and meta-analysis protocols (PRISMA-P) 2015 statement. *Systematic Reviews, 4*(1), 1-9.
- Munezane, Y. (2014). *A structural equation model and intervention study of individual differences, willingness to communicate, and L2 use in an EFL classroom* (Doctoral dissertation). Retrieved from ProQuest. (3637461).
- Noels, K. A. (2003) Learning Spanish as a second language: Learners' orientations and perceptions of their teachers' communication style. In Z. Dörnyei (Ed.), *Attitudes, orientations, and motivations in language learning* (pp. 97-136). Oxford, Blackwell.
- Noels, K., Pelletier, L., & Vallerand, R. (2000). Why are you learning a second language? Motivational orientations and self-determination theory. *Language Learning, 50*, 57–85.
- Noels, K. A., Pelletier, L. G., Clément, R., & Vallerand, R. J. (2000). Why are you learning a second language? Motivational orientations and self-determination theory. *Language Learning, 53*(S1), 33-64.
- Noris, M., & Lecavalier, L. (2009). Evaluating the use of exploratory factor analysis in developmental disability psychological research. *Journal of Autism and Developmental Disorders, 40*(1), 8-20.

- Nunan, D. (2012). The impact of English as a global language on educational policies and practices in the Asia-Pacific Region. *TESOL Quarterly*, 37(4), 589-613.
- Papi, M. (2010). The L2 motivational self-system, L2 anxiety, and motivated behavior: A structural equation modeling approach. *System*, 38, 467-479.
- Papi, M., & Teimouri, Y. (2012). Dynamics of selves and motivation: A cross-sectional study in the EFL context of Iran. *International Journal of Applied Linguistics*, 22(3), 287-309.
- Papi, M., & Teimouri, Y. (2012). Dynamics of selves and motivation: A cross-sectional study in the EFL context of Iran. *International Journal of Applied Linguistic*, 22(3), 287-309.
- Park, J. (2009). English fever in South Korea: Its history and symptoms. *English Today*, 25(1), 50-57. Doi: 10.1017/S026607840900008X
- Peng, J. (2013). The challenge of measuring willingness to communicate in EFL contexts. *The Asia-Pacific Education Researcher*, 22(3), 281–29
- Peng, J. (2015). L2 motivational self system, attitudes, and affect as predictors of L2 WTC: An imagined community perspective. *Asia-Pacific Edu Res*, 24(2), 433-443.
- Pintrich, P. R., Smith, D., Garcia, T., and McKeachie, W. (1991). *A Manual for the Use of the Motivated Strategies for Learning Questionnaire (MSLQ)*. The University of Michigan: Ann Arbor, MI.
- Pitkethly, A. J., and P. W. C. Lau. 2016. “Reliability and Validity of the Short Hong Kong Chinese Self-Regulation of Learning Self-Report Scale (SRL-SRS-C).” *International Journal of Sport and Exercise Psychology* 14 (3): 210–226.  
doi:10.1080/1612197X.2015.1025810.
- Polanin, J. R., Maynard, B. R., & Dell, N. A. (2017). Overviews in education research: A systematic review and analysis. *Review of Educational Research*, 87(1), 172-203.

- Roshandel, J., Ghonsooly, B., Ghanizadeh, A. (2018). L2 motivational self-system and self-efficacy: A quantitative survey-based study. *International Journal of Instruction, 11*(1), 329-344.
- Rolin-Ianziti, J., & Varshney, R. (2008). Students' views regarding the use of the first language: An exploratory study in a tertiary context maximising target language use. *Canadian Modern Language Review, 65*(2), 249e273. Retrieved from <http://dx.doi.org/10.3138/cmlr.65.2.249>.
- Ryan, S. (2008). *The ideal L2 selves of Japanese learners of English*. University of Nottingham, Nottingham, UK.
- Ryan, S. (2009). Self and identity in L2 motivation in Japan: The ideal l2 self and Japanese learners of English. In Z. Dörnyei & E. Ushioda (Eds.), *Motivation, language identity and the L2 self* (pp. 120-143). Bristol, England: Multilingual Matters
- Ryan, R. M., & Deci, E. L. (2000). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary Educational Psychology, 25*, 54-67.
- Sawir, E. 2005, Language difficulties of international students in Australia: The effects of prior learning experience. *International Education Journal, 65*. 567-580
- Sakui, K., & Gaines, S.J. (1999) Investigating Japanese learners' beliefs about language learning. *System, 27*, 473-492.
- Safdari, S. (2017). Validation of a tailored L2 motivational self system questionnaires through confirmatory factor analysis. *International Online Journal of Education and Teaching, 4*(2), 174-183. Retrieved from <http://p2048-lib-ezproxy.tamu.edu/ezproxy.library.tamu.edu/login?url=http://search.ebscohost.com/ezpro>

