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# PRE-SERVICE ELT TEACHERS' LEVEL OF CULTURAL INTELLIGENCE: A MIXED METHOD STUDY

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## HİZMET ÖNCESİ İNGİLİZ DİLİ ÖĞRETMENLERİNİN KÜLTÜREL ZEKA DÜZEYLERİ: BİR KARMA YÖNTEM ÇALIŞMASI

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### HİZMET ÖNCESİ İNGİLİZ DİLİ ÖĞRETMENLERİNİN KÜLTÜREL ZEKA

### DÜZEYLERİ: BİR KARMA YÖNTEM ÇALIŞMASI

Bu tez çalışmasının temel amacı, Türk İngilizce öğretmen adaylarının genel kültürel zekasını (KZ) incelemektir. Ayrıca, bahsi geçen öğretmen adaylarının genel kültürel zekâ düzeyi ve kültürel zekanın dört boyutu katılımcıların cinsiyeti, okul türleri (devlet / özel lise), çifte vatandaşlık durumları, yurtdışı deneyimleri, çok dil konuşma, uluslararası arkadaşlara sahip olma, yaş ve mezun oldukları okul kategorileri gibi etkenlerle kıyaslanmıştır. Çalışmaya büyük bir devlet üniversitesindeki İngilizce Öğretmenliği bölümünde eğitimlerinin dördüncü yılında olan toplam 126 İngilizce öğretmeni adayı dahil edilmiştir.

Bu çalışmanın amaçları doğrultusunda karma yöntem araştırma tasarımı benimsenmiştir. Çalışmada daha büyük bir katılımcı grubuna, niceliksel veriler sağlayan bir "Kültürel Zekâ Ölçeği" (KZÖ) uygulandığı için nicel yöntem tercih edilmiştir. Üç bölümden oluşan ölçekte katılımcıların onam formları, demografik bilgileri ve yirmi sorudan oluşan "üstbilişsel KZ", "bilişsel KZ", "motivasyonel KZ", "davranışsal KZ" faktörlerinden oluşan 20 madde yer almıştır. İstatistiksel analiz aracı olarak SPSS 24 kullanılmıştır. Çalışmanın nitel aşamasında 13 katılımcı ile Zoom isimli çevrimiçi video konferans programı aracılığıyla görüşmeler gerçekleştirilmiştir. Daha sonra görüşmeler için içerik analizi yapılmıştır. Yapılan çalışma sonuçları, öğretmen adaylarının genel kültürel zekâ düzeylerinin yüksek olduğunu göstermiştir. Kültürel zekâ alt boyutları ile ilgili olarak, katılımcıların üstbilişsel, motivasyonel, davranışsal kültürel zekalarının daha yüksek, bilişsel kültürel zekalarının ise orta düzeyde yüksek çıktığı görülmüştür. Değişken olarak cinsiyet, genel kültürel zekâ açısından istatistiksel bir farklılık göstermemiştir. Bununla birlikte, kadın katılımcıların davranışsal kültürel zekâları erkek öğretmen adaylarına göre daha yüksek olarak bulunmuştur. Katılımcıların çifte vatandaşlık statüsüne sahip olmalarına gelince, bu değişken genel kültürel zekâ açısından istatistiksel bir farklılık göstermemiştir. Ancak çifte vatandaşlık statüsüne sahip katılımcılar, tek vatandaşlığa sahip olanlara göre daha yüksek üstbilişsel kültürel zekâ seviyesi göstermiştir. Bulgular, katılımcıların kültürel zekalarının yabancı arkadaş sahibi olma açısından istatistiksel olarak anlamlı şekilde daha yüksek olduğunu göstermiştir. Çalışmada ayrıca katılımcıların mezun oldukları lise türleri önemli ölçüde kültürel zekâ açısından farklılık gösterdiğini ortaya çıkarmıştır. Bu da Anadolu liselerinden mezun olan öğretmen adaylarının Fen ve İmam Hatip liselerine göre daha yüksek Kültürel Zekâ seviyesinde olduklarını göstermiştir.

Bu çalışmanın bulguları, Türk İngilizce öğretmen adaylarını daha yüksek kültürel zekâ ile donatılarak ve Kültürel Zekalarının gelişimine katkıda bulunan faktörleri dikkatlice değerlendirerek, gelecekteki kariyerlerine hazırlamanın önemini vurgulamıştır.

Anahtar Kelimeler: Kültürel Zeka, Kültür, Türk İngilizce Öğretmeni adayları.

#### Abstract

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## PRE-SERVICE ELT TEACHERS' LEVEL OF CULTURAL INTELLIGENCE: A MIXED METHOD STUDY

The primary purpose of this thesis study was to examine Turkish pre-service ELT (English Language Teaching) teachers' overall cultural intelligence (CQ). Besides, the Turkish pre-service ELT teachers' overall level of cultural intelligence and four dimensions of cultural intelligence were compared in terms of their gender, school types (state/private high school), dual citizenship status, overseas experiences, speaking multi-languages, and having international friends. The Turkish ELT pre-service teachers' cultural intelligence was also examined concerning the participants' age and school categories. A total of 126 Turkish pre-service ELT teachers was included in the study. All participants were selected from one of the large state universities in Turkey and were in their fourth year of their study.

A mixed method research design was adopted for the purposes of the present study. The study was quantitative in that a larger group of participants were administered a "Cultural Intelligence (CQ)" scale yielding quantitative data. The scale consisted of three parts: participants' consent forms, participants' demographic information, and the scale itself that included twenty items, which represented "metacognitive CQ", "cognitive CQ", "motivational CQ", "behavioral

CQ". As a statistical analysis tool, SPSS 24 was used. In relation to the qualitative phase of the present study, semi-structured interviews were conducted with 13 interviewees via an online video conferencing software (Zoom). Content analysis was performed for the semi-structured interviews.

The results of the present study indicated that Turkish pre-service ELT teachers' level of overall cultural intelligence was high. With regard to the sub-dimensions of CQ, the participants' metacognitive, motivational, behavioral cultural intelligence was higher, whereas their cognitive, cultural intelligence was found moderately higher. Gender as a variable showed no statistical difference in terms of overall CQ. However, the female participants' behavioral CQ was found higher than the male pre-service ELT teachers. As for the participants' having a dual citizenship status, the participants' overall CQ showed no statistical difference. However, the participants who had a dual citizenship demonstrated higher levels of metacognitive CQ than those of having a single citizenship. Moreover, the findings indicated that the participants who had foreign friends had significantly higher levels of CQ. The study also revealed that the participants' CQ significantly differed in terms of school categories (i.e. the types of high schools that they graduated from), indicating that the pre-service ELT teachers from Anatolian high schools seemed to report higher CQ levels than those who graduated from science and religious high schools.

