

A Model of Willingness to Communicate in English in Iranian
EFL Classroom Context



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โมเดลความเต็มใจที่จะสื่อสารในภาษาอังกฤษในบริบทห้องเรียนภาษาอังกฤษเป็น
ภาษาต่างประเทศในประเทศไทย



วิทยานิพนธ์นี้เป็นส่วนหนึ่งของการศึกษาตามหลักสูตรปริญญาครุศาสตรมหาบัณฑิต
สาขาวิชาการสอนภาษาอังกฤษเป็นภาษาต่างประเทศ ภาควิชาหลักสูตรและการสอน

คณะครุศาสตร์ จุฬาลงกรณ์มหาวิทยาลัย

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ลิขสิทธิ์ของจุฬาลงกรณ์มหาวิทยาลัย

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งานวิจัยนี้มีวัตถุประสงค์เพื่อวิเคราะห์ความสัมพันธ์ระหว่างความเต็มใจที่จะสื่อสารใน
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 ในการใช้ภาษาที่สอง และความวิตกกังวลในการใช้ภาษาที่สอง เป็นตัวแปรที่ส่งผลโดยตรงต่อความเต็มใจใน
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6183396027 : MAJOR TEACHING ENGLISH AS A FOREIGN LANGUAGE
 KEYWORD WILLINGNESS TO COMMUNICATE IN ENGLISH, L2
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Azadeh Amirzadi : A Model of Willingness to Communicate in English in Iranian EFL Classroom Context. Advisor: Asst. Prof. JUTARAT VIBULPHOL, Ph.D.

The present study aimed to investigate the relationships between WTC in English in classroom context and four trait-like variables: L2 confidence, L2 motivation, L2 anxiety and grit, to propose a WTC model in EFL classroom setting in Iran, and to identify the best predicting variable of WTC in English. The participants were 488 non-English majored university students in two public and two private universities in Iran. The research instrument used in this study was an online questionnaire. The structural equation modeling (SEM) using Amos was conducted to analyze the data. The key findings are as follows. First, positive relationships were found between WTC in English and L2 confidence, L2 motivation, and grit and a negative relationship was found between WTC in English and L2 anxiety. Second, based on the finalized model, L2 confidence, L2 motivation, and L2 anxiety are the predicting variables of WTC in English in Iranian EFL classroom settings whereas grit serves as a mediator through L2 motivation and L2 anxiety. Lastly, L2 motivation was found to be the best predicting variable for WTC in English. In order to enhance the willingness to communicate in English with university students in Iran, English teachers are recommended to design their lessons to help students enhance and maintain L2 motivation, build L2 confidence, reduce L2 anxiety and develop grit.



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CHAPTER 1

INTRODUCTION

Willingness to communicate (WTC) in English has become an interest of educators since it was found to affect second language learners' communication behaviors. Studies have shown that learners, in spite of their language proficiency, may not be willing to use the second language they are studying (Bergil, 2016; Husna, 2019; Jongsermtrakoon & Vibulphol, 2010; MacIntyre et al., 1998; Yashima, 2002). In these studies, WTC in English was identified as a variable that encourages or suppresses learners' communication behaviors. Researchers have, therefore, been interested in investigating the variables that may affect WTC in English (Hashimoto, 2002; Kim, 2004; Knell & Chi, 2012; Lee & Drajati, 2019; Lee & Hsieh, 2019; Lee & Lee, 2019; MacIntyre et al., 1998; Wu & Lin, 2014; Yashima, 2002).

One of the most comprehensive models of WTC in English was proposed by MacIntyre and his colleagues in 1998. Their heuristic WTC model identifies two groups of variables, namely trait-like variables and situational context variables (MacIntyre et al., 1998). Since then, the model has been tested in several second language teaching contexts including Iran (Alemi & Pahmforoosh, 2012), Thailand (Jongsermtrakoon & Vibulphol, 2010; Pattapong, 2015), Pakistan (Bukhari et al., 2015), Turkey (Basöz & Erten, 2019; Cetinkaya, 2005), Poland (Mystkowska-Wiertelak, 2016), Taiwan (Lin, 2019), and Japan (Aoyama & Takahashi, 2020), China (Kun et al., 2020). The findings from these studies suggested the dynamic relationship among the variables in different contexts.

Recent development of the WTC model was influenced by the study of positive psychology which focused on positive internal or external factors such as emotions or enjoyment (Dewaele & Dewaele, 2018; Dewaele & Pavelescu, 2021; Lee, 2020; MacIntyre et al., 2019). Ju Seong Lee conducted a series of research with his colleagues (Lee & Drajadi, 2019; Lee & Hsieh, 2019; Lee & Lee, 2019) to investigate MacIntyre's model with a new variable, grit. In Lee's works, grit was added as a personality trait and a positive internal variable in the social and individual context layer of the model. Specifically, they examined the relationships between WTC in English and four variables, namely L2 confidence, L2 motivation, L2 speaking anxiety, and grit. The results suggested that the four variables were associated with WTC in English, but the significant predicting variable of WTC was not the same in different settings (Lee & Drajadi, 2019; Lee & Hsieh, 2019; Lee & Lee, 2019). Interestingly, however, the findings in all studies found grit to be a significant predictor of WTC in English.

The present study was therefore designed to extend Lee's investigation in another context, Iranian EFL university classrooms. Considering the different contexts of English language learning and teaching in Iran and the dynamic nature of WTC in English, the interactions among variables may be different (De Bot et al., 2007). In Iran, English is used as a foreign language with not much need for everyday functions for most people. For most Iranian university students, their use of English is restricted in the classroom settings. Despite this, oral communication in the classrooms is very limited. Unsurprisingly, Iranian students were found to have a low level of willingness to communicate in English in classrooms (Alemi, 2012), or had no tendency to start or continue a conversation in English (Goldoust & Ranjbar, 2017).

A few studies on WTC in English, based on MacIntyre's model, were conducted to examine the effects of situational context variables inside the classroom (Modirkhameneh & Firouzmand, 2014; Riasati, 2018; Shirvan & Taherian, 2016; Zarei et al., 2019; Zarrinabadi, 2014) and trait-like variables such as individual differences (Alemi, 2012; Amirian et al., 2020; Ghanbarpour, 2016; Rastegar & Karami, 2015; Riasati, 2018; Saeedakhtar et al., 2018). L2 confidence, L2 motivation, and L2 anxiety were shown to influence WTC in English of Iranian EFL students (Ghanbarpour, 2016; Ghonsooly et al., 2012; Khajavy et al., 2016); however, no study has attempted to examine the causal effect of these trait-like variables. The present study was thus designed to explore the causal relationships among these variables with an addition of grit as a new individual difference variable. The findings will provide insights to Iranian EFL university instructors on how to design their English lessons that can accommodate WTC effectively.

Research Questions

The present study sought to find answers to the following research questions:

1. What are the relationships among WTC in English, L2 confidence, L2 motivation, L2 anxiety, and grit in Iranian EFL classroom context?
2. What is the model of WTC in English in Iranian EFL classroom context?
3. Which variable is the best predictor of WTC in English of Iranian EFL students?

Research Objectives

The objectives of the present research were to:

1. investigate the relationships among WTC in English, L2 confidence, L2 motivation, L2 anxiety and grit in Iranian EFL classroom context.

2. propose a model of WTC in English in Iranian EFL context.
3. specify which variable is the best predictor of WTC in English of Iranian EFL students.

Definition of terms

The key terms were defined for the purpose of the present research as follows:

Willingness to communicate in English

WTC in English is defined as a learner's decision to use English with different interlocutors in an EFL classroom setting. The present study focused on WTC in English in spoken discourse with two constructs naming focusing on meaning- focused and form-focused activities and was measured using a questionnaire adapted from Peng and Woodrow (2010).

L2 confidence

The term refers to the learner's belief or perception of their own speaking or communicating skill in English language. In this study, a questionnaire was adapted from McCroskey and McCroskey (1988) to measure confidence in three communication situations with three types of receivers including strangers, acquaintances, and friends.

L2 motivation

The term refers to students' desire to learn a second language. The present study adapted a questionnaire on L2 motivation from Noels et al. (2000) based on self-determination theory with two constructs naming intrinsic and extrinsic motivation. Intrinsic motivation could refer to personal desires that learners have in order to learn

a language such as passion for learning a language. In addition, extrinsic motivations could refer to learning a language because of an external outcome such as parents or teachers' encouragement or rewards.

L2 anxiety

L2 anxiety is defined as the negative feelings such as nervousness, worries that the learner could have when using English to communicate. The questionnaire used in the present study was adapted from Horwitz et al. (1986) which measured L2 anxiety focusing on four main constructs naming communication apprehension, foreign language class anxiety, fear of negative evaluation, and test anxiety.

Grit

Grit refers to the learner's desire and persistence to pursue their long-term goals amidst difficulties or failure in their learning process. In order to measure grit with two constructs of passion and perseverance for long term-goal, a questionnaire called the short grit scale adapted from Duckworth et al. (2007); Duckworth and Quinn (2009) was used.

Trait-like variables

Trait-like variables refer to the learner's internal variables. The present study focused on the trait-like variables that could affect the learner's willingness to communicate in English such as L2 motivation, L2 confidence, or L2 anxiety.

Iranian EFL Classroom Context

In the present study, the term refers to the contexts of English classrooms at the university level in Iran for students whose English is not their first language.

Hypothesized Model

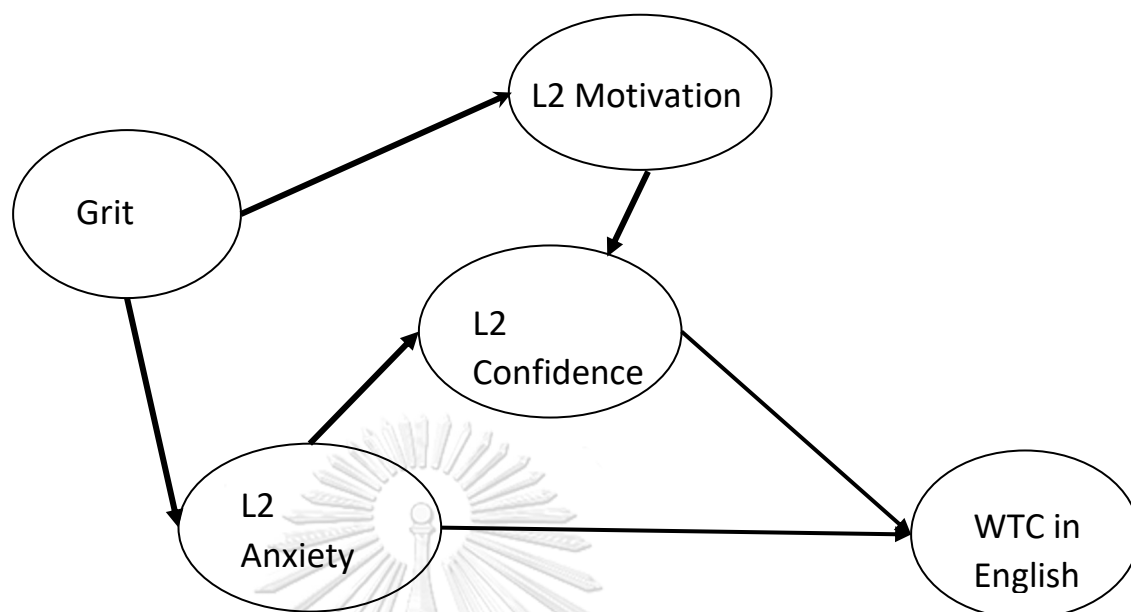


Figure 1 Hypothesized Model of WTC in English

The paths in the hypothesized model were developed based on the findings of three studies on WTC model development (MacIntyre & Charos, 1996; Peng & Woodrow, 2010; Yashima, 2002). As shown in Figure 1, first, a direct path from L2 confidence to WTC in English was hypothesized based on MacIntyre and Charos (1996) and Yashima (2002). Second, the direct paths from anxiety to WTC in English and to L2 confidence were hypothesized based on MacIntyre and Charos (1996). Third, L2 motivation was hypothesized to have an indirect effect on WTC in English through L2 confidence, as revealed in Yashima (2002) and Peng and Woodrow (2010). Lastly, direct paths from grit to L2 motivation and to L2 anxiety were hypothesized based on MacIntyre and Charos (1996).

Scope of the study

This research was conducted to find out the relationship and the causality of five main variables including WTC in English, L2 motivation, L2 confidence, L2 anxiety and grit in classroom context. The target population of the study was Iranian non- major English students in two public and two private universities in Iranian EFL classroom setting in 2020.

Organization of the Chapters

This thesis consists of five chapters. The first chapter includes the background of the study and explains the research questions and its objectives. This chapter presents a definition of key terms in this research. In addition, the research framework, the scope of the study, and the significance of the study are clarified in detail. In order to set the conceptual framework of the study, a review of literature is presented in chapter two which overviews willingness to communicate in English (WTC) and its affective factors. Besides, other areas of literature needed for this research were reviewed including WTC model development and related studies. The third chapter describes the research design, population and participants, research instruments, data collection procedures, and data analysis. The details about the findings of all research questions are provided in chapter four. And finally, the last chapter presents the discussions of the findings of the study in the light of previous research, limitations of the present study, pedagogical implications of the findings, and some suggestions for future research.

CHAPTER 2

REVIEW OF LITERATURE

This chapter presented an overview of the literature that was used to develop the study. Four main areas of literature including willingness to communicate in English (WTC), affective variables on WTC in English, WTC model development, and related studies were reviewed clearly.

Willingness to Communicate in English (WTC)

The topic of willingness to communicate (WTC) was conceptualized as a personality trait for the first time by McCroskey and Baer (1985) and referred to the act of talkativeness or reluctance to talk in the classroom (MacIntyre et al., 1998). Willingness to communicate was first introduced in native language or L1 as a relatively stable variable in different situations with different interlocutors. McCroskey and his colleagues, as reported by MacIntyre et al. (1998) believed that WTC was related to attributes such as communication apprehension, perceived communication competence, introversion-extroversion, self-esteem, etc. Besides, McCroskey's work on WTC focused on speaking skill.

Later, the concept of WTC was applied in language learning and Charos (1994) found a negative correlation between WTC in L1 and L2 (as cited in MacIntyre et al. (1998). MacIntyre et al. (1998) discussed the reason as the “uncertainty inherent in L2 use” and defined WTC in L2 as a “readiness to enter into discourse at a particular time with a specific person or persons, using the second language” (p.547). The concept was

extended by MacIntyre and his colleagues to other skills than speaking and was not limited to a trait-like variable but also treated as a situational variable.

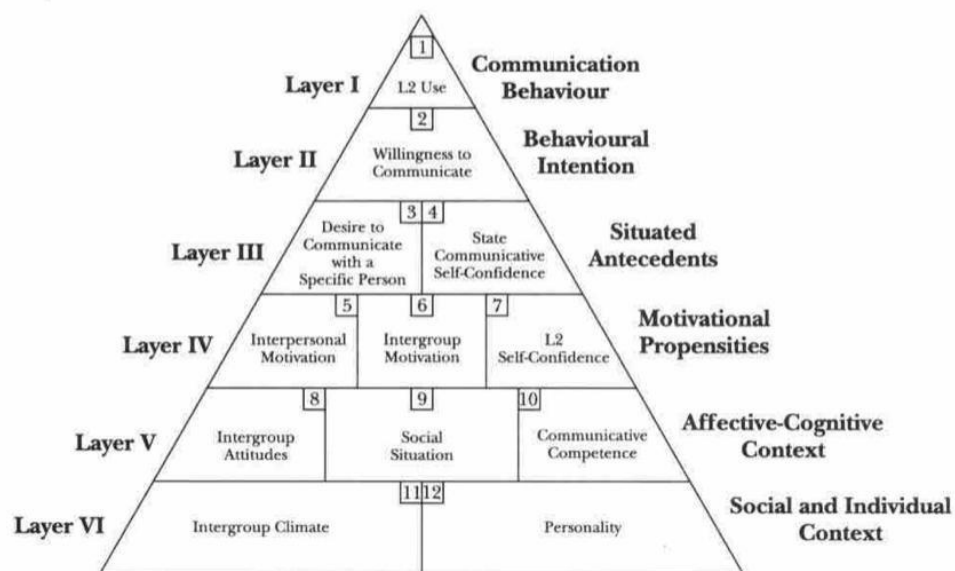


Figure 2 Heuristic Model of Variables Influencing WTC

MacIntyre et al. (1998) theoretical framework in their heuristic model of WTC in English suggested the associated variables as six layers; communication behavior, behavioral intention, situated antecedents, motivational propensities, affective-cognitive context, as well as social and individual context. They divided the variable into two categories of situational context variables and trait-like variables. The first three top layers in the pyramid (see Figure 2) were called situational context variables including communication behavior, behavioral intention, situated antecedents. This group of variables were dependent on the context which the person performed at a time, as a result, they were not stable or long-term as the other group. Moreover, they described trait-like variables naming motivational propensities, affective-cognitive context, as well as social and individual context to be more enduring and the broadest

factors affecting WTC in English. They believed that this group of variables were the “basis or platform on which the rest of influences operate; the foundation on which the pyramid is built” (p.546).

According to the literature, studies have used various approaches in order to measure WTC in English; naming quantitative, qualitative or mixed-method using different instruments such as questionnaires in quantitative studies or interviews, observations, diary, and focused essays in qualitative ones. The first willingness to communicate questionnaire was a self-reported scale in L1 by McCroskey and Baer (1985) in four communication situations including speaking, meetings, dyads, and small groups with three types of interlocutors: strangers, acquaintances, and friends. Studies later adapted this scale to develop an instrument for WTC in second language learning. MacIntyre et al. (2001) developed an instrument to measure WTC in English in four skills inside and outside of the classroom. Furthermore, Weaver (2005) developed an instrument for writing and speaking from which Peng and Woodrow (2010) adapted their questionnaire later; however, their questionnaire merely focused on WTC in English in speaking skill.

Peng and Woodrow (2010)’s questionnaire was adapted from previous studies to measure different effective variables and WTC in English among Chinese students. In their study, the instrument on willingness to communicate was adapted from Weaver (2005) focusing on speaking skill and included 10 items in Likert scale. The instrument included two constructs naming form-focused and meaning-focused activities. He explained that the former referred to activities in the classroom which engaged the learners in form such as learning words in terms of their pronunciation or meaning and

the later referred to activities engaging learners in meaning like role play or short self-introduction in the classroom.

The significance of facilitating and rising WTC in English among learners has been emphasized by various scholars in the field (Kang, 2005; MacIntyre et al., 1998). In this sense, Kang (2005) believed using or interacting in L2 could lead the language learners to learn or develop the language. In addition, MacIntyre et al. (1998) said that the ultimate of language learning and teaching should be learners' willingness to communicate. Therefore, finding the affective factors which could help the learner to communicate or interact in the language they learn has become an interesting topic of investigations.

The results of the studies on WTC in foreign language learning could be categorized into three groups: biological variables, psychological variables, and educational or linguistic variables (Zarrinabadi & Tanbakooei, 2016). Thus, some studies focused on biological variables studied the influence of age and gender (Donovan & MacIntyre, 2004; Lu & Hsu, 2008; MacIntyre et al., 2003). The results showed that biological variables such as age and gender could influence WTC. Other research on psychological variables revealed the effect of several variables such as L2 motivation (Hashimoto, 2002; Peng, 2007; Vatankhah & Tanbakooei, 2014; Zarrinabadi & Abdi, 2011), identity style (Zarrinabadi & Haidary, 2014), L2 anxiety (Cetinkaya, 2005; Ghonsooly et al., 2014; Ghonsooly et al., 2012; Hashimoto, 2002; Kim, 2004; Knell & Chi, 2012; Wu & Lin, 2014), and L2 confidence (Baker & MacIntyre, 2000; Ghonsooly et al., 2012). The last group of studies on educational or linguistic variables investigated the impact of group size that later faced or the degree

of the learners' acquaintance with the group (Cao & Philp, 2006), time and topic of discussion (Kang, 2005), tasks (Cao, 2011), learning environment (Reinders & Wattana, 2015), and teacher's support (Lee & Ng, 2010). These investigations added valuable insight to the literature in terms of identifying affective variables of WTC in English in different contexts.

The two categories of trait- like and situational variables of MacIntyre et al. (1998)'s model of WTC in English raised a question for the investigators to know which group can be more influential. In general, the early research showed that WTC in English was more trait-like rather than situational (Kim, 2004) while the focus of the studies changed to considering WTC as a more situational one later. In the most recent years, trait WTC and situational WTC were considered complementary (Amirian et al., 2020). It meant that trait WTC made language learners ready for communication while situational WTC could affect their decision to start a communication in a situation (p.105).

