

THE IMPACT OF EXTROVERSION AND INTROVERSION ON LANGUAGE LEARNING  
IN AN INPUT-BASED EFL SETTING

By

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## **Abstract**

It has been questioned that even in similar learning environments, students from the same or similar background knowledge and experience differ greatly in how quickly they pick up and reach a proficiency in a language. This complexity comes from cognitive, affective, motivational, personality or other external factors' simultaneous effects on language learning. The impact of extroversion and introversion on language learning has been investigated in various theoretical and empirical studies; however, few conclusive results are generated from previous studies in terms of extroversion and introversion in language learning process. This study aims to provide more conclusive results in the area of the relationship between extroversion and introversion and language performance in English as a Foreign Language (EFL) environment by incorporating an ignored aspect of personality and language learning research. This study aims to examine language learners' individual differences by focusing on the relationships of personality traits (extroversion and introversion) and language learning of 56 Turkish university students through administrating Oxford Online Placement Test (OOPT) and Myers-Briggs Type Indicator (MBTI) in an input-based instruction setting. Before starting the instruction, students took a pre-test, and at the end of academic year students took a post-test along with a personality test. The results of the study provides learning environments and instruction type interact with students' personality type. It is observed that input-based instruction benefits introverts more than extroverts in overall language performance.

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## **List of Abbreviations**

ACTFL: American Council on the Teaching of Foreign Languages

ARAS: Ascending Reticular Activation System

CEFR: Common European Framework of References for Languages

CPP: SkillsOne® Consulting Psychologist Press

EFL: English as a Foreign Language

EPI: Eysenck Personality Inventory

EPQ: Eysenck Personality Questionnaire

ESL: English as a Second Language

FLCAS: Foreign Language Classroom Anxiety Scale

IELTS: International English Language Testing System

L2: Second Language

MBTI: Myers-Briggs Type Indicator

NEO PI-R: Neo Personality Inventory-Revisited

OOPT: Oxford Online Practice Test

SILL: Strategy Inventory for Language Learning

TESOL: Teaching English to Speakers of Other Languages

TOEFL: Test of English as a Foreign Language

Y/G: Yatabe-Guilford Personality Assessment

## Chapter 1: Introduction

In English as a Foreign Language (EFL) environments, learners, instructors, policy makers and researchers try to maximize the students' progress in language learning. To do so, it is important to understand and investigate general principles and uniqueness of the human mind. Recent studies showed that not only cognitive factors have an effect on successful second language learning (Ehrman, 1995), but also affective, motivational, personality and other external factors (Oxford & Ehrman, 1992) have significant effects on this complex process. It has been questioned that even in similar learning environments, students from the same or similar background may experience great differences in how quickly they pick up and reach proficiency in a language (Roberts & Meyer, 2012). So; studying individual differences in second language learning can contribute to a better understanding of the complexity of second language (L2) studies. This is important because it stems from the existence of individual differences, and these make social sciences different from natural sciences (Dörnyei, 2005). It has been highlighted by many researchers that students' unique individual differences must be considered (Chen, 2013). This is because individual differences result in different degrees of impact on everybody (Dörnyei, 2006), and generate significant effects on human thinking, behavior and educational context (Cooper, 2002; Eysenck, 1994; Snow et al., 1994). Even though learner variables, such as gender, age, family background; socio-psychological factors, like motivation and attitude, cognitive styles, or personality-related variables, like self-esteem and anxiety, can have important effects on L2 learning processes and results, in this study only one factor, personality type, will be examined. It should be noted that personality type is generally an important factor in determining human behavior; and this factor affects the way people respond to stimuli and the way they prefer to learn (Carrell et al., 1996; Ehrman & Oxford, 1990; Myers & Myers, 1995).

Despite the fact that personality is the most individual characteristic of a human being, it does not receive as much attention in L2 studies in the education field as other individual difference variables such as motivation and aptitude (Dörnyei, 2006). One of the possible reasons is the lack of consistent correlations between personality types, more specifically extroversion and introversion, and language skills.

### **Statement of the Problem**

According to Dörnyei (2006) the main focus of individual differences in language learning is undertaking essential reformation, and moving to personality, aptitude, motivation, learning styles and learning strategies as the most important domains. Thus, personality has become one of the most important subset of individual differences (Hampson & Colman, 1995) because of its examination of variations in human behaviors (Ehrman & Dörnyei, 1998).

Some studies focused on personality in order to identify certain personality variables' correlation with language learning (Ely, 1986; Guiora & Acton, 1979; MacIntyre & Charos, 1996; Naiman, 1978; Reiss, 1981; Robinson et al., 1994). Others focused on the relationship between personality and second language performance (Busch, 1982; Carrell et al., 1996; Daele et al., 2006; Robinson et al., 1994; Strong, 1983; Wilson & Languis, 1990). Also, some studies investigated the relationships between personality factors and other learner variables (Ehrman & Oxford, 1989, 1990; Liyanage, 2004; MacIntyre & Charos, 1996; Oxford & Ehrman, 1995; Wakamoto, 2000). Studies on personality factors generally focused on extroversion and introversion aspects of personality.

Extroversion is thought to have a positive effect on the development of second language (L2) skills because of extroverts' possible high interaction with other individuals. Thus, language

teachers and family members claim that extroverts are better at language learning than introverts. This valid assumption is based on the fact that extroverts tend to be sociable and more likely to join groups and engage in conversations both inside (Cook, 2013) and outside the classroom (Swain, 1985). So, they have a better chance to take full advantage of using language, and thus will obtain more input. They are also believed to be willing to take risks and are more likely to try out new structures and vocabulary in a faster way. However, introspective learners who are introverts may also experience an advantage in language learning. According to Zafar and Meenakshi (2011), introverts may study target language with more ease and thus develop higher levels of cognitive academic language proficiency. Hurd (2002) asserts that “extrovert students tend to participate more in classroom interactions, worry less about accuracy and have a tendency to take risks with their language, all of which are assets when it comes to communicative oral competence. In other respects, extroversion may well have a role to play in the development of oral skills, but introversion may be of even more significance for the independent language learner, given its positive correlation with meta-cognitive skills and their link with autonomy”. In addition, Ellis (1994) presents two major hypotheses about the possible relationship between the dichotomy of introversion/extroversion and language learning: The first is that extroverts are more successful language learners as they are better at basic interpersonal communication strategies; the second one is that introverts are better language learners as they can developed cognitive academic ability.

Studies focused on extroversion and introversion show diverse results, when examined learners overall or specific language proficiency. While some of the studies showed some correlations in favor to extroversion (Brown et al., 1996; Chastain, 1975; Hassan, 2001; Robinson et al., 1994; Rossier, 1975; Strong, 1983) some correlations were also found in favor to introversion

(Alavinia & Sameei 2012; Bush, 1976; Carrell et al., 1996; Tehrani et al., 2014). It should be also noted that some studies reported no significant relationship between language proficiency and personality types (Bush, 1976; Chen, 2013; Daela et al., 2006; Ehrman & Oxford, 1995; Kim, 1996; Wilson & Lynn, 1990; Suter, 1976; Sharp, 2009; Soozandehfar et al., 2014; Wakamoto, 2007). Overall, the research findings have indicated that while some personality variables have a significant relationship with language learning achievement, some concluded an inconsistent relationship between personality variables and language performance. “These inconsistent results have led the study of personality in language learning to remain relatively unexplored empirically compared to other variables of individual differences, and have led scholars to take other factors affecting successful second language learning into consideration” (Kang, 2012, p. 15).

This inconsistency might have been caused by different teaching and evaluation methods, learning and testing environments (Carrell et al., 1996), or research methods (Daele et al., 2006). It is not known whether the language achievements of the participants in the extroversion and introversion studies are being properly measured by the language achievement measures used in them. The assessment styles may not fit well with their learning styles. Carrell et al., (1996) suggest that “researchers as well as teachers need to be sensitive to the possibility that different results or outcomes may be obtained if there are different relationships between learners’ personality types and their learning environments and/or testing environments.” (p. 97). In addition to these facts and suggestions, Wakamoto (2007) also concludes that the learning context interacts with extroversion and introversion in the achievement of language proficiency. Considering all the facts mentioned above, the purpose of this study is to satisfy the need for more correlation studies to build further support for clarifying the effect of personality effects on

language learning. This study also aims to explore the relationship between extroversion and introversion personality types and a specific instruction type which is input-based instruction.

### **Research Questions**

Based on the research purpose mentioned above, this study will address the following research questions:

1. To what extent does input-based instruction help students' language proficiency?
2. To what extent does input-based instruction favor certain personality types (extroversion and introversion)?
  - a. Do introvert students get higher scores than extrovert students in "Use of English (Grammatical forms, form and meaning etc.)"?
  - b. Do introvert students get higher scores than extrovert students in "Listening Comprehension"?

### **Research Hypotheses**

1. It is hypothesized that participants in general will benefit from input-based instruction and this will improve their overall proficiency.
2. It is hypothesized that introvert participants will benefit more from input-based instruction than their extrovert counterparts.
  - a. Introverts will get higher scores than extroverts in "Use of English (Grammatical forms, form and meaning etc.)" after receiving input-based instruction.
  - b. Introverts will get higher scores than extroverts in "Listening Comprehension" after receiving input-based instruction.



## **Significance of the Study**

The impact of extroversion and introversion on language learning has been investigated in various theoretical and empirical studies. However, because standardized measures and interpretations of subscales in different studies vary, few conclusive results are generated from previous studies in terms of extroversion and introversion in language learning process (Ellis, 2008). Despite the disagreement between researchers, there have been improvements in the theoretical and empirical literature on the role of personality in language learning in order to apply further research in this area (Dörnyei, 2005). Hence, this study aims to provide more conclusive results in the area of the relationship between extroversion and introversion and language performance in EFL settings. Meanwhile, Carrell et al. (1996) claimed that learning environments, testing environments, teaching and research methods need to be considered while conducting research in this area. This idea is supported by Wakamoto (2007) when he states that the learning context interacts with extroversion and introversion in the achievement of language proficiency, and a better way of solving the inconsistency problem in personality and language learning research would be to “provide as much variety in the classroom as possible to ensure that all personality types are catered to in some measure” (Kezwer, 1987, p. 56); thus, an input-based instruction setting was chosen in this study in order to analyze personality effects from a different perspective. In addition, this study indicates the significance of the connection between personality variables and brain processing in language learning and teaching (see Chapter 2). Finally, it is expected that the results of the this study will provide teachers ways to utilize their students’ personality types to design more effective classroom activities and assignments,

including methodological choices, recognition of individual differences and improving teacher-student understanding in EFL and English as a Second Language (ESL) classrooms.

### **English as a Foreign Language (EFL) and English as a Second Language (ESL) Distinction**

The study will be held in an EFL environment, so the distinction between ESL and EFL settings should be noted. An ESL environment or classroom is where students are immigrants or visitors in an English speaking country. In this context, students may not share common culture, language or background. However, an EFL environment or classroom is where students learn English in a non-English speaking country. Students share the same culture, language and background. As in Krashen (1997) summarizations, in EFL environments there are a few opportunities for using the English outside the classroom, teachers are generally non-native speakers of English and there is little time for language instruction. In ESL environments, students' exposure to English can be highly extensive and they have ample amount of opportunity to use the language. Wakamoto (2007) claims that the possible estimate input on ESL environments is 8.8 greater when compared to similar instruction time in EFL environments. That is why EFL settings should provide different ways to exposure students to English and reasons to learn English. Knowing these differences will give more insight to the nature of the study.

### **Overview of the Thesis**

This chapter has presented an introduction to the main theoretical aspects that explains the motivation for the present study. Chapter 2 reviews previous studies and relevant literature regarding individual differences, personality, extroversion and introversion by focusing on language learning. Input-based instruction has been also discussed and specified the research

questions of this study. Chapter 3 describes the research methods used in the study. Chapter 4 includes statistical analyses of the data obtained in the study and a discussion of it. Finally, Chapter 5 provides conclusions of the study, the implications, a statement of limitations and suggestions for future research.

### **Summary**

This chapter has presented the topic of the present study and indicated the theories guiding this research. The research questions and hypotheses were presented. In addition, a brief outline of the study was provided.

## **Chapter 2: Literature Review**

### **Introduction**

This chapter provides a review of the literature and research related to individual differences, more specifically extroversion and introversion aspects of personality and ESL and EFL learning. First, I will discuss individual differences in ESL and EFL studies; then I will provide more detailed information on personality aspects of individual differences; finally, I will investigate personality's relationship to input-based classroom environments.

### **An Overview of Individual Differences in L2 Studies**

Individual differences can be defined as “anything that marks a person as a distinct and unique human being” Dörnyei (2005, p. 4). This definition can be true in many aspects, but in terms of second language studies, it is better to narrow this definition down in order to understand and give more insight to these differences. According to Eysenck (1994) “although human beings differ from each other in numerous ways, some of those ways are clearly of more significance to psychology than others” (p. 1). That is why it will be beneficial to analyze established and regular deviances from a normative blueprint (Dörnyei, 2005).