The findings of the current study underscored the significance of preparing Turkish preservice ELT teachers to their future careers by equipping them with higher cultural intelligences and by carefully considering the contributing factors for the development of their CQ.

Keywords: Cultural Intelligence, Culture, Turkish Pre-service ELT teachers

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#### Madina HUSEYINOGLU

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### List of Abbreviations

CQ: Cultural Intelligence

CQS: Cultural Intelligence Scale

ELT: English Language Teaching

EFL: English as a Foreign Language

KZ: Kültürel Zeka

KZÖ: Kültürel Zeka Ölçeği

#### Chapter 1

#### Introduction

This chapter consists of four sections. The first part gives an account into the background and the theoretical framework of the study. Following an account into the purpose of the thesis study, the third part presents the research questions. The chapter concludes with the significance of the study.

#### **1.1.Background of the study**

The origin and conceptualization of cultural intelligence (CQ hereafter) date back to 2000s. The journey of CQ has experienced various evolutions. Thus, it has become a topic commonly analyzed in different fields of study such as psychology, education, business, etc. With the globalization and development of modern communication technology, CQ has also become one of the most important topics to be investigated in education (Petrovic, 2011). However, developing language learners' CQ has been one of the ignored topics in language learning and teaching.

A number of researchers provided various definitions to help us better make sense of the concept in question (Ang & Van Dyne, 2008; Ang, Van Dyne, & Tan, 2011; Ang, Rockstuhl, & Tan, 2015; Earley & Ang, 2003). The first conceptualization of CQ came from Earley and Ang (2003) who defined CQ as "the capability to function effectively in intercultural contexts". When taking into consideration an individuals' capability, Ang and Earley referred to a general set of skills that facilitate the effectiveness in different cultural environments. Therefore, it can be seen in the literature that the concept "CQ" is built upon the multi-locus framework of intelligence (Sternberg, 1986). In a wide perspective, thus, the sub-dimensions of CQ are "metacognitive CQ", "cognitive CQ", "motivational CQ", and "behavioral CQ". In these sub-factors of CQ,

"metacognitive CQ" refers to one's mental ability to acquire and understand cultural knowledge. "Cognitive intelligence" represents one's own knowledge as to various cultures and differences among cultures. "Motivational CQ" is concerned with an individual's abilities to manage the effort towards having functional interaction in cultural contexts. Behavioral CQ "refers to one's ability to behave flexibly in intercultural situations or communication (Ang & Van Dyne, 2008; Earley & Ang, 2003).

Second language acquisition might not successfully take place in isolation from these four dimensions of CQ. Therefore, investigating the concept of CQ in second language acquisition seems to be of extreme importance. In the 21<sup>st</sup> century skills of learning, intercultural sensitivity, intercultural communicative competence are the key issues strongly tied to CQ. Therefore, CQ is becoming a more and more relevant issue not only for language learners, but language practitioners as well. It is a well-known fact that just being proficient only in the main four skills of language would be insufficient. However, fostering language learners' CQ, in order to enhance and develop their communicative competence, will contribute to eliminating aforementioned insufficiency (Kim, 1991).

In order to eliminate this insufficiency mentioned above, it seems to be a must to educate pre-service ELT teachers first. In addition, language learners need to be more proficient in operating the acquired languages functionally in different cultural contexts and pre-service ELT teachers, in particular. Even though language teacher education programs attempt to help pre-service teachers become linguistically proficient, they have been receiving criticism for their inadequacy to equip pre-service teachers with necessary cultural knowledge (Gajda & Gravedi, 2006; Latham & Vogt, 2007; Levince, 2006).

The most important rationale behind the current thesis study is to provide insights for language teacher education or teacher preparation programs in relation to contributing factors in improving pre-service ELT teachers' cultural competence and intelligence. Numerous studies have found that even though pre-service teachers gained successful results in state-mandated performance-based evaluation, their perceptions may have changed when actualizing the teaching practice with regard to teaching cultural knowledge and delivering intercultural skills towards their students due to inadequate intercultural knowledge (Benton-Borghi & Chang, 2012; Broido, 2004; Comber & Kamler, 2004; Fondrie, 2009).

To this end, analyzing pre-service teachers' CQ seems to be significant both for language teacher education programs and teacher educators. The information flowing from such a study would contribute to the development of pre-service ELT teachers' awareness on important aspects of cultural intelligence in language teacher programs. Such research could enrich the literature by filling an important gap in the ELT literature. Although developing intercultural understanding and intercultural communicative competence are among the key and recent concerns of language learning and teaching, CQ, as one of the ingredients of these key issues, has received very little attention in the field of ELT, if any.

#### **1.2.Purpose of the study**

As it is mentioned in the background of the study, "cultural intelligence" plays a significant role in intercultural communication between diverse cultures. Thus, it seems to be essential to understand whether second language teachers, as the catalysts for successful intercultural communication, have CQ or not or to which extent they have it. This understanding could-and should- first be achieved in pre-service language teacher education and thus would

help us identify the extent to which preservice ELT teachers have CQ and make recommendations as to how to cultivate it from the very beginning of their teaching career.

Facilitating the development of pre-service ELT teachers' CQ would enable them to lessen cultural conflicts, disperse unfamiliarity towards different cultures and minimize the incompatibility during the intercultural interaction. It would also help them to raise their future students' awareness of different cultures- an expectation of the current MoNE curricula. However, in order to achieve all these, it is essential that we first gain a thorough understanding of pre-service ELT teachers' CQ.

Thus, the present study aimed to investigate the overall level of pre-service ELT teachers' "cultural intelligence" with specific references to such variables as their gender, the types of high school that they finished, having a dual citizenship, having abroad experience, speaking more than one second languages, and having friends abroad.

#### **1.3.Research Questions**

In the light of what was stated above, these questions were generated in the present study:

1. What is the overall degree of pre-service ELT teachers' CQ?

2. Do pre-service ELT teachers' metacognitive, cognitive, behavioral and motivational

CQ show any statistically significant difference in terms of their

a. gender?