xy.library.tamu.edu/login.aspx?direct=true&db=mzh&AN=2017652053&site=eds-  
live <http://iojet.org/index.php/IOJET/index>

- Schmidt, R., & Watanabe, Y. (2001). Motivation, strategy use and pedagogical preferences in foreign language learning. In Z. Dörnyei & R. Schmidt (Eds.), *Motivation and second language acquisition* (Technical Report #23, pp. 313-359). Honolulu: University of Hawaii, Second Language Teaching and Curriculum Center.
- Schneider, E. W. (2014). New Reflections on the Evolutionary Dynamics of World Englishes. *World Englishes*, 33(1): 9–32. doi:10.1111/weng.12069.
- Shin, W.-Y., M.-G. Kim, and J.-H. Kim. 2009. Developing Measures of Resilience for Korean Adolescents and Testing Cross, Convergent, and Discriminant Validity. *Studies on Korean Youth* 20(4): 105–131.
- Statistics Korea (2019). Retrieved from  
[http://www.index.go.kr/potal/main/EachDtlPageDetail.do?idx\\_cd=1655](http://www.index.go.kr/potal/main/EachDtlPageDetail.do?idx_cd=1655)
- Subekti, A. S. (2018). L2 motivational self system and L2 achievement: A study of Indonesian EAP learners. *Indonesian Journal of Applied linguistics*, 8(1), 57-67.
- Tabachnick, B. G., & Fidell, L. S. (2007). *Using multivariate statistics* (5<sup>th</sup> edition). Pearson Education Inc.
- Taguchi, T., Magid, M., & Papi, M. (2009). The L2 motivational self system among Japanese, Chinese and Iranian learners of English: A comparative study. In Z. Dörnyei & E. Ushioda (Eds.). *Motivation, language identity and the L2 self* (pp. 66–97). Bristol, UK: Multilingual Matters.
- Taylan, H. (2017). The factors that affect language learning motivation of adult learners who learn English as a foreign language in Turkish university context. *International*



- periodical for the languages, Literature and History of Turkish or Turkic*, 12(14), 411-430.
- Teimouri, Y. (2017). L2 selves, emotions and motivated behavior. *Studies in Second Language Acquisition*, 39, 681-709.
- Thompson, A. S., & Erdil-Moody, Z. (2016). Operationalizing multilingualism: Language learning motivation in Turkey. *International Journal of Bilingual Education and Bilingualism*, 19(3), 314e331. <http://dx.doi.org/10.1080/13670050.2014.985631>.
- Tong, F., Guo, H., Wang, Z., Min, Y., Guo, W., & Yoon, M. (2019). Examining cross-cultural transferability of self-regulated learning model: An adaptation of the motivated strategies for learning questionnaire for Chinese adult learners. *Educational Studies*, DOI: 10.1080/03055698.2019.1590183
- Weston, R. & Gore, P. A. (2006). A brief guide to structural equation modeling. *The Counseling Psychologist*, 34(5), 719-751.
- Ueki, M., & Takeuchi, O. (2013). Forming a clearer image of the ideal L2 self: the L2 motivational self system and learner autonomy in a Japanese EFL context. *Innovation in Language Learning and Teaching*, 7(3), 238-252.
- Uman, L. S. (2011). Systematic reviews and meta-analysis. *Journal of Canadian Academy of Child and Adolescent Psychiatry*, 20(1), 57-59
- Vallerand, R. J., Pelletier, L. G., Blais, M. R., Brière, N. M., Senécal, C., & Vallières, E. F. (1992). The academic motivation scale: A measure of intrinsic, extrinsic, and amotivation in education. *Educational and Psychological Measurement*, 52, 1003–1017.
- Weiner, B. (1992). *Human motivation: Metaphors, theories and research*. Newbury Park, CA: Sage.