Recently, the focus of second language (L2) teaching research moved from teaching methods to learners and their learning process (Wakamoto, 2007). In the 1960's, language learners' differences in language attainment have gained important attention in terms of individual difference variables, especially language aptitude and learning motivation (Dörnyei, 2005). Since the 1970's, other individual difference variables have started to be investigated to reveal important factors that can affect the language learners' learning process. The idea behind this alteration of research in second language studies is based on ample amounts of previous research

with an emphasis on similarities among language learners. Within the frameworks these studies of Universal Grammar (Chomsky, 1959), error analysis (Corder, 1967), morpheme studies (Dulay & Burt, 1974) and so on, researchers explored the similarities among language learners to try to establish the characteristics of the Good Language Learner (Naiman, 1978). However, in recent years, research in individual differences has gained importance in L2 studies. According to Stern (1983) "the disillusionment over the teaching method debate and the inconclusiveness of the method research prompted a number of theorists to demand a search for a deeper understanding of the nature of the second language learning process itself" (p. 110). This concept supports the importance of research in individual differences of learners. In short, individual differences considerably influence a human's thinking and performance; researchers thus have been exploring the relationship between the variation in language learning outcomes and various learner characteristics (Dörnyei, 2005).

Research on individual differences in second language studies has brought out many individual difference factors that affect language learning and the teaching process. Even though there is not much consensus on the concept of individual differences, some literature does provide direct and common consideration of the issue (Bedir, 2011).

In his study, Ellis (2008) identified the key factors in individual difference studies and "grouped according to whether they constitute abilities (i.e., cognitive capabilities for language learning), propensities (i.e., cognitive and affective qualities involving preparedness or orientation to language learning), learner cognitions about second language learning (i.e., conceptions and beliefs about second language learning), or learner actions (i.e., learning strategies)" (p. 529). See Table 1 for a summary of these factors.

**Table 1: Factors Responsible for Individual Differences in L2 Learning (Ellis, 2008, p. 530)**

Category	Factors
1 Abilities	a. Intelligence b. Language Aptitude c. Memory
2 Propensities	a. Learning Style b. Motivation c. Anxiety d. Personality e. Willingness to Communicate
3 Learner Cognitions About L2 Learning	a. Learner Beliefs
4 Learner Actions	a. Learning Strategies

As in Ellis' (2008) study, many researchers did not include age and gender in their research as individual difference factors (Dörnyei, 2005). The reason for this separation is age and genders are seen as important factors in affecting language learning success and affect not only individual difference variables but also every aspect of the second language learning process. Because of the entirely different treatment requirements, age and gender are excluded in individual difference research (Ellis, 2008).

Abundant and significant studies have been conducted on the factors identified by Ellis (2008) (e.g., DeKeyser, 2000; Dörnyei & Skehan, 2003; Gardner, 2000; Robinson, 2002); however, there has not been much research on personality until recently (Dewaele & Furnham, 1999). It is believed that extroversion and introversion are significant predictors for success in learning L2 languages (Griffiths, 1991; Muranoi et al., 2002). In the following section, I will outline relevant previous studies on personality, especially extroversion and introversion, in relation to L2 learning.

## **Personality Factors in Individual Differences**

According to Allport (1937), personality is “the dynamic organization within the individual of those psychological systems that determine his unique adjustment to his environment” (p. 48). In his study, Alastair (2009) explains that personality theory assumes that every person is different and that everyone’s personalities are categorized by a distinctive and basically rigid pattern of traits, dispositions or temperaments. So, according to personality type, people’s preferences, ideas, or lifestyles differ. It should not be surprising to see these differences in education as well. It has been concluded by many researchers that personality makes a difference in how people learn and what they learn (McCaulley & Natter, 1980; Myers, 1980).

In L2 studies and research, researchers aim to find out language learners’ behaviors, as well as the motivation and reasons behind their actions in terms of the language learning process (Manchon, 2009). In order to understand this complex learning process, personality variables are considered one of the essential individual differences variables affecting any attainment of L2 learning (Carrell et al., 1996). The relationship between language learning and personality is not limited to one-way interaction. Ellis (1985) stated a two-way process of personality and language learning: personality’s influence on L2 learning and, in return, the L2 learning process’s influence on personality development which influences variations in learner’s personality. Accordingly, people’s responses to stimuli and preferences of learning ways are affected by personality types (Ehrman & Oxford, 1990; Myers & Myers, 1995).

Personality variables and their relationships with L2 learning have been examined by many researchers. Different personality variables proved their influence on language learning processes, such as shyness and conformity (Hamayan et al., 1977); empathy (Guiora et al.,

1972); discomfort and risk-taking (Ely, 1986); tolerance of ambiguity (Naiman, 1978); extraversion and introversion (Busch, 1982) and so on. Even though there are many different personality variables, the most researched personality aspect in L2 studies has been extroversion and introversion (Dörnyei, 2005). The following section will focus on extroversion and introversion and its relationship with language learning.

### **Extroversion and Introversion and L2 Learning**

The most researched personality aspect in language studies has been the extraversion–introversion dimension (Dörnyei, 2005; Ellis, 2008). This characteristic is essential to world-wide personality philosophies, from the Big Five model to the Myers-Briggs Type Indicator (MBTI) typology and the Eysenck Personality Questionnaire (EPQ) model. Myers (2003) explains that extroversion and introversion are two characterizations of how people relate to the outside world. Extroverts are more interested in what is happening around them than in their own thoughts and emotions. Specifically, extroverts inevitably seek stimulation outside themselves, and their orientation of energy is toward the outer world (Myers, 2003). On the other hand, introvert people are more interested in their own thoughts and feelings than in things outside themselves, and are often shy and unwilling to speak or join in activities with others. In other words, introverts do not need extra stimulation because they have sufficient internal stimulation, so their orientation of energy is toward an inner world (Myers, 2003). In short, extroverts take the attitude of live it, and then understand it; however, introverts prefer to understand it before living it (Myers & Kirby, 1994; Myers, 2003). Extroversion and introversion have been studied largely from two viewpoints: the biological and the social (Wilson & Languis, 1990). In order to accurately analyze the relationship between personality types and language learning processes as well as their results, it is necessary to include the biological differences, namely the brain



processing differences between different personality types (Saleh, 1997). Accordingly, the relationship between personality types and language learning in terms of brain processing can be understood from a more comprehensive perspective. Eysenck (1967) has been the pioneer in terms of the connection between personality types and their biological bases. He describes the general traits of extroverts to include being sociable, outgoing, interactive, expressive, sensation seeking, act first, think later, and a dislike of being alone; on the other hand, introverts are described as being private, reclusive, reserved, quiet, inward, sensitive, think before acting, and exhausted by groups. Eysenck argues that extroversion and introversion dimensions function based on an Ascending Reticular Activation System (ARAS). High ARAS arousal predisposes a person to introversion, whereas low ARAS arousal predisposes a person to extroversion.

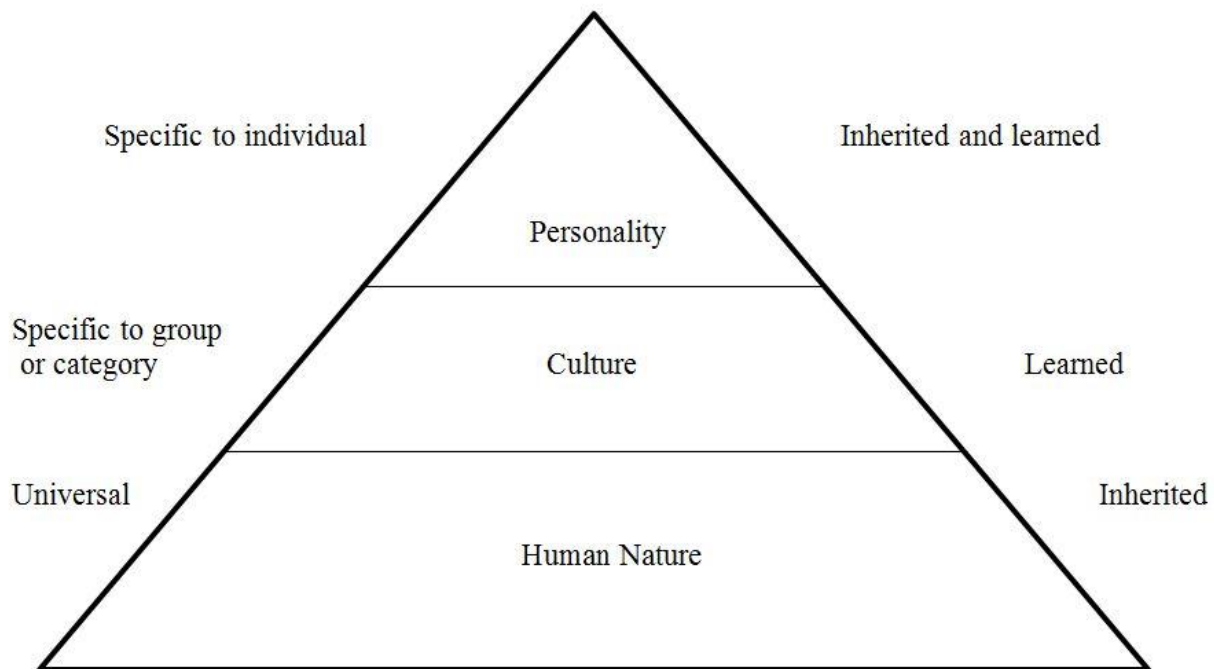
In addition, research has stated that information received by either hemisphere of the brain is processed in different ways. It is suggested that the left hemisphere functions better in verbal, rational, and analytical tasks; on the other hand the right hemisphere performs superiorly in spatial, intuitive, and global tasks (Levy, 1980; Segalowitz, 2014). Crossman and Polich (1989) study reveals that brain hemisphericity and personality types are closely connected with each other, demonstrating that most left-brain dominants are introverts; however, most right-brain dominants are extroverts. Research also indicates that certain personality dimensions can be generalized through left or right hemispheric dominance (Schmidtke & Heller, 2004). Left-hemispheric dominance often performs as introversion, sensing, thinking, and judging (Prifitera, 1981; Taggart et al., 1991); whereas right-hemispheric dominance usually connects with being intuitive and feeling orientations (Prifitera, 1981). The significance of short-term memory capacity in verbal production has been also underlined by recent studies. For instance, Rosen and Engle (1997) show that complex verbal tasks could only be performed fluently by high memory

span participants. On the other hand, participants with low memory span produced more errors and “did not have sufficient working memory capacity to allocate to the retrieval components that required controlled attention” (p. 224). Some researchers also studied the relationship between personality and short/long term memory. Some psychological studies show that extroverts perform better in short term memory than introverts. For example, Eysenck (1981) states that introverts need more time than extroverts to retrieve long term or permanent storage or information. One factor that Eysenck analyzed was that memory processing differences might occur because of the over arousal of the introverts, and it might affect introverts’ parallel processing. Therefore, Eysenck concludes that tasks that include processing of multiple items of information could pose a disadvantage for introverts. The differences between introverts and extroverts in terms of short term memory were also confirmed by Matthews (1992), in which he provides more evidence showing that extroverts are better at storing multiple verbal inputs. Matthews and Deary (1998) further claim that with better verbal processing functions, faster retrieval of information from memory, and a higher degree of resistance to physiological stress extroverts can perform better in high-stimulation environments. Meanwhile, researchers also studied the reasons why introverts face more difficulties in terms of short term memory. Eysenck (1979) pointed out that since anxiety makes people divide their attention to two parts, task-related cognition and self-related cognition, introverts need to spend more effort and time to work on verbal processing and memory retrieval. Therefore, more anxiety during cognitive processing makes introverts’ language performance less efficient.

With the relevant studies mentioned above, it is reasonable to interpret that brain processing is the neural basis for personality variations, which further influence language learning. The implication in terms of language instruction can also be obtained from the brain-based research.

In order to achieve effective instruction, educators should be encouraged to consider the individual differences from brain processing, particularly personality differences in language learning.

Biological and social influences on personality were illustrated by Hofstede (2010) in the following way (see Figure 1).



**Figure 1: Three levels of Uniqueness in Human Mental Programing (Hofstede, 2010, p. 6).**

Figure 1 illustrates that personality is influenced by biological and socio-cultural factors. It shows us that personality is both inherited as human nature and learned as culture. This means the personality of an individual is partially innate, which refers to the individual's unique set of genes, and partially learned, which refers to cultural influences and unique personal experiences. Environmental and genetic factors' interactions in forming an individual's personality were also supported by some psychologists (Dumenci, 1995). In other words, the interaction between

innate characteristics and environmental factors is bidirectional (Chen, 2013). Briefly, individuals' characteristics have an impact on the environment they live in and affect and adjust an individual's personality features.