- b. types of high school they graduated from (state or private)?
- c. being a dual citizen?
- d. having abroad experience?
- e. speaking more than one language?
- f. having friends abroad?

3. Does pre-service ELT teachers' metacognitive, cognitive, behavioral and motivational CQ show any statistically significant difference in terms of their

a. age?

b. the categories of high schools they attended (Anatolian, Science, Imam-Preacher)?

#### **1.4.Significance of the study**

The primary focus of language education is to equip language learners with necessary language competences such as listening, reading, speaking and writing along with a profound intercultural understanding of the target cultures in order to help those language learners share and exchange ideas effectively. Not having an understanding of the cultural context results in misunderstanding or demonstrating culturally inappropriate behaviors towards the people from different cultures (Emitt, Komesaroff, & Pollock, 2006). In order for language learners to interpret and understand the target cultural contexts, the centrality of CQ cannot be ignored due to the complexities and difficulties of interpretation of cultural norms, beliefs, etc. in intercultural communication. Developing language learners' CQ would definitely contribute to raising awareness on the effective use of language in intercultural communicative contexts. However, unfortunately, the importance of culture has been discarded due to an overemphasis on some other language skills in second language acquisition – listening, reading, speaking, and writing, and grammar. Language learners may be linguistically competent; however, their lack of knowledge of the target or diverse cultures would likely pose difficulties for them to successfully communicate with people from different cultures (Celce-Murcia, Marianne, Dörnyei, Zoltan, Thurrell & Sarah, 1995).

Those being said then, first and foremost, an analysis of pre-service ELT teachers' CQ would be crucial for their academic achievement as well as their professional career in the future.

As for their professional career, pre-service ELT teachers can handle cultural difficulties easily if they are equipped with the required cultural knowledge. Secondly, examining pre-service ELT teachers' CQ would offer important information for language teacher educators to contribute to their professional development within the scope of the national education. In conjunction with the objective of the curriculum that comprises an appreciation for cultural diversity, and expects learners to become confident and proficient users of English, who will develop appreciation for their own culture while learning to understand and value a broad spectrum of international languages and cultures (MoNE, 2018).

In the suggestions for practice part of the curriculum the teachers are asked to "note the importance of differences between home and target culture, and be pedagogically correct. For instance, do not create negative models for students, as is the case with the teaching of elements such as food items in many materials" (MoNE, 2018, p.13). Thus, for pre-service ELT teachers may play significant roles in educating young people to become more culturally tolerant and open-minded individuals, in turn, global/intercultural citizens it is of high significance to know these teachers' overall level of CQ.

Not only in the sphere of education, but also in society as well individuals (English learners) may have to prepare themselves to be more empathetic towards the people from different cultural backgrounds in the same country. Equipping young people with highly CQ is, of course, under the shoulder of pre-service English teachers as future ELT practitioners. Societal aspects and contribution of CQ may raise awareness towards diverse cultures in foreign language education.

Not only the stakeholders in Turkish education system, but for Erasmus program coordinators and institutions who deal with exchange programs or students may benefit from the results of this research. By analyzing pre-service ELT teachers' CQ, we could, as teacher educators, devise strategies to help minimize the cultural conflicts, facilitate their intercultural communication by being aware of the cultural norms, values, beliefs, and social practices of the target cultures and cultural diversity. In other words, this analysis may be drawn on to contribute to the development of pre-service ELT teachers' CQ and may then be a starting point to resolve cultural contradictions by conforming to cultural expectations and respecting cultural differences (Koester & Lustig, 2010).

Moreover, language teacher educators may utilize the results of this study to foster the development of prospective pre-service ELT teachers' CQ by providing more information on different cultures and to provide opportunities for their students to acknowledge the value of cultural differences in cross-cultural situations.

Most importantly, a number of studies found in the literature have barely emphasized the CQ of pre-service ELT teachers worldwide. However, many studies focused on the students of Erasmus programs, or non-English teaching departments since the topic of CQ is the wide scope in many interdisciplinary studies (Engel, 2010; Otero & MacCoshan, 2008). Therefore, this study aims to address the CQ of pre-service ELT teachers in order to find out answers to challenging issues of intercultural communication.

#### **1.5.**Conclusion

This chapter provided an account into the background of CQ and the background of the current study with references to the relevant literature. Then, the rationale behind the present study was explained in detail. Following the research questions, the chapter ended up with the significance of the study. In the next chapter, the literature review is presented.

#### **Chapter 2**

#### **Literature Review**

This chapter consists of five main sections. The first section provides some preliminary information about CQ and the roots of it. The second section gives an intensive overview about historical background, definitions, distinctiveness and related theoretical background of CQ and elements of it. The third section provides detailed information about the four key elements of CQ such as "metacognitive CQ"; "cognitive CQ"; "motivational CQ", "and behavioral CQ". Prior to the summary of the chapter, relevant research studies are presented.

#### 2.1.Introduction

In a world of rapid globalization with technical developments and population migrations, language teaching and learning with cultural content cannot be restricted to some societies' culture only (Lustig & Koester, 2010). Particularly, it is a matter of fact for English language that it has gained the status of international language-Lingua Franca. In 1980s, the field of ELT recognized the need for communication with people from different cultures and thus led to deeper research of intercultural theory and intelligence approach (Atay, Acar, Ersin, Kaslioglu & Kurt, 2009) resulting in the conceptualization of CQ (Livermore, 2011).

Language learning cannot simply consist of learning about grammar, vocabulary and language skills, but also it cannot be insulated from acquiring culture. In other words, learning a language cannot be independent of culture, and language learners may be feeling lost in terms of meaning that they would like to communicate if they do not know the elements of the target and other cultures. (MacDevitt, 2004). Numerous scholars have thus pointed out the significance of teaching and learning culture in language classes. Many have provided justification for the importance of culture, which proposes that learning culture actually renders language learning process consequentially, by creating a purpose for language learners to study the target language and its culture (Stainer, 1971; Wang, Heppner, Wang, & Zhu, 2015; Ward, Fischer, Zaid Lam, & Hall, 2008; Yang & Chang, 2017). Other scholars have proposed that learning culture is one of the significant elements in language learners' motivation (Gardner & Lambert, 1972).

Therefore, it bears significance to investigate pre-service ELT teachers' CQ, who are required by the national curriculum to cultivate cultural awareness and creativity in their students.

