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**ENGLISH LANGUAGE AND LITERATURE DEPARTMENT**

# A STUDY ON INDIVIDUAL DIFFERENCES BETWEEN POLISH and TURKISH ESL LEARNERS

**MASTER OF ARTS**

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**To Kafkas University Institute of Social Sciences**

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**ABSTRACT**
**A STUDY ON INDIVIDUAL DIFFERENCES BETWEEN POLISH and TURKISH ESL LEARNERS**
**Yeşim SEVİNÇ**

**MASTER OF ARTS, ENGLISH LANGUAGE AND LITERATURE DEPARTMENT**
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The effects of individual differences in second language learning have been on the agenda of linguistics and second language education. Therefore, a lot of investigations have been carried out about the features and personalities of the second language learners and techniques for how best to them. In addition to this, as English has been receiving more acceptance as a lingua franca due to globalization, studies on relationship between individual and cultural differences have become more of an issue. Beside that with the aim of effective language learning, in the past decades, variation between people and personality characteristics are increasingly being taken into account. In the current study, our main concern is to investigate the personality differences of ESL learners from different nationalities and culture, and whether these differences have any relationship with their nationality or culture. A descriptive research study was conducted with Polish and Turkish ESL learners to discover if ESL learners in these countries present a wide diversity of cultural backgrounds or personality differences in second language learning process.

153 university students aged 20 – 24 from Higher Vocational State School in Wloclawek, Poland and 158 university students aged 20 - 24 from Kafkas University, Turkey participated in the study. For the purposes of this study, data were collected via administration of The Big Five Personality Test with 2 open-ended questions. Questionnaires were analyzed by using SPSS 11.0 (Statistical Package for Social Sciences). Descriptive analysis was performed and frequencies and percentages were calculated. The results of this study revealed that students in these countries do not present a wide diversity of cultural backgrounds or personality differences in second language process. The overall results indicate that there is coherence between the answers of the Polish students and Turkish students. That means large majority of the students in Poland chose the same statement. On the other hand, large majority of the students in Turkey also chose the same statement. For that reason we can conclude that there is a relationship between personality and nationality. Additionally, we can also say that students from two different countries, Poland and Turkey, have almost the same characteristics.

**Keywords:** Culture and Personality, Individual differences, NEO Five, Personality Differences, Second Language Learning.

**ÖZET**
**İKİNCİ DİLİ İNGİLİZCE OLAN POLONYALI ve TÜRK ÖĞRENCİLER ARASINDAKİ BİREYSEL FARKLILIKLAR**
**Yeşim Sevinç**

**Y Ü KSEK LİSANS, İNGİLİZ DİLİ ve EDEBİYATI BÖLÜMÜ**
**Danışman; Yard. Doç. Mustafa ÖZDEMİR**
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Bireysel farklılıkların ikinci dil öğrenimi üzerindeki etkileri uzun bir süredir eğitimcilerin gündemindedir. Bunun sonucunda, iyi bir dil öğretimini sağlamak amacıyla, ikinci dil öğrenen kişilerin kişilik ve karakter özellikleri, ve öğretim teknikleri üzerine çok sayıda araştırma yapılmaktadır. Bunlara ilaveten, globalleşme sebebiyle İngilizcenin günden güne uluslararası ortak dil olarak kabul görmesi, bireysel ve kültürel farklılıklar arasındaki ilişki alanındaki çalışmaların önemini daha da arttırmaktadır. Bununla birlikte, etkili yabancı dil öğretimi amacıyla, son zamanlarda, insanlar ve kişilik özellikleri arasındaki farklılıklar daha da dikkate alınmaktadır. Bu çalışmanın genel amacı, İngilizce öğrenen kişiler arasındaki kişilik farklılıklarını ve bu farklılıkların ırk ve kültürel farklılıklarla ilişkisi olup olmadığını araştırmaktır. Betimsel bir çalışma, Polonyalı ve Türk öğrencilerin, yabancı dil öğrenim suresince, farklı kültürel ve kişilik özelliklerine sahip olup olmadıklarını belirlemek için gerçekleştirilmiştir.

Çalışmaya 20-24 yaşlarında, Polonya, Wloclawek Higher Vocational State School'da okuyan 153, Türkiye, Kars Kafkas Üniversitesi'nde okuyan 158, toplam 311 üniversite öğrencisi katıldı. Çalışmanın amacı doğrultusunda, veriler The Big Five Personality Test'in, iki açık uçlu soru ile uygulanması ile toplandı. Elde edilen anket sonuçları SPSS 11.0 paket programı kullanılarak analiz edildi ve betimsel analiz tekniği kullanılarak frekans ve yüzde değerleri hesaplandı. Bu çalışmanın sonuçları, bu iki farklı ülkedeki öğrenciler arasında ikinci dil olarak İngilizce öğrenim süresince, çok büyük kişilik farklılıkları olmadığını açığa çıkarmıştır. Genel sonuçlar, Polonyalı ve Türk öğrencilerin cevaplarının kendi aralarında da tutarlı olduğunu göstermektedir. Başka bir deyişle, Polonyalı öğrencilerin büyük bir çoğunluğu aynı durumlara, benzer cevaplar vermişler, öte yandan Türk öğrencilerin büyük bir çoğunluğunun cevapları da birbirleriyle uyuşmaktadır. Bu nedenle, kişilik ve ırk arasında bir ilişki olduğu sonucunu çıkarmak mümkündür. Buna ilaveten, Polonyalı ve Türk öğrencilerin hemen hemen aynı kişilik özelliklerine sahip olduklarını da söyleyebiliriz.

**Anahtar Kelimeler:** Kişilik ve Kültür, Bireysel Farklılıklar, İkinci Dil öğretimi, Kişilik Farklılıkları

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## ABBREVATIONS

**The abbreviations used in the study are as follows**

**L1:** Native language of the learners

**L2:** Foreign Language that students learn; English

**ELT:** English language teaching

**EFL:** English as a foreign language (In this study, ESL (English as a second language) was also used referring to "EFL".)

**IDs:** Individual Differences

**i.e. : 1-** In other words **2-** that is, namely

**e.g. :** For as an example

**MLAT:** The Modern Language Aptitude Test

**STM:** Short Term Memory

**BFI:** The Big Five Inventory

**FFP:** Five-Factor Personality

**FI–FD:** The field independence–field dependence

**MBTI:** the Myers–Briggs Type Indicator

**WTC:** Willingness to Communicate

**CLT:** Communicative Language Teaching

**AMTB:** the Attitudes/Motivation Test Battery

**NEO-PI-R:** A self-report paper and pencil questionnaire, covering the five main domains of the Big Five model, each represented by six lower level facets

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# CHAPTER 1

# INTRODUCTION

## 1.1. Background to the Study

Due to globalization, countries and their cultures are getting closer day by day. Therefore, learning a second language becomes a necessity for everyone all over the world. As English is receiving more acceptance as a lingua franca, developing effectiveness in English teaching is taken more seriously in many countries. With the aim of effective language learning, in the past decades, variation between people and personality characteristics are increasingly being taken into account. All the programs, styles, materials, and lessons have been designed in accordance with individual and cultural differences of second language learners. Along with these, in trying to explain variations in human performance and find relationship between individual differences and effective second language learning, investigating personality has also escalated in recent years. Supporting this, Ehrman, Leaver and Oxford (2003) point out that the subject of individual differences in language learning, a topic whose complexity has meant little conclusive knowledge and thus need for continuing investigation. It has been long observed that there is a particularly wide variation among language learners in terms of their ultimate success in mastering an L2 and therefore the study of IDs, especially that of *language aptitude* and *language learning motivation*, has been a featured research area in L2 studies since the 1960s (for past reviews, see e.g., Breen, 2001; Cohen & Dörnyei, 2002; Cornwell & Robinson, 2000; Dörnyei & Skehan, 2003; Ehrman, 1996; Ellis, 2004; McGroarty, 2001; Oxford, 1999c; Oxford & Ehrman, 1993; Sawyer & Ranta, 2001; Robinson, 2002; Segalowitz, 1997; Skehan, 1989, 1991, 1998). In the 1970s the momentum of ID studies was further augmented by influential research on the *good language learner* (MacIntyre & Noels, 1994; Norton & Toohey, 2001). The results of this line of investigation indicated in a fairly consistent manner that besides a high degree of language aptitude and motivation there were other learner factors that helped students to excel, in particular the students' own active and creative participation in the learning process through the application of individualised learning techniques. Thus, *language learning strategies*

were included into the inventory of important learner characteristics, and Peter Skehan's (1989) seminal book on the subject, *Individual Differences in Second Language Learning*, and his follow-up overview paper under the same title (Skehan, 1991), also added *learning styles* to the 'canonical' list of IDs in language learning.

There has also been ongoing research in the relationship between personality and culture and it appears intuitively appealing that individual differences should be related to a person's decision to perform citizenship behaviors, the search for such individual differences has yet to yield clear results (Moorman & Blakely, 2006). In addition to this, we may also consider one of the main concerns in this concept is whether the factor of culture or nationality affects personality differences in second language learning. In this context, Gulgoz emphasizes that culture has been neglected in many areas of psychology for years. Validation and generalization of our theories necessitate research in many cultures and meticulous examination of the results of these studies. Cross-cultural comparisons may suggest universality or major differences but the interpretation of both types of outcomes requires extreme caution.

Additionally, there is a wide range of research on individual differences within culture. For example, Triandis, Brislin and Hui (1988) focused on how individuals from collectivist cultures can be trained to interact more effectively with individuals from individualistic cultures and how individuals from individualistic cultures can be trained to interact more effectively with individuals from collectivist cultures. When such training is given, or when individuals naturally have the skills to place themselves into the framework of the other culture, they are interpersonally more effective (Bhawuk & Brislin, 1992; Singelis, 1994). They also claim when an individual is presented with a scenario where one option is to maintain harmony and another to "tell it as it is", the "correct" response depends on where and with whom the interaction occurs. For example, East Asian collectivists are especially eager to maintain harmonious relationships while individualists from the U.S.A. are more concerned with clearly giving opinions. When a person selects the first option in the scenario with reference to Japan the response is scored as "correct" and the second option is scored as "incorrect." But when referencing the U.S.A. the reverse scoring is applied and it would be more "correct" to "tell it like it is". This type of generalization is well supported in the literature (for reviews see Triandis, 1994,

1995). Of course, there is great variation in the extent to which any individual is representative of the culture. Triandis (1994, 1995) has stressed that within any culture there are individuals who are more or less *allocentric* (or *idiocentric*), the personality attributes that correspond to collectivism (and individualism) at the cultural level. Briefly, in collectivist cultures there will be some counter- cultural individuals, who will be *idiocentric*, and will want to escape from what they see as "the oppression" of their in groups, and in individualistic cultures there will be some counter-cultural individuals, who will be *allocentric*, and will want to join communes and other collectives. Thus, while cultural differences may be the most important consideration when making a "first-best guess" about an individual, within culture differences are also important.

Demographics, especially social class, are also very important. Daab (1991) found that the more educated, in Poland, were more individualistic than the less educated; those who lived in cities were more individualistic than rural samples; men more than women; the young more than the old. Noricks (1987) found that Americans over age 56 assigned greater importance to context than to content in making judgments about the attributes of individuals. This pattern is more typical of collectivist cultures than of individualist cultures. On the other hand, Americans who were younger than 56 did do this task the way people in individualistic cultures usually do it.

Individuals are subject to diverse experiences that need to be considered when interacting with them. For example, a 33-year-old Japanese business person with a Harvard MBA, who spent three years in France, is almost certain to have become more *idiocentric* than a 55-year-old Japanese, who owns a small business and has never left Japan. Similarly, an American who has married a Chinese and spent two years in Taiwan is likely to have become more *allocentric* than an American who has lived exclusively in Wyoming.

This mixing of backgrounds and experiences is increasingly a reality of the modern world. It is therefore not enough to know the culture of the person with whom we are interacting. We need to know a good deal more, and take it into account when formulating our behavior. A more sophisticated approach is to temper cultural knowledge with demographic and life-experience information, such as the type that we will present below. In sum, people should learn to make a "first-best

guess" according to culture, and then adjust it in various ways according to demographics, life experiences and other information revealed as interactions unfold.

Many studies support that cultural differences obviously affect the personality and create individual differences. These differences definitely affect language-learning process. In thus context, the primary aim of the current study is to explore the personal differences of ESL learners from different nationalities and cultures (Poland and Turkey), investigate their personality differences and attitudes towards learning English, and whether these attitudes have any relationship with their nationality or culture. This research is concerned with individual differences in personality that are relevant to educational experience and focuses on the links between personality and different cultures and their implications for educational practice.

### 1.2. Statement of the Problem

Students learning English as a foreign language are observed to have different personalities that affect their attitudes towards learning English and the whole language learning process. In this study, we aim to put light on the crucial issues of personality types and their relation to nationality and cultural differences in second language in classroom settings. As Crozier (1997) summarized it clearly,

> *"A teacher contemplating a new class of students can be confident of one fact the students will be very different from one another. Some of these differences will suggest themselves at the outset as the teacher looks through the class register, where names will reflect the gender and possibly the ethnic, religious or social class backgrounds of the students. The skilful teacher will search for the individual approach that seems to work with particular students, in gaining their attention and interest, in finding appropriate ways to analyze the tasks they find difficult, in responding to their successes and failures. Despite these controversies, educationalists need to be aware of research into personality because one of the principal goals of education should be the personal and social development of students, and understanding the development of personality is essential if the educational system is to meet its obligations to achieve this goal. Difficulties of adjustment can have serious consequences for the individual as well as for the school." (p.228)*

The tension between the individual and the collective also appears in language studies. We can well imagine that second language acquisition (SLA) researchers may become rather irritated with Individual Differences when these prevent the neat formulation of species-wide themes concerning, say, how humans acquire a particular language aspect over time: IDs tend to bring in a *'Yes but...'* factor because there will always be people to whom some findings do not apply (Dörnyei & Murphey, 2003).

We need to know what shapes individual approach to find appropriate ways to analyze the tasks they find difficult, in responding to their successes and failures. Without any doubt, personality is the most individual characteristic of a human being and therefore it is appropriate to start the summary of individual differences with a description of the various personality factors (Dörnyei, 2005).

Consequently, being aware of personality differences, and their causes, and then prepare the learning-teaching process accordingly will incline the learners to develop and sustain positive attitudes towards language learning and to be more successful. We need to know what shapes our attitudes. Discovering students' personality differences will help both teacher and student in the teaching-learning process.

### 1.3. Purpose of the Study

This study aims to (1) explore the personality differences of ESL learners from different nationalities and cultures (Poland and Turkey), (2) investigate their personality differences and attitudes towards learning English, and (3) whether these differences have any relationship with their nationality or culture. This research is concerned with individual differences in personality that are relevant to educational experience and focuses on the links between personality and different cultures and their implications for educational practice. To accomplish these aims: (a) the related literature will be reviewed in order to describe individual differences and personality differences to explain the effective ways to teach by taking these differences into consideration, (b) The Big Five Personality Test with 2 open-ended questions will be conducted with Polish and Turkish ESL learners to discover if ESL learners in these countries present a wide diversity of cultural backgrounds or personality differences in second language learning process, (c)

all data will be analyzed to identify the relationship between ESL's personality differences and their nationalities.

### 1.4. Operational Definitions

In this study, the following terms will be considered in their meanings below:

The term 'personality' is open to many interpretations. We have in mind differences between students in personal characteristics other than intelligence, but we now attempt to define the term more carefully. The word itself derives from *persona,* which has its origins in Latin, referring to the actor's mask and to a character in a dramatic performance. The Concise Oxford Dictionary gives two meanings: (1) being a person; personal existence or identity; (2) distinctive personal character. Allport (1937: p.48) has defined personality as: the dynamic organization within the individual of those psychophysical systems that determine his unique adjustments to his environment.

### 1.5. Research Questions

This study seeks answers to the following questions:

1- Are there any differences between the personality traits of ESL learners from Poland and Turkey?

2- Do ESL learners in these countries present a wide diversity of cultural backgrounds or personality differences in second language learning process?

3- Is there any relationship between personality and nationality? How do different cultures and values affect second language learning?

4- Which personality features help learners to learn English well?

### 1.6. Limitations

In this study we focus on only one of the individual differences, "personality". The scope of the study is also limited to Polish and Turkish ESL learners. To indicate the relationship between personality, nationality and ESL process, administering that study in more various countries would be more helpful. All the data collected is valid just for participants who take part in the study. In addition, other variables like the social background and the sex of the participants are not considered in this research.

That is, during the evaluation of the tasks and the calculation of the data, there might be an error probability.

### 1.7. Outline of the Study

In the first chapter, a brief introduction to the individual differences and background information to the study has been reviewed.

In the second chapter, a more detailed review of individual differences, different approach to the study of personality, and the big five personality traits have been discussed.

In the third chapter, methodology of the study is presented in terms of the participants involved in the study, and the instruments used to gain data from subjects. The procedure of the data collection and analyses of the data such as techniques used to transcribe the data is presented.

The fourth chapter presents the analysis of the data observed. The statistical analyses carried out on the data and the findings that aim to find out the differences of the big five personality factors between the Polish and Turkish students have been presented.

In the fifth chapter, the results are discussed in relation to the research questions presented in chapter one. Some implications for English language teaching and suggestions for further studies are discussed at the end of the chapter.

# CHAPTER 2

# REVIEW OF LITERATURE

## 2.1. Individual Differences in Second Language Learning

Individual difference research has a considerable history in applied linguistics. Horwitz (2000), reviewing publications in The Modern Language Journal from the 1920s up to the end of the 1970s, documents how interest in L2 learners' differences evolved over the decades. She notes a marked change in the labels used to refer to individual differences:

> *"The terms good and bad, intelligent and dull, motivated and unmotivated have given way to a myriad of new terms such as integratively and instrumentally motivated, anxious and comfortable, field independent and field sensitive, auditory and visual" (p. 532).*

Horwitz characterizes these changes as evolutionary rather than revolutionary, but they seem to reflect a radical shift in the way learners are viewed; whereas earlier they were seen in absolute terms, as either innately endowed with or lacking in language learning skills, in more recent research they are characterized in more relative terms, as possessing different kinds of abilities and predispositions that influence learning in complex ways.

This change of perspective over the years reflects a development in the role of individual difference research in applied linguistics. In earlier periods, the primary concern was to provide a basis for selecting which learners should be chosen to receive foreign language instruction. To this end, the main purpose of individual difference research was to predict which learners would succeed. This led ultimately to the development of tests of language aptitude such as the Modern Language Aptitude Battery (Carroll & Sapon, 1959). More recent research on motivation or on learning strategies, however, has sought to explain why some learners succeed more than others and has been seen as complementary to mainstream research in SLA. This later research continues to have an "applied" side, however. It has been used to identify the characteristics of "good language learners" as a basis for learner training

(i.e., providing guidance in how best to learn). It has also served as a basis for aptitude– treatment interactions (i.e., matching learners to different types of instruction so as to maximize learning).

Interest in individual differences has grown since the 1970s to the point where it has become a major area of enquiry in SLA. This interest is reflected in numerous articles published in all the major SLA journals (in particular Language Learning and The Modern Language Journal), in several major surveys of individual differences (Skehan, 1991), and, increasingly, in full-length books devoted to specific factors responsible for individual differences (Dörnyei, 2001). Research into individual differences has taken place alongside and separate from mainstream SLA research, where the primary concern has been the processes responsible for L2 acquisition (e.g., *noticing, chunking, restructuring*). One reason for this is that universalist and differential approaches have distinct agendas, the former seeking to explain the mechanisms responsible for the commonalities observed in the process of language learning (e.g., *the "natural" order and sequence of L2 acquisition*), the latter directed at examining how and why learners differ. This separation, however, is unfortunate, as it results in a piecemeal approach to understanding L2 acquisition that inhibits the development of an integrated theory to account for how and to what extent learners allocate resources to different learning mechanisms. As Breen (2001) emphasizes, an essential feature of psycholinguistic processes is that they are selective. The task facing researchers, therefore, must be to identify not just what the psycholinguistic processes involved in L2 acquisition are or what motivates individual learner selectivity, but how selectivity and processes interact in the performance of different tasks.

Individual difference research has also another aspect which analyzes the factors affecting individual differences. Learners vary enormously in how successful they are in learning a language. How can we explain these differences in achievement? What are the factors responsible for individual differences in L2 learning?

Skehan (1989) gives opinion that things affecting English learning are such as intelligence, language aptitude, motivation, age, personalities of learners and et cetera (in Wakamoto, 2000).

Above theories are still categorized simple if compared to Rod Ellis theory in

*Individual Differences in Second Language Learning* on factors responsible for individual Differences in L2 learning. He grouped these factors 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 L2 learning*" (i.e., conceptions and beliefs about L2 learning), or "*learner actions*" (i.e., learning strategies) (Davies, 2004: 530) (Ellis, 2004, p.530) as shown in Table 2.1:

| Category | Factors |
|---|---|
| 1 Abilities | (a) Intelligence<br>(b) Language aptitude<br>(c) Memory |
| 2 Propensities | (a) Learning style<br>(b) Motivation<br>(c) Anxiety<br>(d) Personality<br>(e) Willingness to communicate |
| 3 Learner cognitions about L2 learning | (a) Learner beliefs |
| 4 Learner actions | (a) Learning strategies |

**Table 1.** Ellis opinion on L2 factors (Ellis, 2004, p.530)

The next part will consider two factors – abilities and propensities- that have been found to contribute to individual differences in learning and will provide a review of the main research findings relating to personality and Big-Five Model.

### 2.1.1. Abilities

Rod Ellis (Table 2.1.) identifies three cognitive abilities hypothesized to be involved in L2 learning – intelligence, language aptitude, and memory and these are clearly related. For example, all tests of language aptitude have included a measure of memory for words, normally in the form of a paired-associates test. Links between the analytic ability involved in identifying grammatical patterns and intelligence have also been identified. Skehan (1990) administered language aptitude tests to the children in the Bristol Language Project after they had reached secondary school. He found that a range of aptitude measures, especially that measuring analytic language learning ability, were significantly correlated with L1 measures (in particular,

measures of the auxiliary system and pronominalization). Language aptitude was also strongly related to measures of foreign language ability. Interestingly, however, there was no relationship between L1 measures based on the children's speech and any of the L2 measures. Skehan explained these results by proposing that the aptitude tests measured both an underlying language learning capacity, which was similar in L1 and L2 learning, and also an ability to handle decontextualized material, such as that found in the formal language tests he used to measure L2 learning. The latter is the same ability tapped by intelligence tests. Sasaki (1996), in a study that factor-analyzed the scores of Japanese learners of English on a language aptitude test and a test of verbal intelligence, reported three first-order factors, reflecting different aspects of language aptitude, but a single second-order factor, on which measures of both language aptitude and verbal intelligence loaded. These studies suggest that language aptitude, notably the ability to analyze linguistic structure (but less so ability to discriminate sounds and memory), and intelligence are related, but also that there are other aspects of language aptitude that are distinct.

Carroll's early research into language aptitude identified four aspects of language aptitude, although the test he and Sapon designed (MLAT) measured only three of these (i.e., there was no measure of inductive learning ability). The four aspects are:

1 phonemic coding ability (i.e., the ability to code foreign sounds in a way that they can be remembered later),

2 grammatical sensitivity (i.e., the ability to recognize the grammatical functions ofwords in sentences),

3 inductive learning ability (i.e., the ability to identify patterns of correspondence and relationships involving form and meaning),

4 rote learning ability (i.e., the ability to form and remember associations between stimuli).