- Wigfield, A., & Guthrie, J. T. (1997). Relations of children's motivation for reading to the amount and breadth of their reading. *Journal of Educational Psychology, 89*, 420–432.
- Wu, C., & Lin, H. (2014). Anxiety about speaking a foreign language as a mediator of the relation between motivation and willingness to communicate. *Perceptual and Motor Skills, 119*(3), 785-798.
- Williams, R. T. (2012). *Using robust standard errors to combine multiple estimates with meta-analysis* (Unpublished doctoral dissertation). Loyola University, Chicago, IL.
- Williams, G. C., Grow, V. M., Freedman, Z., Ryan, R. M., & Deci, E. L. (1996). Motivational predictors of weight loss and weight-loss maintenance. *Journal of Personality and Social Psychology, 70*, 115–126.
- Williams, M., & Burden, R. (1999). Students' developing conceptions of themselves as language learners. *Modern Language Journal, 83*, 193-201.
- Winter, J. C. F., Dodou, D., & Wieringa, P. A., (2009). Exploratory factor analysis with small sample sizes. *Multivariate Behavioral Research, 44*(2), 147-181.
- Yamashita, J. (2004). Reading attitudes in L1 and L2, and their influence on L2 extensive reading. *Reading in a Foreign Language, 16*, 1–19.
- Yamashita, J. (2007). The relationship of reading attitudes between L1 and L2: An investigation of adult EFL learners in Japan. *TESOL Quarterly, 41*, 81–105.
- Yang, H. (2012). Language anxiety, acculturation, and L2 self: A relational analysis in the Taiwanese cultural context. *Electronic Journal of Foreign Language Teaching, 9*(2), 183-193.
- Yang, J., & Kim, T. (2011). The L2 motivational self-system and perceptual learning styles of Chinese, Japanese, Korean, and Swedish students. *English Teaching 66*(1), 141-162.

- Yashima, T. (2002). Willingness to communicate in a second language: The Japanese EFL context. *The Modern Language Journal*, 86(1), 54-66.
- Yashima, T. (2009). International posture and the ideal L2 self in the Japanese EFL context. In Z. Dörnyei & E. Ushioda (Eds.), *Motivation, language identity and the L2 self* (pp. 144–192). Bristol: Multilingual Matters.
- Yashima, T., Zenuk-Nishide, L., & Shimizu, K. (2004). The influence of attitudes and affect on willingness to communicate and second language communication. *Language Learning*, 54, 119-152. doi: 10.1111/j.1467-9922.2004.00250.x
- Yashima, T., Nishida, R., & Mizumoto, A. (2017). Influence of learner beliefs and gender on the motivating power of L2 selves. *The Modern Language Journal*, 101(4), 691-711.
- YBM. (2015). The current usage of TOEIC. [Data file]. Retrieved from [http://exam.ybmnet.co.kr/toEIC/status/recruit\\_company.asp](http://exam.ybmnet.co.kr/toEIC/status/recruit_company.asp)
- YBM. (2017). YBM. (2015). The current usage of TOEIC. [Data file]. Retrieved from [http://exam.ybmnet.co.kr/toEIC/status/recruit\\_company.asp](http://exam.ybmnet.co.kr/toEIC/status/recruit_company.asp)
- You, C., & Dörnyei, Z. (2016). Language Learning Motivation in China: Results of a Large-Scale Stratified Survey, *Applied Linguistics*, 37, 495–519, <https://doi.org.ezproxy.library.tamu.edu/10.1093/applin/amu046>
- Yuan, K., Yang, M., & Jiang, G. (2017). Empirically corrected rescaled statistics for SEM with small n and large p. *Multivariate Behavioral Research*, 52(6), 673-698.
- Zeng, K. (1995). Japan's dragon gate. The effects of university entrance examination on the educational systems and students. *Compare*, 25(1), 59-83.