#### **2.2.CQ and Dimensions of CQ**

The term "Cultural Intelligence" is a comparatively new subject which was put forward initially by Earley and Ang (2003). According to Earley and Ang, CQ can be defined as "a person's capability to function effectively in situations characterized by cultural diversity" (Earley & Ang, 2008). Several other scholars put forward various definitions of CQ and enriched the previous ones by depicting it "the measurement of competences for internal and intercultural communication". These researchers described CQ as a complementary form of intelligence which may account for the coping with diversity and differences in cultural contexts. Moreover, Earley and Ang (2003) put forwarded CQ as a multifaceted construct with cognitive, metacognitive, motivational and behavioral dimensions in light of the previous CQ models (Ang, et al., 2007; Ng, Van Dyne, & Ang, 2009). It can then be understood from the literature that CQ cannot be separated from cross-cultural communication and interaction. Thus, it is actually a significant ingredient for successful interaction between divergent cultures and language teaching.

CQ incorporates four principal dimensions; metacognitive CQ, cognitive CQ, motivational CQ and behavioral CQ.

"Metacognitive CQ" can be defined as an individual's consciousness and cultural awareness in intercultural experiences (Ang and Van Dyne, 2008; Ng, Van Dyne, & Ang, 2009;). It stands for people's capabilities of understanding and controlling different cultural situations and focuses on an individual's "awareness", "planning", and "checking". In other words, metacognitive intelligence is concerned with how one acts reasonably in diverse cultural contexts. It refers to the consciousness of an individual's own culture, developing strategies when encountering a diverse cultural context, and controlling and reaffirming of assumptions and adopting the mental map when dealing with different expectation in actual intercultural concepts.

Metacognitive CQ plays an important role in intercultural interaction. First of all, an individual is able to think actively in dissimilar cultural context. Second of all, metacognitive CQ assists an individual to think beyond the cultural boundary instead of depending on cultural limits strictly. Lastly, by the assistance of metacognitive CQ, people may be able to change their strategies in order to carry out appropriate and successful cross-cultural interactions. Therefore, metacognitive CQ includes self-awareness about one's own culture, "their awareness" which indicates the consciousness of other cultures, and situational awareness which represents the strategies developed by an individual in order to adopt their communicative strategies in the interpretation of cultural interactions. (Ang & Dyne, 2008; Earley & Ang, 2003; Brislin R., 1981; Brislin, Worthley, & MacNab, 2006; Triandis, 2006;)

The second dimension of CQ is "cognitive CQ, which is associated with having a certain amount of knowledge about cultures, norms, values and practices in interactional situations. An individual with higher level of cognitive CQ enables himself/herself to appreciate the differences and similarities between divergent cultures. Cognitive CQ enables an individual to obtain certain knowledge about other cultures' political or economic systems, languages, religions, customs and traditions, etc. Cognitive CQ can render it possible for individuals to assess and evaluate the similarities and differences among various cultures (Brislin, Worthley, & MacNab, 2006). Moreover, cognitive CQ incorporates not only an individual's general knowledge about other culture, but the specific knowledge about certain cultures.

"Motivational CQ" is an individual's aspiration to have knowledge about other cultures. It requires an individual's stamina to be eager to establish communication with people from dissimilar cultures. An individual is likely to be more willing and interested in adjusting to differences in various cultures only if the individual possesses a high level of motivational CQ. Motivational CQ refers to the aspiration of an individual to learn and know about the other cultures, and it includes intrinsic interest, extrinsic enthusiasm, as well as self-efficacy to adopt and adjust oneself to cultural interaction (Bandura, 1997; Bandura, 2002; Eccles & Wigfield, 2002).

With regard to "behavioral CQ", it is interrelated with an individual's verbal and nonverbal behavior in intercultural contexts in which people from different and heterogenous cultures may interact. As behavioral CQ is associated with the behavior of the communicators, an individual with a high degree of motivational CQ exhibits gestures, facial mimics, and utilizes pertinent verbal communication, which are regarded culturally relevant and associative in the specific cultural context (Earley & Ang, 2008; Leung, Maddux, Galinsky, & Chi, 2008).

Behavioral CQ requires one to be able to be flexible in both in verbal and non-verbal communication across different cultures. It requires communicators to be capable of choosing suitable phrases and words during cultural communication.

Behavioral CQ plays significant roles in cross-cultural communication. Foreign or second language speakers with high level of behavioral CQ would presumably overcome the tendency to depend on rigid unspoken habits in communication. This includes code-switching and adjusting to the cultural setting or cultural context (Molinsky, 2007).

Therefore, the four dimensions of CQ includes "cognitive CQ" which refers to knowing about the other cultures, "metacognitive CQ" which highlights the consciousness towards intercultural interaction, "motivational CQ which refers to the inclination to learn about other cultures, and lastly "behavioral CQ" which consists of adapting and adjusting verbal and nonverbal behaviors in cross-cultural interaction.

By way of conclusion, these four main factors of CQ emphasize the effective crosscultural interactions which require perplex flexibility. Acquiring these four main sub-dimensions of CQ could enhance the effectiveness of communication, help develop respect for and understanding of other cultures and could be helpful to make language users or learners interculturally competent global citizens.

#### 2.3.Measurement of CQ

As it is mentioned above, CQ consists of four sub-domains, and it addresses an individual's capability to communicate effectively and efficiently in cross-cultural contexts. Conceptualizing CQ and prioritizing it in second language acquisition has brought many questions regarding to the assessment of aforementioned factors and their overall possible influence on English language learners' communication skills.

In order to assess CQ, the validity and reliability of CQ scales and measurement tools need to be proven (Schaffer & Riordan, 2003; Van de Vijver & Leung, 2009)

Throughout the literature, the historical background of CQ and various definitions of it can be found. Therefore, not only the historical context of the definitions but measurement tools for CQ are presented in detail (Ang & Earley, 2002; Earley & Mosakowski, 2004; Earley & Peterson, 2004; Thomas & Inkson, 2003; Thomas, Ravlin, Stahl, & Ekelund, 2008) Firstly, CQ was introduced into the literature by Earley and Ang in 2002. According to Early and Ang (p. 59), CQ is "... a person's capability to adapt effectively to new cultural

contexts." When it was first taken into consideration, Earley and Ang just focused on the cognitive competence consisting of metacognitive, motivational and behavioral CQ. As for the application of the CQ scale, "global assignment success, diversity assignments and training methods" were taken into consideration as the measurement tool (Ang & Earley, 2002; 2003).