Although this model of language aptitude was designed at a time when the prevailing instructional approach was audiolingual in nature, it has withstood the test of time remarkably well, the MLAT (or tests based on a very similar model of language aptitude) continuing to be the preferred instrument in current research. Carroll (1991) announced that he was "somewhat skeptical about the possibilities for

greatly improving foreign language aptitude predictions beyond their present levels" (p. 27). More recently, however, Skehan (2002) has suggested how a model of L2 acquisition might be used to identify additional aptitudinal aspects, in particular the ability to attend to form in the input and to access language material from memory.

Evidence for the construct validity of the MLAT comes from a number of studies that have shown aptitude scores are related to both formal, test-like measures of L2 proficiency and to more informal measures based on communicative performance. Horwitz (1987), for example, found that MLAT scores correlated significantly with scores on a discrete-point grammar test and with scores derived from relatively spontaneous oral production. Thus, Krashen's (1981) claim that language aptitude would only be related to "learning" and not to "acquisition" has been shown to be unfounded. Further counter evidence can be found in a number of recent experimental studies that have examined the relationship between language aptitude and implicit/explicit learning. In these studies, implicit learning was operationalized as exposure to sentences exemplifying a specific structure with the instruction to memorize the sentences, while explicit learning involved asking learners to actively look for the rule or, in some cases, to process the sentences after they have received an explanation of the rule. Studies (e.g., Robinson, 1997) indicate that language aptitude is implicated in both types of learning. It could be argued, however, that the implicit learning condition in these studies does not correspond to the natural environment in which Krashen argued "acquisition" takes place. The "incidental" condition in Robinson's (1997) study, where the learners were instructed to just try to understand the sentences they were exposed to, is closer perhaps to a natural learning situation. Interestingly, correlations between MLAT and the learning that occurred in this condition were much lower and statistically non-significant. A reasonable interpretation is that language aptitude is implicated in L2 learning when learners are paying attention to form but not when they are focused exclusively on meaning. It is also possible that different aspects of language aptitude are involved in informal and formal learning. For example, if, as Grigorenko, Sternberg, and Ehrman (2000) suggest, intelligence is a factor in explicit learning, we might expect measures of linguistic-analytic ability to be important here, while the phonemic- coding and memory abilities may play a bigger role in informal learning.

These more recent studies demonstrate how the study of language aptitude is being incorporated into some of the current concerns of SLA. Robinson (2001) argues for a research program that systematically examines the inter- actions between task demands, language aptitude and language learning. He suggests that "the information processing demands of tasks draw differentially on cognitive abilities" (p. 386) and that we need to discover how this affects learning outcomes. There have, in fact, been surprisingly few studies that have examined language aptitude in relation to specific pedagogical tasks as opposed to general achievement. An exception is Nagata, Aline, and Ellis (1999) who examined learners' performance on a one-way information gap task involving listening to and carrying out instructions that contained new L2 words – a task directed at incidental acquisition. They reported moderate but statistically significant correlations between measures of sound-symbol association, grammatical-semantic sensitivity and memory for words on the one hand, and comprehension of the instructions on the other. In contrast, only memory for words was systematically related to post-test measures of the acquisition of the new words. This study suggests that different aspects of language aptitude may be implicated in different kinds of language processing. It also reinforces the point made above, namely, that language aptitude is involved in incidental acquisition but only when the task requires attention to the target forms in question.

There have been proposals for new models of language aptitude. Skehan (1998) suggests that Carrol's original four-part model can be collapsed into a three-part one by incorporating grammatical sensitivity and inductive language learning ability into a single "language analytic ability." He argues that these three aptitudes operate differently during the course of adult language learning. Language analytic ability, which is closely related to general intelligence, is involved throughout, while phonemic-coding ability plays a major role only in the early stages. Memory ability is involved in all stages, but in the case of exceptional learners it is enhanced allowing them to achieve a more or less native-like level of proficiency. In a later publication Skehan (2002) suggests the need to relate different components of aptitude to four macro- stages in language acquisition; noticing (e.g., phonemic coding and working memory), patterning (e.g., language analytic ability), controlling (memory retrieval processes), and lexicalizing (e.g., memory abilities).

Grigorenko, Sternberg, and Ehrman (2000) go further in offering an entirely

new model of language aptitude based on an analysis of "acquisition processes." However, their test appears to perform very similarly to earlier tests. When factor-analyzed, scores loaded on two factors – an intelligence related factor and a language-specific factor, with considerable overlap between the two, while correlations with measures of language learning were of the same order as those reported for the MLAT. However, this test does afford the possibility of achieving a closer match between specific aptitudes and specific psycholinguistic processes and, as such, may provide a useful tool for implementing the research program Robinson (2001) advocates.

Finally, Sternberg (2002) suggests that the theory of "successful intelligence" he has developed through general research on native-speaking students may also be applicable to L2 learning. This theory distinguishes three types of aptitude: analytical intelligence (i.e., the ability to analyze, compare, and evaluate), creative intelligence (i.e., the ability to produce novel solutions to problems), and practical intelligence (i.e., the capacity to adapt to, to shape, and to select environments suited to one's abilities). Sternberg argues that tests have generally targeted analytic and, to a lesser extent, creative intelligence, largely because teaching methods have typically emphasized these. He argues that instruction needs to be matched to the particular type of ability a learner is strong in and emphasizes that practical ability, typically neglected by both testers and teachers, is trainable.

Thus, there has been a notable reawakening of interest in language aptitude in recent years. Some researchers, such as Skehan and Grigorenko, have been concerned to develop new models based on theories of L2 acquisition or of psycholinguistic processing. Other researchers, such as Sternberg, have argued for a more differentiated view of aptitude that recognizes the importance of tacit as well as analytic knowledge.

In contrast to the extensive study of language aptitude there has been a paucity of research that has been directed specifically at memory abilities, although it is not difficult to see how memory might influence acquisition. Individual differences in memory are likely to affect learners' ability to notice and also their ability to rehearse what they have noticed. The results of Nagata's study reported above lend support to this claim. Miyake and Friedman (1998) found that a measure of working memory (the English Listening Span Test) predicted syntactic comprehension that required

the Japanese subjects to draw pictures to show the thematic roles of nouns in sentences. They argue that their study demonstrates that learners with a larger working memory are better placed to take advantage of word order information because they can hold more information in their minds. Mackey (2002) utilized tests of both Phonological Short Term Memory (STM) and Verbal Working Memory (*using a test of listening span*). They found that listeners who reported less noticing of question forms as they performed tasks tended to have low working memory capacities while those that reported more noticing tended to have high capacities. However, the learners' developmental stage was also a factor; less-advanced learners with high Phonological STM noticed more than more advanced learners with similar levels of Phonological STM. Both Miyake and Friedman and Mackey also note, not surprisingly, that working memory scores correlate with measures of language aptitude. A key issue, therefore, is to what extent it is to be considered a separate individual difference factor.

To sum up, there is now ample evidence that cognitive abilities, as measured in particular by language aptitude tests, can account for a substantial proportion of the variance in achievement scores in L2 learners. More interestingly, there is growing evidence that they are implicated differentially in the psycholinguistics processes involved in learning under incidental, implicit, and explicit learning conditions. Future research is likely to be directed at identifying which abilities are related to which processes. A question of considerable interest is whether learners with distinct language aptitude profiles (e.g., strong in language- analytic abilities or strong in memory and practical ability) can achieve success in different ways, as Skehan (1998) and Sternberg (2002) propose.

### 2.1.2. Propensities

According to Rod Ellis theory (Davies, 2004:534), there are major differences between "abilities" and "propensities." Whereas the former are, to a considerable extent, a matter of innate endowment and relatively fixed, the latter involve personal preference and consequently are more fluid. Also, propensities such as learning style allow for the possibility of a continuum, with success in learning achievable in more than one way.

#### 2.1.2.1. Learning Style

In a brief overview of individual differences in second language learning Ehrman, Leaver and Oxford (2003) argue that the actual term, learning style, did not appear until Thelen (1954) used it in discussing group dynamics. Although Allport (1937) proposed the term, cognitive style, to mean ways of living and adapting modulated by personality, we more commonly reserve that term for preferred forms of brain activity associated with information acquisition and processing and consider personality variables to represent another kind of learning style. However, the literature on learning styles uses the terms learning style, cognitive style, personality type, sensory preference, modality, and others rather loosely and often interchangeably.

Cognitive-style research in the 1920s and 1930s addressed such phenomena as perceptual speed and flexibility. The field independence–field dependence (FI–FD) construct in the late 1940s started with Witkin's efforts to distinguish variations in proprioception and perception of the vertical (Witkin & Goodenough, 1981). Later, researchers focused on processing styles from the point of view of ego psychology, which was the origin of such cognitive style scales as levelling–sharpening and impulsivity–reflectivity (Schmeck, 1988). In recent years, the influence of personality variables on learning styles has increased greatly, using, for example the Five Factor Personality Model (Busato, 1999), temperament theory (Thomas & Chess, 1977), and the Myers–Briggs Type Indicator (MBTI) (e.g., Ehrman, 1996; Leaver, 1998; Myers, 1998).

All three of these models overlap in significant ways. The least known in SLA is the concept of temperament (Thomas & Chess, 1977), which refers to biological differences in life and learning. Rothbart and Derryberry (1981) defined it as constitutionally based individual differences in reactivity and self-regulation (influenced over time by heredity, maturation, and experience). It is generally identified with relatively stable traits across ages, situations, and cultures (Rothbart & Derryberry, 1981).

Researchers and practitioners use learning style research with personality and cognitive styles to determine ability, predict performance, and improve classroom teaching and learning (Reiff, 1992; Ehrman, 2001; Ehrman & Oxford, 1995). In recent years, the language-teaching profession has also embraced its interpretation of

the multiple intelligences model (Gardner, 1983, 2000) as a learning style model for curriculum and materials development (e.g., Gabala & Lange, 1997; Hatch, 1997). Another well-known model adopted by language teachers is the *4-MAT* (McCarthy, 1980), which is based on a combination of the brain hemisphericity metaphor (Torrance, 1977) and Kolb's (1984) Jung-based model of cognitive style. M.E. Ehrman / System 31 (2003) 313–330–315.

For the most part, there have been few changes in the models used for learning styles since the 1980s. These few include Sternberg's mental self-government model (Sternberg, 1994), which comes from his study of pragmatic intelligence; this is a metaphor using the US government's legislative, judicial, and executive branches. Another, beginning in the 1990s (Ehrman, 1993, 1998b; Hartmann, 1991), is the use of Hartmann's psychoanalytically based ego boundaries approach to address tolerance of ambiguity and defensive style. Ehrman (1996, 1997) has reworked the field inde- pendence construct by unpacking it into two interactive scales, field independence– dependence and field sensitivity–insensitivity (Fig. 1).

Ehrman and Leaver (2002, 2003; Ehrman, 2001) have reorganized a number of the scales for cognitive styles like random–sequential, levelling–sharpening, and abstract–concrete, along with the Ehrman-defined field (in)dependence/field sensitive styles, under a new, comprehensive construct, called the E&L Construct,2 that labels the overarching categories ''*ectasis-synopsis*'' (to avoid confusion with other, similar but different models variously called analytic–global atomistic–gestalt, analytic–holistic, serialist–holist, and the like). In the Ehrman and Leaver model, an ectenic learner wants or needs conscious control over learning process, whereas a synoptic learner leaves more to preconscious or unconscious processing. The result is that the product of the processing seems to come all at once to the synoptic, whereas it appears to come out in a drawn out and extended way to the ectenic (Ehrman & Leaver, 2002; Ehrman, 2001). The contribution to the learning styles field made by this latest entry is the concept and implementation of a complex pro- file that can combine attributes from each of the two ''*poles*'' in multiple combinations (Ehrman & Leaver, 2003).

#### 2.1.2.2. Motivation

Motivation has always been one of the most important factors to be considered, when we think of individual differences among language learners. MacIntyre (2002) suggests that "*what is motivation?"* is not a good question and this question seems to imply that motivation is a "thing" or a "condition." In spoken English, we use phrases like "she is motivated" or "I can't motivate my students." As a working hypothesis, let us assume that most human behavior is motivated. This helps put motivation for language learning into context, as one of the many motives a person might possess. People are motivated to eat, play games, work, socialize, on so on, with potentially hundreds or thousands of more specific motives that could be cited. The number is not as important as the observation that all of these motives occur, to some smaller or larger degree, at the same time.

Motivation has also been the other major area for research into individual differences. Skehan (in press) states that the most influential approach has been known that due to Robert Gardner. Originally, Gardner distinguished between two motivational orientations, integrative and instrumental. The former concerns learners who want to learn a language to "enter" the community of its speakers, while the latter regards language as a potential tool which may simply be useful. Gardner has researched this orientation distinction extensively, and developed complex social psychological models to account for data, in a wide range of situations, as well as an assessment procedure. The approach has received some criticism, but has nonetheless dominated the field until recently (Dornyei & Skehan). In the last decade or so, there have been some major challenges to the Gardner model, suggesting it is not sufficiently dynamic and rooted in classroom situations. More recently Dornyei (2001) has proposed a more dynamic account of motivation, based on Action Control Theory. In this model, clear distinctions are made between the pre-actional phase (where Dornyei locates much of Gardner's work), the actional phase, where learning activities are situated, and the post-actional phase, where important attributions about success and failure are made.

Besides these studies, MacIntyre (2002) also states that there are a multitude of motives present in every person and these motives wax and wane as time moves along. Given that individual motives rise and fall over time, we can conceptualize motivation theory in general as an attempt to explain that which "...gives behavior its

energy and direction" (Reeve, 1992, p. 3). In other words, questions about motivation tend to address two issues: (1) why is behavior directed toward a specific goal, and (2) what determines the intensity or effort invested in pursuing the goal. A third key question, embedded in the first two, involves a search for explanations for individual differences in motivation: why do different people in the same situation differ in the direction and strength of motivated behavior? Against this larger theoretical backdrop, we can examine the leading theory of motivation in the area of language learning, Gardner's (1985) socio-educational model. This model has been widely accepted in the language learning area, but some recent critics argue that its popularity has led to its unhealthy dominance among language researchers and educators, preventing the exploration of other motivational frameworks. A schematic representation of the socio-educational model, taken from Gardner and MacIntyre (1992), is presented in Figure 1. Gardner (1985), in defining motivation, argues that four elements must be present for a student to be considered motivated: a goal, desire to achieve the goal, positive attitudes, and effort. This is an expansion upon the definition offered above, to include attitudes and desires. Gardner has referred to these as "*affective variables,"* clearly differentiating them from the more purely cognitive factors associated with language learning such as intelligence, aptitude and related variables (Gardner & MacIntyre, 1992, 1993a). This definition of motivation is consistent with definitions in the general literature on motivation, but allows Gardner's model to address a widerange of issues under the motivation rubric. It also allows for tapping of the link between motivation and emotion, an essential link that is often missing from motivational concepts emerging cognitively oriented psychology.

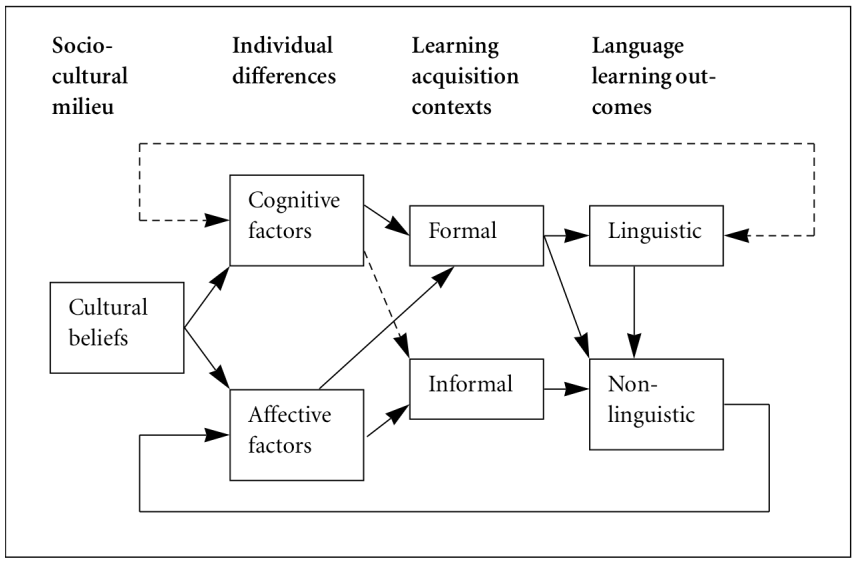


**Figure 1.** The socio-educational model (Gardner & MacIntyre, 1992)

Four major parts of the model are shown: the socio-cultural milieu, individual differences, language acquisition contexts, and language learning outcomes. According to Gardner and MacIntyre (1992), the socio-cultural milieu plays a role in influencing both cognitive and affective individual differences among language learners. Affective variables include attitudes and motivation, language anxiety, and self-confidence. Cognitive factors include variables such as intelligence, language aptitude, and language learning strategies. These individual differences, especially the affective variables, have been the focus of most of the studies done by Gardner and his colleagues (see Gardner, 1985). Gardner and MacIntyre (1992) state that "there are probably as many factors that might account for individual differences in achievement in a second language as there are individuals" (p. 212). Given this proviso, it is well known that Gardner's primary research interest is directed toward the integrative motive, its key concepts measured by the Attitudes/Motivation Test Battery (AMTB, Gardner, 1985). The focus on the integrative motive allowed the socio-educational model to concentrate on a specific subset of variables in a veritable conceptual jungle, and this, coupled with the AMTB, allowed research to proceed in an orderly, programmatic fashion.

The three major variables comprising the integrative motive are attitudes toward the learning situation, integrativeness, and motivation. We can divide the integrative motive into integrativeness and motivation. Integrativeness, which begins with the cultural beliefs present in the socio-cultural milieu, reflects the individual's

level of interest in social interaction with the target language group and attitudes toward the learning situation. The AMTB measures integrativeness with scales tapping attitudes toward the target language group, general interest in foreign languages, and a set of integrative orientation items reflecting reasons for language study based on attraction to the tar- get language group. The socio-cultural milieu also fosters attitudes within the learning situation that are embodied, at least in part, by the teacher as a rep- resentative of the target language group. The AMTB captures these attitudes with respect to the teacher and the language course. Combined, these two categories of attitudes (integrativeness and attitudes toward the learning situation) supply the underlying direction in the learner's behavior.

It should be stressed that Gardner (1996) proposed that the effects of integrative motivation on language learning are largely the result of the motivation component. This component is defined by Gardner as a combination of motivational intensity, desire to learn the language, and attitudes toward learning the language. Gardner emphasizes that it is the active learner, the student who engages with the language, who can be considered motivated. The student who endorses the integrative attitudes, or more simply an integrative orientation or goal, but who does not show effort and engagement with the language, is simply not a motivated learner. This satisfies Gardner's (1985) four-part definition of motivation, having a goal, desire to achieve the goal, positive attitudes, and exerting effort. Gardner and MacIntyre (1993a) argue that this helps to explain why studies of orientations alone produce inconsistent correlations with various specific measures of language achievement (such as cloze tests and course grades).

To complete the socio-educational model, Gardner and MacIntyre (1992) propose that individual differences act in both formal and informal language learning situations, generating linguistic and non-linguistic outcomes. Formal situations refer primarily to classroom settings where direct language instruction is provided. Both cognitive and affective variables operate directly in for- mal contexts where the focus is on teaching language skills. Informal situations refer to language acquisition contexts where learning is incidental to some other activity, as when one "picks up" another language from friends or co- workers during interactions with them. In informal contexts, the exposure to the language can be considered voluntary; one might encourage or discourage friends or co-workers from using the L2. Gardner and

MacIntyre (1992) suggest that, because entry into these situations is voluntary, motivation will play a substantial role in an individual's exposure to situations that provide such opportunities for language learning. Once an individual has decided to enter informal situations, both cognitive and affective variables will operate.

#### 2.1.2.3. Anxiety

Language anxiety has long been included as a variable in Gardner's socio-educational model, but within the model it has not received the attention assigned motivation nor has it been assigned a consistent place (MacIntyre & Gardner, 1991). In some formulations, anxiety is an antecedent to motivation (Tremblay & Gardner, 1995) and in others a product of proficiency (Gardner, Tremblay, & Masgoret, 1997). Gardner and MacIntyre (1993a) suggest that the two variables have a reciprocal relationship, that anxiety affects motivation and motivation affects anxiety. Richard Clément (1980, 1986) has proposed a model in which anxiety combines with self-perceptions of language proficiency to create self-confidence which is viewed as a second motivational process. The relationship between anxiety and L2 proficiency is a larger issue and raises an important question about causal direction.

Does anxiety cause poor performance or does poor performance cause anxiety? (Young, 1986). This is the prototypical question asked about the interpretation of correlations. Take, for example, a study by MacIntyre and Gardner (1994b) where language anxiety was shown to correlate with a number of specific L2 performance measures. Is this evidence that difficulties in language learning create anxiety or that anxiety reduces the quality of performance on these tasks? It is possible that a third variable, such as motivation or aptitude, might be influencing both test scores and anxiety levels. Along these lines, Sparks and Ganschow (1991, 1993a, 1993b) have declared that anxiety is epiphenomenal, proposing that differences in native language linguistic coding create different levels of achievement, and that anxiety is an unfortunate byproduct of poor performance.

A study by MacIntyre and Gardner (1994a) essentially puts the key part of this question to rest, demonstrating that anxiety-arousal can lead to poor L2 performance. Drawing on a model proposed by Tobias (1979, 1980, 1986), MacIntyre and Gardner (1994a) attempted to create anxiety at each of three stages of cognitive processing in order to observe its effects. A video camera was used in order to arouse anxiety

during a computer-mediated vocabulary learning session that had been split into the input stage (*where material is encountered for the first time*), the processing stage (*where connections between new material and existing knowledge are made*), and the output stage (*where knowledge is demonstrated*). Experimental groups were created by randomly assigning learners to a control group or one of three anxiety-arousing conditions. During the study, an anxiety-provoking video camera was introduced immediately prior to the input stage, the processing stage, or the output stage. The control group never saw the video camera. Results showed that anxiety increased most, and performance suffered most, immediately after the camera was introduced. As learners adapted to the camera and their anxiety dissipated, some recovery from the effects of anxiety was evident, as expected. This provides support for the idea that anxiety creates disruption in cognitive activity at each of the stages. Further, the study showed that as anxiety dissipated, learners were able to partially compensate for difficulties at previous stages by increased effort, showing the link between emotion and motivation. To be sure, these results do not rule out the possibility that anxiety might result from poor performance, or that both anxiety and poor performance could result from other factors, such as linguistic coding deficits. However, these results do clearly indicate that anxiety can play a causal role in creating individual differences in language achievement.

#### 2.1.2.4. Willingness to Communicate

According to Ellis (2004) a propensity factor that has attracted recent attention is "willingness to communicate" (WTC), defined as "the intention to initiate communication, given a choice" (MacIntyre, 2001, p. 369). This factor is of obvious interest to communicative language teaching (CLT), which places a premium on learning through communicating; learners with a strong WTC are likely to benefit more from CLT while those who are not so willing may learn better from more traditional instructional approaches. Interestingly, McIntyre reports that WTC inside the classroom correlated strongly with WTC outside in anglophone learners of L2 French in Canada, demonstrating that WTC is a stable, trait-like factor. However, Dörnyei and Kormos (2000) found that Hungarian students' WTC in the classroom was influenced by their attitudes to the task. Strong, positive correlations were found between a measure of WTC and the amount of English produced while performing a

communicative task in the case of learners who expressed positive attitudes to the task but near zero correlations in the case of learners with low task attitudes. It would seem then that learners' WTC depends in part on their personality and in part on their intrinsic motivation to perform specific classroom activities. Again, then, this suggests that teachers can enhance their students' WTC by ensuring they hold positive attitudes to the tasks they are asked to perform.