APPENDIX A

ORIGINAL VERSION OF L2 MOTIVATIONAL QUESTIONNAIRE IN KOREAN CONTEXT

영어학습동기에 관한 설문조사

1. 귀하의 성별을 표시해주세요. (남) (여)
2. 학부 ( ) 전공 ( )
3. 귀하는 몇 년 도에 태어났습니까? ( )
4. 귀하는 현재 몇 학기째 학교를 다니고 있습니까? ( )
5. 귀하는 아래에 해당하는 영어표준 시험을 본적이 있습니까? 있으면 점수를 적어주세요  
TOEIC,( )  
TOEIC speaking and writing ( )  
TOEFL (PBT, ), TOEFL (CBT ), TOEFL (IBT )  
IELTS( )
6. 귀하는 어학연수 또는 학업을 해외에서 하신적이 있습니까? ( )  
있다면 어느 지역에서 얼마나 체류하셨습니까? ( )

아래 각각의 문장을 읽고 해당되는 사항에 1-5 중 하나에 표시해 주십시오. "전혀 그렇지 않다" 는 1번, "그  
 령지 않다" 는 2번, "보통이다" 는 3번, "그런편이다" 는 4번, "매우 그렇다" 는 5번에 표시해주세요.

문항	설문내용	전혀 그렇 지 않 다	그렇 지 않다	보 통 이 다	그런 편이 다	매 우 그 렇 다
1.	만일 미래에 영어강좌가 개설된다면 나는 들을 것이다.	1	2	3	4	5
2.	만일 선생님이 선택적인 숙제를 내어 준다면 나는 기꺼 이 숙제를 할 것이다.	1	2	3	4	5

3.	나는 필수사항이 아니더라도 영어공부를 할 것이다.	1	2	3	4	5
4.	나는 영어공부에 많은 시간을 쓸 것이다.	1	2	3	4	5
5.	나는 다른 주제 보다 영어공부하는것에 집중하고 싶다.	1	2	3	4	5
6.	나는 영어공부를 하는데 많은 노력을 할 준비가 되어있다.	1	2	3	4	5
7.	나는 영어공부하는데 최선을 다 한다고 생각한다.	1	2	3	4	5
8.	다른 학생에 비해서 상대적으로 내가 영어공부를 보다 더 열심히 한다고 생각한다.	1	2	3	4	5
9.	모든 수업이 영어로 진행되는 대학교 수업을 듣고 있는 내 모습을 떠올린다.	1	2	3	4	5
10.	미래의 내 직장을 생각하면 나는 영어를 쓰고 있는 나 자신을 생각하게 된다.	1	2	3	4	5
11.	나는 외국인 친구나 동료와 영어로 이야기 하는 내 모습을 생각한다.	1	2	3	4	5
12.	나는 외국에 살면서 그 곳 사람들과 영어로 이야기 하는 내 모습을 생각한다.	1	2	3	4	5
13.	나는 내가 마치 원어민 선생님처럼 영어를 잘 사용하는 모습을 생각한다.	1	2	3	4	5
14.	내가 영어를 잘 말 할 수 있는 사람이 될 것이라고 상상한다.	1	2	3	4	5
15.	나 스스로가 영어로 유창하게 이메일이나 편지를 쓰는 것을 생각한다.	1	2	3	4	5
16.	나는 친한 친구들이 영어가 중요하다고 생각하기 때문에 영어를 공부한다.	1	2	3	4	5
17.	내 주위 사람들이 나에게 대한 기대가 있기 때문에 영어공부는 필요하다.	1	2	3	4	5
18.	내가 존경하는 사람들이 내가 영어공부를 해야한다고 하기 때문에 중요하다고 생각한다.	1	2	3	4	5
19.	내가 영어를 배우는데 실패를 하면 다른 사람들은 실망할 것이다.	1	2	3	4	5
20.	내 친구나 선생님, 가족, 윗사람들로부터 인정받기 위해서 영어공부는 중요하다.	1	2	3	4	5
21.	교육받은 사람은 영어로 말을 잘 해야하기 때문에 나에게 영어공부를 하는 것은 중요하다.	1	2	3	4	5
22.	내가 영어를 잘 하면 사람들이 나를 존경하기 때문에 영어공부는 중요하다	1	2	3	4	5