Thomas and Inkson (2003, p.18) also argued that CQ represents "...understanding the fundamentals of intercultural interaction, developing a mindful approach to intercultural interactions, and finally building adaptive skills and repertoire of behavior so that one is effective in different intercultural situations.". The elements of CQ developed by Thomas and Inkson included "Knowledge", "Mindfulness", and "Behavioral Skills". The measurement and evaluations of the mentioned CQ scales were reported to be used in decision-making process in cross-cultural situations, the communication between various cultures, leadership in intercultural context, multicultural teams, international careers (Thomas & Inkson, 2003).

An alternative definition of CQ comes from Earley and Mosakowski (2004) who expanded on previous conceptualization of CQ and described it as "...a seemingly natural ability to interpret someone's unfamiliar and ambiguous gestures in just the way that person's compatriots and colleagues would, even to mirror them". This CQ scale (2004) consisted of the following sub-dimensions: cognitive, physical, emotional or motivational CQ. The scale was used to elicit an individual's suitable and appropriate behavior in new cultures (Earley & Mosakowski, 2004).

Earley and Peterson (2004) further put forward an alternative definition of CQ: "...CQ reflects a person's capability to gather, interpret, and act upon these radically different cues to

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function effectively across cultural setting or in multicultural situations." (p. 56) According to the definition above then, the constituent elements of CQ are: (1) metacognitive / cognitive CQ: acquiring communication strategies in dissimilar culture and being appropriate culturally; (2) motivational CQ: being able to show empathy and self-efficacy; (3) behavioral CQ: culturally acceptable behavior and imitations of different culture (Earley & Peterson, 2004).

Thomas (2006) defined CQ and focused on people who are communicating in cultural contexts. According to him, CQ is regarded as an individual's ability to have effective interaction with people who demonstrate cultural differences from one another. Thomas' CQ scale consisted of "Knowledge", "Mindfulness", and "Behavior".

Later, the conceptualizations of CQ concentrated on cultural judgment and decision making as well as the adaptation and performance in cross-cultural contexts. Ang et al. (2007) defined the term "...an individual's capability to function and manage effectively in culturally diverse setting...". Indeed, they again strengthened the dimensions of CQ as "metacognitive CQ", "cognitive CQ", "motivational CQ", and "behavioral CQ".

Thomas et al. (2008) analyzed the CQ as "...a system of interacting knowledge and skills, linked by cultural metacognitive, that allows people to adapt to, select, and shape the cultural aspects of their environment." According to them, CQ scale included cultural knowledge, crosscultural skills, cultural and metacognitive CQ. The scale that they had developed aimed to measure effective intercultural interaction, such as personal adaptation, development of interpersonal relationship, and performance of tasks in diverse cultural context (Thomas, Ravlin, Stahl, & Ekelund, 2008).

CQ is a widely researched topic in the field of education, and studies can be found in the literature investigating learners' cultural intelligence in terms of overseas experience, age,

gender, proficiency in English, and speaking multi-languages (Alon, Boulanger, Meyers, Teras, 2016; Baez, 2014; Eagle & Crowne, 2014; Ghonsooly & Golparvar, 2013; Khodady & Yazdi, 2014).

#### 2.4. Studies Conducted on CQ

With regard to the studies conducted on the relationship between CQ and its contributing factors, scholars have carried out considerable research on the topic in question. These studies mainly concentrated on the relationship between CQ and overseas experience (Eagle and Crowne's study, 2014; Imai & Gelfand, 2010; Morrel, Ravil, Ramsey, & Ward, 2013; Ng, 2009; Papatsiba 2005; Ramalu, Uli, & Kumar, 2010; Tarique & Takekeuchi, 2008; Tekin & Hiç Gencer, 2013; Wood, Heather, & Peters, 2013), age (Azizi, Fatemi, Pishghadam, & Ghapanchi, 2015), gender (Al-Momani & Atoum, 2016; Azizi et al, 2015; Baez, 2014; Ghonsooly & Golparvar, 2013; Muzzurco, Jesiek, Ramane, 2012), learners' proficiency (Alon, Boulanger, Meyers, Teras, 2016; Ghonsooly & Sharififar, Sistanai & Ghahari, 2015; Kadam, Rao, Abdul & Jabeen, 2020; Rachmawaty, Akil, Dollah, 2018; Rafie, Khosvari,& Nasiri, 2016; Ward, Fischer, Lam, Hall, 2009), and speaking multi-languages (Baez, 2014; Khodady & Yazdi, 2014). In the following parts, these aforementioned studies in the literature are presented in detail.

As for learners' CQ and overseas experience, Ramalu, Uli, and Kumar (2010) carried out a study on expat students who had spent considerable amount of time abroad. Their research found a significant positive correlation between their length of stays overseas and three dimensions of CQ (metacognitive, cognitive, and behavioral CQ). However, no correlations were found between students' overseas experience and motivational CQ.

A very similar study reported a positive correlation between students' international travel experience and behavioral CQ (Imai & Gelfand, 2010). Another study confirmed the results of

previous studies that international non-work (study) experience comparatively enhance learners' CQ (Tarique & Takekeuchi, 2008)

Morrell, Ravil, Ramsey, and Ward (2013) performed a study on students who attended international business course in order to find out if previous overseas experience had a positive influence on students' CQ or not. The study indicated that students' prior overseas experience positively influenced their CQ.

Eagle and Crowne's study (2014) is in line with the previous studies in the literature. Their study aimed to investigate the impact of short-term experience on improving college students' CQ. The study suggested that short-term international experience resulted in not only the improvement of students' CQ overall, but also a significant growth of students' metacognitive, cognitive, behavioral and motivational CQ.

Ng et al. (2009) conducted a study on the impact of international work and non-work experience on CQ and as to whether international experience contributed to the development of it. The study found that international or overseas experience can be the contributing factor for the development of participants' CQ.

The relationship between students' overseas exchange programs and their CQ was investigated in Turkey. One study conducted on Erasmus exchange students concluded that international exchange programs had positive influences on students' CQ. As the participants in the study stated: "prejudices are minimized", "self-confidence is increased", "behavior is more conscious", and "do not feel Turkish anymore...started like feeling someone cosmopolitan" (Tekin & Hiç Gencer, 2013).