#### 2.1.2.5. Personality

When we think of individual differences among language learners, personality springs quickly to mind as one of the most important of these variables. Personality within learners is one of factors determining their success in acquiring second language. This idea is supported by many scholars such as the following:

Bernard Spolsky in his *Conditions for Second Language Learning* (1989) mentions several aspects in each individual that support L2 learning; they are Intelligence, Aptitude, Learning Styles and Strategies, **Personality,** and Anxiety. Intelligence of students (p.103) is highly correlated to the school related L2 learning but not in functional communication. Aptitude as second aspect is closely related to the intelligence. To be successful in learning, students need to figure out their own style of learning best; that is what third aspect refers to. Personality and anxiety is different form from applying correct learning style. They are more 'individual' than 'social'.

In the current report by Yan Zhang (2008, cited from Gass & Selinker, 1994; Cook, 1996), he also quotes: A number of theories hold that personality factors significantly influence the degree of success that individuals achieve in learning a second language based on the assumption that some features of the learner's personality might encourage or inhibit second language learning. (p.1)

Skehan (1989) gives opinion that things affecting English learning are such as intelligence, language aptitude, motivation, age, personalities of learners and et cetera (in Wakamoto, 2000: 1).

Personality is the sum total of an individual's characteristics which make him unique. (Hollander, 1971)

Personality consists of several variables and they are found different from one person to another. Two scholars' of Educational Psychology field say as follows:

Brown (2000: 142-154) mentions 'personality' has several features, they are:

1. Self esteem: the way a person sees himself
2. Inhibition: to adapt the language ego
3. Risk-taking: how to 'gamble' in learning new language
4. Anxiety: associated with uneasiness, frustration, or worry
5. Empathy: relation between language and society

Additionally, since personality of each person varies, many scholars have pointed out that learners or teachers should take into account this aspect in the purpose of skill improvement in second language learning (Brown, 2000).

Ellis, (1994) also states that intuitively, personality is a key factor for explaining individual differences in L2 learning. Not surprisingly, therefore, a number of personality variables have been investigated, including anxiety (as a trait), risk-taking, tolerance of ambiguity, empathy, self-esteem, and inhibition. The aspect of personality that has received the greatest attention, however, is extraversion.

Personality, where extraversion exists, in general is viewed to be responsible factors for learners' success in learning second language or L2 (Cook, 1996 in Zhang (2008); Spolsky, 1989; Rod Ellis in Celder (2004)).

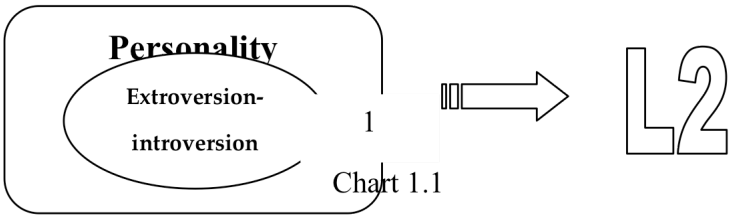


Chart 1.1
Extraversion, Personality and L2 Relationship

**Figure 2.** Extroversion, Personality and L2 Relationship

In research, extraversion appears to receive great attention by scholars to study among other traits in personality (Davies, 2004: 541). Still in the same page of the book, Strong (1983) states that from 6 out to 8 studies that employed oral language test, extroverts performed better than introverts. Meanwhile, Dewaele and Furnham (1999) analyze 30 researches and their conclusion is:

> *"Extraverts were found to be generally more fluent than introverts in both the L1 and L2. They were not, however, necessarily more accurate in their L2, which reinforced the view that fluency and accuracy are separate dimensions in second language proficiency"* (p. 532)

Generally speaking, extraversion is viewed as a factor having a positive effect on the development of L2 basic interpersonal skills, as extraverted learners are likely to interact more and more easily with other speakers of the L2. 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. In general, however, there has only been weak support for these hypotheses. Studies (Carrell, Prince, & Astika, 1996) have found only weak and generally non-significant correlations between personality and measures of L2 proficiency.

Two surveys of the research, however, suggest that extraverted learners may indeed have an advantage when the criterion measure is "natural communicative language." Strong (1983) reviewed the results of 12 studies that had investigated extraversion or similar traits and showed that, in 6 of the 8 studies that included a measure of spontaneous oral language, extraverted learners did better. Dewaele and Furnham (1999) reviewed some 30 studies of personality and concluded: "Extraverts were found to be generally more fluent than introverts in both the L1 and L2. They were not, however, necessarily more accurate in their L2, which reinforced the view that fluency and accuracy are separate dimensions in second language proficiency". They point out that an effect for extraversion only becomes evident on measures of oral communicative speech and that the strength of the relationship depends on the task – the more complex the task, the stronger the relationship. Drawing on Eysenck's theory of personality, they claim that extraverts are less easily distracted when operating from short-term memory, are better equipped physiologically to resist stress, and thus have lower levels of anxiety, which allows for greater attentional selectivity. They suggest that extraverts and introverts may make different choices in the accuracy/speed tradeoff, especially when they are required to perform in the L2 under pressure. Again, then, we see an attempt to relate a factor responsible for individual differences to an information processing view of L2 acquisition.

## 2.2. Different Approaches to the study of Personality

In the psychology of the language learner, Dornyei (2005) mentions that personality is such a crucial aspect of psychology that every main branch of psychological research has attempted to contribute to the existing knowledge in this area. Thus, the scope of theorizing can be as broad as the differences among the various paradigms in psychology. This is why the field of personality is "filled with issues that divide scientists along sharply defined lines and lead to alternative, competing schools of thought" (Pervin & John, 2001, p. 25). These competing schools and paradigms have, in turn, identified a plethora of personality factors that sometimes differ only in label while referring nearly to the same thing, or—which can be more confusing—have the same label while measuring different things. In this rather chaotic 'Tower of Babel' (Funder, 2001) it has been a most welcome development in the past 15 years that a new consensus has emerged in personality psychology with regard to the main dimensions of human personality. As a result, current research in the field is dominated by only two taxonomies focusing on personality traits, Eysenck's three-component construct (Eysenck & Eysenck, 1985) and the 'Big Five' model (Goldberg, 1992, 1993; McCrae & Costa, 2003). Furthermore, the two models overlap considerably: Eysenck's model identifies three principal personality dimensions, contrasting (1) *extraversion* with *introversion*, (2) *neuroticism* and *emotionality* with *emotional stability*, and (3) *psychoticism* and *toughmindedness* with *tender-mindedness*. The Big Five construct retains Eysenck's first two dimensions, but replaces psychoticism with three additional dimensions of *conscientiousness*, *agreeableness,* and *openness to experience*. A wide variety of empirical studies have tested these models and found that they provide a good representation of the central features of personality. At present the Big Five construct in particular is gaining momentum to the extent that it seems almost ubiquitous in the current literature (Funder, 2001). I give a detailed description of the Big Five construct in a separate section below, but let me address some more general issues first.

To start with, although the leading role of the Big Five model in research publications is undeniable, we should note that there is more to personality psychology than the Big Five trait paradigm. Psychoanalytic theories are still active areas and insightful contributions are also made by research in the behaviorist,

social-cognitive, and humanistic vein. Therefore, one challenge for the field is to integrate the rather disparate approaches. A second important issue, which is related to second language studies more directly, concerns the impact of *situational factors* on the variation of personality and behavior. Because this issue is also relevant to some other ID variables (most notably motivation), let us look at it more closely.

Although personality psychology has, by intention, concentrated on stable and distinctive personality properties since its beginnings, it has become increasingly clear that by assuming absolute cross-situational consistency of most traits we can understand only part of the picture because there is evidence for cross-situational variability. As Pervin and John (2001) summarized, "To a certain extent people are the same regardless of context, and to a certain extent they also are different depending on the context" (p. 290). Thus, a broader picture of personality requires complementing static trait- centered theories describing the structure of personality with more dynamic models that describe the situated processes associated with personality in specific contexts. The fact that the latter processes exist are well-known even for non-specialists, evidenced by sayings such as *"this brought out the best/worst of me..."* and there has been a significant amount of research examining these processes, for example in the psychoanalytic paradigm. What is needed in future research is an integration of the two, seemingly conflicting, perspectives into a unifying framework. Although this is a definite challenge, it is not an impossible task because, as Mischel (1999) argues, "dispositions and processing dynamics are two complementary facets of the same phenomena and the same unitary personality system" (p. 56). Finally, before examining the Big Five model in more detail, Dornyei (2005) briefly mentions the third challenge for the study of personality as below:

> *"Along with several other scholars, Cooper (2002) emphasizes that our job is not finished by arriving at a personality structure model that most researchers would accept (such as the Big Five model): Merely establishing the structure of personality is only the first step in any scientific study of individual differences, and the logical subsequent step is to investigate the development of personality. It is evident that the potential determinants of an adult's personality include both environmental factors related to the nature of the home in which the person was raised as a child, and biological factors related to hereditary factors associated with the genetic make-up. Here again, however, we find an unfortunate separation of research directions between scholars studying these aspects, highlighting the need for future integration. In conclusion, although the study of human personality has generated a great amount of knowledge, personality psychology has still a long way to go before a comprehensive account of the interrelationship of all the relevant facets and factors can be achieved. Therefore, it is likely to remain an active and developing field in psychology for the foreseeable future" (p.232)*

### 2.2.1. The Big Five Personality Traits

Dornyei (2005) claims that research that intends to apply personality factors as independent, background variables requires a fairly straightforward and parsimonious system that still captures a considerable proportion of the variance. The *Big Five model* offers exactly this, which explains the overwhelming current popularity of the theory. Furthermore, he also suggests that the five proposed dimensions of the theory make common sense even to non-specialists, which is partly due to the genesis of the construct. Dornyei also claims that the original and quite ingenious idea behind the theory goes back to research conducted in the 1930s and 1940s by Allport, Odbert, and Cattell (for more details, see Cooper, 2002): These scholars assumed that if there was a certain consistency about how people behaved, then this must be reflected in *adjectives* in the language people used to characterize each other. Collecting all the possible such adjectives in a given language would, therefore, provide a comprehensive list of personality factors, and by submitting these adjectives to factor analysis we might distill a smaller number of underlying personality dimensions or traits. As De Raad (2000) summarized in the *Encyclopedia of Psychology*, it took several decades before this psycholexical approach produced the Big Five as a solid framework, and the main researchers who were responsible for the final breakthrough were Lewis Goldberg, Robert McCrae, and Paul Costa (e.g., Goldberg, 1992, 1993; McCrae & Costa, 2003). Costa and McCrae have also developed an assessment instrument, the 'NEO-PI,' that operationalizes the model in a psychometrically appropriate manner (Table 1).

To sum up, in contemporary psychology, the "Big Five" factors of personality are five broad domains or dimensions of personality which have been scientifically discovered to define human personality at the highest level of organization (Goldberg, 1993). These five over-arching domains have been found to contain and subsume more-or-less all known personality traits within their five domains and to represent the basic structure behind all personality traits. They have brought order to the often-bewildering array of specific lower-level personality concepts that are constantly being proposed by psychologists, which are often found to be overlapping and confusing. These five factors provide a rich conceptual framework for integrating all the research findings and theory in personality psychology. The big

five traits are also referred to as the "Five Factor Model" or FFM (Costa & McCrae, 1992), and as the Global Factors of personality (Russell & Karol, 1994).

Costa and McCrae (1992) examine the five main components of the Big Five construct (the initials of which enable the acronym OCEAN) as described in Table 2, all the five dimensions are rather broad, comprising several important facets, which are usually referred to as *primary traits*. Because the model originated in adjectives, an effective way of describing the main dimensions is listing some key adjectives they are associated with at the high and the low end.

1. Neuroticism High scorers are worrying, anxious, insecure, depressed, self-conscious, moody, emotional, and unstable; low scorers are calm, relaxed, unemotional, hardy, comfortable, content, even tempered, and self-satisfied.

2. Extroversion High scorers are sociable, gregarious, active, assertive, passionate, and talkative; low scorers are passive, quiet, reserved, withdrawn, sober, aloof, and restrained.

3. Openness to Experience High scorers are imaginative, curious, flexible, creative, moved by art, novelty seeking, original, and untraditional; low scorers are conservative, conventional, down-to-earth, unartistic, and practical.

4. Agreeableness High scorers are friendly, good-natured, likeable, kind, forgiving, trusting, cooperative, modest, and generous; low scorers are cold, cynical, rude, unpleasant, critical, antagonistic, suspicious, vengeful, irritable, and uncooperative.

5. Conscientiousness High scorers are systematic, meticulous, efficient, organized, reliable, responsible, hard-working, persevering, and self-disciplined; low scorers are unreliable, aimless, careless, disorganized, late, lazy, negligent, and weak-willed. These adjectives have been selected because they are the most commonly cited ones in the various descriptions of the Big Five model, including Costa and McCrae's (1992) manual of the 'NEO-PI' described above (Table 2). When we look at the list it becomes evident that some of the scales are rather 'skewed' in terms of their content, with one end of the scale being clearly more positive than the other (in the Conscientiousness and Agreeableness scales, for example, nobody would want to score low).

The NEO-PI-R is a self-report paper and pencil questionnaire, covering the five main domains of the Big Five model, each represented by six lower level facets. These facets are, in turn, represented by 8 items each, resulting in a total of 240 items.

| **Dimensions and facets** | **Description and sample items (in italics)** |
|---|---|
| *Neuroticism*<br><br>• Anxiety<br>• Angry Hostility<br>• Depression<br>• Self-Consciousness<br>• Impulsiveness<br>• Vulnerability | This scale covers emotional adjustment and stability at one extreme, and maladjustment and neuroticism at the other.<br>• *I am easily frightened.*<br>• *I often get angry at the way people treat me.*<br>• *Sometimes I feel completely worthless*<br>•*At times I had been so ashamed I just wanted to hide.*<br>• *I have trouble resisting my cravings*<br>• *When I'm under a great deal stress, sometimes I feel like I'm going to pieces.* |
| *Extraversion*<br><br>• Warmth<br>• Gregariousness<br>• Assertiveness<br>• Activity<br>• Excitement-Seeking<br>• Positive Emotions | This scale reflects extraversion at one extreme and introversion at the other.<br>• *I really like most people I meet.*<br>• *I like to have a lot of people around me.*<br>• *I am dominant, forceful, and assertive.*<br>• *I usually seem to be in a hurry.*<br>• *I like to be where the action is.*<br>• *Sometimes I bubble with happiness.* |
| *Openness to Experience*<br><br>• Fantasy<br>• Aesthetics<br>• Feelings<br>• Actions<br>• Ideas<br>• Values | This scale taps an openness to new experiences, thoughts, and processes at one end, and a rejection of such at the other end.<br>• *I have an active fantasy life.*<br>• *I am intrigued by the patterns I find in art and nature.*<br>• *How I feel about things is important to me.*<br>• *I often try new and foreign foods.*<br>• *I have a lot of intellectual curiosity.*<br>• *I consider myself broad-minded and tolerant of other peoples' lifestyles.* |
| *Agreeableness*<br><br>• Trust | This scale represents a type of 'easy-going' at one end and 'hard-headed' at the other end<br>• *I believe that most people are basically* |

| | |
|---|---|
| • Straightforwardness<br>• Altruism<br>• Compliance<br>• Modesty<br>• Tender-Mindedness | *well- intentioned.*<br>*• I would hate to be thought of as a hypocrite.*<br>*• I try to be courteous to everyone I meet.*<br>*• I hesitate to express my anger even when it's justified.*<br>*• I tried to be humble.*<br>*• We can never do too much for the poor and elderly.* |
| *Conscientiousness*<br><br>• Competence<br>• Order<br>• Dutifulness<br>• Achievement Striving<br>• Self-Discipline<br>• Deliberation | This scale reflects a complex trait sometimes called 'Will to Achieve' or 'Character,' reflecting a high desire at one end and a lower desire at the other.<br><br>*• I pride myself on my sound judgment.*<br>*• I never seem to be able to get organized.* (Re-versed score)<br>*• When I make a commitment, I can always be counted on to follow through.*<br>*• I've worked hard to accomplish my goals.*<br>*• I am a productive person who always gets the job done.*<br>*• I always consider the consequences before I take action.* |

**Table 2.** A description of Costa and McCrae's (1992) NEO-PI

#### 2.2.1.1. Neuroticism

Neuroticism refers to emotional stability-instability. It is defined as the tendency to experience negative emotions, such as anger, anxiety, or depression. It is sometimes called emotional instability. Those who score high in neuroticism are emotionally reactive and vulnerable to stress. They are more likely to interpret ordinary situations as threatening, and minor frustrations as hopelessly difficult. Their negative emotional reactions tend to persist for unusually long periods of time, which means they are often in a bad mood. These problems in emotional regulation can diminish the ability of a person scoring high on neuroticism to think clearly, make decisions, and cope effectively with stress.

At the other end of the scale, individuals who score low in neuroticism are less easily upset and are less emotionally reactive. They tend to be calm, emotionally stable, and free from persistent negative feelings. Freedom from negative feelings does not mean that low scorers experience a lot of positive feelings.

Matthews and Ian (1998) also defines Neuroticism as following:

Neuroticism is a fundamental personality trait in the study of psychology. It is an enduring tendency to experience negative emotional states. Individuals who score high on neuroticism are more likely than the average to experience such feelings as anxiety, anger, guilt, and depressed mood.

Golemen (1997) also suggests that they respond more poorly to environmental stress, and are more likely to interpret ordinary situations as threatening, and minor frustrations as hopelessly difficult. They are often self-conscious and shy, and they may have trouble controlling urges and delaying gratification. Neuroticism is associated with low emotional intelligence, which involves emotional regulation, motivation, and interpersonal skills. Additionally, Hettema, Neale, Myers, Pewscott and Kendler (2006) claims that it is also a risk factor for "internalizing" mental disorders such as phobia, depression, panic disorder, and other anxiety disorders (traditionally called neuroses).

According to *International Personality Item Pool,* sample neuroticism items are;

**1.** I am easily disturbed.

**2.** I change my mood a lot.

**3.** I get irritated easily.

**4.** I get stressed out easily.

**5.** I get upset easily.

**6.** I have frequent mood swings.

**7.** I often feel blue.

**8.** I worry about things.

**9.** I am relaxed most of the time.

**10.**I seldom feel blue.

**2.2.1.2. Extroversion**

Extroversion and introversion in their meaning:

a. Douglas Brown made definition on extroversion and introversion.

Extroversion is the extent to which a person has a deep-seated to receive ego enhancement, self-esteem, and a sense of wholeness *from other people* as opposed to

receiving that affirmation within oneself. Extrovert is not always talkative and they need other people to position themselves in society. Introvert is described: "...is the extent to which a person derives a sense of wholeness and fulfillment apart from reflection of this self from other people". In contrary to our current perception, introvert may have internal potential power or merit that we perhaps do not notice. (Brown, 2000: 155)

b. In The Role of Personality in Second Language Acquisition by Yan Zhang (2008), the definition is written as following:

> *"Extrovert means a person more interested in what is happening around him than in his own thoughts and emotions. That is to say, the extrovert experiences the world more through contact with others and shared experience than through self examination or study. While its counterpart, introvert is a person who is more interested in his own thoughts and feelings than in things outside himself, and is often shy and unwilling to speak or join in activities with others."* (p.1)

c. Extrovert people need other people to get energy, and become the last person who want to leave parties. Introvert, on the other hand, need time for being alone, spending time for individual activities and have few but intimate friends (Adamopoulos, 2004: 4).

To sum up, some characteristics of extrovert people are: easy going, talkative, going out a lot, spending more times with people than reading books, risk taker, etc. On the other edge, introvert people prefer to enjoy time by themselves, tend to have few but close friends, and not to talk so much.

Whether extrovert or introvert an individual is, no scholars mention anything about 'good' or 'better' attitude. Douglas notes that Western views about introvert people need to be 'reviewed' since extrovert people in fact need other people to be convenient, to express themselves, while introvert is enough by their own. Even Adamopulous describes extrovert as in need to get energy from others (2004: 4).

In case of social life, perhaps extrovert people are considered more desirable. It is due to their open minded characteristic to communicate with many people; in parties, offices, neighborhood etc. However, this does not necessarily signify that introvert tend to be least person to converse with, since they are bad people for instance. It is just the way they express themselves differ from those who are extrovert.

According to *International Personality Item Pool,* sample extraversion items:

1.I am the life of the party.

2.I don't mind being the center of attention.

3.I feel comfortable around people.

4.I start conversations.

5.I talk to a lot of different people at parties.

6.I am quiet around strangers.

7.I don't like to draw attention to myself.

8.I don't talk a lot.

9.I have little to say.

#### 2.2.1.3. Openness to Experience

Goldberg (1993) suggests that openness to experience is one of five major domains which are used to describe human personality.

McCrae and John (1992) claims that openness involves active imagination, aesthetic sensitivity, attentiveness to inner feelings, preference for variety, and intellectual curiosity.

Costa and McCrae, (1992) also thinks that a great deal of psychometric research has demonstrated that these qualities are statistically correlated. Thus, openness can be viewed as a global personality trait consisting of a set of specific traits, habits, and tendencies that cluster together.

**Openness** is a general appreciation for art, emotion, adventure, unusual ideas, imagination, curiosity, and variety of experience. The trait distinguishes imaginative people from down-to-earth, conventional people. People who are open to experience are intellectually curious, appreciative of art, and sensitive to beauty. They tend to be, compared to closed people, more creative and more aware of their feelings. They are more likely to hold unconventional beliefs.

People with low scores on openness tend to have more conventional, traditional interests. They prefer the plain, straightforward, and obvious over the complex, ambiguous, and subtle. They may regard the arts and sciences with suspicion or even view these endeavors as uninteresting.

According to Goldberg's *International Personality Item Pool,* sample openness items

1.I have a rich vocabulary.

2.I have a vivid imagination.

3.I have excellent ideas.

4.I spend time reflecting on things.

5.I use difficult words.

6.I am not interested in abstractions.

7.I do not have a good imagination.

8.I have difficulty understanding abstract ideas.

#### 2.2.1.4. Agreeableness

Graziano and Eisenberg (1997) describe agreeableness as a tendency to be compassionate and cooperative rather than suspicious and antagonistic towards others. The trait reflects individual differences in general concern for social harmony. Agreeable individuals value getting along with others. They are generally considerate, friendly, generous, helpful, and willing to compromise their interests with others.

Agreeable people also have an optimistic view of human nature. They believe people are basically honest, decent, and trustworthy. Jakobwitz and Egan (2006) also claims that agreeableness can be viewed as the opposite of Machiavellianism. It is also similar conceptually to Alfred Adler's idea of social interest.

Disagreeable individuals place self-interest above getting along with others. They are generally unconcerned with others' well-being, and are less likely to extend themselves for other people. Sometimes their skepticism about others' motives causes them to be suspicious, unfriendly, and uncooperative.

According to *International Personality Item Pool,* sample agreeableness items

1.I am interested in people.

2.I feel others' feelings.

3.I have a soft heart.

4.I make people feel at ease.

5.I sympathize with others' feelings.

6.I take time out for others.

7.I am not interested in other people's problems.

8.I am not really interested in others.

9.I feel little concern for others.

10.I insult people.

11.I like being isolated.

#### 2.2.1.5. Conscientiousness

Golemen, D. (1997) describes conscientiousness as a tendency to show self-discipline, act dutifully, and aim for achievement. The trait shows a preference for planned rather than spontaneous behavior. It influences the way in which we control, regulate, and direct our impulses. Conscientiousness includes the factor known as Need for Achievement (NAch).

Conscientiousness is one of five superordinate traits in the "Big Five model" of personality which also consists of extraversion, neuroticism, openness to experience, and agreeableness. Two personality tests that assess these traits are Costa and McCrae's NEO PI-R and Goldberg's NEO-IPIP (Costa, P. T. & McCrae, R. R. (1992)). According to these models, conscientiousness is considered to be a continuous dimension of personality, rather than a categorical "type" of person. Scores in conscientiousness follow a normal distribution.