Moreover, WTC in English could be viewed from a dynamic system viewpoint. In this regard, it would be essential to elaborate what a dynamic system meant. According to De Bot et al. (2007), language can be seen as a dynamic system. Being inspired by a dynamic system of L1 introduced by Freeman (1997) and elaborated by Herdina and Jessner (2002) and Paul Van Greet (2002), they discussed the idea in second language learning. They explained that the theory was originally about a simple system with two variables which had two degrees of freedom. When such a system was applied in a complex system with innumerable variables, it might have various degrees of freedom. They believed that, in a dynamic system, every system was a part of another

system. Therefore, systems could constantly change regardless of the initial system. In other words, as the systems were considered constantly in flow, they would show variations which would make them sensitive to specific input at a given time.

They also presented four key characteristics in a dynamic system including 1) changes over time which means one state is affected by the previous one, 2) interconnection which means that variables are linked and can influence each other in a system, 3) attractor or repeller state meaning that the system can change according to the expected change of variables, 4) butterfly effect which means a small change can cause a large overall change.

In most recent research, studies investigated the dynamic nature of the WTC model (Amirian et al., 2020; Cao & Philp, 2006; Pawlak & Mystkowska-Wiertelak, 2015; Zhang et al., 2018). Besides, MacIntyre and Legatto (2011) and MacIntyre and Gregersen (2021) also studied the nature of WTC in English from idiodynamic method which is counted as “a new mixed- method approach to study in real time the complex dynamics of integrated affective and cognitive states that interact continuously with human communication” (p. 1). The findings showed a fluctuation between the variables considering the dynamic nature of WTC in English.

In Iranian EFL context, WTC in English has been studied by various investigators in Iran and they have studied the relationship of WTC in English with other effective variables found in MacIntyre and his colleagues’ heuristic model of WTC in English (1989). Although these studies have added valuable literature to the field, the studies were conducted at different Iranian EFL settings, mainly language institutions. Besides, few studies focused on developing a model of WTC in English.

The findings of the investigations on the level of willingness to communicate in English among EFL learners have been contradictory in Iran. Alemi (2012) reported that EFL engineer students at university level showed a low level of WTC in English and Goldoust and Ranjbar (2017) showed that EFL English majored students at university had no tendency to start or even continue a conversation in English. Other studies conducted at languages institutes revealed that Iranian EFL students were not highly willing to communicate in the classroom (Riasati, 2018) and they preferred to keep silent during class (Riasati, 2015; Riasati, 2012, 2018; Tousi & Khalaji, 2014).

Whereas Iranian EFL students have shown a low level of WTC in English, some investigations have reported that they were willing to communicate in the classroom in some situations and these studies identified different affective variables. At university level, Alemi and Pahmforoosh (2012) reported linguistics and Alemi et al. (2013) revealed experiencing traveling abroad or talking to foreigners could affect WTC in English among EFL non-English majored students. In addition, Goldoust and Ranjbar (2017) found context-type situations like group discussions, meetings, and one receiver-type; friends, could influence WTC in English among English majored learners. Findings of the studies conducted at a language school showed linguistics (Yousefi & Ahmad Kasaian, 2014), context-types situations (Khatibi & Zakeri, 2014), small class size (Khazaei et al., 2012) could be influential on WTC in English among EFL learners.

Model Development of WTC in English

Relying on the model of WTC in English by MacIntyre and his colleagues (1998), investigators have tried to have a closer look at the variables and figure out the

direct and indirect effect of different affective variables on WTC in English. In this sense, the studies used path analysis to develop a model in different settings. The purpose of path analysis in model development was to figure out the cause-and-effect relationship between various variables. In other words, the method was used to investigate the impacts of multiple variables on each other and WTC in English in a setting.

According to the literature, various researchers including MacIntyre and his colleagues have used path analysis to investigate the causal effect of the multiple variables on WTC in English in second language learning contexts. In this section, three effective studies were reviewed to clarify the required methodology for the aim of the present research including MacIntyre and Charos (1996), Yashima (2002), and Peng and Woodrow (2010). Relying on these studies, the paths in the hypothesized model were used as a framework of the present research.

MacIntyre and Charos (1996) studied the role of global personality traits, L2 motivation, attitude, perceived L2 communicative competence, L2 anxiety, willingness to communicate in L2, and L2 frequency of communication. They believed that the personality trait was the root of WTC in English, and they had an indirect effect on WTC in English. So, they found an indirect path from personality traits to WTC in English through L2 motivation and L2 anxiety. They also found that L2 anxiety could directly affect WTC in English and indirectly through perceived L2 communicative competence.

Besides, Yashima (2002) developed a model in a Japanese university classroom setting. Yashima investigated the causal relationship of international posture, L2

motivation, L2 proficiency, L2 communication confidence, and WTC in English. According to their findings, L2 confidence directly affected WTC in English and L2 motivation affected WTC in English through L2 confidence. In this study, L2 confidence was found as the significant predictor of WTC in English.

Finally, Peng and Woodrow (2010) investigated the impact of classroom environment on learners' belief, communication confidence in English, L2 motivation, and WTC in English. The findings in Peng and Woodrow's study were in line with Yashima (2002) results and showed that L2 motivation affected WTC in English through L2 confidence.

In order to study the path analysis between multiple variables, the three studies used various ways of data analysis using different statistical software. The studies also investigated the goodness of fit index of the model to examine the hypothetical paths in their proposed models. However, Peng and Woodrow (2010) highly recommended that "before testing the model of the dependence relationship of a group of variables in a structural model, all measurement models of these variables should be validated using CFAs (cited from Hair et al. (2006) (p. 849)).

In the last decade, some researchers investigated a model of WTC in English in Iranian EFL context (Aliakbari et al., 2016; Amirian et al., 2020; Ghonsooly et al., 2012; Karimi & Abaszadeh, 2017; Khajavy et al., 2016; Khajavy et al., 2018; Khany & Nejad, 2017). Only one of the studies developed a model of WTC in English for non-English majored students at university level in Iranian Classroom setting (Ghonsooly et al., 2012). Though they investigated different variables, two important findings related to the present research were significant to be considered. Ghonsooly et al. (2012)

developed a model and studied the effect of L2 motivation, perceived communicative competence, anxiety, and international posture on WTC in English. First, the results revealed that L2 self-confidence was the significant predictor of WTC in English. Interestingly, they reported that L2 motivation could affect WTC in English through L2 self-confidence and a direct path from motivation to WTC in English was found though nonsignificant; therefore, the path was deleted in the final fit of their proposed model. Though this path was found significant in Karimi and Abaszadeh (2017) findings among EFL learners in various language institutes in Iran. Second, they found that motivation could affect WTC in English through communication confidence.

Affective Factors on WTC in English

The following variables were found in the literature as affective variables on WTC in English and the present research investigated them in Iranian EFL classroom context. It should be noted that some of the reviewed studies here in Iranian context were not conducted at university levels and they were based on investigations done at language institutes in Iran.

L2 Confidence

MacIntyre and his colleagues (1998) defined the term as “corresponds to the overall belief in being able to communicate in L2 in an adaptive and efficient manner” (p. 551). In their model, they introduced two types of self-confidence and defined one of them as a trait-like variable and the other as a state one. They introduced two components for L2 confidence as a trait-like variable. First, perceived communicative competence which was described as the self-evaluation of the speaker’s ability in L2. Second, lack of anxiety which was defined as a discomfort experienced in using L2.

They stated that combining these two variables into a single construct as L2 confidence could be correlated to L2 context and contributed to L1 WTC. They also reported some studies which revealed the relationship of L2 confidence to intergroup contact, to actual competence in L2, ethnic identity, and intercultural adaptation.

Clément (1980) believed that self- confidence was built through the frequency and pleasantness of contact with the language community. Clément (1980) stated that “a high frequency of pleasant contacts will have a more positive outcome than a low frequency. Conversely, much unpleasant contact will have a more negative effect than a little contact” (p. 151). In other words, the context in which the speaker could have the opportunity to use the second language and the daily use of the language play a significant role in self- confidence.

Later, Dörnyei (2005 cited in Edwards and Roger (2015) pointed out that L2 self- confidence was a socially defined construct that could be derived from the quality and quantity of the contact. This meant that a high level of L2 self-confidence could lead to a high level of communicative competence. In this regard, Noels et al. (1996)’s study on Chinese university students in Canada showed that L2 confidence could affect their involvement in the society and the frequent use of the language.

L2 confidence has been considered as one the affective variables on EFL learners and the investigations in the literature have reported different effects of L2 confidence. In this sense, MacIntyre and Charos (1996) stated that self- confidence could affect the frequency of use of L2. Therefore, the more confident the speaker is, the more they use L2. L2 confidence was also known as the best predictor of language proficiency (Clément, 1986) (p. 286). In this study, the participants showed that their

self- confidence was highly associated with their oral production. Therefore, the learners with a high level of L2 confidence could achieve a higher level of language proficiency. The studies conducted in this regard revealed the same findings (Clément, 1980; Noels et al., 1996).

In order to measure L2 confidence, qualitative and quantitative approaches were used in various studies. In this sense, Edwards and Roger (2015) investigated the challenges of L2 confidence development using semi-structured interviews. The findings revealed the importance of individual perception of control in different communicative settings. Besides, some investigations have used questionnaires to assess L2 confidence in different contexts.

One of the recommended questionnaires in the literature was by McCroskey and McCroskey (1988). He reported four ways of measuring this variable including objective observation, subjective observation, self-report, and receiver- report. They developed a self- report questionnaire to measure these constructs in their study. As L2 confidence could be associated with learners' perception about their own ability in using a language, they believed that self-report approach might be an effective way of assessing L2 confidence. They explained using this approach could lead to an actual perception of the communicator and could be a useful tool to measure this variable. The instrument had three constructs based on the receiver type naming stranger, acquaintance, and friend which an individual may face in four communication contexts including public, large meeting, small meeting, and in a dyad. Their instruments showed a high validity and reliability and have been used in many studies.

In the early research on WTC in English, L2 confidence was found to be one of the most primary variables of L2 WTC (MacIntyre et al., 2003). Yashima et al. (2004) called L2 confidence as the most essential variable in determining WTC in English. Learners with a low level of L2 self- confidence were found to be less willing to communicate in English. In addition, Peng (2007) believed that L2 confidence could be considered as “the most immediate antecedents of L2 WTC” (p.34). Moreover, Cetinkaya (2005) and Peng and Woodrow (2010) reported a direct association of L2 confidence and WTC in English. They found that L2 confidence could be the predictor of WTC in English in different settings.

The research results on L2 confidence revealed that L2 confidence was influential on WTC in English in Iranian context (Ghanbarpour, 2016; Ghonsooly et al., 2012; Khajavy et al., 2016). Therefore, the higher self-confidence students have, they are more willing to communicate in English. Interestingly, Ghonsooly et al. (2012) and Ghanbarpour (2016) found L2 confidence as the best predictor of WTC in English among university non-English students and university English majored students respectively. Aliakbari et al. (2016) also examined various affective variables including L2 confidence among Iranian EFL learners in language institutions and reported a direct effect of L2 confidence on WTC in English.

L2 Motivation

According to EFL literature, L2 motivation could be considered as the most explored variable in general and in terms of its relation to WTC in English. L2 motivation has been known as an important variable which could explain why learners decide to study a language. As various theories were presented to define L2 motivation

in education from different perspectives, the variable has been reviewed by different scholars and it was measured using instruments developed based on these theories. In this section, a brief review of the relationship of different models of L2 motivation with WTC in English was presented.

Most investigations have focused on Gardner's socio-educational model of motivation (Gardner, 1985). He believed that motivation was a cognitive process which could be affected by socio-educational variables. Gardner (1985) 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 experienced in this activity" (p. 7). He introduced two types of motivations naming integrative and instrumental motivation. Integrative motivation was defined as learners' interest in communicating with others in the language community. Moreover, instrumental motivation was defined as learners' practical reasons to learn a language such as getting a degree or finding a well-paid job.

Gardner introduced three components in his model including motivational intensity, desire to learn a language or motivation, and attitude toward language learning. In this sense, integrativeness included three main parts: integrative orientation, attitudes towards foreign language society, and interest in foreign language learning. In addition, attitudes towards learning situations reflected the learner's perception towards language teachers, language courses, and learning materials.

In order to assess motivation based on this theory, Gardner developed an instrument called Attitude/Motivation Test Battery (AMTB). The initial study to develop the questionnaire was conducted among French learning students who were studying the language as a second language. This instrument was a self-report

questionnaire with two ways of rating the items was developed to measure various aspects of motivation. The results from most investigations using AMTB showed a positive direct or indirect relationship with WTC in English (Baker & MacIntyre, 2000; Hashimoto, 2002; MacIntyre et al., 2001; MacIntyre et al., 2003; Yashima, 2002).

However, some problems have been reported in using this model in an EFL context since the only available setting for this context is the classroom environment in comparison to the second language learning environment in which the Gardner's model and questionnaire (AMTB) was developed. Dörnyei (1990) claimed that EFL learners did not form the attitude due to lack of exposure to native speakers in real settings. Dörnyei (2008) also mentioned that the model was useful for multilingual settings, and it had little explanatory power in EFL classrooms. In addition, Peng (2007) studied the relationship of the L2 motivation model and WTC in English and found that integrative L2 motivation accounted for a small proportion of variation in WTC in English. Besides, he found that attitudes towards the learning situation did not predict WTC in English in the EFL setting.

On the other hand, Deci and Ryan (1995) investigated L2 motivation from self-determination theory (SDT). Self-determination theory was considered an approach to human motivation and personality which focused on inner sources of personality growth and behavioral self-regulation (Ryan et al., 1997, as cited in Ryan and Deci (2000). Self-determination theory suggested different needs of humans in learning and identified and distinguished several types of motivations as a result.

According to this theory, motivation was categorized into intrinsic and extrinsic motivation Deci and Ryan (1995). Intrinsic motivation was related to learners' interest

in an activity which can give the feeling of satisfaction and classified it into three orientations of intrinsic knowledge; feeling of pleasure due to gaining knowledge in a special area, intrinsic accomplishment; enjoyment of completing or mastering a task or a goal, and intrinsic stimulation; enjoyment stimulated by performing a task. Extrinsic motivation was defined as actions that were carried out to achieve instrumental goals and was categorized in three forms or regulation according to the framework.

Deci and Ryan (1995) elaborated the differences between external motivation and other types of regulations naming external regulation, introjected regulation, and identified regulation. External regulation was the enjoyment of doing a performance or an activity because of external forces. The second type as introjected regulation was the reason for doing an activity due to pressure. The last type referred to identified regulation which was related to attaining a goal because of its importance or personal reasons. Lastly, Deci and Ryan (1995) discussed amotivation for a situation in which the people cannot figure out any relation between their actions and their results.

Consistent with Deci and Ryan's study (1995), Noels et al. (2000) studied the concept of L2 motivation from self-determination theory in education and developed an instrument to measure L2 motivation. The instrument is a self-reported questionnaire with seven subscales according to SDT consisting of three items for each subscale in a Likert scale. Overall, based on their findings, they reported that motivational principles in self-determination theory may parallel some motivational constructs in L2.

Previous studies using motivational framework of self-determination theory showed that both intrinsic and extrinsic motivation were correlated with WTC in English especially in different EFL contexts especially in Iran (Altiner, 2018; Azmand,

2014; Khajavy et al., 2016; Saeedakhtar et al., 2018). However, the correlation of in studies could be more intrinsically or extrinsically dominated according to EFL context. For example, Saeedakhtar et al. (2018) reported that extrinsic motivation was more dominant than intrinsic one among Iranian university students.

Besides using quantitative approach in order to measure L2 motivation based on different theories, some investigations used qualitative approach, for example using open-ended questions in interviews or diaries, or mixed method in order to measure this variable. As the investigations on L2 motivation has been an interesting topic for scholars for decades, the results suggested the fact that L2 motivation could play an important role in language learning and was found to be a major affective factor in learner's success (Engin, 2009; Guerrero, 2015; Jafari, 2013).

Moreover, according to the literature, language learners with a higher level of L2 motivation were found to be more willing to communicate in different contexts (Altiner, 2018; Azmand, 2014; Lao, 2020). The findings on L2 motivation based on various theories showed a positive correlation between this variable and WTC in English. Therefore, the variable has been considered as one of the most effective variables in investigations and the findings suggested that the more students were motivated, the more they were willing to communicate in English.

In the last decade, few studies on L2 motivation and its relationship with WTC in English in Iranian context were conducted using different theories of L2 motivations in relation with WTC in English. Riasati (2018) studied the relationship between L2 motivation and WTC in English among IELTS candidates using Gardner and Lambert's (1987) questionnaire. The results showed that L2 motivation was positively correlated

with WTC in English in this context. Besides, Azmand (2014), Karimi and Abaszadeh (2017), and Saeedakhtar et al. (2018) studied L2 motivation from self-determination theory. Azmand (2014) and Saeedakhtar et al. (2018) found that both intrinsic and extrinsic motivation were correlated with willingness to communicate in English. And, finally, Shirvan and Taherian (2016) studied WTC in English within the microsystem of the classroom using a qualitative approach. They studied various affective factors and L2 motivation from extrinsic and extrinsic viewpoints and reported that the participants were more extrinsically motivated rather than intrinsically.

L2 Anxiety

The term was defined as “a distinct complex of self-perceptions, beliefs, feelings, and behaviors related to classroom language learning arising from the uniqueness of the language learning process” (Horwitz et al., 1986, p.128). According to them, anxiety is the feeling of tension, nervousness, and worry that prevents learners from performing successfully despite their abilities and they believed that anxiety should be considered as a situation specific in which the language learner performed a task. Later, MacIntyre (1999) gave a simple definition for L2 anxiety later and defined it as negative emotional reactions such as worry, stress and nervousness while learning or using a second language.

In general, Alpert and Haber (1960) classified language anxiety into debilitating anxiety and facilitating one. Debilitating anxiety was defined as harmful anxiety which could affect the learners negatively. In other words, this type of anxiety would interfere with the learners' performance. While, on the other hand, facilitating anxiety was defined as a helpful one in the language learning process. It meant that this type of

anxiety would help learners' performance. However, most studies have investigated the debilitating aspect of anxiety especially in the field of EFL.

As anxiety could be an affective factor on learners, the cause of anxiety has also been investigated by various researchers. Oteir and Al-Otaibi (2019) reviewed and summarized into three sources naming learners, educators, and instructional practice. They stated six major causes including 1) interpersonal and personal anxiety, 2) learners' beliefs about learning a foreign language, 3) classroom procedures, 4) employing teacher-centered methods, 5) teachers' beliefs about language teaching, and 6) language examination.

Dewaele and Al-Saraj (2015) reviewed anxiety from different aspects and reported that levels of L2 anxiety could be linked to a range of variables naming educational and socio-biographical ones such as language learning history and current practices. In this sense, Young (1992) suggested that L2 anxiety was a situational factor since language learning context could trigger language anxiety. Woodrow (2006) distinguished between L2 anxiety in a classroom and outside of a classroom setting in his research and reported the major reasons in classroom settings. Later, Kayaoğlu and Sağlamel (2013) found that both situational and environmental factors such as cultural and social ones could influence L2 anxiety in language learning.

Language anxiety has been reported to have a negative effect on learners in various ways. MacIntyre (1999) mentioned that anxiety could affect learners' performance and achievement negatively. Krashen (1982) believed that language learners' brains could be affected indirectly by anxiety and would be a barrier for language acquisition. Besides, Horwitz et al. (2010) found that language anxiety could

impact learners' feelings about their learning which could lead to unwillingness to communicate in English.

MacIntyre and Gregersen (2021) studied the effect and role of language anxiety in various studies. They reported that one of the consistent findings in second language anxiety literature was the fact that learners with higher levels of language anxiety were more associated with lower levels of language achievement. Based on the literature, they also found that higher levels of language anxiety could be linked to lower levels of perceived competence. Lower self-efficacy, less motivation, and lower level of willingness to communicate in the second language.

MacIntyre (2017) classified the investigations on L2 anxiety in EFL into three categories, naming confounding, specialized, and dynamic one. The results from these categories revealed three major and valuable findings in the literature. First, L2 anxiety was negatively associated with language learning. Second, it could be the reason and lead to second language learners' negative performance. Finally, L2 anxiety was not only an internal factor in learners but also an external factor which could be caused socially.

In order to assess L2 anxiety in EFL, researchers have conducted different studies. The studies could be categorized into quantitative and qualitative approaches to assess L2 anxiety among students. Quantitative measures were mostly Likert-scale considered as self-reporting questionnaires while qualitative ones focused more on gathering personal information using interviews and diaries. Recently, investigators have tended to collect the data using both methods in their studies.

Horwitz et al. (1986) developed a questionnaire as an instrument to measure L2 anxiety and suggested three sources of anxiety in his investigation; fear of negative evaluation, test anxiety, and communication apprehension, related to WTC. Fear of negative evaluation refers to the feeling which could be caused by other people's negative opinion or expectations of learners' performance. Test anxiety was considered as a type of performance in which the learner was anxious with the fear of failure. This type of anxiety could include oral tests which could potentially provoke both test and oral communication anxiety. Finally, the Communication apprehension refers to the anxiety that a person experiences while communicating.