That extroverts and introverts differ from each other has been reported by many researchers in L2 studies. According to Ellis (2008), "extroversion is viewed as a factor having a positive effect on the development of L2 basic interpersonal skills, as extroverted learners are likely to interact more and more easily with other speakers of the second language. However, introspective learners may also experience an advantage: they may find it easier to study the L2 and thereby develop higher levels of cognitive academic language proficiency." (p. 541). These differences are also examined in manuals of major personality assessments. Eysenck (1991) claims that extroverts and introverts may show differences in the accuracy/speed tradeoff, especially in L2 performance. He suggests that extroverts are less easily distracted and that is why they are better equipped to performance under stress, namely they are better at engaging in language study by lowering their anxiety levels. These arguments are also supported by classroom teachers. Lightbown (2013) suggests that many classroom teachers are convinced that extrovert students are more successful in L2 learning than their introvert counterparts, especially in terms of being superior in their communicative ability. The awareness of the differences of personality in language learning is not just restricted to teachers or researchers. Barron-Hauwaert (2010)'s interview with parents revealed that parents think being an extrovert is an advantage for their children, because it would give them more opportunity to practice and engage in language. As it can be seen, there is a common belief that extroverts and introverts differ in L2 learning, with an advantage to extroverts.

To examine the relationship between personality factors and language learning, different types of assessment tools have been used in L2 studies. Commonly used and widely accepted personality assessments in these researches are the Myers-Briggs Type Indicator (MBTI), the Eysenck Personality Questionnaire (EPQ), and the NEO Personality Inventory-Revised (NEO PI-R). Based on Carl Gustav Jung's typological theories, MBTI was developed by Katherine Cook Briggs and Isabel Briggs Myers in 1943. The MBTI is a self-report type questionnaire that sorts people into 16 types through combinations of the following four subscales: extroversion-introversion, perceiving-judging, sensing-intuition, and thinking-feeling. This assessment has been widely used by many researchers to examine the relationship between personality types and language learning (Carrell et al., 1996; Ehrman & Oxford, 1990; Oxford & Ehrman, 1992; Sharp, 2004; Tehrani et al., 2014; Wakamoto, 2007). The EPQ is another personality assessment that has been used in L2 studies in order to analyze the effect of personality (Daele et al., 2006; Liyanage, 2004; Robinson et al., 1994). With three dimensions of personality (extroversion-introversion, neuroticism-emotion stability and psychoticism-socialization) by focusing on genetic-based aspects of personalities, EPQ was developed by Hans Jürgen Eysenck and Sybil B. G. Eysenck in 1972. Another personality assessment used in this area is the NEO PI-R (Costa & McCrae, 1992) developed by Paul T. Costa, Jr. and Robert R. McCrae. It measures the five domain scales and their six facet scales: neuroticism (anxiety, angry hostility, depression, self-consciousness, impulsiveness, and vulnerability); extraversion (warmth, gregariousness, assertiveness, activity, excitement-seeking, and positive emotions); openness (fantasy, aesthetics, feelings, actions, ideas, and values); agreeableness (trust, straightforwardness, altruism, compliance, modesty, and tender-mindedness); and conscientiousness (competence, order, dutifulness, achievement striving, self-discipline, and deliberation). Even though these three

different personality assessments have their own ways of measuring individual personality types, they refer to the same or similar personality dimensions by using slightly different expressions and perceptions.

### **Relevant Works on Extroversion and Introversion in L2 Learning**

In the field of L2 research, many researchers have studied how personality variables, especially extroversion and introversion, influence language learners' proficiency. The results of some studies showed certain correlations between personality types and language performance. In one of these studies, Chastain (1975) studied the relationships between reserved and outgoing personality and final course grades of college students in French, German, and Spanish beginner classes. His findings show that an outgoing personality (extroversion) is one of the most significant factors related to course grades. Chastain found a significant positive correlation between extroversion and final grades of German ( $r = .30, p < .05$ ) and Spanish learners ( $r = .34, p < .01$ ), but not for French learners. He implied a positive influence of extraversion on language achievement of these two languages.

Rossier (1975) explored if extroversion and introversion was a significant variable in learning English by Spanish speakers. Participants' length of the stay in the United States English as a Second Language (ESL) student was controlled and participants' oral productions were assessed by three different raters. At the end of the study, a positive correlation was found between extraversion and oral English fluency of the participants.

Bush (1976) tried to investigate the relationship between extroversion and college level Japanese learners of English. Even though she could not find a significant correlation between personality and English proficiency scores, a weak negative correlation between extroversion and the section

of grammar/vocabulary ( $r = -.18, p < .057$ ) and reading ( $r = -.16, p < .069$ ) was found. In her oral interviews with the participants in order to examine personality effects on oral proficiency, she found a significant negative correlation between extroversion and pronunciation ( $r = -.38, p < .009$ ), which concluded that introversion was a better predictor in pronunciation than extroversion. The results of this study also confirmed the results of Swain and Burnaby's (1976), who also pointed out introverts' better performance on pronunciation.

In another study done by Strong (1983), the impact of extroversion and other traits such as talkativeness or popularity on English language learning was investigated. Thirteen kindergarten English learners of Spanish speakers were recruited for this study and a significant relationship was found between extroversion and oral proficiency in English speaking. This inconsistency may have been due to the small number of participants in his study ( $n=13$ ). However, the researcher concluded that the active use of the input enhanced the children's language learning achievement, which means children who "were talkative, responsive, and sociable tended to be more efficient than others" (p. 285).

In addition, Robinson et al., (1994) recruited 45 college students learning French as a foreign language at Sydney University in order to investigate the effect of personality on language learning ability. The EPQ personality assessment, written performance assessment (grammar and vocabulary) and oral performance assessment (class participation and end of term test) were used. A significant positive correlation between neuroticism and oral performance scores ( $r = .48, p < .01$ ) was found. Another finding was between high extroversion and high neuroticism (long-term tendency to be in a negative emotional state) scores and the oral performance. Students with high extroversion and high neuroticism scores did better on the oral performance. Also, students with high neuroticism and low extroversion scores did better on the written

performance. Unlike Wilson's and Lynn's (1990) previous research conclusion, Robinson et al., (1994) concluded that personality differences were significantly correlated to L2 learning.

In a large-scale investigation with 855 American language learners of various languages, such as Spanish or French, Ehrman and Oxford (1995) examined the relationship between end-of-training proficiency in speaking and reading and the personality type by using the MBTI. Even though a significant correlation was found in sensing-intuition scale (for speaking,  $r = .20$ ,  $p < .0001$ , and for reading,  $r = .20$ ,  $p < .001$ ), no significant relationship between extroversion and introversion and other assessment scores was identified.

In a Japanese University with 320 intensive language program students, Brown et al., (1996) investigated personality, motivation, anxiety, strategies and their effects on overall English proficiency. A Yatabe-Guilford (Y/G) personality assessment, a cloze test and a grammar test were used to conduct the study. According to the results, learning with others (social strategies) positively correlated with extroversion ( $r = .31$ ,  $p < .05$ ) and higher proficiency students had a facilitating anxiety factor which was associated with extroversion (Yamashiro & McLaughlin, 2001).

By using MBTI and monthly assessments of reading comprehension, vocabulary, grammar, and writing, Carrel et al., (1996) examined the effect of personality on academic performance of 76 college students who learned English as a foreign language in Indonesia. While the results did not show a direct relationship between overall language performance and personality types, a negative correlation between extroversion and vocabulary performance was found ( $r = -.19$ ,  $p < .10$ ).



Hassan (2001) examined the relationship between extroversion and introversion and the pronunciation accuracy. Seventy-one Arabic junior English learners in an Egyptian university were recruited. A significant positive correlation between English pronunciation accuracy and extroversion ( $r = .25, p < .05$ ) was found. Hassan concluded that extroverts are more fluent and accurate in the foreign language class because they are “more social than introverts who may be afraid of initiating interaction inside the class” (p. 20).

Another study was conducted to examine the possible relationship between extroversion and introversion and listening ability by Alavinia and Sameei (2012). The participants were English learners of Iranian speakers. An EPQ assessment was used to determine 120 intermediate level students' personalities. The results showed statistically significant correlation between two variables in question, and it also indicated introverted students did better on listening assessment than extroverted students.

In a recent study, Tehrani et al., (2014) conducted a study to investigate the possible relationship between personality types and pronunciation by recruiting 30 Iranian English learners. The data of this study was gathered by using Oxford Online Placement Test (OOPT), EPQ personality assessment, International English Language Testing System (IELTS) format oral interviews and oral placement interviews. According to the results, pronunciation scores of the participants were significantly correlated with personality types. The study revealed introvert students performed better on pronunciation when compared to their extrovert counterparts ( $r = 0.017 < 0.05$ ).

A final study to find out if there was a relationship between personality types and oral proficiency was conducted by Souzandehfar et al., (2014). Researchers used IELTS speaking scores and EPQ personality assessment with 47 English as Foreign Language students.

According to the results, they concluded that “not only is there not a meaningful relationship between each of the extroversion/introversion personality styles and the performance on IELTS speaking test, but also there is no significant difference between the performance of the extroverted and introverted groups on IELTS speaking module” (p. 2163).

Studies on extroversion/introversion and language learning showed also some inconsistent results. Suter (1976) investigated if personality could predict the accuracy on pronunciation in second language learners’ acquisition of English. At the end of this study, significant relationship between extroversion and pronunciation accuracy was not found. This was concluded as the more extroverted learners were not significantly better than their introvert counterparts.

Naiman’s et al.’s (1978) “good language learner” study aimed to identify predictors of success in second language learning in the learner’s personality, cognitive style, and attitudes. Seventy-two high school students were recruited by using a number of personality tests, including Eysenck Personality Inventory (EPI). The participants were assessed by using the International Test of Educational Test of four skills in French and an Imitation Test. The results revealed that “the majority of the cognitive style and personality tests administered did not yield any systematic relationships to the criterion measures” (p. 67). The correlations between extraversion scores and the IEA and the Imitation Test scores showed no significant results,  $r(71) = -.11$  and  $r(71) = -.13$ .

A study conducted in the Irish Republic with 600 primary school students investigated the relationship between personality and different cognitive components. For this study, Wilson and Lynn (1990) used a shortened version of Junior EPQ, cognitive tests and a questionnaire to assess students’ attitudes toward learning Irish. However, the results did not show any significant

relationship between personality traits and performance on the tests among young learners. On the other hand, a significant positive correlation between neuroticism and oral performance scores ( $r = .48, p < .01$ ) was found.

Kim (1996) investigated the relationship between personality variables measured by Murphy-Meisgeir Type Indicator for children and English proficiency of Korean elementary school children. This study, which included 247 participants, did not show any significant main effects of personality variables on participants' English test scores.

Daele et al., (2006) questioned the effect of extroversion on oral fluency, complexity, and accuracy with 25 Dutch-speakers of English learners and French learners in Belgium. Even though a positive correlation was found between extroversion and lexical complexity in English learners ( $r = .35, p < .09$ ) and French learners ( $r = .44, p < .03$ ), no correlation was found between extroversion and other assessment scores.

A recent study conducted by Wakamoto (2007) tried to identify the impact of the extroversion and introversion on language learning in terms of learner strategies and English proficiency. A hundred and forty eight English learners, who were college students in Japan, were selected for this study. The analysis of the results for this study did not show any significant correlation between extroversion and introversion and listening proficiency as in Ehrman and Oxford (1990).

In a Hong Kong study, Sharp (2009) investigated personality differences and strategy use to see if there were any relationships between these two variables and participants' English proficiency. An MBTI personality assessment, a Strategy Inventory for Language Learning (SILL), and a standardized English language test were used with 100 undergraduate students at a university in

Hong Kong. Even though there was a slightly higher score in favor of introvert students, the results indicated no significant relationship between personality and proficiency scores.

Chen (2013) explored the relationship between extroversion and introversion, foreign language anxiety and participants' oral communication performance. Ninety-nine freshman English major students in a college in Taiwan were presented in the study. The Foreign Language Classroom Anxiety Scale (FLCAS), the MBTI and scores of oral final exam were used to explore students' aimed features. The result related to extroversion and introversion and oral proficiency scores showed no significant correlation.

The research literature on extroversion and introversion in language learning shows mixed results when examined learners overall or specific language proficiency (see Table 2).