Conscientiousness is related to impulse control, but it should not be confused with the problems of impulse control found in neuroticism. People high on *neurotic* impulsiveness find it difficult to resist temptation or delay gratification. Individuals who are low on *conscientious* self-discipline are unable to motivate themselves to perform a task that they would like to accomplish. These are conceptually similar but empirically distinct (Costa, P. T. & McCrae, R. R. (1992))

Golemen, D. (1992) also suggests that the trait cluster of conscientiousness overlaps with other models of personality, such as C. Robert Cloninger's Temperament and Character Inventory, in which it is called *self-directedness*. It also includes the specific traits of *rule consciousness* and *perfectionism* in Cattell's 16 PF

model. Many of the behaviors associated with conscientiousness fall under the broad category of emotional intelligence. Traits associated with conscientiousness are frequently assessed by self-report integrity tests given by various corporations to prospective employees.

Gosling, S. (2008) claims that people who score high on the trait of conscientiousness tend to be more organized and less cluttered in their homes and offices. For example, their books tend to be neatly shelved in alphabetical order, or categorized by topic, rather than scattered around the room. Their clothes tend to be folded and arranged in drawers or closets instead of lying on the floor. The presence of planners and to-do lists are also signs of conscientiousness. Their homes tend to have better lighting than the homes of people who are low on this trait.

According to Dewitt and Schouwenburg (2002), conscientiousness is related to successful academic performance in students. Low levels of conscientiousness are strongly associated with procrastination.

According to *International Personality Item Pool,* sample conscientiousness items

1.I am always prepared.

2.I am exacting in my work.

3.I follow a schedule.

4.I like order.

5.I pay attention to details.

6.I leave my belongings around.

7.I make a mess of things.

8.I often forget to put things back in their proper place.

9.I shirk my duties.

## 2.3. Studies on the Five Factor Model of Personality

One of the remarkable researches on the Five Factor Model of Personality is The Geographic Distribution of Big Five Personality Traits: Patterns and Profiles of Human Self-Description Across 56 Nations [in press, *Journal of Cross-Cultural Psychology*, September 2006]. They claim that The Big Five Inventory (BFI; V. Benet-Martínez & O. P. John, 1998) is a self-report measure designed to assess the high-order personality traits of extraversion, agreeableness, conscientiousness, neuroticism, and openness. As part of the International Sexuality Description Project, the BFI was translated from English into 28 languages and administered to 17,837 individuals from 56 nations. The resulting cross-cultural dataset was used to address three main questions. First, does the factor structure of the English BFI fully replicate across cultures? Results indicated that the five-dimensional structure of the BFI was robust across major regions of the world, including North America, South America, Western Europe, Eastern Europe, Southern Europe, the Middle East, Africa, Oceania, South/Southeast Asia, and East Asia. Second, how valid are the BFI trait profiles of individual nations? Results showed that trait levels provided by the BFI were related in predictable ways to self-esteem, sociosexuality, and to national personality profiles previously reported in the literature. Third, how are personality traits distributed throughout the world? Findings suggested, for example, that people from the geographic regions of South America and East Asia were significantly different in openness from those inhabiting other world regions, with the former reporting more openness and the latter reporting less openness than people from other regions.

The research reported in this paper is a result of the International Sexuality Description Project (ISDP), a collaborative effort of over 100 social, behavioral, and biological scientists from 56 nations (Schmitt, 2002). These 56 nations were grouped into 10 geographic world regions. The world region of North America included 4,047 individuals assembled from three nations. The nation of Canada was represented by three independent, English-speaking samples from the Canadian provinces of Ontario, Alberta, and British Columbia; as well as, a French-speaking sample from the province of Quebec. The latter sample was administered the ISDP survey as translated/back-translated into French. The translation/back-translation

procedures will be addressed later. All Canadian samples were college students who volunteered for the study. Thirteen independent samples were obtained from the United States (N = 2,793). This included at least one sample from the states of New York, Illinois, Kentucky, South Carolina, Florida, Alabama, Texas, New Mexico, Idaho, California, and Hawaii. In the sample from Hawaii, 75% of individuals described themselves as "Asian American" or "Native Hawaiian." The samples from mainland USA consisted of 66% European-American (non-Hispanic), 10% African-American, 8% Hispanic-American, 5% Asian-American, 2% Native-American, and 9% Other or non-descriptive. The North American world region also included one sample from Mexico. The Mexican sample was comprised of general community members who volunteered for the study. Five cultures from the South American region were included in the ISDP (N = 1,042). This included samples from Peru, Bolivia, Chile, Argentina, and Brazil. As seen in Table 1, all of these samples were comprised of college students. All volunteered for the study. The Chilean cultural region included two independent samples, one was not administered surveys containing explicit sexual questions. All South American samples were administered the ISDP survey as translated and back-translated into Spanish, except for the Brazilian sample who completed the survey as translated and back-translated into Portuguese.

Nine cultural regions from Western Europe were represented in the ISDP (N = 2,975). This included one sample each from Finland, Northern Ireland, the Netherlands, Belgium (Flanders region), France, and Switzerland (German-speaking region). Multiple samples were collected from England, Germany, and Austria. The samples from England, Germany, and Austria included both college students and general community members. Eleven cultural regions from Eastern Europe were represented in the ISDP (N = 2,795). This included one sample each from Estonia, Latvia, Lithuania, Poland, the Czech Republic, Slovakia, Ukraine, Romania, Serbia (Yugoslavia), Croatia, and Slovenia. All Eastern European samples were administered the ISDP survey in their native languages.

The ISDP had six cultural regions to represent Southern Europe (N = 1,345), including Portugal, Spain, Italy, Malta, Greece, and Cyprus. The Malta region included two samples of college students. It is important to acknowledge that the placement of cultures into these three European "regions" may be viewed by some as

problematic, and certainly that more than three basic regions exist in Europe, including Northern, Central, and other divisions. However, given the number and geography of nations included in the ISDP, we chose these three divisions in order to economize our presentation while maintaining genuine regional variation across the European continent (Schmitt, 2002).

Four cultures from the Middle East world region were included in the ISDP (N = 1,344). This included two samples from Turkey; one comprised of college students and the other of general community members. The placement of Turkey in the Middle East region may be viewed as problematic, in that Turkey could have been placed into several possible categories, including Southeastern Europe, a Mediterranean region, or a Southwestern Asia category. However, for comparative purposes using our present geographic groupings, we chose to place Turkey in the Middle East world region. One sample from Lebanon was included; these were college students who volunteered for the study. Two samples from Israel were included, both were comprised of college students. One sample from Jordan was included; these were volunteer college students who did not receive the full ISDP survey.

Seven cultural regions from Africa were included in the ISDP (N = 1,325). This included college students from Morocco, the United Republic of Tanzania, Zimbabwe, Botswana, and South Africa. A sample of both college students and community members was accumulated from Ethiopia. All of these samples were administered the ISDP survey in English, and the Moroccan and Ethiopian samples' surveys contained annotated explanations for some of the most difficult words and phrases as identified in pre-testing sessions. A seventh African sample containing both college students and community members was accumulated from the Democratic Republic of the Congo. This sample was administered the ISDP survey in French.

Three cultural regions from Oceania were included in the ISDP (N = 926). This included two samples from Australia (one from eastern Australia containing college students and one from western Australia that included both college students and community members), one sample from New Zealand, and one sample from Fiji. The sample from Fiji was collected at the University of the South Pacific, a true regional university. Although a large number of participants were from Fiji, a

significant number came from surrounding nations within the Pacific Island region. Consequently, we will refer to this cultural region as the "Fiji and Pacific Islands" region.

Five cultures from South or Southeast Asia were included in the ISDP (N = 879). This included one sample each from India, Bangladesh, Malaysia, Indonesia, and the Philippines. Four cultural regions from East Asia were included (N = 1,159), one sample each from Hong Kong (now a part of the People's Republic of China), Taiwan (Republic of China), and Japan, and two samples were accumulated from the Republic of (South) Korea. For statistical purposes, the cultures of Taiwan and Hong Kong (China) were kept separate when conducting nation-level analyses.

Overall, this collection of cultural regions represented a diverse array of ethnic, geographic, and linguistic categories. In total, the many cultures of the ISDP represent 6 continents, 13 islands, 29 languages, and 56 nations. Most samples were comprised of college students (indicated in Table 1 under the Sample Type column by "College Students" or "College"); some included general members of the community (indicated by "Community Sample" or "Community"). All samples were convenience samples. Most samples were recruited as volunteers, some received course credit for participation and others received a small monetary reward for their participation. All samples were administered an anonymous self-report survey, most surveys were returned via sealed envelope or the usage of a drop-box. Return rates for college student samples tended to be relatively high (around 95%), though this number was lower in some cultures. Return rates for community samples were around 50%. Not all participants received the full ISDP survey in samples from Chile, Jordan, South Africa, Fiji, India, and Bangladesh, though all samples received the BFI measure used in this paper. Missing data was a problem in some samples, though this was generally restricted to measures that dealt explicitly with sexual desire and infidelity—topics not addressed in this paper. For the BFI, if an individual item was not completed this resulted in the full trait scale being treated as missing data. Further details on the sampling and assessment procedures within each of the cultural regions are provided elsewhere (Schmitt, 2002) and are available from the authors.

This study had three primary objectives. First, we examined whether the factor structure of the English BFI fully generalized across diverse forms of human culture.

As part of the ISDP, the BFI was translated into 29 languages and administered to samples from 56 nations. We found that the five-dimensional structure of the BFI was highly replicable across all the major cultural regions of the world. Results also indicated that the factor scales possessed high levels of internal reliability across all cultures.

The second objective was to evaluate the validity of nation-level BFI trait profiles. We found that BFI trait levels were reliably related to national profiles previously reported in the literature (e.g., from the NEO-PI-R), particularly when issues of sampling and acquiescence are addressed. Importantly, these findings provided the first cross-cultural/cross-instrument validity evidence for the personality dimensions of agreeableness, conscientiousness, and openness. We also found that nation-level personality profiles provided by different Big Five measures converged in their relationships with key external criteria, such as sociosexuality and self-esteem.

A third objective was to document the worldwide distribution of personality traits as measured by the BFI. We found several patterns across cultures, including that people from the geographic regions of Africa and East Asia were significantly different in conscientiousness from those inhabiting other world regions, with the former being more conscientious and the latter reporting less conscientiousness than people from other world regions. In sum, our ISDP findings, though limited in many ways, can be taken as an incremental addition to the growing body of evidence that the Big Five dimensions of personality can be reliably measured across diverse human cultures. The BFI, in particular, may be especially useful for future researchers looking for a brief measure of basic personality traits. The BFI profiles generated by the ISDP may also prove useful as a baseline against which future large-scale studies of personality can be compared.

# CHAPTER 3

# METHODOLOGY OF THE RESEARCH

This chapter presents the nature of the research, the selection of the participants, the instruments, the data collection procedures as well as the methods used for data analysis.

## 4.1. Introduction

Aiming to exploring the personal differences of ESL learners in Poland and Turkey, this study is based on both descriptive and correlational statistics in design. Thus, it involves collecting data regarding the present status of the subjects of the study and also trying to explain the relationships and making implications. Furthermore, both the qualitative and quantitative research design were applied in this study. In the qualitative part, the results were descriptively presented and illustrated through tables. In the quantitative part, data acquired from non-experimental study were analyzed statistically to see the correlation between the groups. In brief, 153 ESL learners at The Higher Vocational State School in Wloclawek, Poland and 158 ESL learners at Kafkas University in Kars, Turkey were given The Big Five Inventory with 2 open-ended questions. In the following sections, data collection tools are described and outlined in a more detailed way.

## 4.2. Participants

The participants in this study were 311 students (171 females and 140 males ranging between 21-25 years of age); students from English Language and Literature Department of Kafkas University, Kars, Turkey and the Higher Vocational State School, Wloclawek, Poland who attended one year-English preparation class in their educational background. Most of them plan to be teachers of English following their graduation. These participants were chosen, as there is also an LLP Erasmus student mobility agreement between Kafkas University and the Higher Vocational State School. Thus, this study may also help the teachers to obtain a general concept

relating to the personality differences of the students undertaken Erasmus exchange program.

The distribution of the participants according to their gender is shown in Table 3:

| Gender | Poland | | Turkey | | Total |
|---|---|---|---|---|---|
| | f | % | f | % | % |
| Female | 82 | 26.3% | 89 | 28.6% | 54.9% |
| Male | 71 | 22.9% | 69 | 22.2% | 45.1% |
| Total | 153 | 49.2% | 158 | 50.8% | 100% |

**Table 3: Distribution of Study Population According to Gender**

As seen in Table 3, the total number of students participated in this study is 311; 171 female and 140 male students. Regarding the percentage, some 55% of the participants are female, and some 45% of them are male.

### 4.3. Instrumentation

#### 3.3.1. Instrumentations in the Study

Adapted from The Big Five Inventory (BFI), a forty four-item questionnaire aimed to assess these themes: (1) *extraversion*, (2) *agreeableness*, (3) *consciousness*, (4) *neuroticism* and (5) *openness,* developed by O. P. John, E. M. Donahue, and R. L. Kentle in 1991. BFI is a self-report measure designed to assess the high-order personality traits of extraversion, agreeableness, conscientiousness, neuroticism, and openness. In BFI, every question represents one of these five personality traits. It consisted of 44 items related to these 5 personality traits. It is also a structured five point-likert-type scale ranging from “strongly agree” to “strongly disagree”. BFI scale scoring requires different scoring for some of the questions, as they are reverse questions. Below, Table 4 shows the items and their reference to the types of personality traits in BFI.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Extraversion | 1 | 6R | 11 | 16 | 26 | 21R | 31R | 36 | | |
| Agreeableness | 2R | 7 | 12R | 17 | 22 | 27R | 32 | 37R | 42 | |
| Conscientiousness | 3 | 8R | 13 | 18R | 23R | 28 | 33 | 38 | 43R | |
| Neuroticism | 4 | 9R | 14 | 19 | 24R | 29 | 34R | 39 | | |
| Openness | 5 | 10 | 15 | 20 | 25 | 30 | 35R | 40 | 41R | 44 |

**Table 4:** Five Personality Traits and questions. (“R” donates reverse-scored items)

The last part of the questionnaire includes 2 open-ended questions, which are used to make a link between students' personalities and their second language learning process. The questions were asked to the students to determine their strengths and weaknesses about their characteristics while learning a second language.

**Research Question 1:** Are there any differences between the personality traits of ESL learners from Poland?
**Research Question 2:** Do ESL learners in these countries present a wide diversity of cultural backgrounds or personality differences in second language learning process?
**Research Question 3:** Is there any relationship between personality and nationality? How do different cultures and values affect second language learning?
**Research Question 4:** Which personality features do help learners to learn English well?

In order to find an answer to this question, following open-ended questions were also added to the Big Five Inventory. 1- What are your 3 to 5 strengths about your characteristics while learning a second language? 2- What are your 3 to 5 weaknesses about your characteristics while learning a second language?

These 2 open-ended questions were evaluated one by one and these responses were grouped in two points. In chapter 4, we will deal with these points, citing some of the participants' verbatim remarks at the introduction of each point.

### 3.3.2. The Reliability and Validity of Big Five Inventory Test

The reliability and validity of scores on the Big Five Inventory (BFI; O. P. John, E. M. Donahue, & R. L. Kentle, 1991) were examined in a sample of 336 African American college students and results indicated moderate reliability and structural validity for BFI scores (Frank C. Worrell , William Jr. Cross E., 2004) .

The Big Five personality factors have been accepted widely in the literate on personality for a number of years (John, 1989, 1990), and many researchers have argued that no assessment of personality is complete without measuring these five basic factors (Aguilar, Kaiser, Murray, & Ozer, 1998). The five-factor model (FFM) of personality has had an interesting history in the research literature. When the Big Five were first reported by Tupes and Christal (1961/1992) and replicated by

Norman (1963), they were ignored by many personality researchers, in part because there were too many other personality traits competing to be designated as the basic personality ones (McCrae & John, 1992). However, since the reemergence of the FFM in the 1980s, evidence for the model has been strong and convincing, and McCrae and John argued, on the basis of current evidence in the literature, that researchers should accept the FFM as an accurate depiction of the personality traits.

Each of the five factors can be identified by more than one name, but they are most commonly referred to as: Extraversion, Agreeableness, Conscientiousness, Neuroticism, and Openness. John and Srivastava (1999) described Extraversion as follows:

> *"This factor implies an energetic approach to the social and material world and includes traits such as sociability, activity, assertiveness, and positive emotionality. In spite of the debate about where Extraversion falls on the interpersonal circumplex, an emerging consensus suggests that the factor has a relatively broad content."* (p.121).

Agreeableness, the second factor named, involves characteristics related to the prosocial and caring side of humanity, such as altruism, affection, and nurturance. Conscientiousness carries all of the weight of that word in English and involves characteristics related to behavior that is task or goal-directed (John & Srivastava, 1999), such as impulse control, organization, and delay of gratification. Neuroticism is the only Big Five factor associated with nondesirable behaviors. This factor is related to anxiety and negative emotions. McCrae and John (1992) suggested that there is more definitional consensus about Neuroticism than there is about any of the other factors. On the other hand, Openness is the factor about which there has been the most controversy (McCrae & John, 1992). In natural language studies, the Openness factor consists of words such as intelligent and perceptive, whereas questionnaire studies have used these same descriptors as well as descriptors related to unconventionality, sensitivity to aesthetics, and the need for variety (McCrae & John, 1992). Raters tend to slant Openness toward the intellect, whereas questionnaire studies include a lot more than an intellectual component. Readers can obtain a more comprehensive review of the FFM by referring to the work of John and Srivastava and of McCrae and John.

### 4.4. Data Collection

The data for this study were collected during 2009-2010 academic year's spring term. 153 university students aged 20 – 24 from the Higher Vocational State School in Wloclawek, Poland and 158 university students aged 20 - 24 from Kafkas University, Turkey participated in the study. For the purposes of this study, The Big Five Personality Test with 3 open-ended questions was administrated to the students in Poland and Turkey.

The participants from Poland were chosen, as there is also an LLP Erasmus teacher mobility agreement between Kafkas University and the Higher Vocational State School. The researcher herself who attended Erasmus teaching mobility in the Higher Vocational State School, Wloclawek, collected data from Poland. In a week, the test was administered to 153 students with the help of Polish teachers as well. Before administration of the questionnaires, the participants were informed about the aim and scope of the study and reassured that the results would not affect their grades in order to prevent possible constraints in answering the questions.

### 4.5. Data Analysis

The responses of the participants were analyzed through SPSS, and frequency and percentages values of the items are presented in tabular forms. To analyze the data correctly, BFI scale score was taken into account. Reverse questions shown in Table 4 were given scores in an opposite way of the other questions. For example, the second item, "tends to find fault with others", is a negative characteristic about the trait, "agreeableness". Thus, we call the second item "reverse-scored item" which means when students assert that they strongly disagree with it, they assign a value of 5 points instead of 1 point. That means, in fact, being disagreed with second item is a positive attitude; therefore, such items had to be reverse scaled before starting to analyze the data. Descriptive analysis of SPSS was used to present the frequencies and percentages of each item. Then, the results were illustrated in tables. As further information, results and their interpretations will be presented in tabular form, referring to each item included in the questionnaire in Chapter 4.

# CHAPTER 4

# DATA ANALYSIS AND FINDINGS

## 4.1. Introduction

This chapter presents the statistical analyses carried out on the data and the findings that aim to find out the differences of the big five personality factors between the Polish and Turkish students.

### 4.1.1. Extroversion

In the Big Five Personality Test, there were 8 questions related to the first personality trait, extraversion. 153 Polish students and 158 Turkish students answered those 8 items. The 1st item was questioning if the student saw himself as a talkative person, the 6th item, one of the reverse scored questions, was about how much the student thought himself as reserved. The 11th question was about the student's being full of energy and the 16th was to find out if the student generated a lot of enthusiasm. The other reverse items: the 21st and the 31st were asking if the student tended to be quite and was sometimes shy, inhibited. The 26th and 36th items were respectively searching if the student had an assertive personality and if he was outgoing, sociable.

The numbers of participants' responses to the first category, extroversion, are presented in Table 5 and 6. In the 2nd, 3rd and 4th tables, the numbers from 1 to 5, represent the statements to indicate the extent to which the student agreed or disagreed with the items. 1 is "disagree strongly"; 2 is "disagree a little", number 3 is "neither agree nor disagree"; 4 is "agree a little" and 5 is "agree strongly".

Table 5 shows the Polish students' responses and Table 6 shows the Turkish students' responses to every question regarding extroversion. Green rows indicate reverse scored items. Purple colored numbers show the most chosen statements and yellow ones show the least. Blue ones indicate the major difference between the Polish and Turkish students' responses comparing Table 5 to Table 6. The big difference is seen in 21st item related to being quite. None of the Turkish students chose "strongly disagree" which means they consider themselves as quite in personality while 39 of the Polish students strongly disagreed with this reverse item.

| | |
|---|---|
| most answered | reverse question |
| least answered | big difference |
| Control number | major difference |

Poland- 153 Students- The Higher Vocational State School

| | Item | 1 | 2 | 3 | 4 | 5 | control no. |
|---|---|---|---|---|---|---|---|
| | | F | F | F | F | F | |
| 1 | 1 | 3 | 33 | 34 | 40 | 43 | 153 |
| 2 | 6R | 31 | 37 | 40 | 30 | 15 | 153 |
| 3 | 11 | | 15 | 15 | 71 | 52 | 153 |
| 4 | 16 | 2 | 10 | 19 | 70 | 52 | 153 |
| 5 | 21R | 39 | 24 | 30 | 24 | 36 | 153 |
| 6 | 26 | 3 | 19 | 52 | 41 | 38 | 153 |
| 7 | 31R | 14 | 32 | 23 | 66 | 18 | 153 |
| 8 | 36 | 2 | 31 | 35 | 40 | 45 | 153 |
| | | 94 | 201 | 248 | 382 | 299 | 1224 |

Table 5: Personality trait profile: Extroversion, based on the Polish Students' responses F: Frequency

TURKEY-158 Students- Kafkas University

| | Item | 1 | 2 | 3 | 4 | 5 | control no. |
|---|---|---|---|---|---|---|---|
| 1 | 1 | 5 | 30 | 36 | 49 | 38 | 158 |
| 2 | 6R | 31 | 38 | 51 | 30 | 8 | 158 |
| 3 | 11 | 1 | 15 | 21 | 70 | 51 | 158 |
| 4 | 16 | 1 | 8 | 25 | 73 | 51 | 158 |
| 5 | 21R | | 53 | 43 | 38 | 24 | 158 |
| 6 | 26 | 2 | 17 | 54 | 49 | 36 | 158 |
| 7 | 31R | 15 | 28 | 29 | 67 | 19 | 158 |
| 8 | 36 | 12 | 39 | 29 | 43 | 35 | 158 |
| | | 67 | 228 | 288 | 419 | 262 | 1264 |
| | | | | | | total Poland | 1224 |
| | | | | | Turkey | Poland | 40 |
| | | | | participants: | 158 | 153 | 5 |
| | | | | | | questions | 8 |
| | | | | | | | 40 |

Table 6: Personality trait profile: Extroversion, based on the Turkish Students' responses F: Frequency

The 1st item was questioning if the student saw himself as a talkative person, 43 of 153 Polish students strongly agreed with the item while only 3 of them strongly

disagreed. On the other hand, 38 of 158 Turkish students strongly agreed with the item while 5 of them strongly disagreed. The 6th item, one of the reverse scored questions, was about how much the student thought himself as reserved. 15 of the Polish students chose the statement of "strongly agree" while 31 students chose "strongly disagree". As for 158 Turkish students, only 8 of them chose the statement of "strongly agree" while 31 students chose "strongly disagree". The 11th question was about the student's being full of energy and 52 Polish and 51 Turkish students strongly agreed with the item. The 16th was to find out if the student generated a lot of enthusiasm. The answers for this item were quite similar to the answers of 11th item. 52 Polish and 51 Turkish students strongly agreed with it. The other reverse items: the item 21 and the 31 were asked to find out respectively if the student tended to be quite and was sometimes shy, inhibited. For the item 21, there were 36 Polish and 24 Turkish students who strongly agreed with being quite in personality. As for 31, the results were quite similar. 18 Polish and 19 Turkish students chose the statement, "strongly agree". The 26th and 36th items were respectively searching if the student had an assertive personality and if he was outgoing, sociable. 38 Polish students and 36 Turkish students strongly agreed that they had an assertive personality. 45 Polish students saw themselves immensely sociable while 35 Turkish students strongly agreed with that item.