23.	만일 내가 영어를 공부하지 않으면 내 인생에 안 좋은 영향이 있을 것이다.	1	2	3	4	5
24.	내 부모님은 내가 시간이 날 때 영어공부를 하도록 하신다	1	2	3	4	5
25.	내 부모님은 기회가 있으면 영어를 사용하도록 하신다.( 말하기 와 읽기)	1	2	3	4	5
26.	내 부모님은 내가 영어를 가능한 많이 연습하도록 하신다	1	2	3	4	5
27.	내 부모님은 내가 수업 이 외의 영어보충 수업에 참여하도록 장려하신다 (영어회화수업)	1	2	3	4	5
28.	우리 가족은 영어공부하는데 많은 압력을 주신다.	1	2	3	4	5
29.	내 부모님/가족은 내가 교육받은 사람이 되기 위해서 영어를 배워야 한다고 생각하신다.	1	2	3	4	5
30.	우리 가족에게 명예를 가져와야 하기 때문에 영어공부는 나에게 중요하다.	1	2	3	4	5
31.	내 부모나 친척을 기쁘게 해주기 위해 영어공부를 성공적이게 하는것은 나에게 중요하다	1	2	3	4	5
32.	내 부모나 가족에게 벌을 받지 않기 위해 나는 영어공부를 해야만 한다.	1	2	3	4	5
33.	나는 영어공부를 해야한다, 그렇지 않으면 우리 부모님은 나에게 실망하실것이기 때문이다.	1	2	3	4	5
34.	영어가 언젠가는 좋은 직업을 잡는데 필요할 것이라고 생각하기에 영어공부는 나에게 중요하다.	1	2	3	4	5
35.	미래에 승진하는데 영어실력이 필요하기 때문에 영어공부는 중요하다.	1	2	3	4	5
36.	나는 글로벌하게 일하고 싶기때문에 영어공부는 중요하다.	1	2	3	4	5
37.	영어실력이 좋으면 돈을 많이 벌 수 있기 때문에 영어공부는 중요하다.	1	2	3	4	5
38.	내 전공에 대해 더 공부할 때 필요할 수 있기 때문에 영어공부는 중요하다.	1	2	3	4	5
39.	해외에서 살고 싶기때문에 영어공부는 필요하다. ( 유학 이나 업무로 인해)	1	2	3	4	5
40.	전 세계에서 일어나는 일들을 알기 위해 영어공부를 한다.	1	2	3	4	5
41.	특별한 목적을 달성하기 위해 영어공부는 중요하다. ( 학	1	2	3	4	5