**Table 2: Summary of Extroversion/Introversion and Language Learning**

Summary of Studies on Extroversion/Introversion and Language Learning			
Study	Correlation	No Correlation	Language Aspect
Chastain (1975)	✓ (Extroversion)		Classroom Achievement
Rossier (1975)	✓ (Extroversion)		Oral Production
Suter (1976)		✓	Pronunciation
Bush (1976)	✓ (Introversion)		Pronunciation
Naiman et al. (1978)		✓	Good Language Learner
Strong (1983)	✓ (Extroversion)		Language Learning
Wilson & Lynn (1990)		✓	Cognitive Components
Robinson et al. (1994)	✓ (Extroversion)		Oral Performance
Ehrman & Oxford (1995)		✓	Speaking and Reading
Brown et al. (1996)	✓ (Extroversion)		English Proficiency
Carrel et al. (1996)	✓ (Introversion)		Vocabulary
Kim (1996)		✓	English Proficiency
Hassan (2001)	✓ (Extroversion)		Pronunciation Accuracy
Daele et al. (2006)		✓	Language Comprehension
Wakamoto (2007)		✓	Listening Proficiency
Sharp (2009)		✓	English Proficiency
Alavinia & Sameei (2012)	✓ (Introversion)		Listening
Chen (2013)		✓	Oral Proficiency
Tehrani et al. (2014)	✓ (Introversion)		Pronunciation
Soozandehfar et al. (2014)		✓	Speaking

While some correlations were reported by Brown et al., (1996), Chastain (1975), Rossier (1975), Strong (1983), Robinson et al., (1994), and Hassan (2001) in favor of extroversion, some correlations were also found in favor of introversion (Alavinia & Sameei, 2012; Bush, 1976; Carrell et al., 1996; and Tehrani et al., (2014). It should be noted as well that no significant relationships were reported in Suter (1976), Bush (1976), Wilson & Lynn (1990), Ehrman and Oxford (1995), Kim (1996), Daela et al., (2006), Wakamoto (2007), Sharp (2009), Chen (2013), and Soozandehfar et al. (2014). Overall, the research findings have indicated that while some personality variables have a significant relationship with language learning achievement, some concluded an inconsistent relationship between personality variables and language performance. This discrepancy might have been caused because of various teaching and evaluation methods, learning and testing environments (Carrell et al., 1996), or research methods (Daele et al., 2006). It is not known whether the language achievements of the participants in some of the extroversion and introversion studies were being properly measured by valid language achievement measurements. The assessment styles may not fit well with students' learning styles. Carrell et al., (1996) suggest that "researchers, as well as teachers, need to be sensitive to the possibility that different results or outcomes may be obtained if there are different relationships between learners' personality types and their learning environments and/or testing environments." (p. 97). The following section will focus on a specific instruction style and its underlying theories.

### **Input-based Instruction**

The role of input has been an important part of research and theory in L2 studies. This motivation comes from the belief that a learner's exposure to the target language alone is not an

adequate condition for second language acquisition. According to Chaudron's (1985) definition; "the input available to second language learners is the raw data from which they derive both meaning and awareness of the rules and structures of the target language" (p. 3). Even though this is a helpful definition, a good metaphor to explain what input is to language learning comes from Lee and VanPatten (2003). They consider input as one of the most fundamental elements to motivate acquisition, and thus language learning, which is like the role of gas in running a car. Lee and VanPatten (2003) also mentioned the significance of choosing the suitable "gas" for a car, which refers to the appropriate types of input in language learning. According to Ellis (2012) input-based instruction is an instruction that "involves the manipulation of the input that learners are exposed to or are required to process" (p.285). This type of instruction aims to direct language learners' attention to input through listening or reading in a second language in order to promote interlanguage improvement without requiring learners to produce the language (Shintani, 2012). In other words, this type of instruction is to assist learners to recognize the input, process it in an appropriate way and understand it suitably.

Some researchers tried to explore the most suitable input for language learners in various ways. According to Park (2005), "from Corder's (1967) early claims of input and intake to Krashen's (1982) Input Hypothesis and Long's (1983a) Interaction Hypothesis, there has been a widespread conviction that input must be comprehended by the learner if it is to assist the acquisition process." (p. 1). This study focused on the use of input-based instruction which a university in Turkey chose as primary way of teaching English as a Foreign Language (EFL). The principles of this instruction come from Krashen's and Terrell's (1983) Natural Approach, more specifically based on the input hypothesis, the affective filter hypothesis and the silent period recommended by this approach.

**Input Hypothesis** Input hypothesis is one of the most known and important theories of Krashen (1982), which states that language acquisition occurs through understanding the messages in the target language, referred to as “comprehensible input”. According to his theory, listening or reading play major roles in the language learning process, and other aspects of language will follow automatically if a sufficient amount and appropriate type of input is provided. The provided input should be neither too difficult to understand nor too easy. His description of appropriate type of input is explained by showing a simple formula in which the learner’s current level is represented by  $i$ , and the level that the learner will get to next is  $i+1$ . In order to see some progress in language learning rather than remain stable, the input needs to always be slightly beyond the current level of the learner. In this process, the learner acquires language with comprehensible input when the learner feels comfortable in the learning environment.

According to Krashen (1985), listening is a more crucial activity than reading because language learners acquire new languages by hearing them in context. It is claimed that “speaking is a result of acquisition and not its cause” (p. 2). He thinks that speaking will emerge in time. Additionally, active knowledge of how to use a target language does not necessarily come from language production; but it comes from getting appropriate type and amount of input; therefore, it is important to provide listening material for the learner to work on according to proficiency level.

Littlewood (1984) considers that “the ideal input for acquiring a second language is similar to the input received by the child, comprehensible, relevant to their immediate interests, not too complex, but not strictly graded either” (p. 59). Similarly, Krashen’s Input theory comes from the observation of children’s language acquisition process. Children hear, in fact, a consistent,

organized, simplified, and redundant set of utterances that in many ways seems quite well designed as a set of “language lessons” (Snow, 1972, p. 498). In parallel with this, Krashen believes that the best classroom activities in classroom are the natural, interesting and understood ones. He adds that when the teaching environment provides these features, the learning environment will be the best and appropriate place for target language acquisition, up to the intermediate level. Even though speaking is not a requirement in his ideal beginning language classroom, interactional modifications happen when a problem arises in communication, and teachers and language learners engage in the negotiation of the meaning in order to solve the problem in communication (Shintani, 2012). This negotiation of meaning has generally been investigated in output based instruction type; however, this can also happen in input-based classrooms. In order to make the input more comprehensible, learners are allowed to ask for clarifications if they do not understand the input (Ellis et al., 1994). This is just one of the tasks that can be used to make the input more comprehensible. In short, as mentioned before, learners are not prohibited from speaking and interacting, they are just not required to do so.

Krashen’s input hypothesis have been advocated by suggesting rich sources of comprehensible input in second language acquisition such as modified input, interactionally modified input and modified output by a few researchers (Doughty & Williams, 1998; Ellis & He, 1999; Long, 1983b; Long, 1996; Mackey, 1999). However, the input hypothesis was also criticized by different researchers from different angles. One of the most criticized aspects is the fact that the complex language acquisition process cannot be clearly explained by defining  $i$  and  $i+1$ . Some researchers claimed that it is difficult to determine the current level of each language learner, so providing  $i+1$  language input for each of them separately in the classroom seems to be difficult to fulfill (Brown, 2007; McLaughlin, 1978). In a recent interview, Krashen replied to this criticism



by giving some examples from other areas (Latifi et al., 2013). He argues that input hypothesis is as simple as Einstein's formula  $e=mc^2$ , and that there is nothing wrong with it. Ellidokuzoğlu (2008) also argues that 'despite the fact that comprehensible input hypothesis is not explanatory enough, it does not mean that the theory is deficient, since Newton also did not provide enough details concerning how gravity takes place.' (p. 2). Like Newton and gravity, in second language acquisition, the comprehensible input model seems plausible and is a basic element of language acquisition. It is also claimed that when  $i+1$  is provided in the classroom environment, it means a semantic based input arrangement in tuning down the challenge to the students' level of understanding. This can be done by helping students to understand the input by shortening of sentences, using concrete vocabulary etc. but not deliberately calibrating the syntactic level of the comprehensible input. Linguistic, conversational, strategic and visual adjustments are some ways to make input comprehensible. Also, choosing the materials according to students' background knowledge and interest areas will help teachers to prepare better lessons according to students' level of understanding.

**The Affective Filter Hypothesis** The affective filter hypothesis determines how receptive to comprehensible input a learner is going to be. This theory explains that comprehensible input is not the only requirement for acquiring languages. With the comprehensible input, learners would let input in to their language acquisition device. According to Krashen (1982), the environment should be a place with low anxiety, which refers to low affective filter, to enable language acquisition to transfer input into intake. There are three factors that can play a significant role in lowering the affective filter. The first one is self-confidence. A strong self-confidence will help language learners to have a better input absorption. The second one is anxiety. A higher anxiety level in language learners will cause them to resist absorbing the

input. The last one is motivation. The learners with high motivation will have a better chance to process the input. Krashen (1982) claims that language learners may not get enough benefit from the input they receive as affective variables act to “impede or facilitate the delivery of input to the language acquisition device” (p. 32). In short, to be able to transfer input into intake efficiently by letting the input in, language learners and teachers should find ways to lower the learners’ affective filter and not obstruct the process of acquisition.

**Silent Period** The input hypothesis is also consistent with other findings and hypotheses in second language acquisition. One of them is the Silent Period. As stated in Roberts (2013) “the term silent period refers to a period of time following introduction to a second language during which children do not orally produce the second language” (p. 23). According to Krashen (1982), most new language learners go through a “silent period”, an interval of time during which they are unable or unwilling to communicate orally in the new language. Even though they might produce some language during this process, the output consists usually of memorized language, or whole sentences that were learned as if they were one word (chunks). The explanation of the silent period in terms of the input hypothesis is straight-forward “the child is building up competence in the second language via listening, by understanding the language around him.” (p. 27). So, language learners in classroom environments need time to listen to others’ talk in order to digest what they hear and develop language skills. When they are not talking in the classroom, this does not mean they are not learning. According to Lantolf (2006) and DaSilva Iddings and Jang (2008), students may be linguistically silent during early phases of second language development; however, they may also be extraordinarily psychologically active during this silent period.

Even though some researchers do not agree about how this silent period helps second language acquisition, the existence of this period has been reported by some studies (Ellis, 1994). However, there is no consensus on how long this period should be. There are so many studies that show different time periods from a few days to a year (Roberts, 2013), depending on a variety of factors such as personality, native culture etc. That is why the school administration decided a pre-determined time frame for this silent period.

**Affective Filter, Silent Period and Personality Types** Krashen (1981) states that prediction of L2 learning performance is also related to self-confidence such as lack of anxiety, outgoing personality, and self-esteem. When students feel comfortable and confident, they will have a better chance to become successful in language learning. In parallel with that lack of confidence and comfort in language learning will lead to negative performance on L2 learning (Brown, 1977). For both extroverts' and introverts' simultaneous success in L2 learning, it is important to eliminate these factors. In their study with linguistically and culturally different children, Gopaul-McNicol and Thomas-Presswood (1998) claim that the extent of negative influences such as anxiety, low self-esteem, low self-confidence "interferes with learning a second language because they not only impair memory but also decrease the learner's willingness to take risks and practice the new language" (p. 68). According to Krashen (1981), in order to create a secure and comfortable environment for language learning students' affective filter should be low. Lim (2009) claims that the feeling of insecure, uncomfortable and being under pressure is due to the lack of respect for students' silent period. "If the silent period is respected and if language input is optimal, it will help second or foreign language learners to keep a low affective filter" (Vera & Eugenio, 2011, p.31). Bearing in mind extroverts' and

introverts' differences, creating an instruction setting that both extroverts and introverts can benefit will give them equal opportunity to learn the L2.

### **Summary**

This chapter has outlined studies on personality as one of the individual differences in language learning and specifically focused on extroversion and introversion types of personality. Findings of previous studies have indicated that personality, especially extroversion and introversion, can be used to determine proficiency, language learning, and other learner variables in ESL and EFL studies. Also, this chapter has discussed fundamentals of input-based instruction, which will be used in this study in order to analyze personality effect from a different angle. The following chapter presents the methodology of the study by addressing research questions, research design, participants, instruments, data collection and analysis.

### **Chapter 3: Methodology**

This study was designed to examine the relationship among extroversion/introversion personality types and language proficiency in an input-based instruction setting. The following chapter presents a description of the subject population tested, instruments used, data collection procedures, research questions, hypotheses, and data analysis techniques utilized in the study.

#### **Research Questions**

1. To what extent does input-based instruction help students' language proficiency?
2. To what extent does input-based instruction favor certain personality types (extroversion and introversion)?
  - a. Do introvert students get higher scores than extrovert students in "Use of English (Grammatical forms, form and meaning etc.)"?
  - b. Do introvert students get higher scores than extrovert students in "Listening Comprehension"?

#### **Research Hypotheses**

1. It is hypothesized that participants in general will benefit from input-based instruction and this will improve their overall proficiency.
2. It is hypothesized that introvert participants will benefit more from input-based instruction than their extrovert counterparts.
  - a. Introverts will get higher scores than extroverts in "Use of English (Grammatical forms, form and meaning etc.)" after receiving input-based instruction.

- b. Introverts will get higher scores than extroverts in “Listening Comprehension” after receiving input-based instruction.