Extroversion- Difference between Poland-Turkey

| | Item | 1 | 2 | 3 | 4 | 5 | |
|---|---|---|---|---|---|---|---|
| 1 | 1 | (2) | 3 | (2) | (9) | 5 | |
| 2 | 6R | 0 | (1) | (11) | 0 | 7 | |
| 3 | 11 | (1) | 0 | (6) | 1 | 1 | |
| 4 | 16 | 1 | 2 | (6) | (3) | 1 | |
| 5 | 21R | 39 | (29) | (13) | (14) | 12 | |
| 6 | 26 | 1 | 2 | (2) | (8) | 2 | |
| 7 | 31R | (1) | 4 | (6) | (1) | (1) | |
| 8 | 36 | (10) | (8) | 6 | (3) | 10 | |
| | | 27 | (27) | (40) | (37) | 37 | (40) |

Table 7: Comparison of the Polish and Turkish students' responses

The difference between the responses of the Polish and Turkish students is also shown in Table 7. Red colored numbers shows Turkish students, who chose this statement, are more in number than the Polish students. The black ones indicate that

the Polish students are more in number than the Turkish students. Blue color indicates the major difference in the Polish students' responses to the 21st question, as mentioned before.

**BFI Scale Scores of the Responses**

The responses of the participants shown in Tables above were analyzed through SPSS, and frequency and percentages values of the items are presented in tabular forms. To analyze the data correctly, BFI scale score was taken into account. Reverse questions were given scores in an opposite way of the other questions. For example, the sixth item, "I see myself as someone who is reserved", is a negative characteristic about the trait, "extroversion". Thus, we call the sixth item "reverse-scored item" which means when students asserted that they strongly disagreed with it, they assigned a value of 5 points instead of 1 point. That means, in fact, being disagreed with sixth item is a positive attitude; therefore, 6th, 21st and 31st items had to be reverse scaled before starting to analyze the data. In the tables below, the scores according to BFI scale are shown. In the 8th, 9th and 10th tables below, the numbers from 1 to 5 indicate the points given to the students regarding the trait of extroversion.

reverse question | big difference
control number | major difference

POLAND- 153 Students- The Higher Vocational State School

| | Item | 1 | 2 | 3 | 4 | 5 | Total |
|---|---|---|---|---|---|---|---|
| 1 | 1 | 3 | 66 | 102 | 160 | 215 | 546 |
| 2 | 6R | 15 | 60 | 120 | 148 | 155 | 498 |
| 3 | 11 | 0 | 30 | 45 | 284 | 260 | 619 |
| 4 | 16 | 2 | 20 | 57 | 280 | 260 | 619 |
| 5 | 21R | 36 | 48 | 90 | 96 | 195 | 465 |
| 6 | 26 | 3 | 38 | 156 | 164 | 190 | 551 |
| 7 | 31R | 18 | 132 | 69 | 128 | 70 | 417 |
| 8 | 36 | 2 | 62 | 105 | 160 | 225 | 554 |
| | | 79 | 456 | 744 | 1420 | 1570 | 4269 |

Table 8: Measured scores of the Polish students' responses

Table 8, regarding the Polish students' scores of the trait of extroversion, shows that most of the students strongly agreed with the 1st item, I see myself as talkative person, while a few of them strongly disagreed with the item. The total score related to being talkative is seen as 546 over 765. It is concluded that most of

the Polish students show an agreement with the first item about being talkative person. 6th question, one of the reverse-scored items was about how much the student considered himself as reserved. Total score for this item was measured as 498, which means most of the students think that they are not reserved in personality. The 11th question was about the student's being full of energy and the score of the students, 619 over 765, shows that a big number of them see themselves as energetic person. As for the item 16, it was to find out if the student generated a lot of enthusiasm. The total score is the same as the 11th item, 619. Thus, it can be concluded that a large number of the Polish students think that they are full of energy and enthusiasm. The other reverse items: the 21st and the 31st were asking if the student tended to be quite and was sometimes shy, inhibited. The total score of the students for these items, 465 and 417, are lower than the other scores. That shows the Polish students see themselves a bit shy and inhibited. The 26th and 36th items were respectively searching if the student had an assertive personality and if he was outgoing, sociable. Both items respectively have the scores of 551 and 554 over 765 points. These scores show that a big number of the students consider that they have confident personality and sociable.

TURKEY-158 Students- Kafkas University

| | Item | 1 | 2 | 3 | 4 | 5 | Total |
|---|---|---|---|---|---|---|---|
| 1 | 1 | 5 | 60 | 108 | 196 | 190 | 559 |
| 2 | 6R | 8 | 60 | 153 | 152 | 155 | 528 |
| 3 | 11 | 1 | 30 | 63 | 280 | 255 | 629 |
| 4 | 16 | 1 | 16 | 75 | 292 | 255 | 639 |
| 5 | 21R | 24 | 76 | 129 | 212 | 0 | 441 |
| 6 | 26 | 2 | 34 | 162 | 196 | 180 | 574 |
| 7 | 31R | 19 | 134 | 87 | 112 | 75 | 427 |
| 8 | 36 | 12 | 78 | 87 | 172 | 175 | 524 |
| | | 72 | 488 | 864 | 1612 | 1285 | 4321 |

Table 9: Measured scores of the Turkish students' responses

Table 9, related to the Turkish students' scores of the trait of extroversion, shows that the total score related to being talkative is seen as 559 over 790. It may be concluded that most of the Turkish students see themselves as a talkative person.

For the 6th question, the reverse-scored item, total score was measured as 528, which is higher than the Polish students' scores. That means more Turkish students think that they are not reserved in personality. The 11th question was about the student's

being full of energy and the score of the students, 629 over 790, shows that a big number of them see themselves as energetic person like the Polish students do. As for the item 16, it was to find out if the student generated a lot of enthusiasm. The total score is 639. Thus, it can be concluded that a large number of Turkish students also think that they are full of energy and enthusiasm. The other reverse items: the 21st and the 31st were asking if the student tended to be quite and was sometimes shy, inhibited. The total score of the students for these items, 441 and 427, is lower than the other scores. That shows the Turkish students also see themselves a bit shy and inhibited. The 26th and 36th items were respectively searching if the student had an assertive personality and if he was outgoing, sociable. Both items respectively have the scores of 574 and 524 over 790 points. These scores show that a big number of the students consider that they have confident personality and sociable. However, when we compare the results, we observe that the numbers of Turkish students who see themselves as sociable are fewer than the numbers of the Polish students who see themselves as sociable. The percentages and numbers of participants' responses to the first category, extroversion, are presented in Tables 10, 11, 12.

POLAND- 153 Students- The Higher Vocational State School

| | Item | 1 | 2 | 3 | 4 | 5 | Total |
|---|---|---|---|---|---|---|---|
| 1 | 1 | 0.5% | 12.1% | 18.7% | 29.3% | 39.4% | 100% |
| 2 | 6R | 3.0% | 12.0% | 24.1% | 29.7% | 31.1% | 100% |
| 3 | 11 | 0.0% | 4.8% | 7.3% | 45.9% | 42.0% | 100% |
| 4 | 16 | 0.3% | 3.2% | 9.2% | 45.2% | 42.0% | 100% |
| 5 | 21R | 7.7% | 10.3% | 19.4% | 20.6% | 41.9% | 100% |
| 6 | 26 | 0.5% | 6.9% | 28.3% | 29.8% | 34.5% | 100% |
| 7 | 31R | 4.3% | 31.7% | 16.5% | 30.7% | 16.8% | 100% |
| 8 | 36 | 0.4% | 11.2% | 19.0% | 28.9% | 40.6% | 100% |
| | | 16.8% | 92.3% | 142.4% | 260.1% | 288.3% | 800% |
| | | 2.1% | 11.5% | 17.8% | 32.5% | 36.0% | 100% |

Table 10: The percentages of the Polish students' responses

TURKEY-158 Students- Kafkas University

| | Item | 1 | 2 | 3 | 4 | 5 | Total |
|---|---|---|---|---|---|---|---|
| 1 | 1 | 0.9% | 10.7% | 19.3% | 35.1% | 34.0% | 100% |
| 2 | 6R | 1.5% | 11.4% | 29.0% | 28.8% | 29.4% | 100% |
| 3 | 11 | 0.2% | 4.8% | 10.0% | 44.5% | 40.5% | 100% |
| 4 | 16 | 0.2% | 2.5% | 11.7% | 45.7% | 39.9% | 100% |
| 5 | 21R | 5.4% | 17.2% | 29.3% | 48.1% | 0.0% | 100% |
| 6 | 26 | 0.3% | 5.9% | 28.2% | 34.1% | 31.4% | 100% |
| 7 | 31R | 4.4% | 31.4% | 20.4% | 26.2% | 17.6% | 100% |
| 8 | 36 | 2.3% | 14.9% | 16.6% | 32.8% | 33.4% | 100% |
| | | 15.3% | 98.8% | 164.5% | 295.3% | 226.1% | 800% |
| | | 1.9% | 12.3% | 20.6% | 36.9% | 28.3% | 100% |

Table 11: The percentages of the Turkish students' responses

Table 10 shows that 36% of the Polish students scored 5 points, 32% of them scored 4 points, 18% of them scored 3, 11% of them scored 2 points, and 2% scored 1 point. It can be concluded that more than 68% of the students got 4 and 5 points, which means high scores for the trait of extraversion.

Table 11 shows that 28% of the Turkish students scored 5 points, 37% of them scored 4 points, 20% of them scored 3, 12% of them scored 2 points, and 2% scored 1 point. It can be concluded that more than 65% of the Turkish students also scored 4 and 5 points, which means high scores for the trait of extraversion. Below, Table 12 also shows the difference between the percentages in Table 10 and 11.

Extroversion- Difference between Poland-Turkey

| | Item | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|---|
| 1 | 1 | -0.3% | 1.4% | -0.6% | -5.8% | 5.4% |
| 2 | 6R | 1.5% | 0.7% | -4.9% | 0.9% | 1.8% |
| 3 | 11 | -0.2% | 0.1% | -2.7% | 1.4% | 1.5% |
| 4 | 16 | 0.2% | 0.7% | -2.5% | -0.5% | 2.1% |
| 5 | 21R | 2.3% | -6.9% | -9.9% | -27.4% | 41.9% |
| 6 | 26 | 0.2% | 1.0% | 0.1% | -4.4% | 3.1% |
| 7 | 31R | -0.1% | 0.3% | -3.8% | 4.5% | -0.8% |
| 8 | 36 | -1.9% | -3.7% | 2.4% | -3.9% | 7.2% |
| | | 1.6% | -6.5% | -22.1% | -35.2% | 62.2% |

Table 12: Difference between the percentages of the Polish and Turkish students'

| | Polish Students (153) | | Turkish Students (158) | |
|---|---|---|---|---|
| EXTRAVERSION | Score | % | Score | % |
| | 4269 | 18.9% | 4321 | 17.9% |

Table 13: Extraversion, measured scores and percentages of the Polish and Turkish students'

When we look at the total scores and percentages of the Polish and Turkish students as shown in Table 13, we see that there is a small difference between them. The Polish students' total score is 4269, while the Turkish students' is 4321. As the Turkish students were more in number, when we calculated the percentages, it was discovered that the Polish students' percentage is 1% higher than the Turkish students'.

### 4.1.2. Agreeableness

In the Big Five Personality Test, there were 9 questions related to the second personality trait, agreeableness. 153 Polish students and 158 Turkish students answered these 9 items. The 2nd item, one of the reverse-scored questions, was questioning if the student tended to find faults with others, the 7th item was about being helpful and unselfish with others. 12th item, also the reverse-scored one, was questioning if the student started quarrels with others. The 17th question was about the student's having a forgiving nature and the 22nd was to find out if the student was generally trusting. The other reverse items: the 27th was asking if the student could be cold and aloof, while the 37th was questioning if the student was sometimes rude to others. The 32nd and 42nd items were respectively searching if the student was kind to almost everyone and if he liked to cooperate with others.

The numbers of participants' responses to the second trait, agreeableness, are presented in Tables 14 and 15. The numbers represent the statements to indicate the extent to which the student agreed or disagreed with the items. 1 is "disagree strongly"; 2 is "disagree a little", number 3 is "neither agree nor disagree"; 4 is "agree a little" and 5 is "agree strongly".

| | | | | |
|---|---|---|---|---|
| most answered | | reverse question | | |
| least answered | | big difference | | |
| control number | | major difference | | |

POLAND- 153 Students- The Higher Vocational State School

| | Item | 1 | 2 | 3 | 4 | 5 | control No. |
|---|---|---|---|---|---|---|---|
| 1 | 2R | 21 | 47 | 46 | 33 | 6 | 153 |
| 2 | 7 | 1 | 6 | 25 | 61 | 60 | 153 |
| 3 | 12R | 37 | 45 | 55 | 12 | 4 | 153 |
| 4 | 17 | 27 | 25 | 29 | 37 | 35 | 153 |
| 5 | 22 | 4 | 20 | 40 | 77 | 12 | 153 |
| 6 | 27R | 62 | 40 | 33 | 12 | 6 | 153 |
| 7 | 32 | 2 | 1 | 43 | 69 | 38 | 153 |
| 8 | 37R | 20 | 55 | 28 | 47 | 3 | 153 |
| 9 | 42 | 1 | 19 | 23 | 65 | 45 | 153 |
| | | 175 | 258 | 322 | 413 | 209 | 1377 |

Table 14: Personality trait profile: Agreeableness, based on the Polish Students' responses

TURKEY-158 Students- Kafkas University

| | Item | 1 | 2 | 3 | 4 | 5 | control No. |
|---|---|---|---|---|---|---|---|
| 1 | 2R | 20 | 42 | 49 | 39 | 8 | 158 |
| 2 | 7 | 2 | 7 | 6 | 61 | 82 | 158 |
| 3 | 12R | 41 | 41 | 52 | 14 | 10 | 158 |
| 4 | 17 | | 12 | 20 | 64 | 62 | 158 |
| 5 | 22 | | 7 | 26 | 57 | 68 | 158 |
| 6 | 27R | 34 | 34 | 43 | 32 | 15 | 158 |
| 7 | 32 | | 1 | 41 | 74 | 42 | 158 |
| 8 | 37R | 24 | 65 | 49 | 12 | 8 | 158 |
| 9 | 42 | 1 | 2 | 45 | 51 | 59 | 158 |
| | | 122 | 211 | 331 | 404 | 354 | 1422 |
| | | | | | | total Poland | 1377 |
| | | | | | Turkey | Poland | 45 |
| | | | | participants: | 158 | 153 | 5 |
| | | | | | | questions | 9 |
| | | | | | | | 45 |

Table 15: Personality trait profile: Agreeableness, based on the Turkish Students' responses

Table 14 shows the Polish students' responses and Table 15 shows the Turkish students' responses to every question regarding agreeableness. Green rows indicate reverse scored items. Purple colored numbers show the most chosen statements and yellow ones show the least. Blue ones indicate the major difference between the Polish and Turkish students' responses comparing Table 14 to Table 15. The major difference is seen in the 22nd item related to being generally trusting. 68 of 158 Turkish students chose "strongly agree" which means they consider themselves as generally trusting while only 12 of 153 Polish students strongly agreed with this item. None of the Turkish students strongly disagreed with being trusting, while only a few number, 7, of them chose "a little disagree" with this item. Below, Table 16 helps us take a closer look at the difference between the Polish and Turkish students responses to the trait of agreeableness.

Agreeableness- Difference between Poland-Turkey

| | Item | 1 | 2 | 3 | 4 | 5 | |
|---|---|---|---|---|---|---|---|
| 1 | 2R | 1 | 5 | (3) | (6) | (2) | |
| 2 | 7 | (1) | (1) | 19 | 0 | (22) | |
| 3 | 12R | (4) | 4 | 3 | (2) | (6) | |
| 4 | 17 | 27 | 13 | 9 | (27) | (27) | |
| 5 | 22 | 4 | 13 | 14 | 20 | (56) | |
| 6 | 27R | 28 | 6 | (10) | (20) | (9) | |
| 7 | 32 | 2 | 0 | 2 | (5) | (4) | |
| 8 | 37R | (4) | (10) | (21) | 35 | (5) | |
| 9 | 42 | 0 | 17 | (22) | 14 | (14) | |
| | | 53 | 47 | (9) | 9 | (145) | (45) |

Table 16: Comparison of the Polish and Turkish students' responses

The difference between the responses of the Polish and Turkish students is also shown in Table 16. Red colored numbers shows Turkish students, who chose this statement, are more in number than the Polish students. The black ones indicate that the Polish students are more in number than the Turkish students. Blue color indicates the major difference in the Polish students' responses to the 22nd question, as mentioned before.

**BFI Scale Scores of the Responses**

The responses of the participants shown in Tables above were analyzed through SPSS, and frequency and percentages values of the items are presented in tabular forms. To analyze the data correctly, BFI scale score was taken into account. Reverse questions were given scores in an opposite way of the other questions. For example, the second item, "I see myself as someone who tends to find faults with others", is a negative characteristic about the trait, "agreeableness". Thus, we call the second item "reverse-scored item" which means when students asserted that they strongly disagreed with it, they assigned a value of 5 points instead of 1 point. That means, in fact, being disagreed with second item is a positive attitude; therefore, 2nd, 12th, 27th and 37th items had to be reverse scaled before starting to analyze the data. In the tables below, the scores according to BFI scale are shown. In the 17th, 18th and 19th tables below, the numbers from 1 to 5 indicate the points given to the students regarding the trait of extroversion.

reverse question | big difference
control number | major difference

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| | Item | 1 | 2 | 3 | 4 | 5 | |
|---|---|---|---|---|---|---|---|
| 1 | 2R | 6 | 66 | 138 | 188 | 105 | 503 |
| 2 | 7 | 1 | 12 | 75 | 244 | 300 | 632 |
| 3 | 12R | 4 | 24 | 165 | 180 | 185 | 558 |
| 4 | 17 | 27 | 50 | 87 | 148 | 175 | 487 |
| 5 | 22 | 4 | 40 | 120 | 308 | 60 | 532 |
| 6 | 27R | 6 | 24 | 99 | 160 | 310 | 599 |
| 7 | 32 | 2 | 2 | 129 | 276 | 190 | 599 |
| 8 | 37R | 3 | 94 | 84 | 220 | 100 | 501 |
| 9 | 42 | 1 | 38 | 69 | 260 | 225 | 593 |
| | | 54 | 350 | 966 | 1984 | 1650 | 5004 |

Table 17: Measured scores of the Polish students' responses

Table 17, regarding the Polish students' scores of the second trait, agreeableness, shows that most of the students disagreed with the 2nd item, one of the reverse-scored questions, I see myself as a person who tends to find faults with others, while only a few of them agreed with the item. The total score of not tending to find faults with others is seen as 503 over 765. It is concluded that most of the Polish students show an agreement with the second item in a positive way, related to the trait, agreeableness. 7th question was about how much the student considered himself as helpful and unselfish with others. Total score for this item was measured as 632, which means a big number of the students think that they are helpful and unselfish in personality. The total score of the 12th item questioning if the student started quarrels with others, is 558 over 765, shows that most of the Polish students see themselves as a person who does not start quarrels with others. As for the item 17, it was to find out if the student had a forgiving nature. The total score is 487 which is the lowest score of the personality trait, agreeableness. Thus, it can be concluded that only a few number of the Polish students think that they have a forgiving future. The 22nd was to find out if the student was generally trusting. The total score is 532, as a big number of the students agreed with the item while a few of them strongly agreed. The other reverse items: the 27th was asking if the student could be cold and aloof, while the 37th was questioning if the student was sometimes

rude to others. The total scores of the students for these items are 599 and 501. The score for 37th question, 501, is lower than the other. That shows some of the Polish students see themselves sometimes rude to others. The 32nd and 42nd items were respectively searching if the student was kind to almost everyone and if he liked to cooperate with others. Both items respectively have the scores of 599 and 593 over 765 points. These scores show that most of the students consider that they are kind to almost everyone and like to cooperate with others.

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| | Item | 1 | 2 | 3 | 4 | 5 | |
|---|---|---|---|---|---|---|---|
| 1 | 2R | 8 | 78 | 147 | 168 | 100 | 501 |
| 2 | 7 | 2 | 14 | 18 | 244 | 410 | 688 |
| 3 | 12R | 10 | 28 | 156 | 164 | 205 | 563 |
| 4 | 17 | 0 | 24 | 60 | 256 | 310 | 650 |
| 5 | 22 | 0 | 14 | 78 | 228 | 340 | 660 |
| 6 | 27R | 15 | 64 | 129 | 136 | 170 | 514 |
| 7 | 32 | 0 | 2 | 123 | 296 | 210 | 631 |
| 8 | 37R | 8 | 24 | 147 | 260 | 120 | 559 |
| 9 | 42 | 1 | 4 | 135 | 204 | 295 | 639 |
| | | 44 | 252 | 993 | 1956 | 2160 | 5405 |

Table 18: Measured scores of the Turkish students' responses

Table 18, regarding the Turkish students' scores of the second trait, agreeableness, shows that most of the students disagreed with the 2nd item, one of the reverse-scored questions, I see myself who tends to find faults with others, while only a few of them agreed with the item. The total score of not tending to find faults with others is seen as 501 over 790, which is a bit lower than the Polish students' score. It is concluded that most of the Turkish students also show an agreement with the second item in a positive way, related to the trait, agreeableness. 7th question was about how much the student considered himself as helpful and unselfish with others. Total score for this item was measured as the highest of all results, 688, which means a big number of the students think that they are helpful and unselfish in personality. The total score of the 12th item questioning if the student started quarrels with others, is 563 over 790, shows that most of the Turkish students see themselves as a person who does not start quarrels with others, like the Polish students do. As for the item 17, it was to find out if the student had a forgiving nature. The total score is 650,

which is much higher than the Polish students' scores. Thus, it can be concluded that Turkish students who think that they have a forgiving future are more in number than the Polish students. The 22nd was to find out if the student was generally trusting. The total score is 660, as a big number of the students strongly agreed with the item while none of them strongly agreed. The biggest difference between the Polish and Turkish students' scores are seen in the item 22. It can be concluded that Turkish students consider themselves as trusting in personality more than the Polish students do. The other reverse items: the 27th was asking if the student could be cold and aloof, while the 37th was questioning if the student was sometimes rude to others. The total scores of the students for these items are 514 and 559. The score for 27th question, 514, is lower than the Polish Students' score. That shows some of the Turkish students see themselves colder and more aloof than the Polish students do while they consider themselves less rude to others. The 32nd and 42nd items were respectively searching if the student was kind to almost everyone and if he liked to cooperate with others. Both items respectively have the scores of 631 and 639 over 790 points. These scores show that most of the Turkish students consider that they are kind to almost everyone and like to cooperate with others. When we compare the results regarding agreeableness, we observe that the total score of Turkish students are higher than the Polish students'. The percentages and numbers of participants' responses to the first category, extroversion, are presented in Tables 19, 20, 21.