	위나 장학금을 따기위해)					
42.	높은 사회적인 직위를 얻기위해 영어공부는 중요하다.	1	2	3	4	5
43.	내 삶에 새로운 도전을 위해 영어공부는 중요하다.	1	2	3	4	5
44.	내가 미래에 하고 싶은 일은 영어가 필요한 일이다.	1	2	3	4	5
45.	영어수업을 듣지 않으면 졸업을 못하기 때문에 영어를 공부해야 한다.	1	2	3	4	5
46.	영어수업에서 낙제하기 싫기 때문에 영어공부를 해야한다.	1	2	3	4	5
47.	대학에서 안좋은 점수를 받고 싶지 않기 때문에 영어공부를 해야한다.	1	2	3	4	5
48.	영어시험에서 안좋은 점수를 받고싶지 않기 때문에 영어공부는 필요하다. (토플이나 아일츠)	1	2	3	4	5
49.	영어공부를 해야한다, 그렇지 않으면 내 미래 커리어에서 성공할 수 없다.	1	2	3	4	5
50.	영어점수가 나쁘면 수치감을 느끼기 때문에 영어공부는 중요하다.	1	2	3	4	5
51.	내가 영어를 잘 못하면 교육을 잘 받지 못한 사람으로 취급될까봐 영어공부는 중요하다.	1	2	3	4	5
52.	나는 영어수업의 분위기가 좋다	1	2	3	4	5
53.	나는 영어수업시간이 항상 기대된다	1	2	3	4	5
54.	나는 영어를 배우는 것이 정말 흥미로운 것이라는것을 알게되었다.	1	2	3	4	5
55.	나는 정말 영어공부하는것이 즐겁다	1	2	3	4	5
56.	영어공부를 하면 시간이 빨리 지나간다고 생각합니까?	1	2	3	4	5
57.	학교에서 더 많은 영어수업을 듣고 싶습니까?	1	2	3	4	5
58.	영어권 국가를 여행하는것을 좋아합니까?	1	2	3	4	5
59.	영어권 국가에 사는 사람들을 좋아합니까?	1	2	3	4	5
60.	영어권 국가에서 온 사람들을 만나는것을 좋아합니까?	1	2	3	4	5
61.	영어권 국가에서 온 사람에 대해 알고 싶습니까?	1	2	3	4	5
62.	영어권 나라의 음악을 좋아합니까?	1	2	3	4	5
63.	영어로 된 영화를 좋아합니까?	1	2	3	4	5
64.	영어잡지, 영자신문, 또는 영어책을 좋아하십니까?	1	2	3	4	5
65.	영어권 국가의 TV프로그램을 좋아하십니까?	1	2	3	4	5
66.	나는 영어수업에서 말하기를 할때 긴장되고 혼란스럽다.	1	2	3	4	5
67.	원어민과 영어로 대화할때 불편하다.	1	2	3	4	5

68.	만약 원어민을 만나면 긴장 할 것이다.	1	2	3	4	5
69.	만일 외국인이 영어로 길을 물어보면 긴장한다.	1	2	3	4	5
70.	만일 다른 사람이 내 영어가 이상하다는것을 알았을때 걱정된다.	1	2	3	4	5
71.	영어를 쓰는 사람들의 문화와 예술을 이해하는데 영어 교육이 얼마나 중요하다고 생각합니까?	1	2	3	4	5
72.	영어로 말하는 사람을 얼마나 닮고 싶습니까?	1	2	3	4	5
73.	얼마나 영어를 좋아하십니까?	1	2	3	4	5
74.	나는 해외여행을 다닐것이기 때문에 영어공부는 중요하다	1	2	3	4	5
75.	영어없이는 여행을 많이 못하기 때문에 영어공부는 나에게 있어 중요하다.	1	2	3	4	5
76.	영어를 하면 해외여행을 즐길 수 있기 때문에 나는 영어 공부를 한다.	1	2	3	4	5



## APPENDIX B

### ORIGINAL VERSION OF L2 MOTIVATIONAL QUESTIONNAIRE IN KOREAN CONTEXT

(ENGLISH)

Questionnaire for L2 motivation and L2 proficiency

1. Gender (M) (F)
2. Department ( ) Major ( )
3. When were you born? ( )
4. What year are you in your school? ( )
5. Please write your score if you have taken one of the tests below  
 TOEIC,( )  
 TOEIC speaking and writing ( )  
 TOEFL (PBT, ), TOEFL (CBT ), TOEFL (IBT )  
 IELTS( )
6. Have you ever studied abroad? ( ), If yes, which country have you visited and how long have you stayed in the country? ( )

Please read carefully and check one of the answer that you agree. Choose 1 if you "strongly disagree" , choose 2 if you "disagree", choose 3 if you feel normal, choose 4 if you "agree", and choose 5 if you strongly "disagree."