Horwitz et al. (1986)'s instrument focused on assessing the anxiety in language learning in general in a classroom context and was found to be the most frequent scale used in investigations. Later on, researchers developed skill instruments to measure the level of anxiety in various skills such as reading (Saito et al., 1999), listening (Cheng, 2004; Cheng et al., 1999), and writing (Elkhafaifi, 2005). However, according to the findings in literature, L2 anxiety was found to be more associated with speaking skill rather than other skills (Alghali, 2016).

The findings of the studies about the relationship of L2 anxiety and WTC in English can be categorized into two major ones. First, investigations about L2 anxiety have suggested that this variable was one of the strongest predictors of WTC in English (Dewaele, 2019; Dewaele & Dewaele, 2018; Hashimoto, 2002). Although, the effects of L2 anxiety on WTC was found to be vary, it was one of the best predictors of WTC in English which could affect it directly. Second, L2 anxiety was found to have a negative correlation with WTC in English (Hashimoto, 2002; Knell & Chi, 2012; Wu

& Lin, 2014). In other words, L2 anxiety affected the learners' performance and students with a higher level of L2 anxiety were not willing to communicate in L2 language.

Besides, the findings on L2 anxiety in Iranian context was consistent with the second results of investigations in the literature. In other words, L2 anxiety was reported to have a negative relationship with WTC in English among Iranian students (Aliakbari et al., 2016; Ghanbarpour, 2016; Ghonsooly et al., 2012; Rastegar & Karami, 2015; Riasati, 2018). The results of studies in Iran did not show that L2 anxiety could be the best predictor of WTC in English to the best of our knowledge.

Grit

Angela Duckworth started the concept of grit in her classes based on observation as a teacher teaching mathematics. She noticed that smart students in her class were not doing well while those who did not have a high level of IQ were doing better at the end of the class. Thus, she found that IQ could not distinguish students' performance and achievement as everyone believes in the field of education and life (Duckworth et al., 2007). As a result, she was concerned to know why students with the same level of intelligence achieved differently in her classes or their academic lives and even some students with a lower level of intelligence were more successful than others.

Duckworth left teaching and she started studying psychology. She and her colleagues studied the reason for success in different fields and found that individual differences could also predict success suggested. They observed that every successful person shared a personal quality which they called grit. They defined grit as a non-

cognitive individual difference was defined as “passion and perseverance for long term goal” (Duckworth et al., 2007). According to them, grit involves working with great effort toward the challenges, maintaining the effort as well as interest over years even if the individual faces failure or hardships. Thus, gritty individuals can work hard even in the presence of setbacks while maintaining their interest in order to achieve their goals. They introduced grit with two major facets naming passion and perseverance for long term goals. Perseverance of effort refers to tendency to work hard even in presence of setbacks and consistency of interest or passion refers to tendency to not change goal or desire frequently in the process of pursuing a goal. Duckworth (2017) highlighted the significance of effort and talent combination which could lead to a skill and the skill plus deliberate practice; in other words, effort over time would result in achievement.

Grit was found to overlap with some concepts from various scholars' viewpoints. Thus, studies revealed that grit was distinguished from motivation since it was found to be conceptually related to other processes such as self-control or motivation; however, it stood alone as a construct (Myers et al., 2016; Von Culin et al., 2014). In a military mentor website, it was written that grit is within individuals; however, motivation is self-regulated or externally generated in individuals (retrieved from <https://militarymentors.org/grit-and-motivation/>). Besides, motivational orientations were found to be correlated by grit Von Culin et al. (2014). On the other hand, Duckworth and Gross (2014) differentiated grit and self- control in their study. They stated that grit and self-control are strongly correlated; however, individuals with high levels of self- control were found to be able to overcome the temptation but did not consistently pursue a dominant goal. They believed that the differentiation between

these two concepts could drive from the hierarchical goal framework and the individual's ways of operation over different timescales.

According to the findings, grit is in people's DNA (Duckworth, 2017; Rimfeld et al., 2016). Duckworth (2017) stated that grit could come from our DNA "in part" and it could also be developed or grown. In her book, she introduces two ways of growing grit from the inside out and the outside in. She proposes four components of growing grit from inside out as interest, practice, purpose, and hope. Rimfeld et al. (2016) revealed in their study that "the etiology of grit is highly similar to other personality traits, not only in showing substantial genetic influence but also in showing no influence of shared environmental factors. Personality significantly predicted academic achievement, but grit added little phenotypically or genetically to the prediction of academic achievement beyond traditional personality factors" (p.1).

Duckworth et al. (2007) conducted six various studies in different contexts such as level of education, job, GPA, military, and National Spelling Bee in order to find out the role of grit. The findings of the six investigations showed that grit was a significant variance of success over and beyond IQ. The results of the research on education depicted that grit as a non-cognitive trait could predict academic success and learners with a higher level of grit gained a higher level of education. In another study, they reported that students with higher levels of grit earned higher GPAs.

On the significance of grit, in an interview, Duckworth said that developing non-cognitive traits such as grit could be essential for students (Perkins-Gough, 2013). She believed that many teachers and educators can have good intuitions in this regard; therefore, she invited them to bring up their ideas to be tested. Although, she stated

some of the results that they found on how to develop or teach grit to students. In this sense, she thought that in theory changing the students' beliefs could lead to a change in their grit level. She also mentioned that teaching students to have a deliberate practice could be helpful; though, it could be difficult, confusing, and even frustrating at the same time. In a study with Carol Dweck, they found that the students with a growth mindset tended to be gritter.

Christopoulou et al. (2018) conducted an investigation to review the role of grit in education systematically and concluded three major findings reviewing twenty-nine studies in education. First, grit was found to be associated with various range of positive outcomes in education. In this regard, they found that grit was positively correlated with academic performances such as GPA and retention. Second, the two facets of grit had correlation with different educational variables. However, the findings were not consistent, it was found that perseverance of effort was a more powerful predictor of academic performance. Finally, positive psychology variables could predict grit in education. Various variables were reported as the predictor of grit including hope, meaning and connection, and learning factors such as learning approach- avoidance goal orientation and self-transcendent purpose of learning.

In order to measure grit, two instruments were developed by Duckworth and her team (2007; 2009). The first scale called Grit-O (Duckworth et al., 2007) was a self-reported instrument to measure the two constructs of grit: passion and perseverance for long term goal with 12 items. They developed the questionnaire emphasizing on “focused effort and interest over time”. However, they did not explore the differential predictive validity of the two facets in their study (Duckworth & Quinn, 2009). Thus,

they conducted another series of studies in order to validate their instrument as a more efficient measure of grit. They named the second instrument as the short scale grit (Grit-S). In this investigation, they retained the same constructs of grit across the four studies that they did in 2007. The results identified 8 items with a higher reliability and validity. Therefore, based on their report, most investigations have used a short grit scale in their research.

Recently, the researchers in the field of EFL have become interested in grit and its effect on foreign language learners; however, the few studies show a gap in literature in order to investigate the impacts on grit in language learning and EFL learners more profoundly. In general, the investigations in EFL have also reported a considerable effect of grit in foreign language performance (Banse & Palacios, 2018; Keegan, 2017; Taşpınar & Külekçi, 2018; Wei et al., 2019; Yamashita, 2018).

Keegan (2017) called attention to the importance of identifying and building grit in language learning and emphasized on the correlation of grit with characteristics of a successful language learner which was introduced by Naiman et al. (1978); “successful language learning with aptitude, personality traits, attitudes and motivation” (p.4). Moreover, the two facets of grit; passion and perseverance for long-term goals could be crucial in language learning since language learning is a lifelong process according to Foley and Thompson (2017). Keegan (2017) explained that these two facets were explained as the characteristics of a second language learner by Naiman et al. (1978). He believed that Naiman et al. (1978) might not use the same words explicitly; however, it could be interpreted as such. Naiman et al. (1978, as cited in

Keegan, 2017) stated that a good language learner always “finds ways to overcome obstacles whether linguistics, affective or environmental” (p. 5).

The concept of grit in language learning has been studied from different viewpoints in the presence of different variables. The results have depicted that grit was considered as one the most significant and effective positive personality traits in language learning. In this regard, Wei et al. (2019) reported grit as a factor to improve foreign language performance directly and indirectly through promoting foreign language enjoyment among learners which could lead to a positive increase of foreign language environment. In addition, Banse and Palacios (2018) studied Latino English language learners and found that grit was most strongly associated with English/ language arts achievement when students perceived that teacher used a high level of care and control.

Moreover, Teimouri et al. (2020) studied the concept of grit and its relation to motivational behavior and language achievement. Interestingly, they developed the language-specific grit scale in their study and the results suggested that L2 grit was positively related to learners’ motivational behavior and achievement above and beyond general grit. Relying on the findings of these investigations, Sudina et al. (2021) conducted a study on language-specific grit in order to investigate the psychometric properties and its predictive validity in both second and foreign language learning in different contexts. They found out that the correlation was stronger in EFL context compared to ESL. Besides, perseverance of effort was reported as a significant predictor of language proficiency in EFL while consistency of interest was found to be a significant negative predictor in ESL context.

Considering grit as a positive internal variable, Lee and Drajadi (2019), Lee and Hsieh (2019), and Lee and Lee (2019) researched the relationships of WTC in English with other affective factors such as grit in three different environments among language learners: in and out- of class and digital contexts. They concluded that grit could be an effective factor in promoting learners' performance in language learning. They specifically found grit as a positive internal variable was one of the significant predictors of students' WTC in English in all settings and all contexts. In other words, they reported that those students with a higher level of grit seemed to seek out more opportunities to practice and improve their English communicative skills.

Lastly, the relation of grit with WTC in English has never been explored in Iranian context. However, grit was studied by Ebadi et al. (2018), Teimouri et al. (2020), and Khajavy et al. (2021) in Iranian EFL context. Ebadi et al. (2018) believed that the general grit questionnaire (Grit-O scale or Short Grit Scale) could not be a good instrument to measure L2 grit; therefore, they developed an Iranian context-specific grit questionnaire. In this regard, relying on the components of growing grit from inside out by Duckworth (2017) and the theory of Johnson and Johnson (1999) for language teaching, they proposed that grit in EFL could include four main components including trying hard to learn English, having interest in language learning, practicing in order to learn English, and having goal for learning English. Their L2 grit questionnaire showed a high reliability and acceptable validity; however, they mentioned that the result could be context specific due to the socio-cultural aspect of grit.

Finally, Khajavy et al. (2021) studied grit and language mindset in Iranian context. The findings revealed that the growth of language mindset could predict one

facet of grit (perseverance of effort) positively though not significantly. Besides, fixed language mindset could not predict perseverance of effort but did predict consistency in interest negatively.

Iranian EFL context

The EFL learning situation in Iran can be considered a different context due to different reasons. In this section, a brief overview of English as a foreign language in schools and universities, the curriculum and the role of English language institutions were provided to present a clear picture of EFL context in Iran.

Studying English at school starts from middle school almost at the age of 12-14 years old. The schools do not provide a communicative learning environment and the books at schools are designed by the Ministry of Education with absence of some skills like listening skill (Sadeghi & Richards, 2016). The syllabus and course content are prescribed for all the schools which focus on reading comprehension, grammar as well as vocabulary and teachers cannot make changes (Sadeghi & Richards, 2016). Studies have reported the absence of a qualified curriculum for the English course in Iran (Atai & Mazlum, 2013; Ebrahimi & Sahragard, 2016). The speaking skill at schools is limited to drilling with the aim of grammar practice and the lessons are taught in Persian (Sadeghi & Richards, 2016).

At university level, all non-English majored students regardless of their majors should pass a three- credit basic English course in which reading skill, sentence structures and translation of the texts are mainly focused (Noora, 2008). Therefore, the EFL instructors at university levels do not teach the textbooks in English and the language of communication in this setting is mainly Persian; official language in Iran

(Avanaki & Sadeghi, 2013). Therefore, university students have few chances to be able to communicate in English. Studies on the university EFL settings in Iran reported two main problems naming lack of trained instructors in using modern teaching approaches and the difficult level of the textbooks (Avanaki & Sadeghi, 2013).

Though lack of exposure to communication in the society has affected students not to feel the necessity of speaking in English, motivated EFL learners spend time and money on tutoring classes at private language institutions. Therefore, communication in English is mainly limited to these extra English classes. Since these institutions are run by private sectors, the EFL context in the institutions could be different from one place to another and even from one class to another in one institute. As a result, there is a huge competition among the language institutions and EFL teachers who work in this sector. In such places, the books are chosen from the available books in the market and the learners can be grouped from various age ranges with different English backgrounds.

The fact that most EFL learners in Iran basically learn to communicate in English in such English language institutions has made these institutes an important setting to learn English and, thus, it can be said that they play a crucial role in Iranian EFL context (Haghighi & Norton, 2017). On the importance of the Language institutions, Borjian (2010) stated that “it is hard to imagine the accomplishment of the private sector without considering the enormous interest shown by Iranian youth in attending these institutions” (p.60) (as cited in Haghighi and Norton, 2017).

Recently, more and more Iranian EFL university learners are interested in attending English language institutions to be able to communicate in English. Shahriari

(2017) mentioned some of the reasons for this fact in his study such as pursuing higher education which requires an English international proficiency test.

Related Studies

In the very recent years, the model of WTC in English has been evolving in the light of different viewpoints especially in the light of positive psychology and positive internal in personality traits or external variables. Therefore, in this section, a brief review of positive psychology and affective variables on WTC in this field was presented.

Positive psychology was first established by Martin Seligman in the American Psychology Association. It was considered as a reaction to “exclusive focus on pathology in psychology” with various topics such as hope, well-being, satisfaction and happiness (Csikszentmihalyi & Seligman, 2000). The purpose of the positive psychology was to help people flourish and make their life worth living.

Seligman and Csikszentmihalyi (2014) introduced three pillars in positive psychology naming positive individual traits, positive experiences and positive institutions (as cited in Wei et al., 2019). According to Gabrys-barker (2016 cited in Wei et al., 2019), the three pillars of positive psychology could influence EFL learners’ academic performance. Therefore, the views of positive psychology have also affected education; and investigators have shown interests in conducting research by bringing the topic of positive psychology to the world of education and investigated the effects of these topics on learners and their relations to learner’s achievements in different areas.

EFL investigators also studied the topics of positive psychology and their impacts on EFL learners. In this regard, Dewaele (2019) and Dewaele and Dewaele (2018) conducted investigations on learner- internal and learner-external predictors of willingness to communicate in foreign language classrooms. In the former one, the study was conducted among EFL learners in Spain using an online questionnaire and the later one was done among secondary school students in the UK using a questionnaire. These two investigations studied the foreign language enjoyment as a positive external variable on willingness to communicate. The results showed that higher levels of social foreign language enjoyment were one of the strongest predictors of WTC.

Moreover, MacIntyre et al. (2019) examined the correlation between intense, highly motivated flow experience and perception of competence with willingness to communicate in both language (Scottish Gaelic) and music. The participants were recruited online through social media, so they were from various countries. However, they mostly speak English as their first language and were asked to complete an online questionnaire to collect the data. The results reported the frequency of flow experience highly correlated between language and music contexts. The findings were interpreted as reflecting a combination of social and personality-based processes.

Recently, in the light of positive psychology, Lee and Drajeti (2019), Lee and Hsieh (2019), and Lee and Lee (2019) also conducted a series of research on WTC and grit as a positive internal personality trait in learners in three different settings: in- and out- of classroom and digital settings. The results of the investigations revealed the correlation of WTC with other variables in their studies; however, the significant

predictors of WTC were different in different settings and different contexts. The findings in these studies showed grit, interestingly, was found to be the significant predicting variable of WTC in English. In the following part, the three studies are reviewed as the core literature of the present study.

Lee and Lee (2019) conducted research on willingness to communicate and effective factors including motivation, self-confidence, risk taking, grit, and virtual experiences in inside and outside of the classroom and also digital settings. They used questionnaires to measure the relationship of these variables among Korean undergraduate students. Their results in their study were categorized into three sections. In one of their findings, they reported grit and motivation as the significant predictor of WTC in English; therefore, students with a higher level of grit and L2 motivation and lower level of L2 speaking anxiety were more willing to communicate in English in the classroom.

Lee and Hsieh (2019) studied the relationship of willingness to communicate and four other variables naming L2 self-confidence, L2 anxiety, L2 motivation and grit in three settings including inside and outside of classroom as well as digital context. The study was conducted among EFL Taiwanese undergraduate students using a quantitative research design. The results revealed two significant findings. First, grit and L2 confidence were the significant predictor of WTC in English meaning that gritty learners with a higher level of L2 self- confidence had a high level of L2 WTC in both digital and non-digital settings among Taiwanese students. Second, L2 anxiety was reported as a significant predictor of WTC in non-digital contexts.

Finally, Lee and Drajati (2019) examined willingness to communicate, informal digital learning of English (IDLE) and affective variables including grit, motivation, self-confidence, L2 speaking anxiety. They studied the relationship between the mentioned variables among Indonesian students from one state university and they conducted a quantitative study using a survey. The results showed that grit, L2 motivation, L2 confidence and informal digital learning of English activities were the significant predictors of the WTC in this setting.

It should be noted that the above studies notified their findings on the correlation of these variables with WTC in English did not imply the cause-and-effect relationship between these variables and recommended other researchers investigate the causal relationship between WTC in English and the affective variables. To date, this point has been a gap in the literature, hence the present study could lead to new insight of WTC in English model development in the field of EFL.

Summary

In summary, this chapter provided information about the five variables including WTC in English, L2 confidence, L2 motivation, L2 anxiety, and grit. The findings from the previous studies in the literature review showed the correlation between the variables and WTC in English in different EFL contexts, especially in Iran. Relying on the findings of Lee and his colleagues, the conceptual framework of the present study aimed to investigate the cause-and-effect relationship of the four variables on WTC in English. Therefore, according to the results from model development in the literature, a hypothesized model was proposed with paths showing that two variables naming L2 confidence and L2 anxiety would affect WTC in English directly and L2

motivation, L2 anxiety, and grit would affect WTC in English indirectly among non-English majored EFL learners in Iranian university classroom setting.



CHAPTER 3

RESEARCH METHODOLOGY

The study aimed to find out the relationships among WTC in English, L2 confidence, L2 motivation, L2 anxiety and grit in Iranian EFL classroom context, to specify the best predictor of WTC in English of Iranian EFL students and propose a model of willingness to communicate in English in Iranian EFL classroom context. This chapter presents detailed information about the research design, participants, research instruments, data collection and data analysis.

Research Design

The present study used a survey method to measure the relationship and causality of the four variables with WTC in English among EFL students. To address the questions, a quantitative approach was used, and the data was obtained using questionnaires.

Population and Participants

The population of this study was Iranian university students numbering approximately 3.5 million studying at public and private universities in Iran. To be able to generalize the findings to the population, at least 400 university students were needed in this study (Yamane, 1967) as a representative of Iranian non-English major students.

Iran is a wide country with thirty-one provinces which was divided into 5 regions by the Ministry of Interior in 2014. Every region consists of big cities and small towns and the aim of this grouping was providing the same regional development and facilities for the citizens of each region. In this study, one region was chosen as the

representative of other regions based on different reasons. The chosen region has a higher population compared to other regions and Tehran, the capital of Iran, is located in this region. Every year, many students immigrate to Tehran from other regions to study at the universities located in this city; therefore, the population of university students in Tehran can be a good representative of the whole country. Moreover, Tehran was selected as a representative of big cities due to the facilities and similarities with other major cities in each region. Besides, a town was selected as a representative of small towns in the region. Two private and public universities who agreed to help distribute the online questionnaire to their students were chosen from this region.

The participants were randomly selected from two public and private universities in the region. The participants were non-English majored university students passing their basic English course in the second semester of 2020. They were studying in different majors including geology, psychology, management, accounting, and engineering such as architecture, computer, and chemistry. Four EFL instructors were asked to provide the online questionnaires for the participants. Both EFL instructors and participants were informed about the purpose of the study and were explained their roles in the study.

In total, 488 participants who were studying in the second semester of 2020 at two public and two private universities in Iran filled the online form. As shown in Table 1, the number of participants from the private universities and the public universities was almost equal. The participants' age range was between 19 to 21 years old. Considering gender, more participants in the study were female (68%). Lastly, based on their self-reported English proficiency, the participants' level of English

proficiency (based on CEFR levels) ranged from A1 to C1 (Basic user to Proficient user). Most participants reported having B1 level (Independent user) while one fourth fell in A1 (Basic user), the lowest level of proficiency.