## **Design of the Study**

### **Participants**

The research was conducted at a state university in Turkey. The age of the participants ranged from 19-20 and all of them were male. The students’ first language was Turkish and all the students who were enrolled in an EFL Beginning class were chosen as participants. English classes are given as a main course to all students in this university and they form a significant part of the curriculum. The level of proficiency of the students in the university is assigned according to the Common European Framework of References for Languages (CEFR), from A1 (Beginner) to C2 (Mastery) level, by administrating the Oxford Online Placement Test (OOPT) scores at the beginning and at the end of the year. According to the OOPT results, students are divided into classes. For the present study, students in the same level groups, which are A1, which is Beginner (Novice Low, Novice Mid, and Novice High levels in American Council on the Teaching of Foreign Languages (ACTFL) proficiency levels) and A2, which is Elementary (Novice High and Intermediate Low in ACTFL proficiency levels), were chosen. The scores ranging from 1 to 20 out of 120 are considered as A1 level, whereas the scores ranging from 20 to 40 out of 120 are considered as A2 in the OOPT rubric.

Out of six classrooms including basic users who are level A1 and A2, two classrooms with 56 students were randomly chosen among the classrooms. Before enrolling in the university, all of the students had nine years of formal EFL instruction in different high schools and middle schools.

## **Instruments**

This study consisted of two major measurements: Myers-Briggs Type Indicator® (MBTI) Step I (European Edition) and Oxford Online Placement Test (OOPT). MBTI was used to determine students' personality type and to ensure more accurate results. The Turkish version of this measurement was used with the permission of the SkillsOne® Consulting Psychologist Press (CPP) Inc. OOPT was used in order to determine the students' proficiency level at the beginning and at the end of the semester.

**The MBTI** The MBTI is the most widely-employed personality test in the world in many different areas including education (Dörnyei, 2005). Based on Carl Gustav Jung's typological theories, MBTI was developed by Katherine Cook Briggs and Isabel Briggs Myers. For the study, the most recent version of MBTI, which is Myers-Briggs Type Indicator® (MBTI) Step I (European Edition), was used. This edition is also known as M Form and contains 88 items written at the seventh-grade level (see Appendix A for sample items). The MBTI is a self-report type questionnaire and designed in a forced-choice format in order to protect itself against bias and indecisive, middle-road responding (Quenk, 2009). The MBTI provides dichotomous information on personality features and cores from four dichotomous scales combine to form 16 possible personality types: extroversion-introversion, perceiving-judging, sensing-intuition, and thinking-feeling. While creating dichotomous information, continuous numbers are used. For example; continuous values for extroversion are 100 minus the numerical portion of the preference score, and continuous values for introversion are 100 plus the numerical portion of the preference score from slight to very clear preference. Respondents who report very clear

preference scores are 51 or higher; clear preferences are 31 through 49; moderate preference scores are 11 through 29; and slight preference scores are 1 through 9. This formula provides high validity and reliability of the MBTI (Quenk, 2009). Because of its simplicity and universality feature, this personality assessment was chosen in the present study. It takes at most 20 minutes to complete. Reliability and validity of MBTI have been discussed, tested and used by many basic and educational research studies (Salter, et al., 2005; Wheeler, 2001). In a research report, Ring (2008) revealed .84 overall reliability, .86 internal consistency and .76 temporal stability in different meta-analyses. Capraro and Capraro (2002) also found an average of about 0.81 in their study. They also suggested consistency over time on test-retest reliability for adults. In addition to test-retest validity, Capraro and Capraro (2002) reported numerous studies on the construct validity of the MBTI, which correlate the scores with findings from various personality instruments and inventories. Additionally, the translated version of MBTI for Turkish speakers is also valid and reliable (Atay, 2012). In his study, Atay (2012) claims using a Turkish version of MBTI provide “linguistic and cultural equivalence, reliability and validity of the test” (p. 74). He reported the Turkish version of the MBTI (M Form) is reliable with .82 Cronbach’s Alpha coefficient and also verifies construct validity. Thus, the Turkish version of the MBTI has satisfactory reliability and validity standards. In this study, this instrument was used solely to determine extroversion/introversion type preferences.

**Instructors’ Evaluation of Students’ Extroversion and Introversion** In addition to the MBTI personality inventory, the study also included the course instructors’ evaluation of learners' extroversion and introversion. Two different course instructors for each class were selected to evaluate participants’ (n = 56; participants of two classes) extroversion and introversion. To help the instructors in making this evaluation, extroversion and introversion



concept and their characteristics were explained. Then, the MBTI results and the course instructors' evaluation were compared to analyze if participants show their personality features in the classroom setting.

**The OOPT** In order to evaluate students' proficiency in terms of linguistic knowledge and listening ability the OOPT was used. This instrument was developed by Oxford University Press in order to provide a valid and reliable measure of learners' language knowledge and how they use this knowledge while communicating (Oxford University Press, 2015). This proficiency assessment is computer-based, and the questions are multiple-choice with computer-adaptive test feature. This means the system adapts to the ability of each test taker and presents the questions according to the appropriate difficulty level. For example, if a test taker answers the question correctly, the next question will be harder than the previous one, and vice versa. This adaptive delivery feature of the OOPT makes the test shorter than other proficiency tests yet still accurate. This system also helps to clear some statements about the uncertainty of the test results, such as "the test taker would have done better (or worse) if they had met different test items" (Alastair, 2009, as cited in Slimon (2014, p. 62)). The instrument takes around 60 minutes to complete and none of the participants exceeded the 60 minutes time period. The instrument is divided into two sections: "Use of English" and "Listening". Use of English section is designed to measure how much learners know about grammatical forms and their meanings, and assesses students' knowledge of grammatical forms, knowledge of explicit and implicit (vocabulary) meaning, and both grammatical forms and meaning together. This part of the test has approximately 30 questions. In the Listening section students need to identify the literal, intended, and implied meanings being communicated in what they hear. To put it differently, students need to understand what is said (literal meaning) in the passage, what is understood 'between the lines'

(intended meaning), and what is communicated “beyond the lines”, drawing on the individual, social, cultural, affective, or attitudinal meanings of the situation. The questions come in different formats: the first format presents a number of short dialogues, each followed by a single four-option multiple-choice question. The second format presents a longer dialogue and the third one a monologue. The students may listen to each recording twice. After the test takers listen, they are asked to answer approximately 15 one or two four-option questions, depending on their level. The result of the OOPT is given as a rating that is based on the Common European Framework of Reference for Languages (CEFR). The CEFR provides six different levels for language learners ranging from basic (*beginner*) to advanced (*proficient user/mastery level*): A1, A2, B1, B2, C1, and C2 (for more information, see the Council of Europe website at [http://www.coe.int/t/dg4/linguistic/Cadre1\\_en.asp](http://www.coe.int/t/dg4/linguistic/Cadre1_en.asp)). The OOPT generates the results on a scale of 0-to-120, with 20 points corresponding to each of the six CEFR levels. Immediately after finishing the test, scores become available as an overall score and also the two individual sections which are “Use of English” and “Listening”. According to the 2010 results of the instrument, the test as a whole was pilot-tested with more than 19,000 students in more than 60 countries. Research on the OOPT is still ongoing in order to keep the test up-to-date.

### **Instruction**

A college level university which applies input-based instruction in English lessons was chosen. The instruction is an application of Input Hypothesis (Krashen, 1985) with a silent period implemented in the classroom environment. For this study, a pre-determined 300 hours silent period of instruction was implemented by the institution. The 300 hours were almost equal to one semester and were divided into 18 hours per week of EFL courses. After the silent period was over, the same type of instruction continued, but in a more interactive way, that is, allowing for

students active participation, guided by their own willingness to produce the language. The instruction focused on the comprehensible input hypothesis. Table 1 shows a list of some of the linguistic, conversational, strategic and visual adjustments that were used in the input-based instruction. These are just a few ways that a teacher can use to make the input more comprehensible to the students.

**Table 3: Making Input Comprehensible**

Linguistic Adjustments	Conversation Adjustments	Communication Strategies	Visual Cues
<ul style="list-style-type: none"> <li>- Slower rate of delivery</li> <li>- Use of pauses</li> <li>- Well-formed, shorter, less complex clauses</li> <li>- Questions: More use in general (Yes/No)</li> <li>- Fewer idiomatic expressions</li> <li>- Higher lexical frequency of nouns and verbs</li> <li>- Higher proportion of cupulas to verbs</li> <li>- Simplification of input</li> </ul>	<ul style="list-style-type: none"> <li>- Here-and-now orientation</li> <li>- Briefer and predictable treatment of topics</li> <li>- More abrupt topic-shifts</li> <li>- Relinquishment of topic-choice to interlocutor</li> <li>- Acceptance of unintentional topic-switches</li> <li>- Use of questions for topic initiating moves</li> <li>- Repetitions</li> <li>- Comprehension checks</li> <li>- Confirmation checks</li> <li>- Expansions</li> <li>- Clarification requests</li> <li>- Question and answer strings</li> <li>- Decomposition</li> <li>- Verbal scaffolding</li> </ul>	<ul style="list-style-type: none"> <li>- Circumlocution</li> <li>- Language switch</li> <li>- Mime</li> <li>- Formulaic expressions</li> <li>- Monitoring</li> <li>- Repetitions of learners' utterances</li> <li>- Expansions of learners' utterances</li> <li>- Conversational frames</li> <li>- Wait time</li> </ul>	<ul style="list-style-type: none"> <li>- Blackboard drawing</li> <li>- Blackboard writing</li> <li>- Pictures</li> <li>- Flashcards</li> <li>- Realia</li> <li>- Application of content and language knowledge</li> </ul>

Note: Adapted from Hasan (2008), Newman and Nyikos (1999) and from Agulló (2001).

Table 3 shows a list of some of the linguistic, conversational, strategic and visual adjustments that were used in the input-based instruction. These are just a few ways that a teacher can use to make the input more comprehensible to the students.

For this study, two classrooms were randomly chosen among the classrooms that took 18 hours of instruction. The total number of students in each class was 28. There must be a different instructor per class in this study because of the necessary 18 hours of instruction time per week and the 20 hour maximum that teachers are allowed to be in the classroom. It is important to control this variable by choosing teachers based on their similar background knowledge and experience.

**Language Teachers** The teachers were chosen according to their recent course evaluations from the students and their reputation for being friendly. The teachers were experienced EFL teachers. All teachers had a bachelor degree from reputable colleges in Turkey, and some had their MA or PhD degrees in different education areas. They had at least an MA degree. The teachers attend at least one professional Teaching English Speakers of Other Languages (TESOL) or EFL workshops and conferences each year in Turkey or abroad. Taking into consideration all the factors mentioned, a significant influence of instructor differences is not expected to be identified in this study.

## **Procedures**

The target university was chosen because of its specific EFL instruction type. The researcher contacted the director and administrative staff of the college in Turkey by phone and email to provide a full explanation of the research and to ask for students' participation in the study. The researcher received the written permission from the director to conduct the study with the

participating students and to use any already available data. At the beginning of the 2014 fall semester, the students took the first OOPT as a pre-test in order to determine the English proficiency of each student. According to students' test result, the students' levels and classes were decided. At the end of the first OOPT, students who demonstrated the same level were placed in the same level classrooms. Among these classrooms, two classrooms were randomly chosen for the study and then asked to sign a Turkish version of an informed consent form. Students took 18 hours of language instruction each week. All 2014 fall semester of this instruction (300 hours) included a silent period, after the silent period ended, the same type of instruction continued. At the end of the 2015 spring semester, students took another OOPT as a post-test. After taking the OOPT, students were asked to take a personality test which was MBTI Step I (M Form) in Turkish. All students gave the researcher permission to use the OOPT scores and MBTI results for the study. Finishing the MBTI took only 20 minutes for all students. When data collection was over, the results were analyzed to report.

### **Data Analysis**

This is a longitudinal (two-semester) and quasi-experimental study. Cluster sampling method has been used. The dependent variables of the study are the test scores. There were two independent variables. The first one was the students' personality types: extroversion and introversion. This independent variable was planned to be treated as both continuous and categorical. However, because the results of the MBTI could not produce a variety of information in terms of degree of extroversion and introversion aspects of personality, the results only focused on categorical aspects of personality types. In the categorical stage, extroversion and introversion are between-subject variables. The other independent variable was test times. There were a pre-test and post-test in this study. This independent variable was categorical with two levels and test times were

within-subject variables. All data was entered into the Statistical Package for SPSS to be analyzed. In order to answer the first research question, a paired-sample t-test was applied after checking outliers and meeting the normality assumption. For the second research question a mixed-design analysis of variance was applied to examine the effect of the personality type (extroversion and introversion) on participants' accuracy on the tests. The notation for this study is 2X2. To be able to analyze the data, it is important to check if there are any significant outliers, and to check the normality of the data and homogeneity of variances by taking into account between-subject and within-subject variables. If there is a statistically significant effect of personality type on participants' test scores, then an independent-sample t-test will be conducted. In the mixed-design analysis of variance, and since the researcher had already checked the outlier, normality issues, and also equal variances, there was no need to worry about the assumptions for independent-sample t-test.

### **Summary**

Research questions were raised in relation to personality aspects (extroversion and introversion) and language performance in an input-based instruction setting for college level Turkish learners of English. Research methods were then described as related to data collection for analysis. Following the data analysis, the results of the research are revealed in Chapter 4.