Number	Questions	Stron- gly disagre e	disagre e	norma l	agre e	Strongl y agree
1.	If an English course was offered in the future, I would like to take it.	1	2	3	4	5

2.	If my teacher would give the class an optional assignment, I would certainly volunteer to do it.	1	2	3	4	5
3.	I would like to study English even if I were not required.	1	2	3	4	5
4.	I would like to spend lots of time studying English.	1	2	3	4	5
5.	I would like to concentrate on studying English more than any other topic.	1	2	3	4	5
6.	I am prepared to expend a lot of effort in learning English.	1	2	3	4	5
7.	I am working hard at learning English.	1	2	3	4	5
8.	Compared to my classmates, I think I study English relatively hard.	1	2	3	4	5
9.	I can imagine myself studying in a university where all my courses are taught in English.	1	2	3	4	5
10.	Whenever I think of my future career, I imagine myself using English.	1	2	3	4	5
11.	I can imagine myself speaking English with international friends or colleagues.	1	2	3	4	5
12.	I can imagine myself living abroad and using English effectively for communicating with the locals.	1	2	3	4	5
13.	I can imagine myself speaking English as if I were a native speaker of English.	1	2	3	4	5
14.	I imagine myself as someone who is able to speak English.	1	2	3	4	5
15.	I can imagine myself writing English e-mails/letters fluently.	1	2	3	4	5
16.	I study English because close friends of mine think it is important.	1	2	3	4	5

17.	Learning English is necessary because people surrounding me expect me to do so.	1	2	3	4	5
18.	I consider learning English important because the people I respect think that I should do it.	1	2	3	4	5
19.	If I fail to learn English I'll be letting other people down.	1	2	3	4	5
20.	Studying English is important to me in order to gain the approval of my peers/teachers/family/boss.	1	2	3	4	5
21.	Studying English is important to me because an educated person is supposed to be able to speak English.	1	2	3	4	5
22.	Studying English is important to me because other people will respect me more if I have a knowledge of English.	1	2	3	4	5
23.	It will have a negative impact on my life if I don't learn English.	1	2	3	4	5
24.	My parents encourage me to study English in my free time	1	2	3	4	5
25.	My parents encourage me to take every opportunity to use my English (e.g., speaking and reading).	1	2	3	4	5
26.	My parents encourage me to practice my English as much as possible.	1	2	3	4	5
27.	My parents encourage me to attend extra English classes after class (e.g., at English conversation schools).	1	2	3	4	5
28.	My family put a lot of pressure on me to study English.	1	2	3	4	5
29.	My parents/family believe(s) that I must study English to be an educated person.	1	2	3	4	5

30.	Studying English is important to me in order to bring honour to my family.	1	2	3	4	5
31.	Being successful in English is important to me so that I can please my parents/relatives.	1	2	3	4	5
32.	I must study English to avoid being punished by my parents/relatives.	1	2	3	4	5
33.	I have to study English, because, if I don't do it, my parents will be disappointed with me	1	2	3	4	5
34.	Studying English can be important to me because I think it will someday be useful in getting a good job	1	2	3	4	5
35.	Studying English is important to me because English proficiency is necessary for promotion in the future.	1	2	3	4	5
36.	Studying English is important to me because with English I can work globally.	1	2	3	4	5
37.	Studying English is important because with a high level of English proficiency, I will be able to make a lot of money.	1	2	3	4	5
38.	Studying English can be important to me because I think I will need it for further studies on my major	1	2	3	4	5
39.	Studying English is important to me because I would like to spend a longer period living abroad (e.g., studying and working)	1	2	3	4	5
40.	I study English in order to keep updated and informed of recent news of the world.	1	2	3	4	5