Table 1 Participant Information

Information	No.	Percentage
Public university students	243	50.6
Private university students	239	49.8
Gender		
Female	333	68
Male	154	31
Age		
19	186	38.5
20	105	21
21	195	40
Level of English		
A1 (Basic user)	122	25
B1 (Independent user)	306	62.8
C1 (Proficient user)	60	12.2

Research Instrument

In order to find the relationships, the best predictor and the causal effect of the four variables with WTC in English, a set of questionnaires was used (Appendix A). The set of questionnaires in this study consisted of seven sections. The first section

included the consent form and information sheet for the participants to read before answering the items in the questionnaire and the second section was used to collect demographic information of the participants such as their age, gender, and level of English. The other five sections were used to measure each variable separately: WTC in English, L2 confidence, motivation, L2 anxiety, and grit. Each part of the questionnaire measuring different variables was adapted from previous studies (Duckworth & Quinn, 2009; Horwitz et al., 1986; McCroskey & McCroskey, 1988; Noels et al., 2000; Peng & Woodrow, 2010). The quality of the questionnaire items, i.e., validity and reliability, reported in the original study was accepted and used in this study. Minor modification of the items was made. The explanation is in the following sections.

Willingness to Communicate in English Questionnaire Items

The WTC in English questionnaire developed by Peng and Woodrow (2010) and adapted in Weaver (2005) was used in this study. The questionnaire composed meaning-focused and form-focused activities (Table 2). This version was employed in this study focused on WTC in English in oral communication context in EFL classrooms specifically. As shown in Appendix A (section 3), the questionnaire included 10 statements describing various speaking situations and with different kinds of interlocutors. The original questionnaire was a 6-point scale; however, in this study, the questionnaire was modified to a 5-point scale, ranging from “Definitely not willing to” to “Definitely willing to”. The participant needed to respond to what extent he or she was willing to use English in the given situation.

Table 2 The Underlying Constructs of WTC in English Questionnaire

Constructs	Number of items	Items
Meaning-focused	6	1, 2, 3, 4, 9, 10
Form-focused	4	5, 6, 7, 8

L2 Confidence Questionnaire Items

The scale was adapted from McCroskey and McCroskey (1988). There were totally 12 items to measure confidence (Appendix A, section 4). The questionnaire was developed as a self-report instrument to measure learners' perceptions of their communication competence and reflected four basic communication contexts; public talking, talking in a large meeting, talking in a small meeting, and talking in a dyad, with three common types of receivers; strangers, acquaintances, and friends (Table 3). This questionnaire was chosen because of its high validity and reliability to measure confidence.

Table 3 The Underlying Constructs of L2 Confidence Questionnaire

Type of Receivers	Number of items	Items
Strangers	4	1, 4, 7, 10
Acquaintances	4	2, 6, 9, 12
Friends	4	3, 5, 8, 11

Two different modifications were applied on this scale for the purpose of the study. First, based on the type of receivers in the questionnaire, the situations were modified to refer to different receivers in a classroom context in the present study. Therefore, the statement “In the language classroom, I feel confident when I ...” was added to the beginning of the items. Second, the original scale was designed to be rated from 0 meaning completely incompetent and 100 meaning completely competent. In this study, the participants were asked to respond to what extent they feel confident using English facing different situations in a classroom. The questionnaire was modified to a 5-point scale, ranging from “Almost never true about me” to “Almost always true about me”.

L2 Motivation Questionnaire Items

The questionnaire was developed by Noels et al. (2000). As shown in the appendix A (section 5), there were 21 items in the original questionnaire on a 7- point scale from “Strongly agree” to “Strongly disagree”. For the purpose of the study, the rating scale was modified to a 5-point scale ranging from “Strongly agree” to “Strongly disagree”.

The instrument consisted intrinsic motivation (including intrinsic motivation-knowledge, intrinsic motivation- accomplishment, and intrinsic motivation-stimulation), extrinsic motivation (including external regulation, introjected regulation, and identifies regulation), and amotivation (Table 4) subscales to measure the learners’ motivation in language learning. The reason for choosing this questionnaire was the fact that the instrument is a better tool for English as a second language according to the literature.

Table 4 The Underlying Constructs of L2 Motivation Questionnaire

Constructs	Number of items	Items
Intrinsic Motivation- Knowledge	3	13, 14, 15
Intrinsic Motivation- Accomplishment	3	16, 17, 18
Intrinsic Motivation- Stimulation	3	19, 20, 21
External Regulation	3	4, 5, 6
Introjected Regulation	3	7, 8, 9
Identified Regulation	3	10, 11, 12
Amotivation	3	1, 2, 3

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L2 Anxiety Questionnaire Items

The questionnaire was developed by Horwitz et al. (1986) which had 33 items on a 6- point scale ranging from “Strongly agree” to “Strongly disagree” in order to measure L2 anxiety as shown in appendix A (section 6). In this study, the rating scale was modified to a 5-point scale ranging from “Strongly agree” to “Strongly disagree”. The items described the feeling of anxiousness in different situations for EFL learners in a classroom with three sub-categories named communication apprehension, test anxiety, and fear of language evaluation (Horwitz et al., 1986).

However, according to Park (2014), the acceptable model of the underlying construct of this scale subdivided into 15 items of communication apprehension, 9 items of foreign language class anxiety, 6 items of fear of negative evaluation, and 3 items of test anxiety (Table 5). This questionnaire was chosen due to the highly use of the instrument in the previous studies and its high validity and reliability.

Table 5 The Underlying Constructs of L2 Anxiety Questionnaire

Constructs	Number of items	Items
Communication apprehension	15	1, 3, 4, 9, 13, 14, 15, 18, 20, 24, 27, 29, 30, 32, 33
Foreign language class anxiety	9	5, 6, 11, 12, 16, 17, 22, 26, 28
Fear of negative evaluation	6	2, 7, 19, 23, 25, 31
Test anxiety	3	8, 10, 21

Short Grit Scale Items

The questionnaire was used to measure the level of grit in the participants. The items described the two factors of perseverance of effort and passion for long-term goals (Table 6). The questionnaire was developed by Duckworth and Quinn (2009). As shown in appendix A (section 7), there were 8 items ranging from 1 to 5 from “Very much like me” to “Not like me at all”. This version of the grit scale was more efficient

to measure trait-level perseverance and passion for long-term goals in comparison to the Grit-O version (Duckworth et al., 2007). No modification was done in this instrument.

Table 6 The Underlying Constructs of Short Grit Scale

Constructs	Number of items	Items
Perseverance of effort	4	2, 4, 7, 8
Passion for long- term goals	4	1, 3, 5, 6

Pilot study

In order to verify the clarity of the instrument for the participants, a back translation method was used since the original questionnaire items were in English. This could assist the participants to prevent any misunderstanding or difficulty in responding. In the first stage, two Iranian experts were asked to do the translation. One of them was asked to translate the items from English to Persian and the other one translated the Persian items into English. Secondly, two native speakers in the field of English language teaching were asked to do the content validity check for the congruency of the items in the original questionnaire and the translated version.

The comments from the native experts were almost similar and could be categorized into 3 groups including grammatical problems, word choice, and meaning. The problematic items were shown in Appendix B. Three items from the L2 motivation questionnaire had grammatical problems which could affect the meaning of the item. One item from the L2 motivation questionnaire and five items from the L2 anxiety

questionnaire had problems with word choice which changed the meaning of the items too. Finally, two items from the grit questionnaire needed to be translated again since the translations were not congruent at all. The changes were made according to the native speakers' suggestions, and they were double checked with the native speakers after the translation. The finalized Persian version was added in the appendix A with the original items from the questionnaires in each section.

The Persian version of the questionnaires were tried out with a group of 49 participants (38 female and 11 male aged 19 to 21) in the first semester of 2020 as a pilot study to ensure the methodology was acceptable before the data collection. The pilot study was conducted with university students from the two private and public universities who shared similar characteristics of the target participants in the present study. Although, it should be notified that the participants in the pilot study were registered in the first semester of 2020 at the same universities. The four ELF instructors were asked to provide the google form link for the participants and explained the aim and role of their participation in the study.

At the outset, negatively scored items were reversed in SPSS and no missing data was found in this stage. Then, in order to check the internal consistency of the items for each variable, Cronbach's Alpha test in SPSS was run. Santos (1999) recommended .70 as a cutoff value or acceptable result. According to this criterion, the results of each variable in this stage of the study showed a high consistency among the items; WTC in English ($\alpha = 0.877$), L2 confidence ($\alpha = 0.962$), L2 motivation ($\alpha = 0.882$), L2 anxiety ($\alpha = 0.940$), and grit ($\alpha = 0.803$). Then, the collected data from the 84

items of the questionnaires was fed into SPSS to check the reliability of the questionnaire consisting of all variables using Cronbach's alpha test. The results ($\alpha=0.847$) suggested that the questionnaire was highly reliable to conduct the research.

Data Collection Procedures

The questionnaire was administered to the participants electronically. Google Form was used to create the questionnaire. Four EFL instructors made the link of the online questionnaire available to the students who were passing their English basic course at the two private and two public universities in Iran in the second semester of 2020 and they were asked to complete the online form if they were willing to participate. They were informed about the purpose of the research. The EFL instructors notified that their participation had no effect on their education. Besides, they were assured that their identity would be concealed.

The google form consisted of seven parts: information sheet and consent form, demographics, WTC in English, L2 confidence, L2 motivation, L2 anxiety, and grit. The consent form was also included in the online form and the participants were asked to express their consent of their participation by clicking a checkbox in the online form. The check box was assigned as a required option for their participation.

In general, it took a week to collect the data and the EFL instructors provided the link of the google form for their basic English classes that they taught during that week. The participants were asked to fill the questionnaire at the end of their class time; therefore, the students who were not willing to participate in this study were allowed to leave the class. No problem was reported by the instructors during the data collection

procedure. However, some participants did not fill the forms completely and the rate of the missing data can be found in the following section.

Data Analysis

Different steps were taken to analyze the data as follows.

Reversed Coded data. As there were some negative statements in each section of the questionnaire, in the first step, those items were identified to be reversed coded before running the analysis. The items that were negatively worded were found in L2 motivation, L2 anxiety, and grit sections (see Appendix C). Therefore, their Likert scale was changed from 1 to the highest and 5 to the lowest when analyzing these items. The positively and negatively coded Likert Scale are presented in Appendix D.

Missing Data. In the second step, the frequency of the missing items was run in SPSS to find the pattern of the missing data. The missing values, frequency of missing items, frequency of missing values as well as the missing value pattern were presented in Appendix E. The results showed that the total missing data was 13.09% of the total cases and 1.429 % of the total values. In general, the missing data for each variable in the study ranged from a low 1.4% for WTC and a high of 7.8% for L2 anxiety. The acceptable percentage of missing data varied from one study to another but ranging between 5 and 20 percentage was considered acceptable according to the literature (Bennett, 2001; Peng et al., 2006; Schafer, 1997).

Analyzing the pattern of the missing data, the results showed that the missing values in this study were not random. The maximum likelihood (ML) method was employed in the present study to predict the missing data since it was recommended to manage this type of data to reduce biases (Schlomer et al., 2010). The model was then

fitted using ML in Amos 26. and model parameters were set to their maximum likelihood estimates. Then, linear regression was run to predict the missing values according to their maximum likelihood estimates (Arbuckle, 2019).

Descriptive analysis process. In order to present the demographic nature of the participants and to describe their degree of the variables, descriptive analysis was employed using SPSS. The mean score was considered to interpret the level of variables among the participants. In this regard, as a rule of thumb, mean scores ranging between 4 and 5 are considered high, between 1 and 2.99 are considered low, and between 3 to 3.99 are considered as a moderate level.

Confirmatory factor analysis. Before running the Amos to answer the research questions, confirmatory factor analysis (CFA) with latent variables was run to measure the construct of the variables or validity of measurement models and to show the variance-covariance matrices input and measure the constructs of each variable. The cutoff criteria recommended in the literature were found not lower than .30 or .40 (Eaton et al., 2019; Swisher et al., 2004). Thus, the results from the CFA showed acceptable factor loadings between the variables and its constructs (see Appendix F). However, two items in the L2 Anxiety questionnaire (item 30 & 32) showed a low loading; thus, the items were removed.

Structural Equation Model. In order to analyze the collected data to answer the three research questions, SEM using IBM SPSS Amos 26 was used. In this regard, three different criteria were considered as following:

In order to analyze the relationships between the four variables with WTC in English, correlation matrix in Amos was used. The correlation size (see Table 7) was used to interpret the data (Ratner, 2009).

Table 7 Interpretation Criteria for Correlation Matrix

Size of correlation	Interpretation
.70 to 1.00 (-.70 to -1.00)	Strong positive (negative) correlation
.30 to .70 (-.30 to -.70)	Moderate positive (negative) correlation
0 to .30 (0 to -.30)	Weak positive (negative) correlation

In order to test the hypothesized model, variety of model-fit criteria could usually be considered naming chi-square (χ^2), chi-square/ degree of freedom (χ^2/df), root-mean square residual (RMR), standardized RMR (SRMR), goodness-of-fit (GFI), adjusted AGFI (GFI), parsimony fit index (PGFI), normed fit index (NFI), comparative fit index (CFI), tucker-lewis index (TLI), root mean square error of approximation (RMSEA), and akaike information criterion (AIC) (Schumacker & Lomax, 2004). Researchers have various opinions in reporting the criteria; however, reporting three to four criteria were agreed to be considered in a study. As a result, in this study, four common criteria including GFI, TLI, CFI, and RMSEA were used to interpret the fitness of the hypothesized model. A model could be acceptable when fit indices were equal or greater than 90 (Hu & Bentler, 1999) and RMSEA was equal or smaller than 0.8 (MacCallum et al., 1996).

Finally, to address the best predictive of WTC in English in classroom setting, Beta weights in path analysis and effect size were considered to interpret the data. Cohen's f^2 was used to calculate the effect size in which $f^2 = R^2 / 1 - R^2$. According to Cohen (1992), f^2 equals or greater than 0.02 presents a small effect, f^2 equals or greater than 0.15 shows a medium effect, and f^2 equals or greater than 0.35 represent a large effect size.



CHAPTER 4

RESEARCH FINDINGS

The following chapter presents the findings of the study to answer the three research questions. To help understand the findings, the descriptive analysis results are presented in the first section.

WTC in English and Affective Variables of Iranian University EFL Students

From the descriptive statistics analysis (see Table 8), the data showed that the participants had a high level of WTC in English and motivation. Their L2 anxiety was low and their L2 confidence and grit were moderate.

Table 8 WTC in English and Affective Variables

Variables	Min	Max	Mean	S.D.	Levels
WTC in English	1	5	4.01	.678	High
L2 confidence	1	5	3.22	.983	Moderate
L2 motivation	1	5	4.11	.730	High
L2 anxiety	1	5	2.62	.729	Low
Grit	1	5	3.34	.413	Moderate

The relationships among WTC in English, L2 confidence, L2 motivation, L2 anxiety, and grit in Iranian EFL classroom context

This section addresses the first research question. In order to figure out the relationship between variables in Iranian EFL classroom context, correlation matrix in Amos was considered. As shown in Table 9, WTC in English had a moderate positive

correlation with L2 motivation ($r = .606$) and L2 confidence ($r = .490$). In addition, WTC had a moderate negative correlation with L2 anxiety ($r = -.361$). Grit had a weak positive correlation with WTC in English ($r = .256$). In the present study, L2 motivation had the strongest correlation with WTC in English ($r = .606$).

Regarding the relationship between the independent variables in this study, L2 anxiety had a negative correlation with all the other variables: a moderate negative correlation with L2 confidence ($r = -.477$), a moderate positive correlation with L2 motivation ($r = .313$) and a moderate negative correlation with grit ($r = -.548$). Moreover, L2 motivation had the weakest correlation with grit ($r = .245$).

Table 9 Correlation Matrix among the Variables

	1	2	3	4	5
1. WTC in English	1	.490**	.606**	-.361**	.256**
2. L2 confidence		1	.393**	-.477**	.255**
3. L2 motivation			1	-.313**	.245**
4. L2 anxiety				1	-.548**
5. Grit					1

(**Correlation is significant at the 0.01 level; 2-tailed)

The model of WTC in English in Iranian EFL classroom context

In order to address the second question, the hypothesized model was first tested using Amos (see Figure 3). This process was used to examine the fitness of the hypothesized model of WTC in English in Iranian EFL classroom context. The hypothesized paths were tested, and then statistical criteria were considered to check if the model was fit.

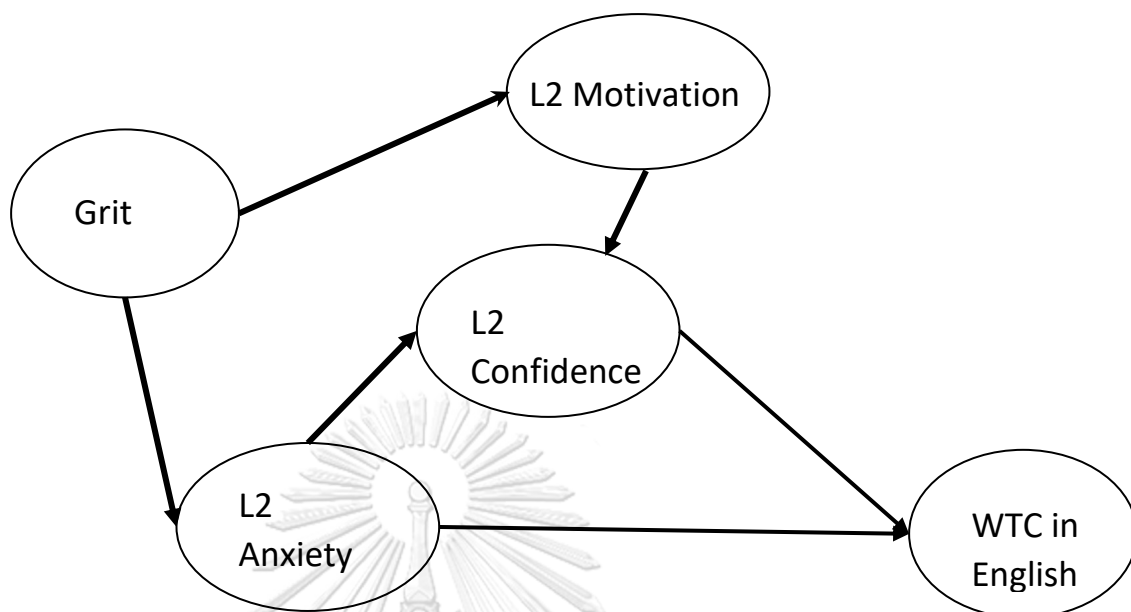


Figure 3 The Hypothesized Model of WTC in English

Based on the criteria mentioned in chapter 3, the initial hypothesized model did not show a good fit (see Table 10). In general, several statistical steps were recommended to be taken to improve the model suggested by Amos; however, theoretical aspects of these steps were also needed to be considered. Therefore, two steps were taken to modify the hypothesized model in this study. First, residual error terms of two L2 motivation items were correlated. The items were negatively correlated because they belonged to different intrinsic, extrinsic and amotivation subscales. As a result, the model improved; however, the good fit of the model was not achieved.

Second, a path was drawn from each variable to the other and the criteria were checked in every step. As a result, a path from L2 motivation to WTC in English was

found to be significant so it was added to the hypothesized model (see Figure 4). In Figure 4, the broken path was the added path based on the data analysis and the solid lines were according to the theories of WTC in English in the literature review.

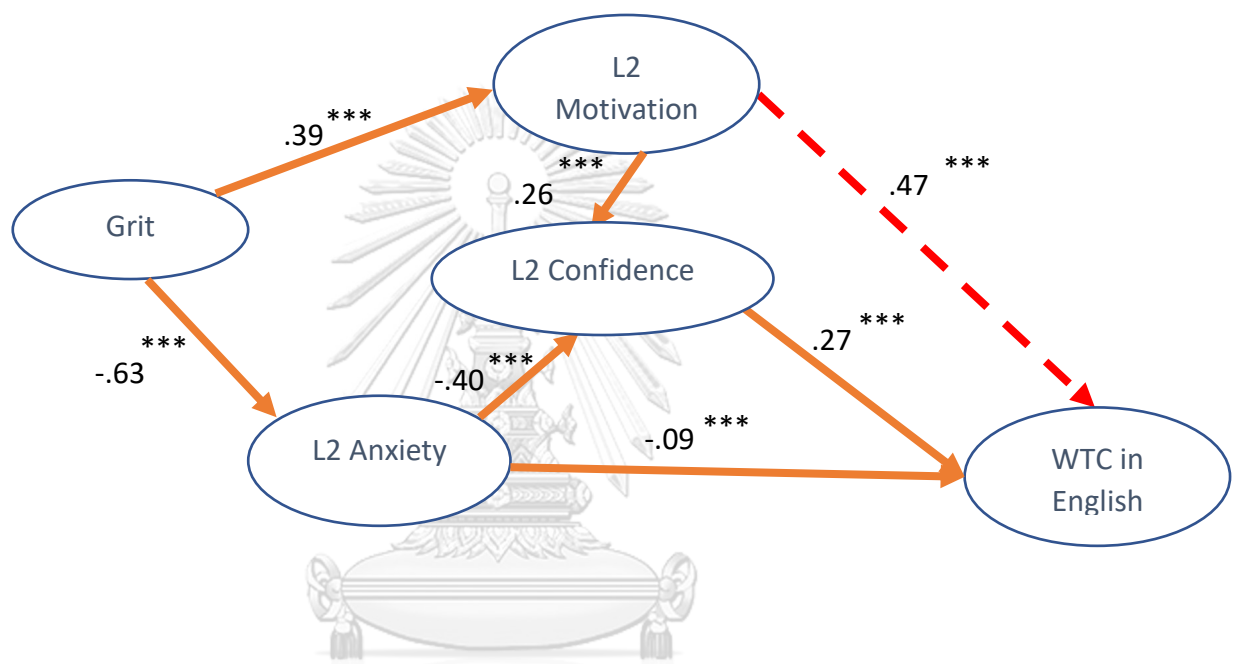


Figure 4 SEM Result of Modified Model of WTC in English

Notes. (P value is significant at .001)

As it was explained in Chapter 3, four criteria could be checked to find a model fit. After the two steps of modification (see Table 10), the model showed a good fit considering the criteria. As it can be seen in Table 10, GFI, TLI, and CFI improved to 90 which showed an acceptable fit according to Hu and Bentler (1999). Finally, RMSEA equaled 0.8 which was an acceptable value according to MacCallum et al. (1996).