Papatsiba (2005) conducted a research on students who participated in Erasmus mobility programs and their CQ. The study mainly focused on students' academic, linguistic and

intellectual achievement during the completion of exchange programs. The study results postulated that overseas experience can be the indicator for improving students' CQ. The study further suggested that Erasmus programs enabled participants to adopt the target culture easily, appreciate the "coexistence" more. To sum up, exchange program can be the effective factor for the enhancement of students' CQ.

Wood, Heather, and Peters (2013) and Wood studied the relationship between short-term study tour and impact of tour on CQ. According to the study, the relationship was analyzed by taking four dimensions of CQ into consideration. The study results indicated considerably higher correlation between CQ and students' short-term cultural tour in foreign countries. It reported that short-term overseas experience was found positively correlated with students' metacognitive CQ, cognitive, and motivational CQ. However, the study reported no relationship between students' overseas experience and behavioral CQ.

Ward et al (2009) also conducted a study on students' CQ. The study suggested that older students with overseas experience had higher CQ than those of young students.

There was another study reported the relationship between gender and students' CQ. (Aziz, Fatemi, Pishghadam, & Ghapanchi, 2015).

Ghonsooly and Golparvar (2013) performed a similar study on students' CQ, the study indicated that there were no significant differences among genders in terms of students' CQ. Azizi et al (2015) conducted research on the relationship of ELT learners' CQ and their home culture attachment, which implied that the male participants' CQ demonstrated the higher mean than that of the female participants in terms of their CQ.

Al-Momani and Atoum (2016) performed a study on Jordanian university students' CQ in terms of participants' gender, study specialization, and place of residence. A total of 366

university students participated in the study in order to elicit students' metacognitive, cognitive, behavioral and motivational CQ. The study results revealed that students' CQ was reported moderate on the total score. However, gender revealed no statistical significance in terms of overall CQ. In terms of participants' motivational CQ, female participants demonstrated higher level of CQ than that of male participants.

Similar studies were conducted to find a statistical meaningful difference between male and female participants' CQ. Muzzurco, Jesiek, & Ramane, 2012 showed that engineering students' CQ did not show any statistical differences in terms of their gender. While on the other hand, Baez (2014) found that female students' CQ was found higher than male participants (Baez, 2014).

As to the relationship between English learners' proficiency in English and CQ, Khodady and Ghahari (2012) conducted a study which included 145 undergraduate university students. The results indicated that there was a negative correlation between English proficiency and students' CQ.

A different study found that students' writing ability and proficiency had a positive correlation with their CQ. It is very interesting to note that the study in question found that cognitive CQ was the contributing factor in students' writing ability (Ghonsooly & Golparvar, 2013).

A further study used a listening test and CQ scale to investigate the relationship between students' listening proficiency and CQ. The study revealed that students who had higher level of metacognitive and motivational CQ scored high in the listening test, which means that English proficiency could be one of the contributing factors for enhancing students' CQ. (Ghonsooly, Sharififar, Sistani & Ghahari, 2015).

Research in the field of the cultural intelligence examined the various antecedents that influence CQ in university students. It investigated how raising a third culture kid or monoculture kid impact the students' CQ. The study indicated that short-term living abroad, competence of their own culture, watching films of other cultures, language proficiency and having friends from other cultures as well as interacting with people from other cultures were contributing factors to CQ and aforementioned antecedents had significant influence on improving students' CQ (Kadam, Rao, Abdul, & Jabeen, 2020).

Shannon and Begley (2008) conducted a research on the relationship between foreign language proficiency and CQ, the study found that higher level of proficiency was an indicator of higher level of CQ. Alon, Boulanger, Meyers and Teras (2016) carried out a study on the hypo meres as to whether speaking more language enhanced the motivation of students in crosscultural contexts. The study results revealed that students who could be able to speak more languages may exhibit much motivation levels and showed more willingness to accept new ideas and diverse cultures.

Ward, Fischer, Lam and Hall (2009) conducted a research in order to find out the international students' CQ through using English proficiency as a variable in their study. The study results suggested that CQ was not the predictor of adopting themselves to the new culture, however, having proficient language ability led to successful adjustment and rendering the adaptation process easier.

Chen, Kirkman, Kim, Farh, and Tangirala (2010) performed a study on the interrelation of language proficiency and students' CQ in order to investigate whether language proficiency and CQ predicted performance of the students in English language classrooms. The study suggested that not only students' language ability and proficiency, but also the four main dimensions of CQ contributed to the students' academic performance). A similar study conducted by Ng and Earley (2011) showed that foreign language skills strongly influenced cognitive and overall CQ.

Several scholars have researched the correlation between CQ and speaking foreign language(s). For instance, Baez (2014) conducted a study in order to investigate the influence of speaking more foreign languages on their CQ. The study showed that students who spoke more foreign languages showed the higher levels of CQ than those who did not.

Khodadady and Yazdi (2014) investigated the relationship between being polyglot and its impact on students' CQ. The study results were in line with Baez's study results, which indicated that polyglot participants showed considerably high degree of CQ than those who did not study a second language.

#### **2.5.**Conclusion

This chapter presented information about the theoretical and empirical foundations of CQ. First, the concept and chronological dimensions of CQ were provided, and then the measurement of CQ and related studies conducted on it were given. Aforementioned studies found a relationship between learners' cultural intelligence and their overseas experience, age, gender, learners' proficiency, and speaking multi-languages abilities. However, the studies conducted on the relationship between learners' cultural intelligence and high school types (state/private high school), high school categories, being dual citizenship were hard to find in the literature. Moreover, though national curriculum requires raising students' cultural awareness and creativity through teaching English, there are no studies conducted to examine overall level of CQ or some of its dimensions on the behalf of the pre-service ELT teachers' themselves. The next chapter provides an account into the methodological procedures in the study.

#### Chapter 3

#### Methodology

#### **3.1.Introduction**

This chapter is dedicated to the methodological procedures followed in the current study. Following an account into the research setting and research design, information about participant selection and research instruments are presented along with the description of data collection procedures and data analysis tools.

#### **3.2.Research Setting**

The primary objective of this thesis is to arrive at answers as to pre-service ELT teachers' CQ. In addition to this, variables such as gender, age, the types of high school the participants attended, dual citizenship status, overseas experience, speaking foreign languages (other than English), and having English speaking friends were taken into account in order to examine differences between CQ and these variables.