## Chapter 4: Results

### Descriptive Statistics

The sample consisted of 56 participants. The results of the Myers-Briggs Type Indicator (MBTI) revealed that 31 participants showed an extrovert personality type and 25 participants showed an introvert personality type. While 55% of the participants have extroversion personality type, 44% of them show introversion. The MBTI results and instructors' evaluation of extroversion and introversion were compared and both sets of evaluations did not show any difference. In order to decide participants' level at the beginning of the instruction and analyze their improvement throughout the academic year the Oxford Online Placement Test (OOPT) were applied. As seen in Table 4, the results of the OOPT revealed an overall mean score of 6.2 (SD = 9.75) for pre-test, and 18.7 (SD = 8.83) for post-test for the general population in the study.

**Table 4: The OOPT Results According to Personality Types**

	Personality	N	Min.	Max.	Mean	Std. Deviation
Overall Pre-Test	Extroversion	31	1	35	6.9032	10.42547
	Introversion	25	1	32	5.4000	8.98610
	Overall	56	1	35	6.2321	9.75144
Use of English Pre-Test	Extroversion	31	1	35	7.1209	10.89569
	Introversion	25	1	32	5.5600	9.29642
	Overall	56	1	35	6.4286	10.15311
Listening Pre-Test	Extroversion	31	1	35	6.9355	10.52595
	Introversion	25	1	32	5.2800	8.76793
	Overall	56	1	35	6.1964	9.72984
Overall Post-Test	Extroversion	31	4	32	15.4516	7.98682
	Introversion	25	4	40	22.8400	8.21442
	Overall	56	4	40	18.7500	8.83022
Use of English Post-Test	Extroversion	31	4	40	15.2903	9.20215
	Introversion	25	4	42	24.1600	9.99867
	Overall	56	4	42	19.2500	10.46944
Listening Post-Test	Extroversion	31	1	48	15.7097	11.12113

Introversion	25	5	40	21.3600	10.89679
Overall	56	1.00	48.00	18.2321	11.28312

The participants' scores on the two sections of the OOPT were used to differentiate the participants according to their linguistic knowledge (Use of English) and listening proficiency. According to the pre-test results, a mean score of 6.4 (SD = 10.15) for use of English, and a mean score of 6.1 (SD = 9.72) were calculated for listening proficiency. In terms of the post-test, a mean score of 19.2 (SD = 10.46) for use of English, and a mean score of 18.2 (SD = 11.28) for listening were calculated.

The OOPT results were analyzed in terms of extroversion and introversion for pre- and post-tests and subscales. The results revealed an overall mean score of 6.9 (SD = 10.42) on pre-tests for the extroversion group, and a mean score of 5.4 (SD = 8.98) on pre-tests for the introversion group. For post-tests, a mean score of 15.4 (SD = 7.98) for the extroversion group, and a mean score of 22.8 (SD = 8.21) for the introversion group were calculated. The results also show similar values for use of English and listening for extrovert and introvert groups in both pre- and post-tests, suggesting the pattern of extroverts doing better than introvert in the pre-test, and the opposite pattern in the post-test, that is, although both groups, extroverts and introverts improved on the post-test, the introverts improved much more than the extroverts

### **Impact of Instruction on Language Performance**

A paired-samples *t*-test was conducted to evaluate whether participants performed better after two semesters of instruction. No outlier was detected by inspection of a boxplot. The assumption of normality was not violated, as assessed by Shapiro-Wilk's test ( $p = .195$ ). The results indicated that the mean score on the post-test ( $M = 18.75$ ,  $SD = 8.83$ ) was significantly higher than the mean score on the pre-test ( $M = 6.23$ ;  $SD = 9.75$ ;  $t(55) = 7.17$ ;  $p = .0001$ ). On the



measure used, a higher score indicates better performance. The magnitude of the difference in the means (12.51 points) was large. The  $d$ , a standardized effect size rating, was .95, a large value. The results suggest that participants' language performance significantly improved after a yearlong academic instruction. This finding allows further examinations of the data in order to analyze impact of extroversion/introversion on language learning.

In order to clarify whether having two different teachers affected the participants' performance or not, an independent-samples  $t$ -test was conducted. There was not a significant difference in the scores of the pre-test;  $t(54) = .668$ ,  $p = .507$ . Similarly, the post-test scores did not differ significantly;  $t(54) = .481$ ,  $p = .633$ .

### **Analyzing Extroversion and Introversion Impact on Language Learning**

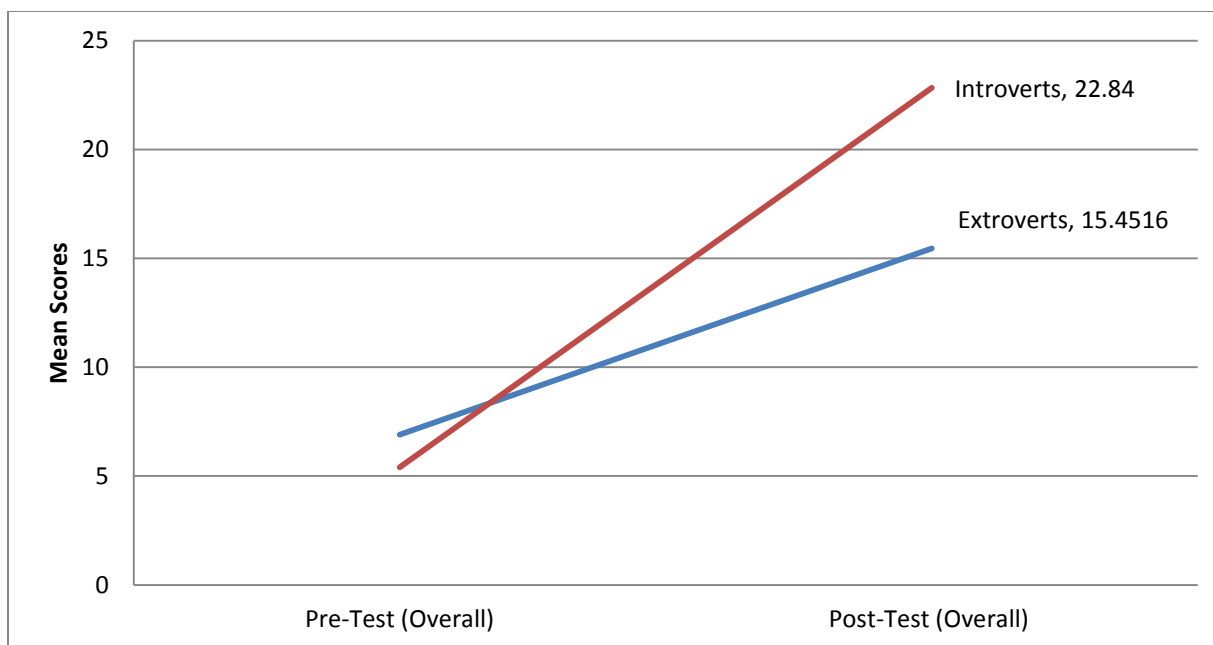
A 2x2 mixed-design analysis of variance was conducted to examine the effects of the personality type (extroversion and introversion) on participants' improvement from the beginning of the semester to the end of the year. The dependent variable was the OOPT test scores. The between-subject factors were personality types with two levels (extroversion and introversion) and within-subject variables were test times with two levels (pre- and post-tests). The means and standard deviations for score improvement are presented in Table 5. To be able to analyze the data, it is important to check if there are any significant outliers, normality of the data, and homogeneity of variances by taking into account between-subject and within-subject variables. No outlier was detected by inspection of a boxplot. The assumption of normality was not violated for both groups, as assessed by Shapiro-Wilk's test ( $p > .05$ ). There was homogeneity of variances, as assessed by Levene's test of homogeneity of variance ( $p > .05$ ). There was homogeneity of covariance, as assessed by Box's test of equality of covariance matrices ( $p = .680$ ).

For the pre-test, the results revealed a mean score of 6.90 (SD = 10.42) for extroverts, and 5.40 (SD = 8.98) for introverts. For the post-test, the results revealed a mean score of 15.45 (SD = 7.98) for extroverts, and 22.84 (SD = 8.21) for introverts. The Test Times main effect and Test Times X Personality interaction effect were tested using the multivariate criterion of Wilks's Lambda ( $\Lambda$ ). There was a main effect of Test Times ( $\Lambda = .470$ ,  $F(1, 54) = 60.930$ ,  $p = .01$ , partial  $\eta^2 = .530$ ), indicating that the scores at the post-test were significantly higher than scores at the pre-test. However, there was a significant interaction between Test Times and Personality ( $\Lambda = .883$ ,  $F(1, 54) = 7.132$ ,  $p = .010$ , partial  $\eta^2 = .117$ ).

**Table 5: Pairwise Comparison of Overall Scores**

Test Times	(I) Personality	(J) personality	Mean Difference (I-J)	Std. Error	Sig. <sup>b</sup>	95% Confidence Interval for Difference <sup>b</sup>	
						Lower Bound	Upper Bound
Pre-General	Extrovert	Introvert	1.503	2.638	.571	-3.785	6.791
	Introvert	Extrovert	-1.503	2.638	.571	-6.791	3.785
Post-General	Extrovert	Introvert	-7.388*	2.174	.001	-11.748	-3.029
	Introvert	Extrovert	7.388*	2.174	.001	3.029	11.748

Two independent-sample t-tests were conducted to follow-up the significant interaction. There was a statistically significant difference between groups over time. Familywise error rate across these tests were controlled by using Holm's sequential Bonferroni approach. The results revealed that while there was no significant difference between introverts and extroverts at the pre-test ( $M = 1.503$ ,  $SE = 2.638$ ,  $p = .571$ ), introverts performed significantly better ( $M = 7.388$ ,  $SE = 2.174$ ,  $p = .001$ ) than extroverts at the post-test. Figure 2 shows participants' improvement throughout the year according to their personality types.



**Figure 2: Participants' Overall Improvement**

**Analyzing Extroversion and Introversion Impact on Use of English** The same statistical analysis was applied in order to analyze if students' performance differed according to the OOPT subscale (Use of English and Listening) results throughout the academic year. For the pre-test subscales score for use of English, the results revealed a mean score of 7.12 (SD = 10.89) for extroverts, and 5.56 (SD = 9.29) for introverts. For the post-test, the results revealed a mean score of 15.29 (SD = 9.20) for extroverts, and 24.16 (SD = 9.99) for introverts.

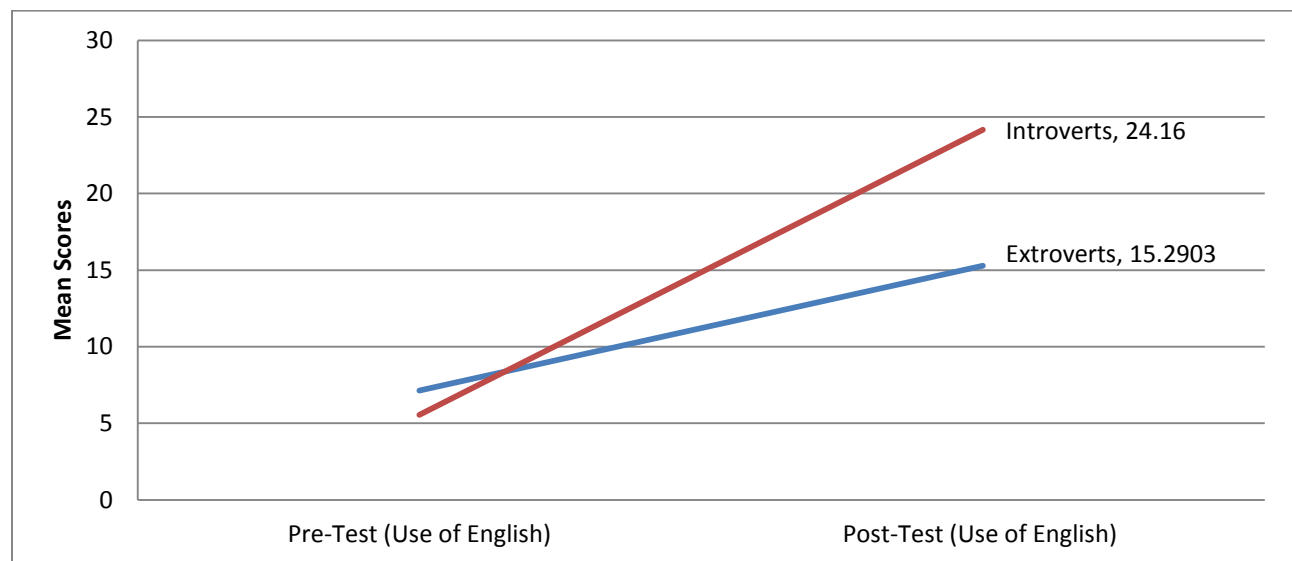
The Test Times main effect and Test Times X Personality interaction effect were tested using the multivariate criterion of Wilks's Lambda ( $\Lambda$ ). There was a main effect of Test Times ( $\Lambda = .482$ ,  $F(1, 54) = 57.937$ ,  $p = .01$ ,  $\text{partial } \eta^2 = .518$ ), indicating that the scores at the post-test were significantly higher than scores at the pre-test. However, there was a significant interaction between Test Times and Personality ( $\Lambda = .860$ ,  $F(1, 54) = 8.824$ ,  $p = .004$ ,  $\text{partial } \eta^2 = .140$ ).