Table 10 Revision Steps for Hypothesized Model of WTC in English in Iranian Classroom Context

	X ²	df	X ² /df	GFI	AGFI	PGFI	NFI	CFI	TLI	RMSEA
Initial model	698.06	129	5.41	.86	.81	.65	.88	.90	.88	.095
Modified residual error	619.93	126	4.92	.88	.83	.65	.89	.91	.89	.090
Add a path from L2M to WTC_in English	517.71	125	4.14	.90	.86	.66	.91	.93	.92	.080

The best predictor of WTC in English of Iranian EFL students

To address the third questions two criteria were considered which were explained in chapter three. As shown in Table 11, Beta weights (R^2) and size effect (F_2) were used to find the best predicting variable. As a result, L2 motivation ($B = .47$, $R^2 = .15$, $f_2 = 5.66$, large effect size) was found to be the strongest and direct predictor of WTC in English in Iranian classroom context. In addition, L2 confidence ($B = .27$, $R^2 = .28$, $f_2 = 2.67$, large effect size) directly predicted WTC in English and L2 anxiety

($B = -.09$, $R^2 = .39$, $f^2 = 1.56$, large effect size) also predicted WTC in English directly though negatively. Besides, L2 anxiety ($B = -.40 * .27$, $R^2 = .39$, $f^2 = 1.56$, large effect size) effects WTC indirectly through L2 confidence. However, both of these variables are not significant predictors of WTC in English in Iranian classroom context. Besides, grit affected WTC in English indirectly through L2 motivation and L2 anxiety ($B = .39 * .47 + -.63 * -.09$, $R^2 = .01$, $f^2 = 0.1$, small effect size).

Table 11 Standardized Parameter Estimates for the Structural Model

Latent variable	R2	F2
1. WTC_E	.43	.75
2. L2C	.28	2.57
3. L2M	.15	5.66
4. L2A	.39	1.56
5. Grit	.01	.01

Notes. WTC_E= Willingness to communicate in English; L2C= L2 confidence; L2 M= L2 motivation; L2A= L2 anxiety

Therefore, the path from grit to L2 motivation showed that grit was the moderate predictor of L2 motivation ($B = .39$) and the path from grit to L2 anxiety revealed that grit was a strong predictor of L2 anxiety ($B = -.63$). Moreover, the path from L2 motivation to L2 confidence presented that L2 motivation was a weak predictor of L2 confidence ($B = .27$). And finally, L2 anxiety was a moderate predictor of L2 confidence ($B = -.40$).

CHAPTER 5

RESEARCH DISCUSSION

This chapter consists of five sections. In the first section, the summary of the study is presented. In the second section, the findings, discussion, and conclusion of the research is explained. The third section presents the limitations of the study. The fourth section deals with the pedagogical implication based on the results. Finally, the last section discusses recommendations for future studies.

Summary of the Study

The present study investigated a model of willingness to communicate in Iranian EFL classroom context. The participants were 488 non-English majored university students who attended English foundation courses (required by their program of study) in the second semester of 2020. An online questionnaire, adapted from previous studies (Duckworth & Quinn, 2009; Horwitz et al., 1986; McCroskey & McCroskey, 1988; Noels et al., 2000; Peng & Woodrow, 2010) and translated into Iranian language was used to collect the data. The questionnaire consisting of seven sections was sent to the participants via their course instructors. The sections included 1) the information and consent sheet, 2) demographic information, 3) WTC in English questionnaire, 4) L2 confidence questionnaire, 5) L2 motivation questionnaire, 6) L2 anxiety questionnaire, and 7) short grit scale. The return rate showed 13.09% of the total missing cases and 1.429 % of the total missing values.

The collected data were analyzed using descriptive statistics and structural equation model (SEM) to answer three following research questions:

1. What are the relationships among WTC in English, L2 confidence, L2 motivation, L2 anxiety, and grit in Iranian EFL classroom context?
2. What is the model of WTC in English in Iranian EFL classroom context?
3. Which variable is the best predictor of WTC in English of Iranian EFL students?

To address the three research questions, three statistical steps were run using Amos. To address the first question, matrix correlation was considered and correlation between the variables were found. To answer the second question, the hypothesized model of the five variables was tested. Some modifications were done to improve the model fit and the model showed a goodness of fit for WTC in English among non-English majored university students in classroom context. Finally, to find the best predictor of WTC in English, path analysis was conducted. In this regard, two factors were used including effect size and R² in path analysis.

Summary of the findings

The descriptive analysis revealed that the participants had a high level of L2 WTC and L2 motivation, moderate level of L2 confidence and grit, and low level of L2 anxiety. The findings for the three research questions are as follows:

Firstly, both positive and negative relationships were found between the four independent variables: L2 confidence, L2 motivation, L2 anxiety, and grit, and WTC in English. Specifically, WTC in English was found to have a positive relationship with L2 confidence, L2 motivation, and grit while it was negatively correlated with L2 anxiety. In addition, grit was the only variable that showed a weak correlation with WTC in English. The other three variables: L2 confidence, L2 motivation, and L2 anxiety had moderate association with WTC in English.

Second, all the paths in the hypothesized WTC model in Iranian university classroom context were confirmed with one direct path added from L2 motivation to WTC in English. To sum up, the final model showed that L2 motivation, L2 confidence, and L2 anxiety were the predicting variables of WTC in English in Iranian university classroom context. Moreover, L2 motivation, L2 anxiety, and grit were found to be the mediators in the final model. Apart from having a direct effect on WTC in English, L2 motivation and L2 anxiety also has a mediating effect through L2 confidence. Lastly, grit was a mediating variable in the model through L2 motivation and L2 anxiety.

Finally, among the four independent variables under study, L2 motivation was found to be the strongest predictor of WTC in English in Iranian university classroom settings.

Discussion

In this section, three key findings of the present study were discussed.

L2 motivation, confidence and anxiety as predicting variables of WTC in English in Iranian university classroom context

The model tested in the present study showed L2 motivation, L2 confidence, and L2 anxiety to have direct relationships with WTC in English, with L2 motivation being the strongest predictor. The participants who reported being willing to communicate in English had a high level of motivation and a moderate level of confidence and a low level of anxiety. The direct path from L2 motivation is not consistent with previous studies in Iran (Ghonsooly et al., 2012) elsewhere (MacIntyre & Charos, 1996; Peng & Woodrow, 2010; Yashima, 2002). Ghonsooly et al. (2012), for example, found L2 confidence to be the best predicting variable while they found

L2 motivation to only play a mediating role through L2 confidence. Nevertheless, the direct paths from L2 confidence and L2 anxiety to WTC in English confirm the findings in previous studies (Peng & Woodrow, 2010; Yashima, 2002). The additional direct path from L2 motivation to WTC in English found in this present study may be context specific as university students in Iran are more motivated to learn English in a more communicative way for different reasons (Shahriari, 2017) which can affect their WTC in English.

Iranian university students with high level of WTC in English

In the present study, Iranian university non-English majored students were found to be willing to communicate in English, unlike in previous studies (Alemi, 2012; Goldoust & Ranjbar, 2017; Tousi & Khalaji, 2014). Considering the direct effect of L2 motivation, confidence, and anxiety on WTC in English and the degree of prediction of L2 motivation in the model, the high level of WTC in English revealed in the present study could be explained. First, compared with Ghonsooly et al. (2012), the participants in the present study may have different levels of motivation and confidence in using English. While the Iranian EFL students in Ghonsooly et al. (2012) did not feel the necessity of using English in everyday life, more recent studies have shown a different situation. Iranian students were found to be both intrinsically and extrinsically motivated (Saeedakhtar et al., 2018; Shirvan & Taherian, 2016). Besides, Shahriari (2017) reported that most EFL students in Iran were motivated to learn English to pursue their goals in continuing their study abroad. These findings tend to suggest that, in recent years, Iranian EFL students have become more aware of the importance of learning English and have more exposure to English, which could affect their L2 motivation (Karimi & Abaszadeh, 2017), L2 confidence (Ghanbarpour, 2016), and L2

anxiety (Safari Moghaddam & Ghafournia, 2019). Consistently, the participants in the present study reported having a high level of willingness to communicate in English.

Grit as a mediating factor of WTC in English for Iranian university students

Grit was hypothesized as a mediating variable in the WTC model for the first time in the present study and the results are confirmative. The direct paths from grit to L2 motivation and L2 anxiety were found. Considering the direct relationship between L2 motivation and L2 anxiety and WTC in English and the degree of prediction of L2 motivation revealed in the present study, grit should be considered as another important factor in enhancing WTC in English of Iranian university students. As discussed in previous studies, gritty learners could have a higher level of WTC in English (Lee & Drajati, 2019; Lee & Hsieh, 2019; Lee & Lee, 2019).

Limitations of the Study

The findings in the present study should be discussed with two considerations: First, the present study employed only one method of data collection, relying on self-reported data. This may risk the effects of the participants over-rating or under-rating the responses.

Second, the data collection was conducted at the beginning of a semester. The participants' self-assessment of WTC, motivation, confidence, anxiety, and grit at the beginning and at the end of the semester may be different. Since the present study attempted to study the WTC model in the context of classroom settings, the time of the data collection should then be noted.

Pedagogical Implications

Considering the relationships between the variables in the present study, the following pedagogical implications are suggested.

First, English teachers in Iranian universities should design lessons that can boost and maintain the students' L2 motivation. Designing activities that can help learners using more modern approaches such as task-based technique can provide a more meaningful use of English. Second, building learners' L2 confidence in using English in a more communicative way through activities that can assist using language more authentically. Third, protecting the learners from anxiety by creating a learning environment which can be friendly and relaxed and enhancing cooperation and collaboration among learners can facilitate learners' L2 anxiety. Last, promoting grit through providing more support by EFL instructors in case of facing difficulty in the learning process may increase the learners' passion and persistence in their learning process.

Suggestions for Further Studies

To further explore the relationships of variables affecting WTC in English, a few suggestions for future studies are as follows:

First, since this research relied only on quantitative data from a questionnaire, future studies that employ mixed methods and qualitative data collection are encouraged to gain a more in-depth understanding of the interactions among the five variables.

Secondly, the results from this study showed the cause-and-effect model of trait-like variables in a classroom context. Considering the dynamic effects of trait-like and

situational context variables on WTC in English (Amirian et al., 2020; Cao & Philp, 2006; Zhang et al., 2018), future studies should explore situational context variables such as classroom environment or interlocutor as these two categories are considered complementary (Amirian et al., 2020).

Lastly, future studies may investigate the relationships among the five variables in other settings. For example, the WTC model in context of the emergency remote learning during the COVID-19 pandemic or the communication contexts outside the classroom.



REFERENCES

- Alemi, M. (2012). Willingness to communicate in English among Iranian EFL engineering students. *Teaching English Language*, 6(1), 103-119.
http://www.teljournal.org/article_54922_a79adc92265debb33b392b17b566673a.pdf
- Alemi, M., & Pahmforoosh, R. (2012). EFL learners' willingness to communicate: The interplay between language learning anxiety and language proficiency. *International Journal of English Linguistics*, 11(2), 23-34.
- Alemi, M., Tajeddin, Z., & Mesbah, Z. (2013). Willingness to communicate in L2 English: Impact of learner variables. *Journal of Research in Applied Linguistics*, 4(1), 42-61.
- Alghali, N. (2016). Foreign language anxiety and learner's willingness to communicate in the L2 classroom. The IAFOR International Conference on Language Learning–Dubai 2016 Official Conference Proceedings. Retrieved from www.iafor.org,
- Aliakbari, M., Kamangar, M., & Khany, R. (2016). Willingness to Communicate in English among Iranian EFL Students. *English Language Teaching*, 9(5), 33-45.
- Alpert, R., & Haber, R. N. (1960). Anxiety in academic achievement situations. *The Journal of abnormal and social psychology*, 61(2), 207.
<https://doi.org/10.1037/h0045464>
- Altiner, C. (2018). Turkish EFL Learners' Willingness to Communicate in L2 and Motivation. *Journal of Education and Training Studies*, 6(n11a), 181-185.
<https://doi.org/10.11114/jets.v6i11a.3815>

- Amirian, Z., Karamifar, Z., & Youhanaee, M. (2020). Structural equation modeling of EFL learners' willingness to communicate and their cognitive and personality traits. *Applied Research on English Language*, 9(1), 103-136.
<https://doi.org/10.22108/are.2019.116248.1451>
- Aoyama, T., & Takahashi, T. (2020). International Students' Willingness to Communicate in English as a Second Language: The Effects of L2 Self-Confidence, Acculturation, and Motivational Types. *Journal of International Students*, 10(3), 703-723. <https://doi.org/10.32674/jis.v10i3.730>
- Arbuckle, J. L. (2019). Amos 26.0 User's Guide. In. Chicago: IBM SPSS.
- Atai, M. R., & Mazlum, F. (2013). English language teaching curriculum in Iran: Planning and practice. *The Curriculum Journal*, 24(3), 389-411.
<https://doi.org/10.1080/09585176.2012.744327>
- Avanaki, H. J., & Sadeghi, B. (2013). English language teaching (ELT) in Iranian universities in brief. *Theory and Practice in Language Studies*, 3(12), 2296.
<https://doi.org/10.4304/tpls.3.12.2296-2302>
- Azmand, M. (2014). The relationship between Iranian EFL learners' willingness to communicate, intrinsic and extrinsic motivation, and self-esteem. *Unpublished MA. Thesis. Islamic Azad University of Shiraz.*
- Baker, S. C., & MacIntyre, P. D. (2000). The role of gender and immersion in communication and second language orientations. *Language learning*, 50(2), 311-341. <https://doi.org/10.1111/0023-8333.00119>
- Banse, H., & Palacios, N. (2018). Supportive classrooms for Latino English language learners: Grit, ELL status, and the classroom context. *The Journal of*

Educational Research, 111(6), 645-656.

<https://doi.org/10.1080/00220671.2017.1389682>

Basöz, T., & Erten, I. H. (2019). A Qualitative Inquiry into the Factors Influencing EFL Learners' In-Class Willingness to Communicate in English. *Novitas-ROYAL (Research on Youth and Language)*, 13(1), 1-18.

<https://files.eric.ed.gov/fulltext/EJ1214141.pdf>

Bennett, D. A. (2001). How can I deal with missing data in my study? *Australian and New Zealand journal of public health*, 25(5), 464-469.

<https://doi.org/10.1111/j.1467-842x.2001.tb00294.x>

Bergil, A. S. (2016). The influence of willingness to communicate on overall speaking skills among EFL learners. *Procedia-Social and Behavioral Sciences*, 2(32), 177-187. <https://doi.org/10.1016/j.sbspro.2016.10.043>

Bukhari, S. F., Cheng, X., & Khan, S. A. (2015). Willingness to Communicate in English as a Second Language: A Case Study of Pakistani Undergraduates. *Journal of education and practice*, 6(29), 39-44.

<https://iiste.org/Journals/index.php/JEP/article/view/26670/27475>

Cao, Y. (2011). Investigating situational willingness to communicate within second language classrooms from an ecological perspective. *System*, 39(4), 468-479.

<https://doi.org/10.1016/j.system.2011.10.016>

Cao, Y., & Philp, J. (2006). Interactional context and willingness to communicate: A comparison of behavior in whole class, group and dyadic interaction. *System*, 34(4), 480-493. <https://doi.org/10.1016/j.system.2006.05.002>

- Cetinkaya, Y. B. (2005). *Turkish college students' willingness to communicate in English as a foreign language* [The Ohio State University].
- Cheng, Y.-S. (2004). A measure of second language writing anxiety: Scale development and preliminary validation. *Journal of second language writing*, 13(4), 313-335.
<https://doi.org/10.1016/j.jslw.2004.07.001>
- Cheng, Y. s., Horwitz, E. K., & Schallert, D. L. (1999). Language anxiety: Differentiating writing and speaking components. *Language learning*, 49(3), 417-446. <https://doi.org/10.1111/0023-8333.00095>
- Christopoulou, M., Lakioti, A., Pezirkianidis, C., Karakasidou, E., & Stalikas, A. (2018). The role of grit in education: A systematic review. *Psychology*, 9(15), 2951-2971. <https://doi.org/10.4236/psych.2018.915171>
- Clément, R. (1980). Ethnicity, contact and communicative competence in a second language. In *Language* (pp. 147-154). Elsevier. <https://doi.org/10.1016/b978-0-08-024696-3.50027-2>
- Clément, R. (1986). Second language proficiency and acculturation: An investigation of the effects of language status and individual characteristics. *Journal of Language and social Psychology*, 5(4), 271-290.
<https://doi.org/10.1177/0261927x8600500403>
- Cohen, J. (1992). A power primer. *Psychological bulletin*, 112(1), 155.
<https://doi.org/10.1037/0033-2909.112.1.155>
- Csikszentmihalyi, M., & Seligman, M. (2000). Positive psychology. *American psychologist*, 55(1), 5-14.

- De Bot, K., Lowie, W., & Verspoor, M. (2007). A dynamic systems theory approach to second language acquisition. *Bilingualism: Language and cognition*, 10(1), 7-21. <https://doi.org/10.1017/s1366728906002732>
- Deci, E. L., & Ryan, R. M. (1995). Human autonomy. In *Efficacy, agency, and self-esteem* (pp. 31-49). Springer. https://doi.org/10.1007/978-1-4899-1280-0_3
- Dewaele, J.-M. (2019). The effect of classroom emotions, attitudes toward English, and teacher behavior on willingness to communicate among English foreign language learners. *Journal of Language and social Psychology*, 38(4), 523-535. <https://doi.org/10.1177/0261927x19864996>
- Dewaele, J.-M., & Al-Saraj, T. M. (2015). Foreign Language Classroom Anxiety of Arab learners of English: The effect of personality, linguistic and sociobiographical variables. *Studies in Second Language Learning and Teaching*, 5(2), 205-228. <https://doi.org/10.14746/ssllt.2015.5.2.2>
- Dewaele, J.-M., & Dewaele, L. (2018). Learner-internal and learner-external predictors of willingness to communicate in the FL classroom. *Journal of the European Second Language Association*. <https://doi.org/10.22599/jesla.37>
- Dewaele, J.-M., & Pavelescu, L. M. (2021). The relationship between incommensurable emotions and willingness to communicate in English as a foreign language: A multiple case study. *Innovation in Language Learning and Teaching*, 15(1), 66-80. <https://doi.org/10.1080/17501229.2019.1675667>
- Donovan, L. A., & MacIntyre, P. D. (2004). Age and sex differences in willingness to communicate, communication apprehension, and self-perceived competence.

Communication Research Reports, 21(4), 420-427.

<https://doi.org/10.1080/08824090409360006>

Dornyei, Z. (2008). *The Psychology of Language Learner: Individual Differences in Second Language Acquisition*. New Jersey: Taylor & Francis-Library.

Dörnyei, Z. (1990). Conceptualizing motivation in foreign-language learning. *Language learning*, 40(1), 45-78. <https://doi.org/10.1111/j.1467-1770.1990.tb00954.x>

Duckworth, A. (2017). *Grit-Why Passion and Resilience are the Secrets to Success*. London, UK: Vermillion.

Duckworth, A., & Gross, J. J. (2014). Self-control and grit: Related but separable determinants of success. *Current directions in psychological science*, 23(5), 319-325. <https://doi.org/10.1177/0963721414541462>

Duckworth, A. L., Peterson, C., Matthews, M. D., & Kelly, D. R. (2007). Grit: perseverance and passion for long-term goals. *Journal of personality and social psychology*, 92(6), 1087. <https://doi.org/10.1037/0022-3514.92.6.1087>

Duckworth, A. L., & Quinn, P. D. (2009). Development and validation of the Short Grit Scale (GRIT-S). *Journal of personality assessment*, 91(2), 166-174. <https://doi.org/10.1080/00223890802634290>

Eaton, P., Frank, B., Johnson, K., & Willoughby, S. (2019). Comparing exploratory factor models of the Brief Electricity and Magnetism Assessment and the Conceptual Survey of Electricity and Magnetism. *Physical Review Physics Education Research*, 15(2), 020133.