Below, Table 19 shows that 32.2% of the Polish students scored 5 points, 39.7% of them scored 4 points, and 19.5% of them scored 3, while 7.4% of them scored 2 points, and 1.2% scored 1 point. It can be concluded that 72% of the students got 4 and 5 points, which means high scores for the trait of agreeableness.

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| | Item | 1 | 2 | 3 | 4 | 5 | Total |
|---|---|---|---|---|---|---|---|
| 1 | 2R | 1.2% | 13.1% | 27.4% | 37.4% | 20.9% | 100% |
| 2 | 7 | 0.2% | 1.9% | 11.9% | 38.6% | 47.5% | 100% |
| 3 | 12R | 0.7% | 4.3% | 29.6% | 32.3% | 33.2% | 100% |
| 4 | 17 | 5.5% | 10.3% | 17.9% | 30.4% | 35.9% | 100% |
| 5 | 22 | 0.8% | 7.5% | 22.6% | 57.9% | 11.3% | 100% |
| 6 | 27R | 1.0% | 4.0% | 16.5% | 26.7% | 51.8% | 100% |
| 7 | 32 | 0.3% | 0.3% | 21.5% | 46.1% | 31.7% | 100% |
| 8 | 37R | 0.6% | 18.8% | 16.8% | 43.9% | 20.0% | 100% |
| 9 | 42 | 0.2% | 6.4% | 11.6% | 43.8% | 37.9% | 100% |
| | | 10.5% | 66.6% | 175.8% | 357.1% | 290.1% | 900% |
| | | 1.2% | 7.4% | 19.5% | 39.7% | 32.2% | 100% |

Table 19: The percentages of the Polish students' response

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| | Item | 1 | 2 | 3 | 4 | 5 | Total |
|---|---|---|---|---|---|---|---|
| 1 | 2R | 1.6% | 15.6% | 29.3% | 33.5% | 20.0% | 100% |
| 2 | 7 | 0.3% | 2.0% | 2.6% | 35.5% | 59.6% | 100% |
| 3 | 12R | 1.8% | 5.0% | 27.7% | 29.1% | 36.4% | 100% |
| 4 | 17 | 0.0% | 3.7% | 9.2% | 39.4% | 47.7% | 100% |
| 5 | 22 | 0.0% | 2.1% | 11.8% | 34.5% | 51.5% | 100% |
| 6 | 27R | 2.9% | 12.5% | 25.1% | 26.5% | 33.1% | 100% |
| 7 | 32 | 0.0% | 0.3% | 19.5% | 46.9% | 33.3% | 100% |
| 8 | 37R | 1.4% | 4.3% | 26.3% | 46.5% | 21.5% | 100% |
| 9 | 42 | 0.2% | 0.6% | 21.1% | 31.9% | 46.2% | 100% |
| | | 8.2% | 46.1% | 172.7% | 323.9% | 349.2% | 900% |
| | | 0.9% | 5.1% | 19.2% | 36.0% | 38.8% | 100% |

Table 20: The percentages of the Turkish students' responses

Table 20 shows that 38.8% of the Turkish students scored 5 points, 36% of them scored 4 points, and 19.2% of them scored 3, while 5.1% of them scored 2 points, and 0.9% scored 1 point. It can be concluded that more than 74% of the Turkish students also scored 4 and 5 points, which means high scores for the trait of agreeableness.

Agreeableness- Difference between Poland-Turkey

| | Item | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|---|
| 1 | 2R | -0.4% | -2.4% | -1.9% | 3.8% | 0.9% |
| 2 | 7 | -0.1% | -0.1% | 9.3% | 3.1% | -12.1% |
| 3 | 12R | -1.1% | -0.7% | 1.9% | 3.1% | -3.3% |
| 4 | 17 | 5.5% | 6.6% | 8.6% | -9.0% | -11.8% |
| 5 | 22 | 0.8% | 5.4% | 10.7% | 23.3% | -40.2% |
| 6 | 27R | -1.9% | -8.4% | -8.6% | 0.3% | 18.7% |
| 7 | 32 | 0.3% | 0.0% | 2.0% | -0.8% | -1.6% |
| 8 | 37R | -0.8% | 14.5% | -9.5% | -2.6% | -1.5% |
| 9 | 42 | 0.0% | 5.8% | -9.5% | 11.9% | -8.2% |
| | | 2.3% | 20.5% | 3.0% | 33.2% | -59.1% |

Table 21: Difference between the percentages of the Polish and Turkish students

Table 21 also shows the difference between the percentages in the Tables 19th and 20th. It shows that Turkish students who scored 5 points are almost 60% more than the Polish students in the percentage.

| | Polish Students (153) | | Turkish Students (158) | |
|---|---|---|---|---|
| AGREEABLENESS | Score | % | Score | % |
| | 5004 | 22.1% | 5405 | 22.4% |

Table 22: Agreeableness, measured scores and percentages of the Polish and Turkish students

When we look at the total scores and percentages of the Polish and Turkish students as shown in Table 22, we see that there is a small difference between them. The Polish students' total score is 5004, while the Turkish students' is 5405. When we calculated the percentages, it was discovered that the percentages are almost the same and the Turkish students' percentage is only 0.3% higher than the Polish students'.

### 4.1.3. Conscientiousness

In the Big Five Personality Test, there were 9 questions related to the third personality trait, conscientiousness. 153 Polish students and 158 Turkish students answered these 9 items. The 3rd item was to find out if the student did a through a job. The 8th item, one of the reverse-scored questions, was questioning if the student could be sometimes careless, the 13th item was about being a reliable worker. 18th item, also the reverse-scored one, was questioning if the student tented to be disorganized. The other reverse items: the 23rd was asking if the student tended to be lazy, while the 43rd was questioning if the student was easily distracted. The 28th question was about whether the student persevered until the task was finished, and the 33rd and 38th items were respectively searching if the student did things efficiently and if he made plans and followed through with them.

The numbers of participants' responses to the third trait, conscientiousness, are presented in Tables 20 and 21. The numbers represent the statements to indicate the extent to which the student agreed or disagreed with the items. 1 is "disagree strongly"; 2 is "disagree a little", number 3 is "neither agree nor disagree"; 4 is "agree a little" and 5 is "agree strongly".

Table 23 shows the Polish students' responses and Table 24 shows the Turkish students' responses to every question regarding extroversion. Green rows indicate reverse scored items. Purple colored numbers show the most chosen statements and yellow ones show the least. Blue ones indicate the major difference between the Polish and Turkish students' responses comparing Table 23 to Table 24. The big difference is seen in 23rd item related to tending to be lazy. A big number, 73, of the Turkish students, chose "strongly disagree" which means they do not consider themselves as lazy in personality while 25 of the Polish students strongly disagreed with this reverse item. Moreover, 50 of the Polish students agreed that they tend to be lazy.

| | |
|---|---|
| most answered | reverse question |
| least answered | big difference |
| control number | major difference |

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| | Item | 1 | 2 | 3 | 4 | 5 | Control No. |
|---|---|---|---|---|---|---|---|
| 1 | 3 | 2 | 8 | 60 | 60 | 23 | 153 |
| 2 | 8R | 3 | 33 | 58 | 56 | 3 | 153 |
| 3 | 13 | | 4 | 38 | 54 | 57 | 153 |
| 4 | 18R | 12 | 35 | 24 | 56 | 26 | 153 |
| 5 | 23R | 25 | 6 | 33 | 50 | 39 | 153 |
| 6 | 28 | 3 | 16 | 69 | 43 | 22 | 153 |
| 7 | 33 | | 3 | 54 | 64 | 32 | 153 |
| 8 | 38 | 3 | 26 | 63 | 34 | 27 | 153 |
| 9 | 43R | 9 | 9 | 64 | 34 | 37 | 153 |
| | | 57 | 140 | 463 | 451 | 266 | 1377 |

Table 23: Personality trait profile: Conscientiousness, based on the Polish Students' responses

TURKEY-158 Students- Kafkas University

| | Item | 1 | 2 | 3 | 4 | 5 | control No. |
|---|---|---|---|---|---|---|---|
| 1 | 3 | 1 | 3 | 57 | 66 | 31 | 158 |
| 2 | 8R | 3 | 31 | 58 | 64 | 2 | 158 |
| 3 | 13 | | 3 | 33 | 53 | 69 | 158 |
| 4 | 18R | 40 | 54 | 25 | 27 | 12 | 158 |
| 5 | 23R | 73 | 37 | 20 | 23 | 5 | 158 |
| 6 | 28 | 1 | 2 | 38 | 63 | 54 | 158 |
| 7 | 33 | | 5 | 58 | 60 | 35 | 158 |
| 8 | 38 | 2 | 23 | 32 | 68 | 33 | 158 |
| 9 | 43R | 2 | 44 | 62 | 40 | 10 | 158 |
| | | 122 | 202 | 383 | 464 | 251 | 1422 |
| | | | | | total Poland | | 1377 |
| | | | | | Turkey | Poland | 45 |
| | | | | participants: | 158 | 153 | 5 |
| | | | | | | questions | 9 |
| | | | | | | | 45 |

Table 24: Personality trait profile: Conscientiousness, based on the Turkish Students' responses

Below, Table 25 helps us take a closer look at the difference between the Polish and Turkish students responses to the trait of conscientiousness.

Conscientiousness- Difference between Poland-Turkey

| | Item | 1 | 2 | 3 | 4 | 5 | |
|---|---|---|---|---|---|---|---|
| 1 | 3 | 1 | 5 | 3 | (6) | (8) | |
| 2 | 8R | 0 | 2 | 0 | (8) | 1 | |
| 3 | 13 | 0 | 1 | 5 | 1 | (12) | |
| 4 | 18R | (28) | (19) | (1) | 29 | 14 | |
| 5 | 23R | (48) | (31) | 13 | 27 | 34 | |
| 6 | 28 | 2 | 14 | 31 | (20) | (32) | |
| 7 | 33 | 0 | (2) | (4) | 4 | (3) | |
| 8 | 38 | 1 | 3 | 31 | (34) | (6) | |
| 9 | 43R | 7 | (35) | 2 | (6) | 27 | |
| | | (65) | (62) | 80 | (13) | 15 | (45) |

Table 25: Comparison of the Polish and Turkish students' responses

The difference between the responses of the Polish and Turkish students is also shown in Table 25. Red colored numbers shows Turkish students, who chose this statement, are more in number than the Polish students. The black ones indicate that the Polish students are more in number than the Turkish students. Blue color indicates the major difference in the Polish students' responses to the 23$^{rd}$ question, as mentioned before.

**BFI Scale Scores of the Responses**

The responses of the participants shown in Tables above were analyzed through SPSS, and frequency and percentages values of the items are presented in tabular forms. To analyze the data correctly, BFI scale score was taken into account. Reverse questions were given scores in an opposite way of the other questions. For example, the eighth item, "I see myself as someone who can be sometimes careless", is a negative characteristic about the trait, "conscientiousness". Thus, we call the eighth item "reverse-scored item" which means when students asserted that they strongly disagreed with it, they assigned a value of 5 points instead of 1 point. That means, in fact, being disagreed with eighth item is a positive attitude; therefore, 8$^{th}$,

18th, 23rd and 43rd items had to be reverse scaled before starting to analyze the data. In the tables below, the scores according to BFI scale are shown. In the 26th, 27th and 28th tables below, the numbers from 1 to 5 indicate the points given to the students regarding the trait of conscientiousness.

least answered | big difference
control number | major difference

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| | Item | 1 | 2 | 3 | 4 | 5 | |
|---|---|---|---|---|---|---|---|
| 1 | 3 | 2 | 16 | 180 | 240 | 115 | 553 |
| 2 | 8R | 3 | 112 | 174 | 132 | 15 | 436 |
| 3 | 13 | 0 | 8 | 114 | 216 | 285 | 623 |
| 4 | 18R | 26 | 112 | 72 | 140 | 60 | 410 |
| 5 | 23R | 39 | 100 | 99 | 24 | 125 | 387 |
| 6 | 28 | 3 | 32 | 207 | 172 | 110 | 524 |
| 7 | 33 | 0 | 6 | 162 | 256 | 160 | 584 |
| 8 | 38 | 3 | 52 | 189 | 136 | 135 | 515 |
| 9 | 43R | 37 | 68 | 192 | 36 | 45 | 378 |
| | | 113 | 506 | 1389 | 1352 | 1050 | 4410 |

Table 26: Measured scores of the Polish students' responses

Table 26, regarding the Polish students' scores of the third trait, conscientiousness, shows that most of the students agreed with the 3rd item, I see myself as a person who does a through job. The total score of that item is seen as 553 over 765, which means most of the Polish students consider that they do a through job. 8th question, the first reverse-scored questions, was questioning if the student could be sometimes careless. While only a few of the Polish students agreed with the item, most of the students chose "neither agree nor disagree". The total score for this item was measured as 436. As for the 13th item, which was about being a reliable worker, most of the students strongly agreed with it. The total score, the highest one, is seen as 623. It can be concluded that most of the Polish students show an agreement with the item 13th in a positive way, related to the trait, conscientiousness. The other reverse items: the 18th questioning if the student tented to be disorganized, has a low score, 410. Additionally, the other reverse scale items, the 23rd was asking if the student tended to be lazy, while the 43rd was questioning if the student was

easily distracted. Regarding the total score of the laziness, 387 over 765, we can conclude that a big number of the students see themselves as a person who tends to be lazy. Looking at the last reverse item, 43, about getting easily distracted, we can see the lowest score of that trait, 378. The 28th and 33rd items were respectively searching if the student persevered until the task was finished and if he did things efficiently. Both items respectively have the scores of 524 and 584 over 765 points. These scores show that most of the students consider that they persevere until the task is finished and they do things efficiently. The last item, 38th was questioning if the students made plans and followed through with them. The total score of the students for this item is 515. The score for 38th question, 501, is lower than the other non-reverse items. That shows some of the Polish students do not see themselves as a person who makes plans and follows through with them.

TURKEY-158 Students- Kafkas University

| | Item | 1 | 2 | 3 | 4 | 5 | |
|---|---|---|---|---|---|---|---|
| 1 | 3 | 1 | 6 | 171 | 264 | 155 | 597 |
| 2 | 8R | 2 | 128 | 174 | 124 | 15 | 443 |
| 3 | 13 | 0 | 6 | 99 | 212 | 345 | 662 |
| 4 | 18R | 12 | 54 | 75 | 216 | 200 | 557 |
| 5 | 23R | 5 | 46 | 60 | 148 | 365 | 624 |
| 6 | 28 | 1 | 4 | 114 | 252 | 270 | 641 |
| 7 | 33 | 0 | 10 | 174 | 240 | 175 | 599 |
| 8 | 38 | 2 | 46 | 96 | 272 | 165 | 581 |
| 9 | 43R | 10 | 80 | 186 | 176 | 10 | 462 |
| | | 33 | 380 | 1149 | 1904 | 1700 | 5166 |

Table 27: Measured scores of the Turkish students' responses

Table 27, regarding the Turkish students' scores of the third trait, conscientiousness, shows that most of the students agreed with the 3rd item, I see myself as a person who does a through job. The total score of that item is seen as 597 over 790, which means most of the Turkish students consider that they do a through job as the Polish students do. 8th question, the first reverse-scored questions, was questioning if the student could be sometimes careless. While only a few of the Polish students agreed with the item, most of the students chose "neither agree nor disagree". The total score for this item was measured as 443, the lowest one

regarding conscientiousness. I can be concluded that there is a remarking similarity between the Polish and Turkish students' responses. As for the 13th item, which was about being a reliable worker, most of the students strongly agreed with it. The total score, the highest one, is seen as 662. It can be concluded that most of the Turkish students show an agreement with the item 13th in a positive way, related to the trait, conscientiousness. The other reverse items: the 18th questioning if the student tented to be disorganized, has a higher score, 557, than the Polish students made for that item. Additionally, the other reverse scale items, the 23rd was asking if the student tended to be lazy, while the 43rd was questioning if the student was easily distracted. Regarding the total score of the laziness, 624 over 790, in contrast to the Polish students we can conclude that only a small number of the students see themselves as a person who tends to be lazy. Looking at the last reverse item, 43, about getting easily distracted, we can see the second lowest score of that trait, 462. The 28th and 33rd items were respectively searching if the student persevered until the task was finished and if he did things efficiently. Both items respectively have the scores of 641 and 599 over 790 points. These scores show that most of the students consider that they persevere until the task is finished and they do things efficiently. The last item, 38th was questioning if the students made plans and followed through with them. The total score of the students for this item is 581. The score for 38th question, 581, is lower than the other non-reverse items as we also see in the Polish students' results. That shows some of the Turkish students do not see themselves as a person who makes plans and follows through with them. When we compare the results regarding conscientiousness, we observe that the total score of Turkish students are higher than the Polish students'.

The percentages and numbers of participants' responses to the first category, extroversion, are presented in Tables 28, 29, 30.

Below, Table 28 shows that 22.6% of the Polish students scored 5 points, 29% of them scored 4 points, and 32.1% of them scored 3, while 13.1% of them scored 2 points, and 3.2% scored 1 point. It can be concluded that only 52% of the students got 4 and 5 points, which means high scores for the trait of conscientiousness. The percentages show us the results are lower than the other traits, the extroversion and agreeableness.

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| | Item | 1 | 2 | 3 | 4 | 5 | Total |
|---|---|---|---|---|---|---|---|
| 1 | 3 | 0.4% | 2.9% | 32.5% | 43.4% | 20.8% | 100% |
| 2 | 8R | 0.7% | 25.7% | 39.9% | 30.3% | 3.4% | 100% |
| 3 | 13 | 0.0% | 1.3% | 18.3% | 34.7% | 45.7% | 100% |
| 4 | 18R | 6.3% | 27.3% | 17.6% | 34.1% | 14.6% | 100% |
| 5 | 23R | 10.1% | 25.8% | 25.6% | 6.2% | 32.3% | 100% |
| 6 | 28 | 0.6% | 6.1% | 39.5% | 32.8% | 21.0% | 100% |
| 7 | 33 | 0.0% | 1.0% | 27.7% | 43.8% | 27.4% | 100% |
| 8 | 38 | 0.6% | 10.1% | 36.7% | 26.4% | 26.2% | 100% |
| 9 | 43R | 9.8% | 18.0% | 50.8% | 9.5% | 11.9% | 100% |
| | | 28.4% | 118.2% | 288.6% | 261.3% | 203.4% | 900% |
| | | 3.2% | 13.1% | 32.1% | 29.0% | 22.6% | 100% |

Table 28: The percentages of the Polish students' responses

Below, Table 29 shows that 30.9% of the Turkish students scored 5 points, 36.8% of them scored 4 points, and 23.3% of them scored 3, while 8.4% of them scored 2 points, and 0.7% scored 1 point. It can be concluded that more than 67% of the Turkish students also scored 4 and 5 points, which means high scores for the trait of agreeableness.

TURKEY-158 Students- Kafkas University

| | Item | 1 | 2 | 3 | 4 | 5 | Total |
|---|---|---|---|---|---|---|---|
| 1 | 3 | 0.2% | 1.0% | 28.6% | 44.2% | 26.0% | 100% |
| 2 | 8R | 0.5% | 28.9% | 39.3% | 28.0% | 3.4% | 100% |
| 3 | 13 | 0.0% | 0.9% | 15.0% | 32.0% | 52.1% | 100% |
| 4 | 18R | 2.2% | 9.7% | 13.5% | 38.8% | 35.9% | 100% |
| 5 | 23R | 0.8% | 7.4% | 9.6% | 23.7% | 58.5% | 100% |
| 6 | 28 | 0.2% | 0.6% | 17.8% | 39.3% | 42.1% | 100% |
| 7 | 33 | 0.0% | 1.7% | 29.0% | 40.1% | 29.2% | 100% |
| 8 | 38 | 0.3% | 7.9% | 16.5% | 46.8% | 28.4% | 100% |
| 9 | 43R | 2.2% | 17.3% | 40.3% | 38.1% | 2.2% | 100% |
| | | 6.2% | 75.4% | 209.6% | 331.0% | 277.8% | 900% |
| | | 0.7% | 8.4% | 23.3% | 36.8% | 30.9% | 100% |

Table 29: The percentages of the Turkish students' responses

Below, Table 30 also shows the difference between the percentages in the Tables 28$^{th}$ and 29$^{th}$. It shows that Turkish students who scored 5 points are almost 75% more than the Polish students in the percentage.

Conscientiousness- Difference between Poland-Turkey

| | Item | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|---|
| 1 | 3 | 0.2% | 1.9% | 3.9% | -0.8% | -5.2% |
| 2 | 8R | 0.2% | -3.2% | 0.6% | 2.3% | 0.1% |
| 3 | 13 | 0.0% | 0.4% | 3.3% | 2.6% | -6.4% |
| 4 | 18R | 4.2% | 17.6% | 4.1% | -4.6% | -21.3% |
| 5 | 23R | 9.3% | 18.5% | 16.0% | -17.5% | -26.2% |
| 6 | 28 | 0.4% | 5.5% | 21.7% | -6.5% | -21.1% |
| 7 | 33 | 0.0% | -0.6% | -1.3% | 3.8% | -1.8% |
| 8 | 38 | 0.2% | 2.2% | 20.2% | -20.4% | -2.2% |
| 9 | 43R | 7.6% | 0.7% | 10.5% | -28.6% | 9.7% |
| | | 22.2% | 42.8% | 79.1% | -69.7% | -74.3% |

Table 30: Difference between the percentages of the Polish and Turkish students'

When we look at the total scores and percentages of the Polish and Turkish students as shown in Table 31, we see that the Polish students' total score is 4410, while the Turkish students' is 5166. When we calculated the percentages, it was discovered that the Turkish students' percentage is 2% higher than the Polish students'.

| | Polish Students (153) | | Turkish Students (158) | |
|---|---|---|---|---|
| CONSCIENTIOUSNESS | Score | % | Score | % |
| | 4410 | 19.5% | 5166 | 21.4% |

Table 31: Conscientiousness, measured scores and percentages of the Polish and Turkish students

### 4.1.4. Neuroticism

In the Big Five Personality Test, there were 8 questions related to the fourth personality trait, neuroticism. 153 Polish students and 158 Turkish students answered those 8 items. The 4th item was questioning if the student saw himself as a depressed or blue person. The 9th item, one of the reverse-scored questions, was about how much the student saw himself as relaxed and who handles stress well. The 14th question was about the student's being tense and the 19th was to find out if the student worried a lot. The 24th item, another reverse scored question, was about how much the student thought himself as emotionally stable, not easily upset. The 29th and 39th items were respectively searching if the student could be moody and if he got nervous easily. The last reverse item: the 34th were asking if the student remained calm in tense situations.

The numbers of participants' responses to the fourth category, neuroticism, are presented in Table 32 and 33. In the 32nd, 33rd and 34th tables, the numbers from 1 to 5, represent the statements to indicate the extent to which the student agreed or disagreed with the items. 1 is "disagree strongly"; 2 is "disagree a little", number 3 is "neither agree nor disagree"; 4 is "agree a little" and 5 is "agree strongly".