Two independent-sample t-tests were conducted to follow up the significant interaction. There was a statistically significant difference between groups over time. Familywise error rate across these tests were controlled by using Holm's sequential Bonferroni approach.

**Table 6: Pairwise Comparison of Use of English Scores**

Test Times	(I) Personality	(J) Personality	Mean Difference (I- J)	Std. Error	Sig. <sup>b</sup>	95% Confidence Interval for Difference <sup>b</sup>	
						Lower Bound	Upper Bound
Pre-Test	Extrovert	Introvert	1.569	2.746	.570	-3.937	7.075
	Introvert	Extrovert	-1.569	2.746	.570	-7.075	3.937
Post-Test	Extrovert	Introvert	-8.870*	2.571	.001	-14.024	-3.715
	Introvert	Extrovert	8.870*	2.571	.001	3.715	14.024

The results revealed that while there was no significant difference between introverts and extroverts at the pre-test ( $M = 1.569$ ,  $SE = 2.746$ ,  $p = .570$ ), but at the post-test, introverts performed significantly better ( $M = 8.870$ ,  $SE = 2.571$ ,  $p = .001$ ).

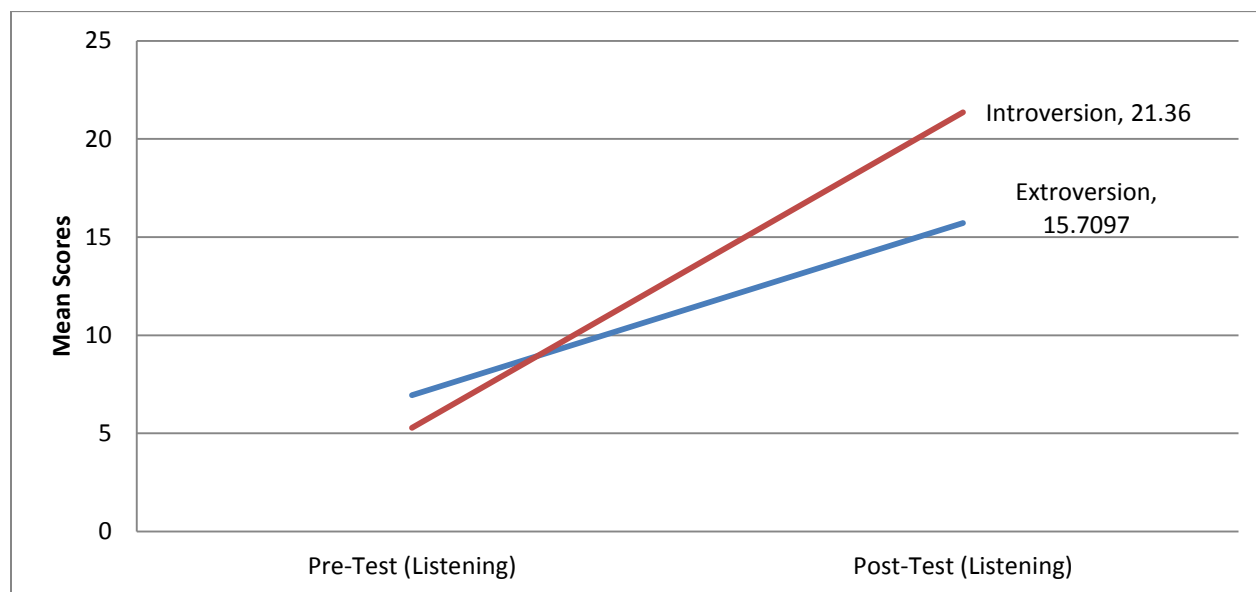


**Figure 3: Participants' Improvement on Use of English**

Figure 2 shows participants' improvement throughout the year according to their personality types. The figure visualizes how introverts significantly improved their performance on Use of English part of the OOPT.

**Analyzing Extroversion and Introversion Impact on Listening** The same statistical analysis was applied in order to analyze if students' performance differed according to Listening results throughout the academic year. For the pre-test subscales score of Listening, the results revealed a mean score of 6.93 (SD = 10.52) for extroverts, and 5.28 (SD = 8.76) for introverts. For the post-test, the results revealed a mean score of 15.70 (SD = 11.12) for extroverts, and 21.36 (SD = 10.36) for introverts.

After running a mixed-design analysis of variance, the results indicated no statistically significant interaction between test times and personality groups,  $F(1, 54) = 3.296$ ,  $p = .075$ , partial  $\eta^2 = .058$ . However, the mean scores of introverts were higher than those of extroverts.



**Figure 4: Participants' Improvement on Listening**

Figure 4 shows participants' improvement throughout the year according to their personality types. It visualizes introverts and extroverts performance on listening part of the OOPT.

Eventhough the improvement of introverts is higher than extroverts, the results did not produce significant difference between them.

## Chapter 5: Discussion

### Introduction

This chapter presents the answers to the two research questions based on the results of on the previous section.

### Responding to Research Question 1

My first research question addresses the following, *“To what extent does input-based instruction help students’ language proficiency?”* It has been hypothesized that participants in general (regardless of their personality) will benefit from input-based instruction and this will improve their proficiency. Before starting the instruction, the participants’ average pre-test scores were 6.2. Overall pre-test scores showed that more than half of the participants started taking the instruction with 1 or 2 points out of 120. However, most of those participants with low scores improved their scores on the post-test and increased their proficiency to the upper level. As the results indicated, the overall average post-test scores were 18.75. The mean difference was statistically different from zero and, therefore, we can accept the proposed hypothesis. It was hypothesized that participants in general would benefit from input-based instruction and this would improve their overall proficiency.

Proficiency improvement can be expected as one of the natural outcomes of any type of instruction. However, knowing the participants’ very basic and similar proficiency level, even after 9 years of language instruction in different schools before starting the input-based instruction, highlighted the importance of how the types of instruction can have an effect on language development. Unlike previous instruction types provided to the participants, the input-based instruction focused on reading and listening skills without requiring them to produce the

target language for a specific time. This helped participants to engage more with the language in a meaningful and less stressful way. However, lack of a control group to compare the outcome in this study restricts the strong assumptions on superiority of input-based instruction over other type of instruction settings. It should be also noted that the input-based instruction included a silent-period for a specific amount of time. While the literature did not provide a consensus on the amount of silent period, 300 hours of instruction were determined in advance. Even though the focus of the study was not the silent period in language instruction, the results show partially empirical evidence on the issue. Due to some limitations (which will be mentioned in the Limitations of the Study section), the study could not provide more convincing evidence on the silent period, such as analyzing the progress of the participants' at the end of the silent period, and deciding if the pre-determined time interval was appropriate for EFL classrooms.

## **Responding to Research Question 2**

The second research question addresses the following, *“To what extent does input-based instruction favors certain personality types (extroversion and introversion)?”* It has been hypothesized that introvert participants will benefit more than extrovert counterparts after receiving input-based instruction. The results were examined to see the effects of the personality type (extrovert-introvert) on participants' improvement from the beginning of the semester to the end of the year. The results showed an improvement on overall language proficiency in both groups; however, introverts performed better than their extrovert counterparts. The mean difference was statistically different from zero and, therefore, we can accept the proposed hypothesis. It was hypothesized that introvert participants would benefit more from input-based instruction than their extrovert counterparts.



One important factor to this significant difference is language environment and instruction type. Carrell et al., (1996) claimed that learning environments, testing environments, teaching and research methods need to be considered while conducting research in personality types and language learning. In addition, Wakamoto (2007) claimed that the learning context interacts with extroversion and introversion in the achievement of language proficiency. The results of this study are in line with Wakamoto's (2007) conclusion. Providing a risk-free and low anxiety environment helped introverts to easily process the provided input. This easy language processing facilitated introverts' performance on the language whereas it might have resulted too restrictive and frustrating for the constant need to perform of the extroverts. Thus, introverts performed better than extroverts. However, it should not be concluded that introverts are better than extroverts in language learning. The current study focused on input-based learning context's interaction with extroversion and introversion. Even though the results showed that extroverts improved their performance, their improvement was not as good as their introvert counterparts. One possible explanation for extroverts' lower performance can be, again, instruction type. It is known that extroverts perform better in fluency-oriented learning environments (Ehrman & Oxford, 1990). They are willing to take risks (Daele et al., 2006), and they actively participate in class activities in order to utilize language use and control affective domains (Wakamoto, 2000). The unusual instruction type, which is input-based instruction with a silent period in it, can be considered a negative influence on extroverted students' performance on language learning. To be able to give an absolute answer to this possibility, it is required to analyze this assumption with a longer input-based instruction. As stated in Kezwer (1987), a longer input based-instruction will remove the personality differences because the instruction will "provide as much

variety in the classroom as possible to ensure that all personality types are catered to in some measure” (p. 56).

### **Responding to Sub-Research Questions**

The second research question has two sub-questions and hypotheses. The first sub-question addresses the following, “*Do introvert students get higher scores than extrovert students in ‘Use of English’ (Grammatical forms, form and meaning etc.)?*” It has been hypothesized that introvert participants will get higher scores than extroverts in “Use of English” (Grammatical forms, form and meaning etc.) after receiving input-based instruction. Because the overall mean score differences are statistically different between extroverts and introverts, it is expected to see a significant difference in both of the sub-scales of the OOPT test. The results showed an improvement on use of English sub-scale in both groups; however, introverts performed better than their extrovert counterparts. The mean difference was statistically different from zero and, therefore, we can accept the alternative hypothesis that has been proposed. It was hypothesized that introverts would get higher scores than extroverts in Use of English (Grammatical forms, form and meaning etc.) after receiving input-based instruction. The results of this study also confirmed the results of Carrell et al., (1996). The Use of English section is designed to measure how much learners know about grammatical forms and their meanings, and assesses students’ knowledge of grammatical forms, knowledge of explicit and implicit (vocabulary) meaning, and both grammatical forms and meaning together. It has been reported that introverts generally listen to language by focusing on each individual meaning of a new word, and they distinguish grammatical differences in language (Kezwer, 1987). One explanation to introverts’ superiority in Use of English can be that when introverts are allowed some time to process information, they can retrieve the information they focused more efficiently than extroverts. Extroverts’ and

introverts' brain processing differences were confirmed by different researchers (see Chapter 2). When a less anxiety environment is created for introverts during the cognitive process, they can be as efficient as extroverts while processing and storing multiple inputs. In terms of memory capacity, introverts' lack of sufficient short-term memory capacity leads to difficulties in language performance (Dörnyei, 2005; Eysenck, 1981; Matthews, 1992; Matthews & Deary, 1998). Eysenck (1981) states that introverts need more time than extroverts to retrieve long term or permanent storage or information. It seems that, when given time in an appropriate language setting to process the information, introverts' performance on language can be as good as extroverts.

The second sub-question addresses the following, "*Do introvert students get higher scores than extrovert students in 'Listening Comprehension?'*" It has been hypothesized that introvert participants will get higher scores than extroverts in "Listening Comprehension" after receiving input-based instruction. Because the overall mean score differences are statistically different between extroverts and introverts, a significant difference can be expected. The results showed an improvement on Listening sub-scale in both groups; however, introverts did not perform significantly better than their extrovert counterparts. Different from their performance in the Use of English section, participants' performance on "Listening Comprehension" did not significantly differ in terms of personality types. Even though introverts' performance on Listening was higher than extroverts, the mean difference between personality types was not significant, so this research hypothesis is rejected. It was hypothesized that introverts would get higher scores than extroverts in "Listening Comprehension" after receiving input-based instruction. It is surprising not to see a significant mean difference on Listening subscales. While overall OOPT scores and Use of English scores differ significantly in terms of personality types,

for Listening subscale, the results did not reveal the expected outcome. The results of this study contradict with Alavinia and Sameei (2012) findings, but confirm the results of Wakamoto (2007). However it should be noted that introverts performed better than extroverts in Listening as in the other parts of the OOPT. Finding a non-significant improvement of introverts was not expected. One possible explanation to this can be that both group benefitted from input-based instruction in terms of listening. Aforementioned in Chapter 2 and 3 that listening skill is the skill which input-based instruction focuses on more. That is why a significant difference could not be seen because of ample amount of listening activities. However, it should be noted that introverts performance on Listening is higher than their extrovert counterparts. The post-test results showed that while participants' mean score difference in Use of English section was 9, mean score difference in Listening was around 5. The non-significant better performance is because of introverts' lower performance on Listening when compared to Use of English part of the OOPT. Introvert participants' previous language experience may have an effect on this lower listening performance. Even though they had 9 years language instruction before starting college, participants' learning of English focused on the learning of vocabulary, grammar rules, and paper-based test oriented abilities. That is why they had little opportunity for authentic interaction with language, and this may lead to some difficulties in language performance to analyze and intake in input.