<https://doi.org/10.1103/physrevphyseducre.15.020133>

- Ebadi, S., Weisi, H., & Khaksar, Z. (2018). Developing an Iranian ELT context-specific grit instrument. *Journal of psycholinguistic research*, 47(4), 975-997.
<https://doi.org/10.1007/s10936-018-9571-x>
- Ebrahimi, F., & Sahragard, R. (2016). Some Insights into Iran's English Curriculum Based on Iran's Major Policies. *Journal of Language Teaching & Research*, 7(5).
<https://doi.org/10.17507/jltr.0705.27>
- Edwards, E., & Roger, P. S. (2015). Seeking Out Challenges to Develop L2 Self-Confidence: A Language Learner's Journey to Proficiency. *Tesl-Ej*, 18(4).
- Elkhafaifi, H. (2005). Listening comprehension and anxiety in the Arabic language classroom. *The modern language journal*, 89(2), 206-220.
<https://doi.org/10.1111/j.1540-4781.2005.00275.x>
- Engin, A. O. (2009). Second language learning success and motivation. *Social Behavior and Personality: an international journal*, 37(8), 1035-1041.
<https://doi.org/10.2224/sbp.2009.37.8.1035>
- Foley, J., & Thompson, L. (2017). *Language learning: A lifelong process*. Routledge.
- Gardner, R. C. (1985). *Social psychology and second language learning: The role of attitudes and motivation*. Arnold.
- Ghanbarpour, M. (2016). Willingness to communicate, linguistic self-confidence, and language-use anxiety: The Iranian EFL context. *Theory and Practice in Language Studies*, 6(12), 2265. <https://doi.org/10.17507/tpis.0612.05>
- Ghonsooly, B., Fatemi, A. H., & Khajavy, G. (2014). Examining the relationships between willingness to communicate in English, communication confidence, and

classroom environment. *International journal of research studies in educational technology*, 3(1). <https://doi.org/10.5861/ijrset.2013.392>

Ghonsooly, B., Khajavy, G. H., & Asadpour, S. F. (2012). Willingness to communicate in English among Iranian non-English major university students. *Journal of Language and social Psychology*, 31(2), 197-211.

<https://doi.org/10.1177/0261927x12438538>

Goldoust, A., & Ranjbar, H. (2017). Willingness or unwillingness? The investigation of Iranian EFL learners' tendency toward willingness to communicate. *Journal of Applied Linguistics and Language Research*, 4(1), 260-267.

Guerrero, M. (2015). Motivation in second language learning: A historical overview and its relevance in a public high school in Pasto, Colombia. *How*, 22(1), 95-106.

<https://doi.org/10.19183/how.22.1.135>

Haghighi, F. M., & Norton, B. (2017). The role of English language institutes in Iran.

Tesol Quarterly, 51(2), 428-438. <https://doi.org/10.1002/tesq.338>

Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. (2006).

Multivariate data analysis . Uppersaddle River. In: NJ: Pearson Prentice Hall.

Hashimoto, Y. (2002). Motivation and willingness to communicate as predictors of reported L2 use: The Japanese ESL context. *University of Hawai'I Second*

Language Studies Paper 20 (2). <http://hdl.handle.net/10125/40649>

Horwitz, E. K., Horwitz, M. B., & Cope, J. (1986). Foreign language classroom anxiety.

The modern language journal, 70(2), 125-132. [https://doi.org/10.1111/j.1540-](https://doi.org/10.1111/j.1540-4781.1986.tb05256.x)

[4781.1986.tb05256.x](https://doi.org/10.1111/j.1540-4781.1986.tb05256.x)

- Horwitz, E. K., Tallon, M., & Luo, H. (2010). Foreign language anxiety. *Anxiety in schools: The causes, consequences, and solutions for academic anxieties*, 2, 96-115.
- Hu, L. t., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural equation modeling: a multidisciplinary journal*, 6(1), 1-55.
<https://doi.org/10.1080/10705519909540118>
- Husna, L. (2019). STUDENTS' UNWILLINGNESS TO SPEAK IN EFL CLASSROOM FROM CULTURAL PERSPECTIVE.
<https://doi.org/10.31227/osf.io/py7ur>
- Jafari, S. S. (2013). Motivated learners and their success in learning a second language. *Theory and Practice in Language Studies*, 3(10), 1913.
<https://doi.org/10.4304/tpls.3.10.1913-1918>
- Jongsermtrakoon, H., & Vibulphol, J. (2010). โมเดล การ สื่อสาร ภาษา อังกฤษ ของ นักเรียน ระดับ มัธยมศึกษา ใน บริบท ไทย. *An Online Journal of Education*, 5(2), 674-688.
 จุฬาลงกรณ์มหาวิทยาลัย
- Kang, S.-J. (2005). Dynamic emergence of situational willingness to communicate in a second language. *System*, 33(2), 277-292.
<https://doi.org/10.1016/j.system.2004.10.004>
- Karimi, M. N., & Abaszadeh, A. (2017). Autonomy-Supportive Teaching, Willingness to Communicate in English, Motivation, and English Speaking Self-Efficacy among EFL Learners: A Structural Equation Modelling Study. *Iranian Journal of Applied Linguistics (IJAL)*, 20(2), 113-156.

- Kayaoğlu, M. N., & Sağlamel, H. (2013). Students' perceptions of language anxiety in speaking classes. *Journal of History Culture and Art Research*, 2(2), 142-160.
- Keegan, K. (2017). Identifying and Building Grit in Language Learners. *English Teaching Forum*,
- Khajavy, G. H., Ghonsooly, B., Hosseini Fatemi, A., & Choi, C. W. (2016). Willingness to communicate in English: A microsystem model in the Iranian EFL classroom context. *Tesol Quarterly*, 50(1), 154-180. <https://doi.org/10.1002/tesq.204>
- Khajavy, G. H., MacIntyre, P. D., & Barabadi, E. (2018). Role of the emotions and classroom environment in willingness to communicate: Applying doubly latent multilevel analysis in second language acquisition research. *Studies in Second Language Acquisition*, 40(3), 605-624. <https://doi.org/10.1017/s0272263117000304>
- Khajavy, G. H., MacIntyre, P. D., & Hariri, J. (2021). A closer look at grit and language mindset as predictors of foreign language achievement. *Studies in Second Language Acquisition*, 43(2), 379-402. <https://doi.org/10.1017/S0272263120000480>
- Khany, R., & Nejad, A. M. (2017). L2 willingness to communicate, openness to experience, extraversion, and L2 unwillingness to communicate: The Iranian EFL context. *RELC Journal*, 48(2), 241-255. <https://doi.org/10.1177/0033688216645416>
- Khatibi, M. B., & Zakeri, J. (2014). Iranian EFL learners' willingness to communicate across different context-and receiver-types. *Procedia-Social and Behavioral Sciences*, 98, 932-939.

- Khazaei, Z. M., Zadeh, A. M., & Ketabi, S. (2012). Willingness to Communicate in Iranian EFL Learners: The Effect of Class Size. *English Language Teaching*, 5(11), 181-187. <https://doi.org/10.5539/elt.v5n11p181>
- Kim, S. J. (2004). *Exploring willingness to communicate (WTC) in English among Korean EFL (English as a foreign language) students in Korea: WTC as a predictor of success in second language acquisition*. The Ohio State University.
- Knell, E., & Chi, Y. (2012). The roles of motivation, affective attitudes, and willingness to communicate among Chinese students in early English immersion programs. *International Education*, 41(2), 5.
- Krashen, S. (1982). Principles and practice in second language acquisition.
- Kun, Y., Senom, F., & Peng, C. F. (2020). Relationship between Willingness to Communicate in English and Classroom Environment. *Universal Journal of Educational Research*, 8(9A), 41-50. <https://doi.org/10.13189/ujer.2020.082006>
- Lao, T. L. (2020). The Relationship between ESL Learners' Motivation, Willingness to Communicate, Perceived Competence, and Frequency of L2 Use. *Studies in Applied Linguistics & TESOL*, 20(2), 36-56.
- Lee, J. S. (2020). The role of grit and classroom enjoyment in EFL learners' willingness to communicate. *Journal of Multilingual and Multicultural Development*, 1-17. <https://doi.org/10.1080/01434632.2020.1746319>
- Lee, J. S., & Drajeti, N. A. (2019). Affective variables and informal digital learning of English: Keys to willingness to communicate in a second language. *Australasian Journal of Educational Technology*, 35(5), 168-182. <https://doi.org/10.14742/ajet.5177>

- Lee, J. S., & Hsieh, J. C. (2019). Affective variables and willingness to communicate of EFL learners in in-class, out-of-class, and digital contexts. *System*, 82, 63-73.
<https://doi.org/10.1016/j.system.2019.03.002>
- Lee, J. S., & Lee, K. (2019). Affective factors, virtual intercultural experiences, and L2 willingness to communicate in in-class, out-of-class, and digital settings.
Language Teaching Research, 24(6), 813-833.
<https://doi.org/10.1177/1362168819831408>
- Lee, W., & Ng, S. (2010). Reducing student reticence through teacher interaction strategy. *ELT journal*, 64(3), 302-313. <https://doi.org/10.1093/elt/ccp080>
- Lin, Y.-T. (2019). Taiwanese EFL learners' willingness to communicate in English in the classroom: Impacts of personality, affect, motivation, and communication confidence. *The Asia-Pacific Education Researcher*, 28(2), 101-113.
<https://doi.org/10.1007/s40299-018-0417-y>
- Lu, Y., & Hsu, C.-F. (2008). Willingness to communicate in intercultural interactions between Chinese and Americans. *Journal of Intercultural Communication Research*, 37(2), 75-88. <https://doi.org/10.1080/17475750802533356>
- MacCallum, R. C., Browne, M. W., & Sugawara, H. M. (1996). Power analysis and determination of sample size for covariance structure modeling. *Psychological methods*, 1(2), 130. <https://doi.org/10.1037/1082-989x.1.2.130>
- MacIntyre, P. D. (1999). Language anxiety: A review of the research for language teachers. *Affect in foreign language and second language learning: A practical guide to creating a low-anxiety classroom atmosphere*, 24, 41.

MacIntyre, P. D. (2017). 2. An Overview of Language Anxiety Research and Trends in its Development. *New insights into language anxiety*, 11-30.

<https://doi.org/10.21832/9781783097722-003>

MacIntyre, P. D., Baker, S. C., Clément, R., & Conrod, S. (2001). Willingness to communicate, social support, and language-learning orientations of immersion students. *Studies in Second Language Acquisition*, 23(3), 369-388.

<https://doi.org/10.1017/s0272263101003035>

MacIntyre, P. D., Baker, S. C., Clément, R., & Donovan, L. A. (2003). Sex and age effects on willingness to communicate, anxiety, perceived competence, and L2 motivation among junior high school French immersion students. *Language learning*, 53(S1), 137-166. <https://doi.org/10.1111/1467-9922.00226>

MacIntyre, P. D., & Charos, C. (1996). Personality, attitudes, and affect as predictors of second language communication. *Journal of Language and social Psychology*, 15(1), 3-26. <https://doi.org/10.1177/0261927x960151001>

MacIntyre, P. D., Clément, R., Dörnyei, Z., & Noels, K. A. (1998). Conceptualizing willingness to communicate in a L2: A situational model of L2 confidence and affiliation. *The modern language journal*, 82(4), 545-562.

<https://doi.org/10.1111/j.1540-4781.1998.tb05543.x>

MacIntyre, P. D., & Gregersen, T. (2021). The idiodynamic method: willingness to communicate and anxiety processes interacting in real time. *International Review of Applied Linguistics in Language Teaching*.

<https://doi.org/10.1515/iral-2021-0024>

MacIntyre, P. D., & Legatto, J. J. (2011). A dynamic system approach to willingness to communicate: Developing an idiodynamic method to capture rapidly changing affect. *Applied Linguistics*, 32(2), 149-171.

<https://doi.org/10.1093/applin/amq037>

MacIntyre, P. D., Ross, J., & Sparling, H. (2019). Flow experiences and willingness to communicate: Connecting Scottish Gaelic language and traditional music. *Journal of Language and Social Psychology*, 38(4), 536-545.

<https://doi.org/10.1177/0261927x19867364>

McCroskey, J. C., & Baer, J. E. (1985). Willingness to communicate: The construct and its measurement.

McCroskey, J. C., & McCroskey, L. L. (1988). Self-report as an approach to measuring communication competence. <https://doi.org/10.1080/08824098809359810>

Modirkhameneh, S., & Firouzmand, A. (2014). Iranian EFL learners' willingness to communicate and language learning orientations. *Procedia-Social and Behavioral Sciences*, 98, 1134-1139.

<https://doi.org/10.1016/j.sbspro.2014.03.526>

Myers, C. A., Wang, C., Black, J. M., Bugescu, N., & Hoeft, F. (2016). The matter of motivation: Striatal resting-state connectivity is dissociable between grit and growth mindset. *Social cognitive and affective neuroscience*, 11(10), 1521-1527.

<https://doi.org/10.1093/scan/nsw065>

Mystkowska-Wiertelak, A. (2016). Dynamics of classroom WTC: Results of a semester study. *Studies in Second Language Learning and Teaching*, 6(4), 651-676.

<https://doi.org/10.14746/ssllt.2016.6.4.5>

- 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*, 50(1), 57-85. <https://doi.org/10.1111/0023-8333.00111>
- Noels, K. A., Pon, G., & Clément, R. (1996). Language, identity, and adjustment: The role of linguistic self-confidence in the acculturation process. *Journal of Language and social Psychology*, 15(3), 246-264. <https://doi.org/10.1177/0261927x960153003>
- Noora, A. (2008). Iranian undergraduates non-English majors' language learning preferences. *GEMA Online® Journal of Language Studies*, 8(2).
- Oteir, I. N., & Al-Otaibi, A. N. (2019). Foreign Language Anxiety: A Systematic Review. *Arab World English Journal*, 10(3), 309-317. <http://dx.doi.org/10.2139/ssrn.3466022>
- Park, G.-P. (2014). Factor analysis of the foreign language classroom anxiety scale in Korean learners of English as a foreign language. *Psychological Reports*, 115(1), 261-275. <https://doi.org/10.2466/28.11.pr0.115c10z2>
- Pattapong, K. (2015). Complex Interactions of Factors Underlying Thai EFL Learners' Willingness to Communicate in English. *PASAA: Journal of Language Teaching and Learning in Thailand*, 49, 105-136.
- Pawlak, M., & Mystkowska-Wiertelak, A. (2015). Investigating the dynamic nature of L2 willingness to communicate. *System*, 50, 1-9. <https://doi.org/10.1016/j.system.2015.02.001>

- Peng, C.-Y. J., Harwell, M., Liou, S.-M., & Ehman, L. H. (2006). Advances in missing data methods and implications for educational research. *Real data analysis*, 31-78.
- Peng, J. E. (2007). Willingness to communicate in the Chinese EFL classroom: A cultural perspective. *English language teaching in China: New approaches, perspectives and standards*, 2(1), 250-269.
- Peng, J. E., & Woodrow, L. (2010). Willingness to communicate in English: A model in the Chinese EFL classroom context. *Language learning*, 60(4), 834-876.
<https://doi.org/10.1111/j.1467-9922.2010.00576.x>
- Perkins-Gough, D. (2013). The significance of grit: A conversation with Angela Lee Duckworth. *Educational Leadership*, 71(1), 14-20.
- Rastegar, M., & Karami, M. (2015). On the relationship between foreign language Classroom anxiety, willingness to communicate and scholastic success among Iranian EFL learners. *Theory and Practice in Language Studies*, 5(11), 2387.
<https://doi.org/10.17507/tpls.0511.25>
- Ratner, B. (2009). The correlation coefficient: Its values range between+ 1/- 1, or do they? *Journal of targeting, measurement and analysis for marketing*, 17(2), 139-142. <https://doi.org/10.1057/jt.2009.5>
- Reinders, H., & Wattana, S. (2015). Affect and willingness to communicate in digital game-based learning. *ReCALL*, 27(1), 38-57.
<https://doi.org/10.1017/s0958344014000226>
- Riasati, M. (2015). Examining Willingness to Speak English in EFL Classrooms. Proceedings of the Multidisciplinary Academic Conference,

- Riasati, M. J. (2012). EFL learners' perception of factors influencing willingness to speak English in language classrooms: A qualitative study. *World Applied Sciences Journal*, 17(10), 1287-1297.
- Riasati, M. J. (2018). Willingness to speak English among foreign language learners: A causal model. *Cogent Education*, 5(1), 1455332.
<https://doi.org/10.1080/2331186x.2018.1455332>
- Rimfeld, K., Kovas, Y., Dale, P. S., & Plomin, R. (2016). True grit and genetics: Predicting academic achievement from personality. *Journal of personality and social psychology*, 111(5), 780-789. <https://doi.org/10.1037/pspp0000089>
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American psychologist*, 55(1), 68. <https://doi.org/10.1037/0003-066x.55.1.68>
- Sadeghi, K., & Richards, J. C. (2016). The idea of English in Iran: An example from Urmia. *Journal of Multilingual and Multicultural Development*, 37(4), 419-434.
<https://doi.org/10.1080/01434632.2015.1080714>
- Saeedakhtar, A., Hamidizare, S., & Abdi, R. (2018). The interplay of motivation and willingness to communicate in four skills: The Iranian perspective. *Iranian Journal of English for Academic Purposes*, 7(1), 72-95.
- Safari Moghaddam, M., & Ghafournia, N. (2019). Elaboration on foreign language anxiety in L2 speaking: A study of Iranian EFL learners. *International Journal of Foreign Language Teaching and Research*, 7(26), 137-156.
- Saito, Y., Garza, T. J., & Horwitz, E. K. (1999). Foreign language reading anxiety. *The modern language journal*, 83(2), 202-218.

Santos, J. R. A. (1999). Cronbach's alpha: A tool for assessing the reliability of scales.

Journal of extension, 37(2), 1-5.

Schafer, J. L. (1997). *Analysis of incomplete multivariate data*. CRC press.

Schlomer, G. L., Bauman, S., & Card, N. A. (2010). Best practices for missing data management in counseling psychology. *Journal of Counseling psychology*,

57(1), 1-10. <https://doi.org/10.1037/a0018082>

Schumacker, R. E., & Lomax, R. G. (2004). *A beginner's guide to structural equation modeling*. psychology press.

Seligman, M. E., & Csikszentmihalyi, M. (2014). Positive psychology: An introduction.

In *Flow and the foundations of positive psychology* (pp. 279-298). Springer.

https://doi.org/10.1007/978-94-017-9088-8_18

Shahriari, H. (2017). The status of English in Iran.

https://www.researchgate.net/publication/320234413_The_Status_of_English_in_Iran

Shirvan, M. E., & Taherian, T. (2016). Dynamic emergent patterns of L2 willingness to communicate within the ecology of the classroom. *Konin Language Studies*,

4(4), 415-438. <https://doi.org/10.30438/ksj.2016.4.4.3>

Sudina, E., Vernon, T., Foster, H., Del Villano, H., Hernandez, S., Beck, D., & Plonsky, L. (2021). Development and Initial Validation of the L2-Teacher Grit Scale.

Tesol Quarterly, 55(1), 156-184. <https://doi.org/10.1002/tesq.581>

Swisher, L. L., Beckstead, J. W., & Bebeau, M. J. (2004). Factor analysis as a tool for survey analysis using a professional role orientation inventory as an example.