Table 32 shows the Polish students' responses and Table 33 shows the Turkish students' responses to every question regarding neuroticism. Green rows indicate reverse-scored items. Purple colored numbers show the most chosen statements and yellow ones show the least. Blue ones indicate the major difference between the Polish and Turkish students' responses comparing Table 32 to Table 33. The big difference is seen in 24th item related to being emotionally stable and not easily being upset. Only 2 of the Polish students chose "strongly disagree" which means they consider themselves as emotionally stable in personality while 37 of the Turkish students strongly disagreed with this reverse item. By looking at this result, we can conclude that more Turkish students see themselves as a person who is not emotionally stable and they may easily get upset.

| | |
|---|---|
| most answered | reverse question |
| least answered | big difference |
| control number | major difference |

POLAND- 153 Students- The Higher Vocational State School

| | Item | 1 | 2 | 3 | 4 | 5 | Control No. |
|---|---|---|---|---|---|---|---|
| 1 | 4 | 69 | 38 | 38 | 4 | 4 | 153 |
| 2 | 9R | 16 | 18 | 47 | 51 | 21 | 153 |
| 3 | 14 | 13 | 32 | 51 | 44 | 13 | 153 |
| 4 | 19 | 12 | 38 | 49 | 36 | 18 | 153 |
| 5 | 24R | 2 | 18 | 54 | 45 | 34 | 153 |
| 6 | 29 | 18 | 29 | 36 | 49 | 21 | 153 |
| 7 | 34R | 3 | 21 | 54 | 51 | 24 | 153 |
| 8 | 39 | 30 | 33 | 25 | 36 | 29 | 153 |
| | | 163 | 227 | 354 | 316 | 164 | 1224 |

Table 32: Personality trait profile: Neuroticism, based on the Polish Students' responses

TURKEY-158 Students- Kafkas University

| | Item | 1 | 2 | 3 | 4 | 5 | control No. |
|---|---|---|---|---|---|---|---|
| 1 | 4 | 50 | 23 | 56 | 28 | 1 | 158 |
| 2 | 9R | 12 | 18 | 55 | 57 | 16 | 158 |
| 3 | 14 | 26 | 31 | 52 | 42 | 7 | 158 |
| 4 | 19 | 6 | 32 | 34 | 46 | 40 | 158 |
| 5 | 24R | 37 | 19 | 42 | 30 | 30 | 158 |
| 6 | 29 | 40 | 34 | 48 | 30 | 6 | 158 |
| 7 | 34R | 6 | 21 | 34 | 76 | 21 | 158 |
| 8 | 39 | 18 | 21 | 25 | 39 | 55 | 158 |
| | | 195 | 199 | 346 | 348 | 176 | 1264 |
| | | | | | total Poland | | 1224 |
| | | | | | Turkey | Poland | 40 |
| | | | | participants: | 158 | 153 | 5 |
| | | | | | | questions | 8 |
| | | | | | | | 40 |

Table 33: Personality trait profile: Neuroticism, based on the Turkish Students' responses

The 4th question was questioning if the student saw himself as a depressed or blue person, 69 of 153 Polish students strongly disagreed with the item while only 4 of them strongly agreed. On the other hand, 50 of 158 Turkish students strongly disagreed with the item while 28 of them agreed. We also see that most of the

Turkish students chose "neither agree nor disagree" for the item. The 9th item, one of the reverse-scored questions, was about how much the student saw himself as relaxed and who handles stress well. The students' responses are quite similar for that item. 21 of the Polish students chose the statement of "strongly agree" while 51 students chose "agree". As for 158 Turkish students, only 16 of them chose the statement of "strongly agree" while 57 students chose "agree". That means almost half of the students considers themselves as someone who is relaxed and handles stress well. The 14th question was about the student's being tense and 44 Polish and 42 Turkish students agreed with the item while a big number of them chose "neither agree nor disagree". The 19th was to find out if the student worried a lot. 18 Polish and 40 Turkish students strongly agreed with it. We can conclude that more Turkish students think that they worry a lot. The 24th item, another reverse scored question, was about how much the student thought himself as emotionally stable, not easily upset. For the item 24, there were 37 Turkish students who strongly disagreed with being emotionally stable, not easily upset in personality while there were only 2 Polish students who strongly disagreed with the item. As for the 29th and 39th items were respectively searching if the student could be moody and if he got nervous easily. 18 Polish and 40 Turkish students chose the statement, "strongly disagree" with the 29th item while 21 of the Polish and only 6 of the Turkish students strongly agreed with being moody. For the 39th item, there were 29 Polish students and 55 Turkish students who strongly agreed that they got nervous easily. The last reverse item: the 34th were asking if the student remained calm in tense situations. 51 Polish students and 76 Turkish students chose "agree" for the item.

Neuroticism-Difference between Poland-Turkey

| | Item | 1 | 2 | 3 | 4 | 5 | |
|---|---|---|---|---|---|---|---|
| 1 | 4 | 19 | 15 | (18) | (24) | 3 | |
| 2 | 9R | 4 | 0 | (8) | (6) | 5 | |
| 3 | 14 | (13) | 1 | (1) | 2 | 6 | |
| 4 | 19 | 6 | 6 | 15 | (10) | (22) | |
| 5 | 24R | (35) | (1) | 12 | 15 | 4 | |
| 6 | 29 | (22) | (5) | (12) | 19 | 15 | |
| 7 | 34R | (3) | 0 | 20 | (25) | 3 | |
| 8 | 39 | 12 | 12 | 0 | (3) | (26) | |
| | | (32) | 28 | 8 | (32) | (12) | (40) |

Table 34: Comparison of the Polish and Turkish students' response.

The difference between the responses of the Polish and Turkish students is also shown in Table 34. Red colored numbers shows Turkish students, who chose this statement, are more in number than the Polish students. The black ones indicate that the Polish students are more in number than the Turkish students. Blue color indicates the major difference in the Polish students' responses to the 24th question, as mentioned before.

**BFI Scale Scores of the Responses**

The responses of the participants shown in Tables above were analyzed through SPSS, and frequency and percentages values of the items are presented in tabular forms. To analyze the data correctly, BFI scale score was taken into account. Reverse questions were given scores in an opposite way of the other questions. For example, the ninth item, "I see myself as someone who is relaxed and handles stress well", is a positive characteristic and it is an opposite characteristics to the fourth trait, "neuroticism". Thus, we call the sixth item "reverse-scored item" which means when students asserted that they strongly disagreed with it, they assigned a value of 5 points instead of 1 point. That means, in fact, being disagreed with the ninth item brings high score regarding "neuroticism"; therefore, 9th, 24th and 34th items had to be reverse scaled before starting to analyze the data. In the tables below, the scores according to BFI scale are shown. In the 35th, 36th and 37th tables below, the numbers from 1 to 5 indicate the points given to the students regarding the trait of extroversion..

least answered | big difference
control number | major difference

POLAND- 153 Students- The Higher Vocational State School

| | Item | 1 | 2 | 3 | 4 | 5 | |
|---|---|---|---|---|---|---|---|
| 1 | 4 | 69 | 76 | 114 | 16 | 20 | 295 |
| 2 | 9R | 21 | 102 | 141 | 72 | 80 | 416 |
| 3 | 14 | 13 | 64 | 153 | 176 | 65 | 471 |
| 4 | 19 | 12 | 76 | 147 | 144 | 90 | 469 |
| 5 | 24R | 34 | 90 | 162 | 72 | 10 | 368 |
| 6 | 29 | 18 | 58 | 108 | 196 | 105 | 485 |
| 7 | 34R | 24 | 102 | 162 | 84 | 15 | 387 |
| 8 | 39 | 30 | 66 | 75 | 144 | 145 | 460 |
| | | 221 | 634 | 1062 | 904 | 530 | 3351 |

Table 35: Measured scores of the Polish students' responses

Table 35, regarding the Polish students' scores of the trait of neuroticism, shows that most of the students strongly disagreed with the 4th item, I see myself as a depressed or blue person, while only a few of them strongly agreed with the item. The total result related to being depressed or blue is seen as 295 over 765, which is the lowest result. It is concluded that most of the Polish students consider that they are not depressed or blue in personality. 9th question, one of the reverse-scored items was about how much the student saw himself as relaxed and who handles stress well. Total score for this item was measured as 416, which more students think that they are relaxed and can handle stress well in. The 14th question was about the student's being tense and the score of the students, 471 over 765, shows that a big number of them see themselves as a tense person. As for the item 19th was to find out if the student worried a lot. The total score is close to the 14th item, 469. Thus, it can be concluded that most of the Polish students think that they worry a lot. The 24th item, another reverse scored question, was about how much the student thought himself as emotionally stable, not easily upset. The total score of the students for this item is 368, one of the lowest scores. As for the 29th and 39th items were respectively searching if the student could be moody and if he got nervous easily. Both items respectively have the scores of 485 and 460 over 765 points. These scores show that more students consider that they could be moody and got nervous easily. The last reverse item: the 34th was asking if the student remained calm in tense situations. The total score of the students for this item is 387. We can conclude that most of the Polish students think that they do not remain calm in tense situations most of the time.

TURKEY-158 Students- Kafkas University

| | Item | 1 | 2 | 3 | 4 | 5 | |
|---|---|---|---|---|---|---|---|
| 1 | 4 | 50 | 46 | 168 | 112 | 5 | 381 |
| 2 | 9R | 16 | 114 | 165 | 72 | 60 | 427 |
| 3 | 14 | 26 | 62 | 156 | 168 | 35 | 447 |
| 4 | 19 | 6 | 64 | 102 | 184 | 200 | 556 |
| 5 | 24R | 30 | 60 | 126 | 76 | 185 | 477 |
| 6 | 29 | 40 | 68 | 144 | 120 | 30 | 402 |
| 7 | 34R | 21 | 152 | 102 | 84 | 30 | 389 |
| 8 | 39 | 18 | 42 | 75 | 156 | 275 | 566 |
| | | 207 | 608 | 1038 | 972 | 820 | 3645 |

Table 36: Measured scores of the Turkish students' responses.

Table 36, regarding the Turkish students' scores of the trait of neuroticism, shows that most of the students agreed with the 4th item, I see myself as a depressed or blue person, while only a few of them strongly agreed with the item. The total result related to being depressed or blue is seen as 381 over 790, which is the lowest result. It is concluded that some of the Turkish students consider that they are depressed or blue in personality. 9th question, one of the reverse-scored items was about how much the student saw himself as relaxed and who handles stress well. Total score for this item was measured as 427, which less Turkish students think that they are relaxed and can handle stress well. The 14th question was about the student's being tense and the score of the students, 447 over 790 shows that a big number of them see themselves as a tense person. As for the item 19th was to find out if the student worried a lot. The total score is close to the 14th item, 556, one of the highest scores. Thus, it can be concluded that a big number of the Turkish students think that they worry a lot. The 24th item, another reverse scored question, was about how much the student thought himself as emotionally stable, not easily upset. The total score of the students for this item is 477, higher than the Polish students' score.

As for the 29th and 39th items were respectively searching if the student could be moody and if he got nervous easily. Both items respectively have the scores of 402 and 566 over 790 points. These scores show that more students consider that they could be moody and got nervous easily. The big difference is seen on the item 39; we can conclude that more Turkish students think that they get nervous easily. The last reverse item: the 34th was asking if the student remained calm in tense situations. The total score of the students for this item is 389. We can conclude that most of the Turkish students think that they do not remain calm in tense situations most of the time.

The percentages and numbers of participants' responses to the first category, neuroticism, are presented in Tables 37, 38, 39.

POLAND- 153 Students- The Higher Vocational State School

| | Item | 1 | 2 | 3 | 4 | 5 | Total |
|---|---|---|---|---|---|---|---|
| 1 | 4 | 23.4% | 25.8% | 38.6% | 5.4% | 6.8% | 100% |
| 2 | 9R | 5.0% | 24.5% | 33.9% | 17.3% | 19.2% | 100% |
| 3 | 14 | 2.8% | 13.6% | 32.5% | 37.4% | 13.8% | 100% |
| 4 | 19 | 2.6% | 16.2% | 31.3% | 30.7% | 19.2% | 100% |
| 5 | 24R | 9.2% | 24.5% | 44.0% | 19.6% | 2.7% | 100% |
| 6 | 29 | 3.7% | 12.0% | 22.3% | 40.4% | 21.6% | 100% |
| 7 | 34R | 6.2% | 26.4% | 41.9% | 21.7% | 3.9% | 100% |
| 8 | 39 | 6.5% | 14.3% | 16.3% | 31.3% | 31.5% | 100% |
| | | 59.4% | 157.2% | 260.8% | 203.8% | 118.8% | 800% |
| | | 7.4% | 19.6% | 32.6% | 25.5% | 14.8% | 100% |

Table 37: The percentages of the Polish students' responses

TURKEY-158 Students- Kafkas University

| | Item | 1 | 2 | 3 | 4 | 5 | Total |
|---|---|---|---|---|---|---|---|
| 1 | 4 | 13.1% | 12.1% | 44.1% | 29.4% | 1.3% | 100% |
| 2 | 9R | 3.7% | 26.7% | 38.6% | 16.9% | 14.1% | 100% |
| 3 | 14 | 5.8% | 13.9% | 34.9% | 37.6% | 7.8% | 100% |
| 4 | 19 | 1.1% | 11.5% | 18.3% | 33.1% | 36.0% | 100% |
| 5 | 24R | 6.3% | 12.6% | 26.4% | 15.9% | 38.8% | 100% |
| 6 | 29 | 10.0% | 16.9% | 35.8% | 29.9% | 7.5% | 100% |
| 7 | 34R | 5.4% | 39.1% | 26.2% | 21.6% | 7.7% | 100% |
| 8 | 39 | 3.2% | 7.4% | 13.3% | 27.6% | 48.6% | 100% |
| | | 48.6% | 140.1% | 237.7% | 211.9% | 161.7% | 800% |
| | | 6.1% | 17.5% | 29.7% | 26.5% | 20.2% | 100% |

Table 38: The percentages of the Turkish students' responses

Table 37 shows that 14.8% of the Polish students scored 5 points, 25.5% of them scored 4 points, 32.6% of them scored 3, 19.6% of them scored 2 points, and 7.4% scored 1 point. It can be concluded that most of the Polish students neither agreed nor disagreed with most of the items. Additionally, 40.3% of the Polish students got 4 and 5 points, which means high scores for the trait of neuroticism.

Table 38 shows that 20% of the Turkish students scored 5 points, 26.5% of them scored 4 points, 29.7% of them scored 3, 17.5% of them scored 2 points, and 6.1% scored 1 point. It can also be concluded that most of the Turkish students neither agreed nor disagreed with most of the items. Moreover, more than 46% of them scored 4 and 5 points, which means high scores for the trait of extraversion. Below, Table 39 also shows the difference between the percentages in Table 37 and

38. Below, Table 39 also shows the difference between the percentages in the Tables 37th and 38th. It shows that Turkish students who scored 5 points are almost 43% more than the Polish students in the percentage.

Neuroticism-Difference between Poland-Turkey

| | Item | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|---|
| 1 | 4 | 10.3% | 13.7% | -5.5% | -24.0% | 5.5% |
| 2 | 9R | 1.3% | -2.2% | -4.7% | 0.4% | 5.2% |
| 3 | 14 | -3.1% | -0.3% | -2.4% | -0.2% | 6.0% |
| 4 | 19 | 1.5% | 4.7% | 13.0% | -2.4% | -16.8% |
| 5 | 24R | 2.9% | 11.9% | 17.6% | 3.6% | -36.1% |
| 6 | 29 | -6.2% | -5.0% | -13.6% | 10.6% | 14.2% |
| 7 | 34R | 0.8% | -12.7% | 15.6% | 0.1% | -3.8% |
| 8 | 39 | 3.3% | 6.9% | 3.1% | 3.7% | -17.1% |
| | | 10.8% | 17.1% | 23.1% | -8.1% | -42.9% |

Table 39: Difference between the percentages of the Polish and Turkish students

| | Polish Students (153) | | Turkish Students (158) | |
|---|---|---|---|---|
| NEUROTICISM | Score | % | Score | % |
| | 3351 | 14.8% | 3645 | 15.1% |

Table 40: Neuroticism, measured scores and percentages of the Polish and Turkish students

When we look at the total scores and percentages of the Polish and Turkish students as shown in Table 40, we see that there is a small difference between them and the results are lower than the first three traits, extroversion, agreeableness and conscientiousness. The Polish students' total score is 3351, while the Turkish students' is 3645. When we calculated the percentages, it was discovered that the Turkish students' percentage is 1% higher than the Polish students'.

### 4.1.5. Openness

In the Big Five Personality Test, there were 10 questions related to the last personality trait, openness. 153 Polish students and 158 Turkish students answered these 10 items. The 5th item was to find out if the student was original and came up with new ideas. The 10th item was questioning if the student was curious about many different things, the 15th item was about being an ingenious, a deep thinker. 20th item was questioning if the student had an active imagination. The 25th question was about whether the student was inventive or not. The 30th item was about how much the student saw himself as a person who valued artistic, aesthetic experience. The reverse items: the 35th was asking if the student preferred to work that was routine, while the 41st was questioning if the student had few artistic interests. Finally, the 40th and 44th items were respectively searching if the student liked to reflect, played with the ideas and if he was sophisticated in art, music or literature.

The numbers of participants' responses to the fifth trait, openness, are presented in Tables 38 and 39. The numbers represent the statements to indicate the extent to which the student agreed or disagreed with the items. 1 is "disagree strongly"; 2 is "disagree a little", number 3 is "neither agree nor disagree"; 4 is "agree a little" and 5 is "agree strongly".

Table 41 shows the Polish students' responses and Table 42 shows the Turkish students' responses to every question regarding extroversion. Green rows indicate reverse scored items. Purple colored numbers show the most chosen statements and yellow ones show the least. Blue ones indicate the major difference between the Polish and Turkish students' responses comparing Table 41 to Table 42. The big difference is seen in 41st item related to having few artistic interests. A big number, 64, of the Turkish students, chose "neither agree nor disagree" while only 19 of the Polish students chose "neither agree nor disagree" for this reverse item. Moreover, 45 of the Polish students agreed and 45 of them disagreed that they have artistic interest while 46 of the Turkish students agreed and only 26 of them disagreed with that reverse item.

most answered — reverse question
least answered — big difference
control number — major difference

POLAND- 153 Students- The Higher Vocational State School

| | Item | 1 | 2 | 3 | 4 | 5 | Control No. |
|---|---|---|---|---|---|---|---|
| 1 | 5 | 2 | 2 | 43 | 69 | 37 | 153 |
| 2 | 10 | 4 | 6 | 24 | 68 | 51 | 153 |
| 3 | 15 | | 20 | 39 | 59 | 35 | 153 |
| 4 | 20 | | 7 | 35 | 61 | 50 | 153 |
| 5 | 25 | 2 | 5 | 55 | 52 | 39 | 153 |
| 6 | 30 | 12 | 14 | 34 | 57 | 36 | 153 |
| 7 | 35R | 36 | 46 | 45 | 21 | 5 | 153 |
| 8 | 40 | | 4 | 57 | 67 | 25 | 153 |
| 9 | 41R | 4 | 45 | 19 | 45 | 40 | 153 |
| 10 | 44 | 6 | 24 | 38 | 45 | 40 | 153 |
| | | 66 | 173 | 389 | 544 | 358 | 1530 |

Table 41: Personality trait profile: Openness, based on the Polish Students' responses

TURKEY-158 Students- Kafkas University

| | Item | 1 | 2 | 3 | 4 | 5 | Control No. |
|---|---|---|---|---|---|---|---|
| 1 | 5 | | 12 | 44 | 83 | 19 | 158 |
| 2 | 10 | | 17 | 21 | 61 | 59 | 158 |
| 3 | 15 | | 13 | 30 | 61 | 54 | 158 |
| 4 | 20 | | 7 | 34 | 77 | 40 | 158 |
| 5 | 25 | | 14 | 62 | 76 | 6 | 158 |
| 6 | 30 | 13 | 15 | 63 | 54 | 13 | 158 |
| 7 | 35R | 20 | 29 | 43 | 56 | 10 | 158 |
| 8 | 40 | | 11 | 49 | 57 | 41 | 158 |
| 9 | 41R | 4 | 26 | 64 | 46 | 18 | 158 |
| 10 | 44 | 8 | 8 | 42 | 62 | 38 | 158 |
| | | 45 | 152 | 452 | 633 | 298 | 1580 |

| | | |
|---|---|---|
| | total Poland | 1530 |
| | Turkey / Poland | 50 |
| participants: | 158 / 153 | 5 |
| | questions | 10 |
| | | 50 |

Table 42: Personality trait profile: Openness, based on the Turkish Students' responses

Below, Table 43 helps us take a closer look at the difference between the Polish and Turkish students responses to the trait of conscientiousness.

Openness- Difference between Poland-Turkey

| | Item | 1 | 2 | 3 | 4 | 5 | |
|---|---|---|---|---|---|---|---|
| 1 | 5 | 2 | (10) | (1) | (14) | 18 | |
| 2 | 10 | 4 | (11) | 3 | 7 | (8) | |
| 3 | 15 | 0 | 7 | 9 | (2) | (19) | |
| 4 | 20 | 0 | 0 | 1 | (16) | 10 | |
| 5 | 25 | 2 | (9) | (7) | (24) | 33 | |
| 6 | 30 | (1) | (1) | (29) | 3 | 23 | |
| 7 | 35R | 16 | 17 | 2 | (35) | (5) | |
| 8 | 40 | 0 | (7) | 8 | 10 | (16) | |
| 9 | 41R | 0 | 19 | (45) | (1) | 22 | |
| 10 | 44 | (2) | 16 | (4) | (17) | 2 | |
| | | 21 | 21 | (63) | (89) | 60 | (50) |

Table 43: Comparison of the Polish and Turkish students' responses

The difference between the responses of the Polish and Turkish students is also shown in Table 43. Red colored numbers shows Turkish students, who chose this statement, are more in number than the Polish students. The black ones indicate that the Polish students are more in number than the Turkish students. Blue color indicates the major difference in the Polish students' responses to the 41$^{st}$ question, as mentioned before.

**BFI Scale Scores of the Responses**

The responses of the participants shown in Tables above were analyzed through SPSS, and frequency and percentages values of the items are presented in tabular forms. To analyze the data correctly, BFI scale score was taken into account. Reverse questions were given scores in an opposite way of the other questions. For example, the 35$^{th}$ item, "I see myself as someone who prefers to work that is routine", is a negative characteristic about the trait, "openness". Thus, we call the eighth item "reverse-scored item" which means when students asserted that they strongly disagreed with it, they assigned a value of 5 points instead of 1 point. That

means, in fact, being disagreed with 35th item is a positive attitude; therefore, the 35th and 41st items had to be reverse scaled before starting to analyze the data. In the tables below, the scores according to BFI scale are shown. In the 44th, 45th and 46th tables below, the numbers from 1 to 5 indicate the points given to the students regarding the trait of openness.

least answered — big difference
control number — major difference

POLAND- 153 Students- The Higher Vocational State School

| | Item | 1 | 2 | 3 | 4 | 5 | |
|---|---|---|---|---|---|---|---|
| 1 | 5 | 2 | 4 | 129 | 276 | 185 | 596 |
| 2 | 10 | 4 | 12 | 72 | 272 | 255 | 615 |
| 3 | 15 | 0 | 40 | 117 | 236 | 175 | 568 |
| 4 | 20 | 0 | 14 | 105 | 244 | 250 | 613 |
| 5 | 25 | 2 | 10 | 165 | 208 | 195 | 580 |
| 6 | 30 | 12 | 28 | 102 | 228 | 180 | 550 |
| 7 | 35R | 5 | 42 | 135 | 184 | 180 | 546 |
| 8 | 40 | 0 | 8 | 171 | 268 | 125 | 572 |
| 9 | 41R | 40 | 90 | 57 | 180 | 20 | 387 |
| 10 | 44 | 6 | 48 | 114 | 180 | 200 | 548 |
| | | 71 | 296 | 1167 | 2276 | 1765 | 5575 |

Table 44: Measured scores of the Polish students' responses

Table 44, regarding the Polish students' scores of the forth trait, openness, shows that most of the students agreed with the 5th item, I see myself as a person who is original and comes up with new ideas. The total score of that item is seen as 596 over 765, which means most of the Polish students consider that they are original and come up with new ideas. 10th question was questioning if the student was curious about many different things. While only a very few of the Polish students disagreed with the item, most of the students chose "agree" and "strongly agree". The total score for this item was measured as 615, the highest score. As for the 15th item, which was about being an ingenious, a deep thinker, most of the students agreed with it while none of the students strongly disagreed. The total score is seen as 568. The 20th questioning if the student had an active imagination has a high score, 613 and we see that none of the Polish students strongly disagreed with that item. Additionally, The 25th question was about whether the student was inventive or not while the 30th item was about how much the student saw himself as a person who valued artistic, aesthetic experience. Both items respectively have the

scores of 580 and 550 over 765 points. We can conclude that most of the Polish students consider themselves as people who are inventive and value artistic, aesthetic experience. As for the reverse-scale items, the 35th was asking if the student preferred to work that was routine, while the 41st was questioning if the student had few artistic interests. Regarding the total score of work on the routine things, 546 over 765, we can conclude that a big number of the students see themselves as a person who prefers to work that is routine. Looking at the last reverse item, 41, about having few artistic interests, we can see the lowest score of that trait, 387. It can be concluded that most of the Polish students show an agreement with the item 41st in a positive way, related to the trait, openness. The 40th and 44th items were respectively searching if the student liked to reflect, played with the ideas and if he was sophisticated in art, music or literature. Both items respectively have the scores of 572 and 548 over 765 points. These scores show that more students consider that they like to play with the ideas and they are sophisticated in art, music or literature.