The current study adopted a mixed method research methodology which merged the use of quantitative and qualitative research designs. A mixed methodology design was preferred in this thesis for several reasons. First of all, it allowed to bring both inductive and deductive perspectives together as to the results of the current study. Second of all, it made it possible to combine the results of statistical analysis with the interview results, by which an in-depth understanding of numerical results was gained. Finally, by utilizing a mixed method approach, insufficiency of the quantitative data was complemented by qualitative data (Jogulu & Pansiri, 2011).

In the present study, the quantitative research method, firstly, was conducted to obtain more generalizable results from a large sampling (Dörnyei, 2007; Paltridge & Phakiti, 2015;

Thomas, 2003;). A qualitative methodology was also adopted to yield more comprehensive and in-depth information about the research questions posed in the present study, and semi-structured interviews were thus conducted. Taking the advantageous aspects of both quantitative and qualitative research methods, a mixed method study was designed to arrive at answers of these following research questions:

- 1. What is the general overall degree of the pre-service ELT teachers' CQ?
- 2. Do the pre-service ELT teachers' metacognitive, cognitive, behavioral and motivational CQ show any statistically significant difference in terms of their

a. gender

- b. types of high school (state or private)
- c. being a dual citizenship
- d. having aboard experience
- e. speaking more than one languages
- f. having friends from abroad
- 3. Does the pre-service ELT teachers' metacognitive, cognitive, behavioral and motivational CQ show any statistically significant difference in terms of their
- a. age
- b. high school they graduated from (Anatolian, Science, Imam-Preacher)?

#### **3.3.Participants**

A total of 126 participants took part in the current thesis study, as mentioned before. 87 of the participants (69%) were females and 39 (31%) males. The teacher trainees were in their fourth year of study on the ELT programme of a large state university in Bursa. The interview participants (n= 13) were randomly selected on voluntary basis, from this larger sample size.

Table 1 illustrates the participants' demographic information about their gender, age, school type, school categories, dual citizenship, overseas experience, speaking multi-languages, and having foreign friends. The participants' age is another variable. As indicated in the table next page, 85 of the participants was aged between 18 and 23 (67.5%), 24 of them between 24 and 29 (19%). There were 17 participants whose age was 30 and above 30 (13.5%). With regard to the participants' high school type, 112 participants graduated from state high schools (88.90%) and 14 participants attended private high schools (11.1%). More specifically, 90 participants were graduates of Anatolian high schools (71.4%), 18 science high schools (14.3%), 6 religious high school graduates (4.8%). There were 12 participants who attended "other" types of schools (9.5%). The participants' status of citizenship was another variable in the current study. 13 participants held dual citizenships (10.3%), and 113 participants had only single citizenship (89.7%).

The questionnaire also asked the participants if they had any international traveling experience. As is clear in Table 1, 69 participants had overseas experience (54.80%), whereas 57 of them reported not to have an international traveling experience (45.2%). Speaking multi-languages was another variable to look at in the current thesis study. 56 participants (44.4%) reported to be speaking more than 2 languages, and 70 of participants only Turkish (55.60%). The participants were also asked to state if they had foreign friends and kept communication with them. 99 participants had foreign friends (78.6%), and 27 participants had no foreign friends (21.4%).

		Variable	es		
	Gender	Frequency	<u>%</u>	Valid %	Cumulative %
Valid	Female	87	69.0	69.0	69.0
	Male	39	31.0	31.0	100.0
	Total	126	100.0	100.0	
	Age	Frequency	<u>%</u>	Valid %	Cumulative %
	18-23	85	67.5	67.5	67.5
Valid	24-29	24	19.0	19.0	86.5
	30 and over	17	13.5	13.5	100.0
	Total	126	100.0	100.0	
	<u>School Type</u>	Frequency	<u>%</u>	Valid %	Cumulative %
Valid	State	112	88.9	88.9	88.9
	Private	14	11.1	11.1	100.0
	Total	126	100.0	100.0	
	School Categories	Frequency	<u>%</u>	Valid %	Cumulative %
Valid	Anatolian High School	90	71.4	71.4	71.4
	Science High School	18	14.3	14.3	85.7
	Religious School	6	4.8	4.8	90.5
	Other	12	9.5	9.5	100.0
	Total	126	100.0	100.0	
	Dual Citizenship	Frequency	<u>%</u>	Valid %	Cumulative %

# Descriptive statistics of participants' demographic information

					25
Valid	Yes	13	10.3	10.3	10.3
	No	113	89.7	89.7	100.0
	Total	126	100.0	100.0	
	<b>Overseas Experience</b>	Frequency	<u>%</u>	Valid %	Cumulative %
Valid	Yes	69	54.8	54.8	54.8
	No	57	45.2	45.2	100.0
	Total	126	100.0	100.0	
	<u>Speak multi-languages</u>	Frequency	<u>%</u>	Valid %	Cumulative %
Valid	Yes	56	44.4	44.4	44.4
	No	70	55.6	55.6	100.0
	Total	126	100.0	100.0	
	Foreign Friends	Frequency	<u>%</u>	Valid %	Cumulative %
Valid	Yes	99	78.6	78.6	78.6
	No	27	21.4	21.4	100.0
	Total	126	100.0	100.0	

#### **3.4.Research Instruments**

Before administering Cultural Intelligence Scale (CQS) (Appendix 1) in the research setting, all permissions were received from the concerned institutions. In order to gain an understanding of the pre-service ELT teachers' overall degree of CQ, a CQS, which was developed by Ang, Van Dyne, Koh, Ng, Templar (2007), was utilized and administrated as the quantitative research instrument. The rationale behind this choice is that it has been validated by several researchers and has been proven to satisfy the criteria of construct validity and measurement equivalence across cultures (Ang et al., 2007; Shannon & Begley, 2008; Shokef & Erez, 2008; Van Dyne et al., 2008).

For instance, Shokef and Erez (2008) validated the reliability of the CQS by administrating the same scale in four different phases. The reliability alpha coefficients for the whole sampling were 0.90, 0.90, and 0.91.

Not only international researchers, but researchers in Turkey have proven the validity and reliability of the given scale (Şahin, Gürbüz, Köksal & Ercan, 2013). The studies conducted in Turkey have tested its reliability and validity by findings out the positive and significant correlation between the English and Turkish version of CQS.