Physical Therapy, 84(9), 784-799. <https://doi.org/10.1093/ptj/84.9.784>

- Taşpınar, K., & Külekçi, G. (2018). Grit: An essential ingredient of success in the EFL classroom. *International Journal of Languages' Education and Teaching*, 6, 208-226. <https://doi.org/10.18298/ijlet.3137>
- Teimouri, Y., Plonsky, L., & Tabandeh, F. (2020). L2 grit: Passion and perseverance for second-language learning. *Language Teaching Research*, 1362168820921895. <https://doi.org/10.1177/1362168820921895>
- Tousi, M., & Khalaji, H. (2014). The impact of willingness to communicate on Iranian EFL learners speaking ability. *International Research Journal of Applied and Basic Sciences*, 8(11), 1866-1869.
- Vatankhah, M., & Tanbakooei, N. (2014). The role of social support on intrinsic and extrinsic motivation among Iranian EFL learners. *Procedia-Social and Behavioral Sciences*, 98, 1912-1918. <https://doi.org/10.1016/j.sbspro.2014.03.622>
- Von Culin, K. R., Tsukayama, E., & Duckworth, A. L. (2014). Unpacking grit: Motivational correlates of perseverance and passion for long-term goals. *The Journal of Positive Psychology*, 9(4), 306-312. <https://doi.org/10.1080/17439760.2014.898320>
- Weaver, C. (2005). Using the Rasch model to develop a measure of second language learners' willingness to communicate within a language classroom. *Journal of Applied Measurement*, 6(4), 396-415.
- Wei, H., Gao, K., & Wang, W. (2019). Understanding the relationship between grit and foreign language performance among middle school students: The roles of

- foreign language enjoyment and classroom environment. *Frontiers in psychology*, 10, 1508. <https://doi.org/10.3389/fpsyg.2019.01508>
- Woodrow, L. (2006). Anxiety and speaking English as a second language. *RELC Journal*, 37(3), 308-328. <https://doi.org/10.1177/0033688206071315>
- Wu, C.-P., & Lin, H.-J. (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. <https://doi.org/10.2466/22.pms.119c32z7>
- Yamane, T. (1967). *Statistics: An introductory analysis*.
- Yamashita, T. (2018). Grit and second language acquisition: Can passion and perseverance predict performance in Japanese language learning? <https://doi.org/10.7275/12097560>
- Yashima, T. (2002). Willingness to communicate in a second language: The Japanese EFL context. *The modern language journal*, 86(1), 54-66. <https://doi.org/10.1111/1540-4781.00136>
- 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(1), 119-152. <https://doi.org/10.1111/j.1467-9922.2004.00250.x>
- Young, D. J. (1992). Language anxiety from the foreign language specialist's perspective: Interviews with Krashen, Omaggio Hadley, Terrell, and Rardin. *Foreign Language Annals*, 25(2), 157-172. <https://doi.org/10.1111/j.1944-9720.1992.tb00524.x>

- Yousefi, M., & Ahmad Kasaian, S. (2014). Relationship between willingness to communicate and Iranian EFL learner's speaking fluency and accuracy. *Journal of Advances in English Language Teaching*, 2(6), pp. 61-72.
- Zarei, N., Saeidi, M., & Ahangari, S. (2019). Exploring EFL teachers' socioaffective and pedagogic strategies and students' willingness to communicate with a focus on Iranian culture. *Education Research International*, 2019.
<https://doi.org/10.1155/2019/3464163>
- Zarrinabadi, N. (2014). Communicating in a second language: Investigating the effect of teacher on learners' willingness to communicate. *System*, 42, 288-295.
<https://doi.org/10.1016/j.system.2013.12.014>
- Zarrinabadi, N., & Abdi, R. (2011). Willingness to Communicate and Language Learning Orientations in Iranian EFL Context. *International Education Studies*, 4(4), 206-214. <https://doi.org/10.5539/ies.v4n4p206>
- Zarrinabadi, N., & Haidary, T. (2014). Willingness to communicate and identity styles of Iranian EFL learners. *Procedia-Social and Behavioral Sciences*, 98, 2010-2017. <https://doi.org/10.1016/j.sbspro.2014.03.636>
- Zarrinabadi, N., & Tanbakooei, N. (2016). Willingness to communicate: Rise, development, and some future directions. *Language and Linguistics Compass*, 10(1), 30-45. <https://doi.org/10.1111/lnc3.12176>
- Zhang, J., Beckmann, N., & Beckmann, J. F. (2018). To talk or not to talk: A review of situational antecedents of willingness to communicate in the second language classroom. *System*, 72, 226-239. <https://doi.org/10.1016/j.system.2018.01.003>



APPENDICES

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Appendix A: A Questionnaire on Willingness to Communicate in English and Affective Variables

Section 1: Information sheet and Consent Form

<p>Information Sheet for the Research Participants</p> <p>Title of the research project: A Model of Willingness to Communicate in English in Iranian EFL Classroom Context</p> <p>Name of the principal researcher: Azadeh Amirzadi</p> <p>Position: researcher</p> <p>Advisor: Jutarat Vibulphol</p> <p>Address (Home): No. 877/566, Building C, Regent Home 27, Soi Krungtep-Nonnaburi 23/1, Bangsue, Bangkok, Thailand</p> <p>Mobile number: (+66) 916986271</p> <p>e-mail: azade.amirzadi@gmail.com</p> <p>You are invited to take part in this research project. Before you decide to join the project, it is necessary for you to understand why this research project is being conducted and what it involves. Please take time to read the following information carefully. If some statements are unclear, you may ask or require further information.</p> <p>This research project aims to:</p> <ol style="list-style-type: none"> investigate the relationships among five variables: willingness to communicate (WTC) in English, motivation in learning English, confidence in communicating in English, anxiety in learning and communicating in English, and passion and perseverance in 	<p>برگه اطلاعیه برای مشارکت در تحقیق</p> <p>عنوان تحقیق: ایجاد ارتباط به انگلیسی و دیگر عوامل موثر در کلاس زبان در ایران</p> <p>نام محقق: آزاده امیرزادی</p> <p>جایگاه: محقق</p> <p>نام استاد راهنما: جوتارات ویبولفول</p> <p>C, آدرس منزل: شماره ۵۶۶/۸۷۷، ساختمان ریجنت هوم ۲۷، خیابان کرانگتپ نانابوری ۲۳/۱، بنگسو، بانکوک، تایلند</p> <p>شماره موبایل: ۰۹۱۶۹۸۶۲۷ (+۶۶)</p> <p>ایمیل: azade.amirzadi@gmail.com</p> <p>شما دعوت شده اید تا در این تحقیق شرکت کنید. قبل از جواب دادن به سوالات، لازم است بدانید که چرا در این تحقیق مشارکت میکنید. لطفا کمی وقت گذاشته و مطالب زیر را به دقت بخوانید.</p> <p>اهداف این تحقیق عبارتند از:</p> <ol style="list-style-type: none"> یافتن رابطه ی میان ۵ فاکتور: تمایل در ایجاد ارتباط به انگلیسی، تمایل در ایجاد ارتباط به انگلیسی، انگیزه در یادگیری زبان انگلیسی، اعتماد به نفس در ایجاد ارتباط به انگلیسی، اضطراب در ایجاد ارتباط و یادگیری انگلیسی، علاقه و پشتکار در یادگیری زبان انگلیسی تعیین بهترین عامل در ایجاد ارتباط به انگلیسی در کلاس زبان ایران ارایه مدلی از این ارتباط در کلاس زبان انگلیسی در ایران <p>نتایج حاصله از این تحقیق به مدرسان زبان در دانشگاهها کمک میکند تا فهم بهتری از عوامل موثر در تمایل در ایجاد ارتباط به انگلیسی در میان دانشجویان در کلاس داشته باشند و بتوانند روش های بهتری برای افزایش این تمایل پیدا کنند.</p>
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<p>learning English in the Iranian EFL classroom context.</p> <ol style="list-style-type: none"> specify which variable is the best predictor of WTC in English of Iranian EFL students propose a model of WTC in English in Iranian EFL context <p>The insights gained from this research will help Iranian EFL university instructors understand the extent to which the four variables under study can influence WTC so they can find ways to enhance WTC of Iranian students effectively.</p> <p>The duration of the research period is approximately six months, from February 2021 to July 2021. The number of the research participants is at least 400.</p> <p>You are invited to take part in this research because:</p> <ol style="list-style-type: none"> You are a non- English majored university student in Iran. You are studying in the university that has agreed to help administer this questionnaire. <p>Once you have decided to take part in this research project, I would like to ask you to answer the questions in this online questionnaire. The questionnaire consists of 6 sections. Part I is to collect some demographic information about you such as age, gender and Level of English. Part 2 to 6 are used to investigate each variable separately. The total number of the questions is 8. The total time you may need to complete this questionnaire is approximately 25-30 minutes.</p> <p>Your personal information will be kept confidential and will not be revealed to the public as information about an</p>	<p>طول مدت این تحقیق تقریباً ۶ ماه است (از اسفند ۱۳۳۹ تا شهریور ۱۴۰۰) و تعداد دانشجویان شرکت کننده در این تحقیق حداقل ۴۰۰ نفر میباشد.</p> <p>از شما به دلایل زیر دعوت شده در این تحقیق شرکت کنید:</p> <ol style="list-style-type: none"> شما دانشجویی هستید که در شاخه ای غیر از زبان انگلیسی در دانشگاه تحصیل میکنید شما در یکی از دانشگاه های آزاد یا سراسری در ایران در حال تحصیل هستید <p>بعد از اینکه شما تصمیم گرفته اید در این تحقیق شرکت کنید، محقق مایل است سوالاتی از شما به صورت پرسشنامه آنلاین بپرسد. این پرسشنامه در شش قسمت میباشد: بخش اول اطلاعات شخصی به عنوان مثال سن، جنس و سطح زبانی و بخش دوم در خصوص ۵ عامل موثر به صورت مجزا میباشد. زمان لازم برای پاسخ دهی به سوالات حدود ۲۵ تا ۳۰ دقیقه میباشد. و ۸۴ سوال در پرسشنامه ها موجود است.</p> <p>محقق اطلاعات جمع آوری شده را از شما و دیگر شرکت کنندگان در پایان شهریور ۱۴۰۰ بعد از اتمام تحقیق از بین میبرد. اطلاعات شخصی شما به صورت محرمانه نگه داری خواهد شد و به صورت جمعی گزارش داده میشود. کسانی که به این اطلاعات دسترسی دارند شامل خود محقق، کسانی که در این تحقیق دست دارند و کمیته اخلاقی تحقیق میباشد.</p> <p>هیچ خطری برای شرکت کنندگان وجود ندارد. لطفاً در خاطر داشته باشید که انصراف از شرکت در این تحقیق حق شماست و مشکلی برای شما ایجاد نخواهد کرد. این تحقیق برای شما هیچ هزینه ای ندارد و شما در ازای آن پولی دریافت نخواهید کرد.</p> <p>شما میتوانید با شرکت در این تحقیق نقش مهمی را ایفا کنید. شرکت داوطلبانه شما باعث میشود که اهداف این تحقیق محیا شود و همچنین به مدرسان زبان انگلیسی در ایران کمک میشود. محقق پیشاپیش از شرکت شما در این تحقیق سپاسگذار است. اگر سوالی در خصوص تحقیق دارید میتوانید در هر زمانی با محقق تماس حاصل کنید.</p>
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<p>individual. In the analysis, your information will be identified using numbers. The research results will be reported collectively. The data file will be saved in a secure folder with password and can only be accessed by the researcher.</p> <p>Once the study is completed, scheduled to be by July 2021, all the data will be destroyed. This study does not produce any risk for the participants. You can withdraw from the research project at any time without advance notification. Your decision not to take part in or to withdraw from this research project will not affect you in any way. This research will not cost you anything and you will not be paid for the time spent.</p> <p>You can play a significant role by taking part in this research. Your voluntary participation will help me to achieve the objectives of this research, which will in turn benefit the advancement of English teaching in Iran. I am grateful for your participation and would like to extend my thanks to you in advance.</p> <p>If you have any questions regarding the research, at all times, please make further inquiries by contacting the researcher. If you have any complaint, you can file it to the Research Ethics Review Committee for Research Involving Human Subjects: The Second Allied Academic Group in Social Sciences, Humanities and Fine and Applied Arts, Chulalongkorn University, Chamchuri Building, Room 114, Phayathai Road, Wang Mai Sub-district, Pathum Wan District, Bangkok 10330, Telephone number +6622183210, +6622183211, E-mail: curec2.ch1@chula.ac.th.</p>	<p>اگر شکایتی دارید، میتوانید با کمیته اخلاقی تحقیق تماس بگیرید</p> <p>کمیته تحقیق، دانشگاه چولالانکورن، ساختمان جمجولی، اتاق ۱۱۴، خیابان پایاتایا، ناحیه پتونام، -۰۰۲۲۱۸۳۲۱۰: بانکوک ۱۰۳۳۰، شماره تماس ۱۱،</p> <p>آدرس ایمیل</p> <p>Curec2.chu1@chula.ac.th</p>
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<p>Letter of Consent to Take Part in Research</p> <p>I, the one agreeing with this letter, wish to consent to take part in this research project.</p> <p>Title of the research project: A Model of Willingness to Communicate in English in Iranian EFL Classroom Context</p> <p>Name of the principal researcher: Azadeh Amirzadi</p> <p>Address (Home): No. 877/566, Building C, Regent Home 27, Soi Krungtep-Nonnaburi 23/1, Bangsue, Bangkok, Thailand</p> <p>Mobile number: (+66)916986271</p> <p>I have been notified of:</p> <ol style="list-style-type: none"> 1. the details of the rationale and the research objectives 2. details of the participation that I must have in the study 3. the risks/dangers and the benefits to be obtained from this research <p>I therefore agree to take part in this research project, as specified in the information sheet for research participants. Concerning this, I consent to answer the following online questionnaire.</p> <p>I am aware that I have the right to withdraw from the research at any time without having to state the reason. This withdrawal will in no way negatively affect me, my study or assessment in any course.</p> <p>I have been assured that the researcher will treat me in accordance with what is specified in the information sheet for the research participants and any</p>	<p>رضایت نامه</p> <p>من رضایت خود را از شرکت در این تحقیق بیان میکنم.</p> <p>عنوان تحقیق: ایجاد ارتباط به انگلیسی و دیگر عوامل موثر در کلاس زبان در ایران</p> <p>نام محقق: آزاده امیرزادی</p> <p>آدرس منزل: شماره ۵۶۶/۸۷۷، ساختمان C،</p> <p>ریجنٹ هوم ۲۷، خیابان کرانگتپ نانابوری ۲۳/۱، بنگسو، بانکوک، تایلند</p> <p>شماره موبایل: (+۶۶) ۹۱۶۹۸۶۲۷۱ من اظهار دارم که:</p> <p>از جزئیات تحقیق و هدف آن. ۱.</p> <p>جزئیات مراحل پرسشنامه که باید انجام دهم. ۲.</p> <p>از خطرات و فواید این تحقیق آگاهی دارم. ۳.</p> <p>بنابراین موافقت خود را در مشارکت در این تحقیق اظهار میکنم. با توجه به این موضوع، رضایت خود را در جواب دادن به سوالات موجود در پرسشنامه آنلاین زیر بیان میکنم. من حق دارم هر وقت تمایل داشتم بدون بیان دلیل از شرکت در این تحقیق سر باز زنم. و این عمل در رود آموزشی من تاثیری نمیگذارد. من مطمئن هستم که محقق همان طور که در قسمت قبلی ذکر شد اطلاعات من را به صورت محرمانه نگهداری میکند. و اطلاعات من به صورت فردی منتشر نخواهد شد و آگاهی دارم که اطلاعات جمع آوری شده از تمامی شرکت کنندگان در این تحقیق بعد از مراحل تحقیق از بین خواهد رفت. اگر با من طبق موارد ذکر شده برخورد نشود</p> <p>من این حق را دارم که با کمیته تحقیق تماس بگیرم. کمیته تحقیق، دانشگاه چولالانکورن، ساختمان چمچولی، اتاق ۱۱۴، خیابان پایاتایا، ناحیه پتونام، بانکوک ۱۰۳۳۰، شماره تماس ۰۰۲۲۱۸۳۲۱۰-۱۱،</p> <p>آدرس ایمیل</p>
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<p>information about me will be treated by the researcher as confidential. The research findings will be presented as collective data. No information in the report will lead to identifying me as an individual and all the data will be kept in a secure place and will be destroyed after the research completion.</p> <p>If I am not treated according to what is specified in the information sheet for the research participants, I have the right to file a complaint to the Research Ethics Review Committee for Research Involving Human Subjects: The Second Allied Academic Group in Social Sciences, Humanities and Fine and Applied Arts, Chulalongkorn University, Chamchuri 1 Building, First Floor, Room 114, Wang Mai Sub-district, Pathum Wan District, Bangkok 10330, Telephone number +6622183210, +6622183211, E-mail: curec2.ch1@chula.ac.th.</p>	<p>Curec2.chu1@chula.ac.th</p>
<p>I announce my volunteer agreement to participate in this study and I am aware of my right to withdraw from answering the questions and the objectives of this study.</p> <p>من موافقت خود را برای شرکت داوطلبانه در این تحقیق اعلام میکنم و از اهداف تحقیق و حق خود در صورت عدم تمایل</p> <p><input type="checkbox"/> *به پاسخ دادن به سوالات آگاهی دارم</p>	

Section 2: Demographic Information

<p>Age:</p>	<p>Gender:</p>
<p>Level of English:</p>	

Section 3: Willingness to Communicate in EFL Context

<p>5= Definitely willing</p> <p>4= Probably willing</p> <p>3= Neither willing nor unwilling</p> <p>2= Probably not willing</p> <p>1= Definitely not willing</p>
<p>1. I am willing to do a role-play standing in front of the class in English (e.g., ordering food in a restaurant)</p> <p>من مایلم در جلوی کلاس به زبان انگلیسی نقش آفرینی کنم (مثلا سفارش غذا در یک رستوران)</p>
<p>2. I am willing to give a short self-introduction without notes in English to the class</p> <p>من حاضرم خودم را به صورت کوتاه و مختصر بدون در دست داشتن یادداشتی در جلوی کلاس معرفی کنم</p>
<p>3. I am willing to give a short speech in English to the class about my hometown with notes</p> <p>من حاضرم یک سخنرانی کوتاه در مورد شهرم با در دست داشتن یادداشت در جلوی کلاس ارائه دهم</p>
<p>4. I am willing to translate a spoken utterance from Persian into English in my group</p> <p>من مایلم یک گفتار را از زبان فارسی به انگلیسی در گروهم ترجمه کنم</p>
<p>5. I am willing to ask the teacher in English to repeat what he/she just said in English because I didn't understand</p> <p>من تمایل دارم از معلم به انگلیسی بخواهم مطلبی را که به انگلیسی گفته است تکرار کند چون من متوجه نشده ام</p>
<p>6. I am willing to do a role-play in English at my desk, with my peer (e.g., ordering food in a restaurant)</p> <p>من مایلم نقشی را به زبان انگلیس پشت میزم با همسالانم اجرا کنم (برای مثال سفارش غذا در یک رستوران)</p>

7. I am willing to ask my peer sitting next to me in English the meaning of an English word

من مایلم که از دوست خود که در کنار من نشسته است به انگلیسی معنی یک کلمه را بپرسم

8. I am willing to ask my group mates in English the meaning of word I do not know

من مایلم از هم گروهی هایم معنی کلمه ای را که نمیدانم به انگلیسی بپرسم

9. I am willing to ask my group mates in English how to pronounce a word in English

من مایلم از هم گروهی هایم تلفظ کلمه ای را بپرسم

10. I am willing to ask my peer sitting next to me in English how to say an English phrase to express the thoughts in my mind

من مایلم که از دوست همسن خودم که در کنار من نشسته است به انگلیسی بپرسم که چگونه یک عبارت برای بیان افکارم به انگلیسی بگویم

Section 4: L2 Confidence

5= Almost always true about me

4= Usually True about me

3= Sometimes true about me

2= Usually not true about me

1= Almost never true about me

In the language classroom, I feel confident when I...