41.	Studying English is important to me because in order to achieve a special goal ( e.g., to get a degree or scholarship)	1	2	3	4	5
42.	Studying English is important to me because in order to attain a higher social respect.	1	2	3	4	5
43.	Studying English is important to me because because it offers a new challenge in my life.	1	2	3	4	5
44.	The things I want to do in the future require me to use English.	1	2	3	4	5
45.	I have to learn English because without passing the English course I cannot graduate.	1	2	3	4	5
46.	I have to learn English because I don't want to fail the English course.	1	2	3	4	5
47.	I have to study English because I don't want to get bad marks in it at university.	1	2	3	4	5
48.	Studying English is necessary for me because I don't want to get a poor score or a fail mark in English proficiency tests	1	2	3	4	5
49.	I have to study English; otherwise, I think I cannot be successful in my future career.	1	2	3	4	5
50.	Studying English is important to me, because I would feel ashamed if I got bad grades in English.	1	2	3	4	5
51.	Studying English is important to me because, if I don't have knowledge of English, I will be considered a weak learner.	1	2	3	4	5
52.	I like the atmosphere of my English classes.	1	2	3	4	5

53.	I always look forward to English classes.	1	2	3	4	5
54.	I find learning English really interesting.	1	2	3	4	5
55.	I really enjoy learning English.	1	2	3	4	5
56.	Do you think time passes faster while studying English?	1	2	3	4	5
57.	Would you like to have more English lessons at school?	1	2	3	4	5
58.	Do you like to travel to English-speaking countries?	1	2	3	4	5
59.	Do you like the people who live in English-speaking countries?	1	2	3	4	5
60.	Do you like meeting people from English-speaking countries?	1	2	3	4	5
61.	Would you like to know more about people from English-speaking countries?	1	2	3	4	5
62.	Do you like the music of English-speaking countries (e.g., pop music)?	1	2	3	4	5
63.	Do you like English films?	1	2	3	4	5
64.	Do you like English magazine, newspapers, or books?	1	2	3	4	5
65.	Do you like TV programmes made in English speaking countries?	1	2	3	4	5
66.	I get nervous and confused when I am speaking in my English class.	1	2	3	4	5
67.	I would feel uneasy speaking English with a native speaker	1	2	3	4	5
68.	If I met an English native speaker, I would feel nervous.	1	2	3	4	5
69.	I would get tense if a foreigner asked me for directions in English	1	2	3	4	5
70.	I am worried that other speakers of English would find your English strange.	1	2	3	4	5

71.	How important do you think learning English is in order to learn more about the culture and art of its speakers?	1	2	3	4	5
72.	How much would you like to become similar to the people who speak English?	1	2	3	4	5
73.	How much do you like English?	1	2	3	4	5
74.	Learning English is important to me because I would like to travel internationally.	1	2	3	4	5
75.	Studying English is important to me because without English I won't be able to travel a lot.	1	2	3	4	5
76.	I study English because with English I can enjoy travelling abroad.	1	2	3	4	5

Please read carefully and check one of the answer that you agree. Choose 1 if you "strongly disagree", choose 2 if you "disagree", choose 3 if you feel normal, choose 4 if you "agree", and choose 5 if you strongly "disagree"

Number	Questions	Stron- gly disagre e	disagre e	norma l	agre e	Strongl y agree
1.	I can say the days of the week in English.	1	2	3	4	5
2.	I can give the current date (month, day, year) in English.	1	2	3	4	5
3.	I can order a simple meal in a restaurant in English.	1	2	3	4	5
4.	I can ask for directions on the street in English.	1	2	3	4	5
5.	I can buy clothes in a department store in English.	1	2	3	4	5

6.	I can introduce myself in social situations, and use appropriate greetings and leave-taking expressions in English.	1	2	3	4	5
7.	I can talk about my favorite hobby at some length in English.	1	2	3	4	5
8.	I can describe my present job, studies, or other major life activities in English.	1	2	3	4	5
9.	I can explain what I did last weekend at some length in English.	1	2	3	4	5
10.	I can explain what I plan to be doing 5 years from now at some length in English.	1	2	3	4	5
11.	I can sustain everyday conversation in very polite style in English with a person much older than I am.	1	2	3	4	5
12.	I can sustain everyday conversation in casual style English with my native-English speaking friend.	1	2	3	4	5
13.	I can describe the educational system of my own country in some detail in English.	1	2	3	4	5
14.	I can state and support with reasons my position on a conversational topic (for example, cigarette smoking) in English.	1	2	3	4	5
15.	I can describe in English the role played by Korean business corporations in the world market.	1	2	3	4	5