TURKEY-158 Students- Kafkas University

| | Item | 1 | 2 | 3 | 4 | 5 | |
|---|---|---|---|---|---|---|---|
| 1 | 5 | 0 | 24 | 132 | 332 | 95 | 583 |
| 2 | 10 | 0 | 34 | 63 | 244 | 295 | 636 |
| 3 | 15 | 0 | 26 | 90 | 244 | 270 | 630 |
| 4 | 20 | 0 | 14 | 102 | 308 | 200 | 624 |
| 5 | 25 | 0 | 28 | 186 | 304 | 30 | 548 |
| 6 | 30 | 13 | 30 | 189 | 216 | 65 | 513 |
| 7 | 35R | 10 | 112 | 129 | 116 | 100 | 467 |
| 8 | 40 | 0 | 22 | 147 | 228 | 205 | 602 |
| 9 | 41R | 18 | 92 | 192 | 104 | 20 | 426 |
| 10 | 44 | 8 | 16 | 126 | 248 | 190 | 588 |
| | | 49 | 398 | 1356 | 2344 | 1470 | 5617 |

Table 45: Measured scores of the Turkish students' responses

Table 45, regarding the Turkish students' scores of the forth trait, openness, shows that most of the students agreed with the 5th item, I see myself as a person who is original and comes up with new ideas. The total score of that item is seen as 583 over 790, which means the Polish students who consider that they are original and come up with new ideas are more in number. 10th question was questioning if the student was curious about many different things. While none of the Turkish students disagreed with the item, most of the students chose "agree" and "strongly agree".

The total score for this item was measured as 636, the highest score of the trait. As for the 15th item, which was about being an ingenious, a deep thinker, most of the students agreed with it while none of the students strongly disagreed. The total score is 630, higher than the Polish students'. The 20th questioning if the student had an active imagination has a high score, 624 and we see that none of the Turkish students strongly disagreed with that item as well. Additionally, The 25th question was about whether the student was inventive or not while the 30th item was about how much the student saw himself as a person who valued artistic, aesthetic experience. Both items respectively have the scores of 548 and 513 over 790 points. We can conclude that the number of the Turkish students who consider themselves as people who are inventive and value artistic, aesthetic experience is lower than the number of the Polish students. As for the reverse-scale items, the 35th was asking if the student preferred to work that was routine, while the 41st was questioning if the student had few artistic interests. Regarding the total score of work on the routine things, 467 over 790, we can conclude that less Turkish students see themselves as a person who prefers to work that is routine. Looking at the last reverse item, 41, about having few artistic interests, we can see the lowest score of that trait, 426. It can be concluded that most of the Polish students show an agreement with the item 41st in a positive way, related to the trait, openness. The 40th and 44th items were respectively searching if the student liked to reflect, played with the ideas and if he was sophisticated in art, music or literature. Both items respectively have the scores of 602 and 588 over 765 points. These scores show that more students consider that they like to play with the ideas and they are sophisticated in art, music or literature.
When we compare the results regarding openness, we observe that the Polish students' overall scores higher than the Turkish students' overall responses.

The percentages and numbers of participants' responses to the first category, extroversion, are presented in Tables 46, 47, 48.

Below, Table 46 shows that 30.7% of the Polish students scored 5 points, 40.9% of them scored 4 points, and 20.8% of them scored 3, while 6.0% of them scored 2 points, and 1.6% scored 1 point. It can be concluded that almost 72% of the students got 4 and 5 points, which means high scores for the trait of openness.

POLAND- 153 Students- The Higher Vocational State School

| | Item | 1 | 2 | 3 | 4 | 5 | Total |
|---|---|---|---|---|---|---|---|
| 1 | 5 | 0.3% | 0.7% | 21.6% | 46.3% | 31.0% | 100% |
| 2 | 10 | 0.7% | 2.0% | 11.7% | 44.2% | 41.5% | 100% |
| 3 | 15 | 0.0% | 7.0% | 20.6% | 41.5% | 30.8% | 100% |
| 4 | 20 | 0.0% | 2.3% | 17.1% | 39.8% | 40.8% | 100% |
| 5 | 25 | 0.3% | 1.7% | 28.4% | 35.9% | 33.6% | 100% |
| 6 | 30 | 2.2% | 5.1% | 18.5% | 41.5% | 32.7% | 100% |
| 7 | 35R | 0.9% | 7.7% | 24.7% | 33.7% | 33.0% | 100% |
| 8 | 40 | 0.0% | 1.4% | 29.9% | 46.9% | 21.9% | 100% |
| 9 | 41R | 10.3% | 23.3% | 14.7% | 46.5% | 5.2% | 100% |
| 10 | 44 | 1.1% | 8.8% | 20.8% | 32.8% | 36.5% | 100% |
| | | 15.9% | 59.9% | 208.2% | 409.1% | 306.9% | 1000% |
| | | 1.6% | 6.0% | 20.8% | 40.9% | 30.7% | 100% |

Table 46: The percentages of the Polish students' responses

Below, Table 43 shows that 24.8% of the Turkish students scored 5 points, 41% of them scored 4 points, and 25.3% of them scored 3, while 7.9% of them scored 2 points, and 1% scored 1 point. It can be concluded that more than almost 65% of the Turkish students also scored 4 and 5 points, which means the Polish students' high scores for "openness" is 12% more in percentage.

TURKEY-158 Students- Kafkas University

| | Item | 1 | 2 | 3 | 4 | 5 | Total |
|---|---|---|---|---|---|---|---|
| 1 | 5 | 0.0% | 4.1% | 22.6% | 56.9% | 16.3% | 100% |
| 2 | 10 | 0.0% | 5.3% | 9.9% | 38.4% | 46.4% | 100% |
| 3 | 15 | 0.0% | 4.1% | 14.3% | 38.7% | 42.9% | 100% |
| 4 | 20 | 0.0% | 2.2% | 16.3% | 49.4% | 32.1% | 100% |
| 5 | 25 | 0.0% | 5.1% | 33.9% | 55.5% | 5.5% | 100% |
| 6 | 30 | 2.5% | 5.8% | 36.8% | 42.1% | 12.7% | 100% |
| 7 | 35R | 2.1% | 24.0% | 27.6% | 24.8% | 21.4% | 100% |
| 8 | 40 | 0.0% | 3.7% | 24.4% | 37.9% | 34.1% | 100% |
| 9 | 41R | 4.2% | 21.6% | 45.1% | 24.4% | 4.7% | 100% |
| 10 | 44 | 1.4% | 2.7% | 21.4% | 42.2% | 32.3% | 100% |
| | | 10.3% | 78.7% | 252.5% | 410.3% | 248.2% | 1000% |
| | | 1.0% | 7.9% | 25.3% | 41.0% | 24.8% | 100% |

Table 47: The percentages of the Turkish students' responses

Below, Table 48 also shows the difference between the percentages in the Tables 42$^{nd}$ and 43$^{rd}$. It shows that Polish students who scored 5 points are almost 58.7% more than the Turkish students in the percentage.

Openness- Difference between Poland-Turkey

| | Item | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|---|
| 1 | 5 | 0.3% | -3.4% | -1.0% | -10.6% | 14.7% |
| 2 | 10 | 0.7% | -3.4% | 1.8% | 5.9% | -4.9% |
| 3 | 15 | 0.0% | 2.9% | 6.3% | 2.8% | -12.0% |
| 4 | 20 | 0.0% | 0.0% | 0.8% | -9.6% | 8.7% |
| 5 | 25 | 0.3% | -3.4% | -5.5% | -19.6% | 28.1% |
| 6 | 30 | -0.4% | -0.8% | -18.3% | -0.7% | 20.1% |
| 7 | 35R | -1.2% | -16.3% | -2.9% | 8.9% | 11.6% |
| 8 | 40 | 0.0% | -2.3% | 5.5% | 9.0% | -12.2% |
| 9 | 41R | 6.1% | 1.7% | -30.3% | 22.1% | 0.5% |
| 10 | 44 | -0.3% | 6.0% | -0.6% | -9.3% | 4.2% |
| | | 5.6% | -18.9% | -44.3% | -1.2% | 58.7% |

Table 48: Difference between the percentages of the Polish and Turkish students

| | Polish Students (153) | | Turkish Students (158) | |
|---|---|---|---|---|
| OPENNESS | Score | % | Score | % |
| | 5575 | 24.7% | 5617 | 23.3% |

Table 49: Openness, measured scores and percentages of the Polish and Turkish students

When we look at the total scores and percentages of the Polish and Turkish students as shown in Table 49, we see that the Polish students' total score is 5575, while the Turkish students' is 5617. When we calculated the percentages, it was discovered that the Polish students' percentage is 1.4% higher than the Turkish students'.

### 4.2. Analysis of Open-ended Questions

The last item of the questionnaire included 2 open-ended questions, which were used to determine the link between personality traits and second language learning process. As a first question, when asked what the students' 3 to 5 strengths about their characteristics are while learning a second language, almost all of the participants had something to say. The responses can be summarized according to the participants' verbatim remarks at their characteristics. Citing some of the participants' verbatim remarks, it can be concluded that most of the second language learners listed their strengths by pointing out the importance of the traits:

extroversion, agreeableness, conscientiousness and openness. The most common strengths about their characteristics; being talkative, active, energetic, sociable, hardworking, reliable worker and curious about many different things, liking to cooperate, learn new things and ask questions.

As a second question, it is asked to the participants what their 3 to 5 weaknesses about their characteristics are while learning a second language. The responses can be summarized according to the participants' verbatim remarks at their characteristics. Citing some of the participants' verbatim remarks, it can be concluded that most of the second language learners listed their weaknesses by adding the personality trait, neuroticism to their characteristics; getting nervous easily, being easily distracted, depressed, not being relaxed, and getting easily stressed. Additionally, they also point out the opposite of the other personality traits, by listing; being lazy, shy, disorganized, unmotivated, getting afraid of making mistakes, not having enough patience, not a reliable worker, getting easily bored and tired of studying.

# CHAPTER 5

## DISCUSSION AND CONCLUSION

This chapter presents the discussion of findings, conclusions drawn from the study, and suggests implications for further research and practice.

This study aimed to (1) explore the personal differences of ESL learners from different nationalities and cultures (Poland and Turkey), (2) investigated their personality differences and attitudes towards learning English, and (3) whether these attitudes had any relationship with their nationality or culture. This research was concerned with individual differences in personality that were relevant to educational experience and it also focused on the links between personality and different cultures and their implications for educational practice. To accomplish these aims: (a) the related literature was reviewed in order to describe individual differences and personality differences to explain the effective ways to teach by taking these differences into consideration, (b) The Big Five Personality Test with 2 open-ended questions (see Appendix 1) was conducted with Polish and Turkish ESL learners to discover if ESL learners in these countries present a wide diversity of cultural backgrounds or personality differences in second language learning process, (c) all data were analyzed to identify the relationship between ESL's personality differences and their nationalities. The research questions for the study were as follows:

**Research Question 1:** Are there any differences between the personality traits of ESL learners from Poland and Turkey?
**Research Question 2:** Do ESL learners in these countries present a wide diversity of cultural backgrounds or personality differences in second language learning process?
**Research Question 3:** Is there any relationship between personality and nationality? How do different cultures and values affect second language learning?
**Research Question 4:** Which personality features do help learners to learn English well?

### 5.1. Are there any differences between the personality traits of ESL learners from Poland and Turkey?

The Big Five Personality Test with 2 open-ended questions (see Appendix 1) was conducted with Polish and Turkish ESL learners and all data were analyzed to identify the relationship between ESL's personality differences and their nationalities. The results were quite similar. Table 46 shows us the overall percentages and difference between the students from Poland and Turkey. For the first trait extroversion, the Polish students' percentage was 1% higher than the Turkish students', for the second trait, agreeableness; the results were almost the same. As for the third personality trait conscientiousness, the Turkish students' percentage was 2% higher than the Polish students', and for the third trait, neuroticism, there was a small difference (0.3%) and Polish students' percentage was lower than the Turkish students'. As for the last personality trait, openness the Polish students' percentage was 1.4% higher than the Turkish students'.

| | score Poland | | score Turkey | |
|---|---|---|---|---|
| EXTRAVERSION | 4269 | 18.9% | 4321 | 17.9% |
| AGREABLENESS | 5004 | 22.1% | 5405 | 22.4% |
| CONSCIENTIOUSNESS | 4410 | 19.5% | 5166 | 21.4% |
| NEUROTICISM | 3351 | 14.8% | 3645 | 15.1% |
| OPENNES | 5575 | 24.7% | 5617 | 23.3% |
| total | 22609 | 100% | 24154 | 100% |

| | | |
|---|---|---|
| total score Turkey (158 participants) | 24154 | |
| correction 153/158 | 0.968 | |
| see below* | 23390 | 100.0% |
| total score Poland | 22609 | 96.7% |

Table 50: Overall scores and percentages of the Big Five Personality Traits
* corrected Turkish score to match the scoring of the 153 Polish participants

### 5.2. Do ESL learners in these countries present a wide diversity of cultural backgrounds or personality differences in second language learning process?

Having evaluated 2 open-ended questions, we found out that the students' characteristic and their strengths and weaknesses in learning a second language were

almost the same. The most common strengths about their characteristics were listed as being talkative, active, energetic, sociable, hardworking, reliable worker and curious about many different things, liking to cooperate, learn new things and ask questions. Additionally, the most common weaknesses were listed as the following; getting nervous easily, being easily distracted, depressed, not being relaxed, and getting easily stressed. Additionally, they also point out the opposite of the other personality traits, by listing; being lazy, shy, disorganized, unmotivated, getting afraid of making mistakes, not having enough patience, not a reliable worker, getting easily bored and tired of studying. Thus, we can say that students in these countries do not present a wide diversity of cultural backgrounds or personality differences in second language process.

### 5.3. Is there any relationship between personality and nationality? How do different cultures and values affect second language learning?

The overall results indicate that there is coherence between the answers of the Polish students and Turkish students. That means large majority of the students in Poland chose the same statement. On the other hand, large majority of the students in Turkey also chose the same statement. For that reason we can conclude that there is a relationship between personality and nationality. Additionally, we can also say that students from two different countries, Poland and Turkey, have almost the same characteristics.

Similarly, as Rothbart and Derryberry (1981) claim cultural psychologists have noted that some aspects of personality differ across cultural groups. Cultural psychologists face the difficult challenge of studying and describing differences among cultures without stereotyping any particular culture. Ideally, cultural psychologists acknowledge that all members of a culture do not behave similarly. Variation exists within every culture, in terms of both individuals and subcultures. They also suggest that cultural differences affect the learning style claiming that learning style is generally identified with relatively stable traits across ages, situations, and cultures (Rothbart & Derryberry, 1981).

### 5.4. Which personality features do help learners to learn English well?

Costa & McCrae (1992) claim that because the model originated in adjectives, an effective way of describing the main dimensions is listing some key adjectives they are associated with at the high and the low end.

1. Neuroticism High scorers are worrying, anxious, insecure, depressed, self-conscious, moody, emotional, and unstable; low scorers are calm, relaxed, unemotional, hardy, comfortable, content, even tempered, and self-satisfied.

2. Extroversion High scorers are sociable, gregarious, active, assertive, passionate, and talkative; low scorers are passive, quiet, reserved, withdrawn, sober, aloof, and restrained.

3. Openness to Experience High scorers are imaginative, curious, flexible, creative, moved by art, novelty seeking, original, and untraditional; low scorers are conservative, conventional, down-to-earth, unartistic, and practical.

4. Agreeableness High scorers are friendly, good-natured, likeable, kind, forgiving, trusting, cooperative, modest, and generous; low scorers are cold, cynical, rude, unpleasant, critical, antagonistic, suspicious, vengeful, irritable, and uncooperative.

5. Conscientiousness High scorers are systematic, meticulous, efficient, organized, reliable, responsible, hard working, persevering, and self-disciplined; low scorers are unreliable, aimless, careless, disorganized, late, lazy, negligent, and weak-willed. These adjectives have been selected because they are the most commonly cited ones in the various descriptions of the Big Five model.

When we look at the list it becomes evident that some of the scales are rather 'skewed' in terms of their content, with one end of the scale being clearly more positive than the other for a second language learner. In the Conscientiousness, Extroversion, Openness and Agreeableness scales, for example, none of the language learners would want to score low. Overall results of open-ended questions also support this idea. Most of the students claim that they owe their success in language learning to mostly have the high scored characteristics related to the key adjectives of Conscientiousness, Extroversion, Openness and Agreeableness in the test. Most of the students also agree that the high-scored factors of neuroticism affect their language learning process in a negative way.

### 5.5. Implications for Further Study

The present study has many implications for English teachers, school authorities, ELT departments, teacher trainers, English as a second language learners and curriculum designers particularly at Wloclawek Higher Vocational School in Poland and Kafkas University in Turkey in terms of understanding the personality differences of the learners in language learning process.

In accordance with our findings, students from Poland and Turkey do not have a big personality differences learning English. With the administration of the Big Five Personality Test, it has been revealed that for the first trait extroversion, the Polish students' percentage was 1% higher than the Turkish students', for the second trait, agreeableness; the results were almost the same. As for the third personality trait conscientiousness, the Turkish students' percentage was 2% higher than the Polish students', and for the third trait, neuroticism, there was a small difference (0.3%) and Polish students' percentage was lower than the Turkish students'. As for the last personality trait, openness the Polish students' percentage was 1.4% higher than the Turkish students'.

This study has also revealed that a considerable majority of the Polish and Turkish students' characteristics and their strengths and weaknesses in learning a second language were almost the same. The most common strengths about their characteristics were listed as being talkative, active, energetic, sociable, hardworking, reliable worker and curious about many different things, liking to cooperate, learn new things and ask questions. Additionally, the most common weaknesses were listed as the following; getting nervous easily, being easily distracted, depressed, not being relaxed, and getting easily stressed. Additionally, they also point out the opposite of the other personality traits, by listing; being lazy, shy, disorganized, unmotivated, getting afraid of making mistakes, not having enough patience, not a reliable worker, getting easily bored and tired of studying. Thus, we can say that students in these countries do not present a wide diversity of cultural backgrounds or personality differences in second language process.

Another important implication that can be drawn from this study is the coherence between the answers of the Polish students and Turkish students. That means large majority of the students in Poland chose the same statement. On the other hand, large majority of the students in Turkey also chose the same statement.

For that reason we can conclude that there is a relationship between personality and nationality. Additionally, we can also say that students from two different countries, Poland and Turkey, have almost the same characteristics.

### 5.6. Recommendation for Further Research

In this study, the Big Five Personality Traits was investigated by administering questionnaire only to the students. Teachers' views of their students' attitudes towards learning English and the foreign language communities, perceptions of their language learning process might also be investigated in order to find out whether the students' responses to the questionnaires reflect their actual thoughts and behaviors, and gain a clearer picture of the characteristics of Turkish and Polish second language (English) learners.

In the present study, personality traits of the Polish and Turkish students have been examined. It might be interesting to replicate this study with the other students from Western European countries who learn English as a second language. Similarly, a replication of this study with both young and adult language learners might be helpful in revealing whether their nationalities, age, gender, their cultural, educational and social background plays a role in their personality traits.

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## APPENDIX 1

**Country:** **Age :**
**Female ( ) Male ( )**

**1. The Big Five Inventory (BFI)**

This study is being performed to observe the possible individual differences between Turkish and Polish ESL learners. Here are a number of characteristics that may or may not apply to you. For example, do you agree that you are someone who likes to spend time with others? Please write a number next to each statement to indicate the extent to which you agree or disagree with that statement.

| Disagree strongly | Disagree a little | Neither agree nor disagree | Agree a little | Agree strongly |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |

**I see Myself as Someone Who...**

| | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| **1)** Is talkative | | | | | |
| **2)** Tends to find fault with others | | | | | |
| **3)** Does a thorough job | | | | | |
| **4)** Is depressed, blue | | | | | |
| **5)** Is original, comes up with new ideas | | | | | |
| **6)** Is reserved | | | | | |
| **7)** Is helpful and unselfish with others | | | | | |
| **8)** Can be somewhat careless | | | | | |
| **9)** Is relaxed, handles stress well | | | | | |
| **10)** Is curious about many different things | | | | | |
| **11)** Is full of energy | | | | | |
| **12)** Starts quarrels with others | | | | | |
| **13)** Is a reliable worker | | | | | |
| **14)** Can be tense | | | | | |

| | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| **15)** Is ingenious, a deep thinker | | | | | |
| **16)** Generates a lot of enthusiasm | | | | | |
| **17)** Has a forgiving nature | | | | | |
| **18)** Tends to be disorganized | | | | | |
| **19)** Worries a lot | | | | | |
| **20)** Has an active imagination | | | | | |
| **21)** Tends to be quiet | | | | | |
| **22)** Is generally trusting | | | | | |
| **23)** Tends to be lazy | | | | | |
| **24)** Is emotionally stable, not easily upset | | | | | |
| **25)** Is inventive | | | | | |
| **26)** Has an assertive personality | | | | | |
| **27)** Can be cold and aloof | | | | | |
| **28)** Perseveres until the task is finished | | | | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **29)** Can be moody | | | | | | **37)** Is sometimes rude to others | | | | |
| **30)** Values artistic, aesthetic experiences | | | | | | **38)** Makes plans and follows through with them | | | | |
| **31)** Is sometimes shy, inhibited | | | | | | **39)** Gets nervous easily | | | | |
| **32)** Is considerate, kind to almost everyone | | | | | | **40)** Likes to reflect, play with ideas | | | | |
| **33)** Does things efficiently | | | | | | **41)** Has few artistic interests | | | | |
| **34)** Remains calm in tense situations | | | | | | **42)** Likes to cooperate with others | | | | |
| **35)** Prefers work that is routine | | | | | | **43)** Is easily distracted | | | | |
| **36)** Is outgoing, sociable | | | | | | **44)** Is sophisticated in art, music or literature | | | | |

Please check: Did you write a number in front of each statement?

**2. Please answer the questions below.**

**a.** What are your 3 to 5 strengths about your characteristics while learning a second language?

**b.** What are your 3 to 5 weaknesses about your characteristics while learning a second language?

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