..... در کلاس زبان احساس اعتماد به نفس میکنم وقتی که

1. present a talk to a group of strangers

سخنرانی برای غریبه ها ارائه میدهم

2. talk with an acquaintance

با یکی از آشنایان گفتگو میکنم

3. talk in a large meeting of friends	در جلسات بزرگ با دوستا گفتگو میکنم
4. talk in a small group of strangers	در گروه کوچکی از غریبه ها گفتگو میکنم
5. talk with a friend	با یک دوست گفتگو میکنم
6. talk in a large meeting of acquaintances	در یک جلسه بزرگ با آشنایان صحبت میکنم
7. talk with a stranger	با یک غریبه گفتگو میکنم
8. present a talk to a group of friends	برای گروهی از دوستان سخنرانی میکنم
9. talk in a small group of acquaintances	در گروه کوچکی از آشنایان صحبت میکنم
10. talk in a large meeting of strangers	در یک جلسه بزرگ با غریبه ها صحبت میکنم
11. talk in a small group of friends	در گروه کوچکی از دوستان صحبت میکنم
12. present a talk to a group of acquaintances	سخنرانی در مقابل گروه کوچکی از آشنایان ارائه میدهم

Section 5: L2 Motivation

5= Strongly agree
4= Agree
3= Undecided
2= Disagree
1= Strongly disagree
<p>1. I cannot come to see why I study a second language, and frankly, I don't give a damn</p> <p>صادقانه بگویم برایم اهمیتی ندارد و مطمئن نیستم چرا زبان دوم یاد میگیرم</p>
<p>2. Honestly, I don't know, I truly have the impression of wasting my time in studying a second language</p> <p>در حقیقت این تصور را دارم که وقتم را برای یادگیری زبان دوم هدر میدهم</p>
<p>3. I don't know; I can't come to understand what I am doing studying a second language</p> <p>نمیتوانم درک کنم که چرا من در حال یادگیری زبان دوم هستم</p>
<p>4. Because I have the impression that it is expected of me</p> <p>این تصور را دارم که از من انتظار دارند</p>
<p>5. In order to get a more prestigious job later on</p> <p>برای اینکه در آینده شغلی با موقعیت بالاتر پیدا کنم</p>
<p>6. In order to have a better salary later on</p> <p>برای اینکه حقوق بهتری داشته باشم زبان دوم یاد میگیرم</p>

7. To show myself that I am a good citizen because I can speak a second language

برای اینکه به خودم نشان دهم شهروند خوبی هستم زیرا میتوانم به زبان دوم صحبت کنم

8. Because I would feel ashamed if I couldn't speak to my friends from the second language community in their native tongue

اگر نتوانم با دوستانم به زبان دوم که زبان مادری آنهاست صحبت کنم خجالت خواهم کشید

9. Because I would feel guilty if I didn't know a second language

اگر زبان دوم ندانم احساس گناه خواهم کرد

10. Because I choose to be the kind of person who can speak more than one language

زیرا من انتخاب میکنم آدمی باشم که میتواند بیش از یک زبان صحبت کند

11. Because I think it is good for my personal development

چون احساس میکنم برای پیشرفت شخصی من خوب است

12. Because I choose to be the kind of person who can speak a second language

زیرا من انتخاب میکنم آدمی باشم که میتواند به زبان دوم صحبت کند

13. For the pleasure that I experience in knowing more about the literature of the second language group

به دلیل لذتی که از دانستن ادبیات زبان دوم میبرم

14. For the satisfied feeling I get in finding out new things

برای احساس رضایتمندی که از دانستن چیزهای جدید بدست می آورم

15. Because I enjoy the feeling of acquiring knowledge about the second language community and their way of life

چون از آشنا شدن با جامعه زبان دوم ونحوه زندگی آنها لذت میبرم

16. For the pleasure I experience when surpassing myself in my second language studies

به دلیل لذتی که از پیشی گرفتن از خودم در یادگیری زبان دوم تجربه میکنم

17. For the enjoyment I experience when I grasp a difficult construct in the second language

برای لذت از تجربه ای که از فهم ساختاری دشوار در زبان دوم بدست می آورم

18. For the satisfaction I feel when I am in the process of accomplishing difficult exercises in the second language

از حس رضایتی که در حین انجام تمرین های سخت در زبان دوم دارم

19. For the "high" I feel when hearing foreign languages spoken

برای حس خوشایندی که هنگام شنیدن زبان خارجی دوم تجربه میکنم

20. For the "high" feeling that I experience while speaking in the second language

برای حس خوشایندی که هنگام صحبت کردن زبان دوم تجربه میکنم

21. For the pleasure I get from hearing the second language spoken by native second language speakers

برای حس لذت بخشی که هنگام صحبت کردن با افراد بومی آن زبان دارم

Section 6: L2 Anxiety

<p>5= Strongly agree</p> <p>4= Agree</p> <p>3= neither agree nor disagree</p> <p>2= Disagree</p> <p>1= Strongly disagree</p>
<p>1. I never feel quite sure of myself when I am speaking in my foreign language class</p> <p>من هیچ وقت زمانی که به زبان دوم صحبت میکنم از خودم کاملاً مطمئن نیستم</p>
<p>2. I don't worry about making mistakes in language class</p> <p>من از اشتباه کردن در کلاس زبان نگران نیستم</p>
<p>3. I tremble when I know that I'm going to be called on in language class</p> <p>وقتی میدانم قرار است از من در کلاس زبان سوال شود میلرزم</p>
<p>4. It frightens me when I don't understand what the teacher is saying in the foreign language</p> <p>وقتی نمیفهمم معلم زبانم به خارجی چه میگوید میترسم</p>
<p>5. It wouldn't bother me at all to take more foreign-language classes</p> <p>از این که در کلاس های زبان بیشتری شرکت کنم مشکلی ندارم</p>
<p>6. During language class, I find myself thinking about things that have nothing to do with the course</p> <p>در طول کلاس زبان متوجه میشم به موضوعاتی که به کلاس مربوط نیست فکر میکنم</p>
<p>7. I keep thinking that other students are better at languages than I am</p> <p>مدام به این فکر میکنم که بقیه دانش آموزان کلاس از من بهترند</p>
<p>8. I am usually at ease during tests in my language class</p> <p>معمولاً در حین امتحان زبان آسوده خاطر هستم</p>

9. I start to panic when I have to speak without preparation in language class وقتی قرار است بدون آمادگی قبلی در کلاس زبان صحبت کنم ترس بر من غلبه میکند
10. I worry about consequences of failing my foreign language class من از عواقب رد شدن در کلاس زبان نگرانم
11. I don't understand why some people get so upset over foreign language classes من نمیفهمم چرا بعضی ها در مورد کلاس زبان احساس خوبی ندارند
12. In language class, I can get so nervous I forget things I know در کلاس زبان به حدی عصبی میشوم که چیزهایی که بلد هستم را فراموش میکنم
13. It embarrasses me to volunteer answers in my language class از پاسخ داوطلبانه دادن در کلاس زبان خجالت میکشم
14. I would not be nervous speaking the foreign language with native speakers از صحبت کردن با افراد بومی زبان خارجی عصبی میشوم
15. I get upset when I don't understand what the teacher is correcting وقتی متوجه نمیشوم که معلم چه چیزی را تصحیح میکند حس خوشایندی ندارم
16. Even if I am well prepared for language class, I feel anxious about it حتی اگر برای کلاس آماده باشم باز هم عصبی میشوم
17. I often feel like not going to my language class اغلب دوست ندارم در کلاس زبان حاضر شوم
18. I feel confident when I speak in foreign language class وقتی در کلاس زبان صحبت میکنم اعتماد به نفس دارم

19. I am afraid that my language teacher is ready to correct every mistake I make

از اینکه معلم زبانم آماده تصحیح تمامی اشتباهاتم هست میترسم

20. I can feel my heart pounding when I'm going to be called on in language class

وقتی قرار است در کلاس زبان اسم من صدا زده شود میترسم

21. The more I study for a language test, the more confused I get

هر چه بیشتر برای آزمون زبان درس میخوانم بیشتر گیج میشوم

22. I don't feel pressure to prepare very well for language class

از اینکه برای کلاس زبان خیلی خوب آماده شوم احساس فشار نمیکنم

23. I always feel that the other students speak the foreign language better than I do

اغلب احساس میکنم دیگر دانش آموزان از من زبان خارجه را بهتر صحبت میکنند

24. I feel very self-conscious about speaking the foreign language in front of other students

از اینکه در مقابل دانش آموزان دیگر به زبان خارجی صحبت کنم عصبی میشوم

25. Language class moves so quickly I worry about getting left behind

سرعت کلاس زبان باعث میشود نگران عقب افتادن از بقیه شوم

26. I feel more tense and nervous in my language class than in my other classes

من در کلاس زبان بیشتر از کلاس های دیگر عصبی هستم

27. I get nervous and confused when I am speaking in my language class

وقتی در کلاس زبان صحبت میکنم عصبی و گیج هستم

28. When I'm on my way to language class, I feel very sore and relaxed

وقتی در مسیر رفتن به کلاس زبانم بسیار خونسرد و شاد هستم

29. I get nervous when I don't understand every word the language teacher says

وقتی معنی همه کلماتی که معلم زبانم میگوید را نمیفهمم عصبی میشوم

30. I feel overwhelmed by the number of rules you have to learn to speak a foreign language

احساس میکنم غرق قوانینی که برای یادگیری صحبت کردن در زبان خارجه لازم شده ام

31. I am afraid that the other students will laugh at me when I speak the foreign language

از اینکه دانش آموزان دیگر به خارجی صحبت کردن من بخندند میترسم

32. I would probably feel comfortable around native speakers of the foreign language

احتمالا در بین بومیان یک زبان خارجه احساس راحتی و آرامش دارم

33. I get nervous when the language teacher asks questions which I haven't prepared in advance

وقتی که معلم زبان سوالی میپرسد که من از قبل آمادگی جواب دادن به آن را ندارم عصبی میشوم

Section 7: Short Grit Scale

5= Very much like me
4= Mostly like me
3= Somewhat like me
2= Not much like me
1= Not like me at all
<p>1. New ideas and projects sometimes distract me from previous ones</p> <p>ایده های و پروژه های جدید گاهی اوقات تمرکز من را از ایده های و پروژه های قبلی منحرف میکنند</p>
<p>2. Setbacks don't discourage me</p> <p>پیشرفت نکردن انگیزه من را از بین نمیبرند</p>
<p>3. I have been obsessed with a certain idea or project for a short time but later lost interest</p> <p>من به مدت کوتاهی تحت تاثیر ایده های و پروژه های خاصی قرار میگیرم ولی بعد از مدتی جاذبه خود را از دست میدهند</p>
<p>4. I am a hard worker</p> <p>من فرد سخت کوشی هستم</p>
<p>5. I often set a goal but later choose to pursue a different one</p> <p>من اغلب هدفی را مشخص میکنم و بعدا تصمیم میگیرم هدف دیگری را دنبال میکنم</p>
<p>6. I have difficulty maintaining my focus on projects that take more than a few months to complete</p> <p>تمرکز کردن روی پروژه ای که چندین ماه طول میکشد تا کامل شود برای من سخت است</p>
<p>7. I finish whatever I begin</p> <p>من هر چیزی که شروع میکنم را به اتمام میرسانم</p>

8. I am diligent

من سخت کوش هستم



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Appendix B: Revised Items in Back Translation Process

Items	Type of Problem	Back Translated Item	Final Version	
Appendix No.				
C	9	Grammar	I feel guilty if I don't know a second language	I would feel guilty if I don't know a second language
C	10	Grammar	Because I chose to be a person who can speak in more than one language	Because I would choose to be a person who can speak in more than one language
C	12	Grammar	Because I chose to be a person who can speak a second language	Because I would choose to be a person who can speak a second language
C	5	Word choice	In order to find a reputable job in the future	In order find a higher profile job
D	1	Word choice	I never feel fully satisfied with myself when I speak a second language in the class	I am never fully confident when I speak a second language in the class
D	2	Word choice	I don't worry about making mistakes in class	I don't worry about making mistakes in language class
D	3	Word choice	I shake nervously when I know I'm going to be questioned in class	I shake nervously when I know I'm going to be questioned in language class
D	15	Word choice	I feel sad when I don't understand what the teacher is correcting	I feel disturbed when I don't understand what the teacher is correcting
D	17	Word choice	I don't often like being in the class	I don't often like being in the language class
D	30	Word choice	I'm fed up with the rules I need to learn for	I feel I am loaded with the rules I need to learn for

Items	Type of Problem	Back Translated Item	Final Version
Appendix No.			
		speaking a foreign language	speaking a foreign language
E 5	Meaning	I often set a goal and later try to achieve a harder one	I often set goals but later decide to follow a different one
E 6	Meaning	I can concentrate on a project hard, and it usually takes months to finish that	It is difficult for me to concentrate on a project which takes month to finish



Appendix C: Reversed Coded Items

Questionnaire	Number of Item	Item
L2 Motivation	1	I cannot come to see why I study a second language, and frankly, I don't give a damn
	2	Honestly, I don't know, I truly have the impression of wasting my time in studying a second language
	3	I don't know; I can't come to understand what I am doing studying a second language
	4	Because I have the impression that it is expected of me
	8	Because I would feel ashamed if I couldn't speak to my friends from the second language community in their native tongue
L2 Anxiety	9	Because I would feel guilty if I didn't know a second language
	2	I don't worry about making mistakes in language class
	5	It wouldn't bother me at all to take more foreign language classes

Questionnaire	Number of Item	Item
L2 Anxiety	8	I am usually at ease during tests in my language class
	11	I don't understand why some people get so upset over foreign language classes
	14	I would not be nervous speaking the foreign language with native speakers
	18	I feel confident when I speak in foreign language class
	22	I don't feel pressure to prepare very well for language class
	28	When I'm on my way to language class, I feel very sore and relaxed
Grit	32	I would probably feel comfortable around native speakers of the foreign language
	1	New ideas and projects sometimes distract me from previous ones
	3	I have been obsessed with a certain idea or project for a short time but later lost interest

Questionnaire	Number of Item	Item
	5	I often set a goal but later choose to pursue a different one
	6	I have difficulty maintaining my focus on projects that take more than a few months to complete



Appendix D: Positively and Negatively Coded Likert Scale

Questionnaire	Positive Coded Likert Scale		Negatively Coded Likert Scale	
L2 Motivation	5	Strongly agree	5	Strongly disagree
	4	Agree	4	Disagree
	3	Undecided	3	Undecided
	2	Disagree	2	Agree
	1	Strongly disagree	1	Strongly agree
L2 Anxiety	5	Strongly agree	5	Strongly disagree
	4	Agree	4	Disagree
	3	neither agree nor disagree	3	neither agree nor disagree
	2	Disagree	2	Agree
	1	Strongly disagree	1	Strongly agree
Grit	5	Very much like me	5	Not like me at all
	4	Mostly like me	4	Not much like me
	3	Somewhat like me	3	Somewhat like me
	2	Not much like me	2	Mostly like me
	1	Not like me at all	1	Very much like me

Appendix E: Missing Data

Missing Items Pattern

The pie charts in Figure 5. below summarizes the missing values in the present study.

The results showed that the total missing data was 13.09% of the total cases and 1.429 % of the total values.

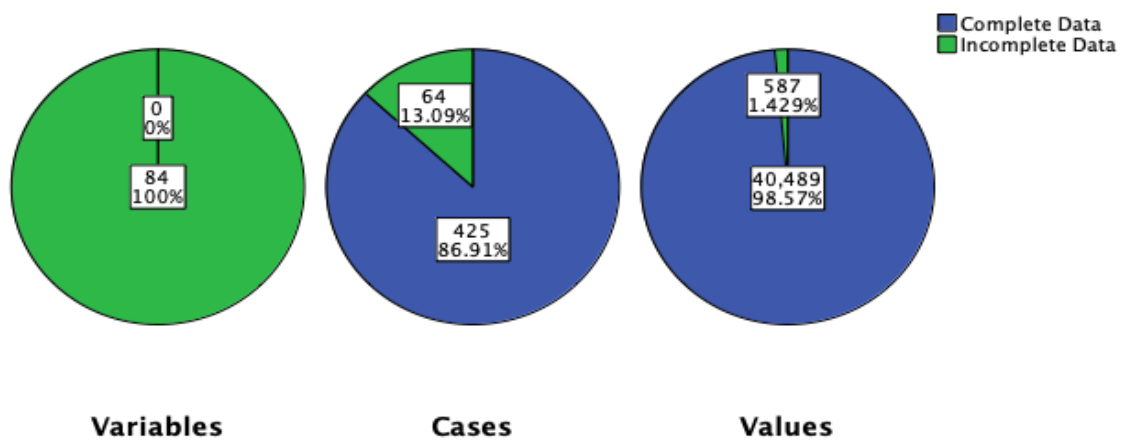


Figure 5 Summary of Missing Values

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Missing Data Percentage

Table 1. presents of the most frequent missing items and their percentage. The other items which are not included in the Table 12. had less than 10 missing items.

Table 12 Percentage of Frequent Missing Items

Questionnaire	Item Number	Missing		Valid Number
		No.	Percent	
L2 Anxiety	33	16	3.3%	473
L2 Anxiety	30	16	3.3%	473
L2 Anxiety	31	15	3.1%	474
L2 Anxiety	24	15	3.1%	474
Grit	3	14	2.9%	475
L2 Anxiety	22	14	2.9%	475
L2 Anxiety	28	14	2.9%	475
Grit	8	13	2.7%	476
Grit	7	13	2.7%	476
Grit	5	13	2.7%	476
Grit	4	13	2.7%	476
Grit	2	13	2.7%	476
L2 Anxiety	29	13	2.7%	476
L2 Anxiety	27	13	2.7%	476
L2 Anxiety	26	13	2.7%	476
L2 Anxiety	25	13	2.7%	476
L2 Anxiety	23	13	2.7%	476
Grit	6	12	2.5%	477
Grit	1	12	2.5%	477
L2 Anxiety	22	12	2.5%	477

Questionnaire	Item Number	Missing		Valid Number
		No.	Percent	
L2 Anxiety	18	11	2.2%	478
L2 Anxiety	10	11	2.2%	478
L2 Anxiety	21	10	2.0%	479
L2 Anxiety	20	10	2.0%	479
L2 Anxiety	19	10	2.0%	479

Table 13 shows the frequency of missing data for each variable. In general, the missing data for each variable in the study is ranged from a low 1.4% for WTC in English and a high of 7.8% for L2 anxiety.

Table 13 Frequent Missing Data for Variables

Variable	Missing		Valid Number
	No.	Percent	
WTC in English	7	1.4%	489
L2 confidence	18	3.7%	471
L2 motivation	10	2.0%	479
L2 anxiety	38	7.8%	451
Grit	17	3.5%	472

Missing Value Pattern

Figure 6 shows in the graph below was run by SPSS. The pattern from the missing data reveals that the missing values were not missing at random.

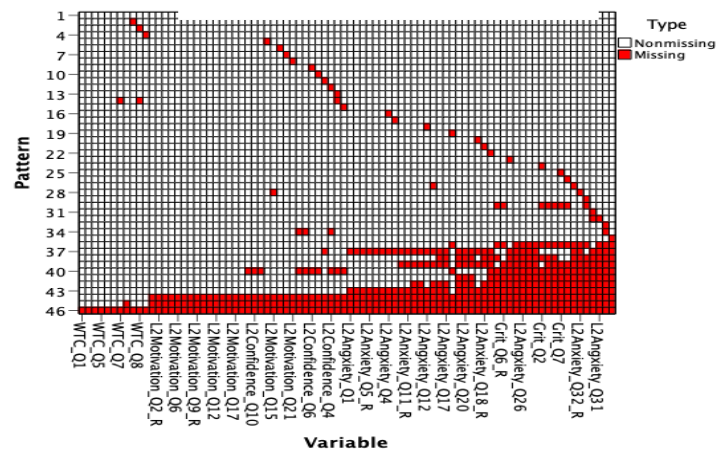
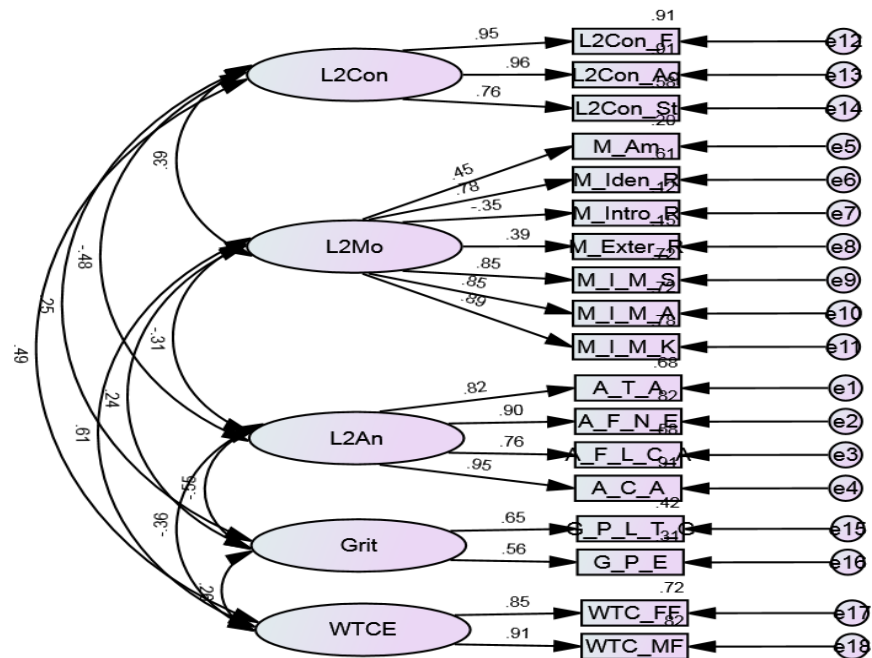


Figure 6 Missing Values Pattern

Appendix F: Confirmatory Factor Analysis Result



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Notes. WTCE= Willingness to communicate in English; L2Con= L2 confidence; L2 Mo= L2 motivation; L2An= L2 anxiety; L2Con_F= L2 confidence_Friends; L2Con_Aq= L2 confidence_acquaintance; L2Con_St= L2 confidence_Stranger; M_Am= L2 motivation_Amotive; M_Iden_R= L2 motivation_Identified regulation; M_Intro_R= L2 motivation_Introjection regulation; M_Ext_R= L2 motivation_External regulation; M_I_M_S= L2 motivation_Intrinsic motivation-stimulation; M_I_M_A= L2 motivation_Intrinsic motivation-accomplishment; M_I_M_K= L2 motivation_Intrinsic motivation -knowledge; A_T_A= L2 Anxiety_Test anxiety; A_F_N_E= L2 Anxiety_Fear of negative evaluation; A_F_L_C_A= L2 Anxiety_Foreign language class anxiety; A_C_A= L2 Anxiety_Communicationa aprehension; G_P_L_T_G= Grit_Passion for long- term goals; G_P_E= Grit_Perseverance of effort; WTCE_FF= Willingness to communicate in English_Form-focused Form-focused; WTCE_MF= Willingness to communicate in English_Meaning-focused activities.

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