## **Chapter 6: Conclusions**

This chapter presents conclusions drawn from the findings and results of the data analysis. This chapter also provides limitations of the study, teaching implications and further research recommendations that emerge from the study.

### **Conclusion of Results**

This study provides further evidence of the relationship between extroversion/introversion and language learning since it was found that extroversion and introversion can be a significant predictor of language performance in an input-based instruction setting. While previous studies focus on personality variables and their relationship to some language learning outcomes, this study includes an important and missing aspect of these studies. Previous studies ignored the possible significant impact of language instructions on personality types, and they tried to conclude whether extroversion or introversion can be a good predictor in language learning without including instruction setting. The research findings of previous studies have indicated that while some personality variables have significant relationships with language learning, some concluded non-significant relationships between personality variables and language performance (see Chapter 2). The present study includes the aspect of language instruction and tries to provide possible evidence of the interaction between personality types and particular instruction setting, namely input-based instruction. Thus, it is hoped that this study has made some important contributions toward a better understanding of the extroversion and introversion personality variables in their relationship to language learning in input-based instruction.

According to results of this study, instruction types that provide a setting in favor to some personality types can give an answer to the question “which type of personality is better at

language learning?” The input-based instruction that include a silent period favors introversion personality type. Providing an appropriate environment in the classroom, reducing anxiety and providing a secure setting serve introverts better than extroverts. Accordingly, different learners respond differently to the same input because their personality affects their perception (Abukhattala, 2012). As MacIntyre and Charos (1996) point out, “for academic achievement in general, introversion is usually the more desirable end of the trait dimension. But for language learning, the desirable end may be either extroversion or introversion, depending on the learning context and instructional methods” (p. 20). It seems that introvert students have more possibilities to reveal their abilities in language learning in classrooms where they feel more comfortable. As Dewaele and Furnham (2000) suggested performance of introverts is affected by pressure around them because higher anxiety pushes their arousal beyond optimal level and this affects their performance. So, when a secure and appropriate classroom environment is provided to introverts, as in this study, they may perform better than their extrovert counterparts in language learning.

As Vera & Eugenio (2011) suggested, “if the silent period is respected and if language input is optimal, it will help second or foreign language learners to keep a low affective filter” (p. 31). The results of this study are in line with this statement, however, it should be noted that lowering the affective filter, providing comprehensible input, respecting students’ silent period and giving appropriate feedback helped introverts more than extroverts only in the Use of English section of the post-test, but not in the Listening section. However, this should not be interpreted as extroverts not benefiting from this classroom atmosphere. As the results of this study suggested, the listening performance of introverts did not significantly differed from that of extroverts. Even

though introverts performed slightly better than extroverts in Listening, this difference was not significant.

### **Limitations and Further Recommendations of the Study**

Although the present study was intended and planned according to previous research in the field, some limitations are unavoidable. They are discussed along with some possible suggestions for future research:

- 1- The present study was conducted with a limited number of participants involved ( $n = 58$ ) and specific features of those participants significantly limits the generalizability of the results. The participants' number, age, gender, and background limits any general recommendations for curriculum improvement that can be made based on these results in language teaching and learning. Because the chosen participants are only representative of the larger population in the school chosen, the results of the study can only be generalized to the participants in that school. That is why a study with a larger number and variety participants (such as gender or background differences) should be included by future studies.
- 2- Participants in this study were taught English with an Input-based instruction, and there was no control group being taught with a different type of instruction, so no claims can be put forward about the superiority of Input-based instruction over other types of instructions. What this study shows, however, is that Input-based instructions benefits introvert learners significantly more than extroverts. That is why, for further studies, it would be beneficial to compare input-based instruction with other types of instruction.

- 3- Another limitation is that this study used only the OOPT results as a measure of proficiency. Even though it is claimed that the OOPT gives reliable and valid results in overall language proficiency within only an hour as validly and reliably as Test of English as a Foreign Language (TOEFL) or IELTS exams, the results did not give sufficient information on the effect of personality types on productive skills such as speaking and writing. To be able to analyze oral proficiency, pronunciation, accuracy and fluency performance in terms of personality types, it is necessary to include a valid and reliable productive skills measurement.
- 4- Another limitation consists of not including qualitative aspects in the study. Classroom observations, teachers and participants' verbal feedback on the study can be some examples of qualitative aspects. Knowing the participants' thoughts about the instruction style before and after taking the instruction, or their perceived language development in terms of language learning styles and techniques would give more insights into the study.
- 5- Lastly, the effect and importance of the silent period in the study is not clear. According to results, the input-based instruction including a limited silent period during the instruction work for participants. However, to be able to provide empirical evidence on how long a silent period should be and the necessity of this period, it is required to include different types of measurement right at the time when the silent period ends. Qualitative and quantitative measurements on participants' language performance, thoughts, attitude and viewpoints would also provide more insight on the effect of the silent period.



## **Teaching Implications**

The results of this study propose some educational implications that can inform language teaching and learning. Some recommendations in terms of lowering students' anxiety, respecting personality differences, and sustaining better quality of language teaching by creating effective and efficient learning environments will be suggested for the consideration by EFL college level institutions, teachers and learners.

First of all, in order to provide successful language instruction, teachers need to learn to recognize and appreciate their students' individual differences. It is known that language learning is a very complex process and this complexity should be realized by teachers. Knowing and respecting students' individual differences will provide more knowledge and understanding on students' different performance under the same instruction. One of the basic individual differences is personality types, which enter almost every area of life. As aforementioned, personality plays an important role in acquiring a second language. For teachers, recognizing the students' personality types provides an insight into the ways to manipulate and organize their teaching process. For students, recognizing their own personality dimension will give them an understanding of the possible strengths and difficulties that they may come across while studying a language. Awareness and understanding of learner differences will create an environment in which individual differences are appreciated and the mixture in the class is respected. As Oxford and Ehrman (1992) suggested, "to provide the most effective instruction possible, teachers of a second language should learn to identify and comprehend significant individual differences in their students" (p. 188).

In parallel with previous implication, students, teachers and parents should break the personality stereotypes on language learning. It was reported in Chapter 2 that researchers, teachers, and parents think being an extrovert is an advantage for their students or children, because it would give them more opportunity to practice and engage in language. The result of this study shows that this stereotype should be avoided because introverts can be as good language learners as extroverts. Maintaining the assumption that extroverts have advantage over introverts on language learning will negatively motivate introvert students' performance. Not only teachers' possible negative and untrue attitudes but also introverts' themselves and their peers' similar attitudes will impede the progress in language learning. As Oxford' (2003) suggestion, when given the opportunity, introverts can participate and benefit equally as extroverts do in language learning. That is why everybody in the process of education should know and realize that every student has equal chance to learn a language in a classroom environment in terms of their personality types.

In terms of introversion and extroversion, the differences between these two personality types were explained in Chapter 2 in detail. Basically, apart from differences in brain hemisphericity, memory and processing the input, introverts are more likely to respond the stimuli more sensitively, they are more afraid of negative evaluation than extroverts and their performance in classroom activities differ in terms of their risk-taking behaviors (Laney, 2002) or lack thereof. The classroom environment in this study aimed to provide an instruction setting that both personality types can benefit. The results showed instruction setting is an important factor in L2 learning in terms of personality differences. Bearing these facts in mind, teachers should provide safe environments for both personality types in order to achieve successful and meaningful language learning in their students. As Ehrman (1989) suggested not only introverts but also

extroverts “would probably find it easier to make the most of the classroom experience if teaching staff were to help them understand that a classroom is a relatively safe place to practice language, a place where it is all right to try out new behavior and make mistakes” (p. 179). Thus, in such a safe environment, while extroverts keep their tendency to participate in class activities, introverts will continue their motivation to learn and try to become a part of classroom activities. The linguistic, conversational, strategic and visual adjustments listed in Table 3 (Chapter 2), can be used in the input-based instruction to make this happen. Also, choosing the materials according to students’ familiarity and background knowledge will create more practical and communicative environments for students to perform in a meaningful and effective way.

One of the possible reasons for introverts’ better performance on this study might have been the provision of appropriate feedback to the students in order to lower their affective filters. In language learning, feedback is one of the most crucial tools, and it should be positive and constructive rather than harsh, unconstructive and negative. In addition to positive feedback, teachers should be sensitive to the need of providing different kinds of activities and assignments by modifying them in fun ways to diminish student’s anxiety and stress. This will make the activities more accessible to a wider range of learners, particularly introverts. Using small groups or pair activities rather than whole-class activities will reduce the stress and anxiety level in the classroom (Liu, 2006). While assigning tasks and homework, providing options for them will facilitate the learning. For example, rather than designing a syllabus which forces every student to do presentations or writing task without paying attention to their willingness to do these tasks, giving them choices on these tasks will keep them in the class with a higher motivation. This will help students to feel more comfortable in doing the assigned tasks.

The need for recognizing and appreciating the students' individual differences were mentioned earlier; however, this may not be an easy task for teachers because complete individualization may not be possible in some classrooms. Teachers may need to cover certain topics at certain allotted time and maybe in very crowded classrooms. In these cases, it is crucial for teachers to integrate technology into their teaching. This will help teachers to effectively assist students in language learning. This can be done by separating some of the classroom hours for individual study or encouraging students with extracurricular activities integrated with technology. One advantage of integrating technology is that students can intuitively select the activities or practices according to their learning style and preferences. The other advantage of technology integration, as Kung and Chuo (2002) concluded, is that students find more interesting to study EFL multimedia sources and they experience a reduction in their affective filter. Thirdly, technology will enhance their motivation and it will facilitate students' exposure to authentic language materials. With authentic materials, students will be more integrated into the real language. Finally, integrating language classrooms with different output assistance programs such as Webquest or Blackboard with voice threads, voice lecture instructions will give students opportunity to produce the language without anxiety and stress. These applications will also give more time to the teachers to clarify students' questions, help them individually and assess their language learning progress.

Lastly, providing an appropriate learning environment, eliminating anxiety and encouraging students to spend more time on language can be done by allowing the Silent Period that takes place at the beginning of the instruction. It is not uncommon that educators want to see and outcome from the students and they want the students to talk right away. However, as in Lim (2009) study recommendations educators should "respect the silent period for language learners

by not forcing them to produce the new material until they have time to properly understand it” (p. 7). Accordingly, creating a relaxed and caring atmosphere to lower students’ affective filters by providing inputs comprehensible to their level will allow their productive skills to emerge gradually through communication. However, the appropriate length of the Silent Period is not clear and it varies from learners to learners. While some students may need a very short period and start producing the language right after the first few classes, others’ language production may seem to take some time and they may never volunteer to speak in class until they feel comfortable to do it. Longer silent periods can cause some negative effects on students because some students may take advantage of the freedom in production and resist producing the language. That is why it is important to observe students’ language progress and decide the length of the freedom from production in the classroom.

To sum up, not only current teacher and educators but also teacher education programs should have the knowledge and understanding of individual differences, personality types. The awareness of differences will lead to a more diverse, richer curriculum in language teaching and finally better instructional methods. This study has contributed to the notion that personality types affect language learning by showing that the factor of type of instruction plays a significant role too. As suggested by the results of this study, selecting a learner-friendly type of instruction, like input-based + silent period, might benefit all students, including introverts, traditionally thought to be more language-learning challenged than extroverts.

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## Appendices

### Appendix A

#### Sample Items

From the

#### Myers-Briggs Type Indicator Instrument® Form M

By Katharine C. Briggs and Isabel Briggs-Myers

Your answers will help show you how you like to look at things and how you like to go about deciding things. There are no “right” and “wrong” answers to these questions. Knowing your own preferences and learning about other people’s can help you understand what your strengths are, what kinds of work you might enjoy, and how people with different preferences can relate to one another and contribute to society.

Part I: Which answer comes closest to telling how you usually feel or act?

16. Are you inclined to  
 A. value sentiment more than logic, or  
 B. value logic more than sentiment?
20. Do you prefer to  
 A. arrange dates, parties, etc., well in advance,  
 or  
 B. be free to do whatever looks like fun when the time comes?

Part II: Which word in each pair appeals to you more? Think about what the words mean, not about how they look or sound.

36. A. systematic  
 B. casual
58. A. sensible  
 B. fascinating

Part III: Which answer comes closest to describing how you usually feel or act?

59. When you start a big project that is due in a week, do you  
 A. take time to list the separate things to be done and the order of doing them,  
 or  
 B. plunge right in?
67. At parties do you  
 A. do much of the talking, or  
 B. let others do most of the talking?

Part IV: Which word in each pair appeals to you more? Think about what words mean, not about how they look or how they sound.

79. A. imaginative  
B. realistic
91. A. devoted  
B. determined

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