As mentioned earlier, to gather quantitative data, a CQS was used. The first part of the scale aimed to gather information about the participants' sociodemographic background such as gender, overseas experience, high school background, overseas experience, having English-speaking friends, being dual citizenship. The second part of the instrument consisted of 20 items and asked the participants to state their views on a five-point Likert scale. In this five-point scale instrument, 1 represents "strongly disagree"; 2 represents "disagree"; 3 "neutral"; 4 "agree", and lastly 5 "strongly agree". In order to eliminate the bias in data collections and the possibility that the participants may incline to produce the same answers to the questions under the same factor, all items which represented 4 different factors of CQ were randomly blended.

There are 4 sub-factors in the scale: metacognitive intelligence, cognitive intelligence, motivational intelligence, behavioral intelligence. In the sub-scale "meta-cognitive intelligence" are included 4 items, in "cognitive intelligence" 6, in "motivational intelligence" 5, and lastly behavioral intelligence 5.

With regard to the qualitative phase of the study, a total of 12 questions were asked to the participants (Appendix 2a & 2b). Among these 12 interview questions, question 1 was asked to reveal the participants' general perceptions of CQ, question 2 and 4 were to examine their metacognitive CQ, question 3 and 5 were for cognitive CQ, question 9,10,11 were for the motivational CQ, and question 12 was for the participants' behavioral cultural intelligence. Moreover, question 6, 7, and 8 were asked for eliciting their perceptions about the relationship between their cultural intelligence and such variables as speaking multi-languages, having overseas experiences, and the types of high schools they attended.

Table 2

Reliability analysis

		N	%	Cronbach's	Cronbach's Alpha Based on	N of items
				Alpha	Standardized Items	
G	Valid	126	100			
Cases	Excluded <sup>a</sup>	0	0			
	Total	126	100	.857	.860	20

In order to perform the statistical analysis, first, the reliability of the data was checked by using test of reliability. As can be seen from Table 2, it clearly reveals that the data in this study was highly reliable due to the higher Cronbach's Alpha (Cronbach's Alpha= 0.860), which shows that the data shows 86% of reliability.

# Items reliability analysis

Scale Items	Scale Mean if Item Deleted	Corrected-item Total Correlation	Cronbach's Alpha if Item Deleted
Item 1	71.95	.385	.853
Item 2	72.13	.433	.851
Item 3	72.13	.455	.850
Item 4	72.08	.532	.847
Item 5	73.02	.377	.853
Item 6	72.79	.273	.858
Item 7	72.44	.517	.848
Item 8	73.01	.505	.848
Item 9	72.93	.425	.851
Item 10	73.07	.557	.846
Item 11	71.76	.381	.853
Item 12	72.18	.439	.851
Item 13	72.35	.516	.848
Item 14	72.44	.511	.848
Item 15	72.37	.425	.851
Item 16	72.47	.318	.856

			29
 Item 17	72.61	.439	.851
Item 18	72.48	.516	.848
Item 19	72.52	.449	.850
Item 20	72.52	.489	.849
Total Scale		76.28	

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In order to assess the reliability of each "CQS" item, a total of 20 questions were included in the test of reliability. As it can be seen from Table 3, all scale items showed higher level of reliability, and Cronbach's Alphas for each questionnaire items were higher than 0.84. It can thus be concluded that not only the whole scale, but the scale items showed higher reliability in the current study.

#### **3.5.Data Collection**

Prior to collecting data, a research ethics committee report was taken from the ethic committee board of the university where the CQS would be conducted. No monetary incentives were given to the participants. All participation was voluntary, and the participants were asked to sign consent forms.

In terms of the pilot study, a randomly selected 16 pre-service ELT teachers, who did not participate in the main study, were administrated the scale. The data collected from these 16 participants were analyzed by using SPSS 24. The reliability of the scale was high with a 0.822, Cronbach's Alpha value.

The data collection in the main study consisted of two phases. In the initial phase, CQ scale was printed and distributed to the fourth grade pre-service ELT teachers in the department

of ELT in Bursa. Meanwhile, a google form scale was generated in order to reach the participants who had been doing their internship in various schools affiliated to the Ministry of Education. There was a total of 126 participants who responded to the scale.

In the second stage of the data collection, semi-structured interviews were conducted with 10% of the research population. The interviews were recorded and later transcribed for the qualitative analysis. Finally, the qualitative and quantitative findings were combined to answer the research questions. After finalizing the data collection, all scales were numbered to avoid any confusion in data entry into the SPSS program for the statistical analyses.

The participants were invited to the semi-structured interviews via cloud meeting software (ZOOM). Held in Turkish, the interviews were audio-recorded in order to conduct the related analysis (Appendix 3). Later fully transcribed, the interviews lasted between 30 and 40 minutes.

#### **3.6.Data Analysis**

To analyze the quantitate data, SPSS 24 (Statistical Package for the Social Science 24) was used. The missing values of the collected data were replaced with the group means due to the fact that leaving out the gathered data may influence the results of the statistical analyses.

The descriptive statistics and frequency analysis were applied. All the findings from the quantitative analysis were reported in the form of tabulation.

In order to report the participants' demographic information, descriptive statistics frequency tests were conducted.

The second research question in the present study analyzed the participants' CQ and 4 subscales of CQ in terms of their gender, school type, dual citizenship status, travelling abroad experience, speaking multi-languages abilities and having international friends. To compare the

participants' CQ and its four subscales, a parametric test- an independent samples t-test was performed. Such a test was conducted as the data showed normal distribution.

In order to analyze the qualitative data, content analysis (Appendix 4) was performed. First of all, all interview notes were transcribed, and these notes were collected under 12 different interview questions. Second of all, similar themes were coded, and frequencies of these codes were counted. Third of all, these counted codes were subcategorized into sub-themes. Finally, the main themes and emerging themes were reported in tables. For each sub-theme, one example meaning unit was provided to elaborate the conducted analysis (See Appendix 4).

For purposes of validation and verification of qualitative data analyses, an independent researcher was asked to analyze the interviews and form her own categories from it. The co-rater was an experienced researcher in the field of ELT and prior to the analysis was informed about the purpose of the study and the research questions. To achieve consistency on the communication units, at first, a small amount of data was analyzed separately by the two researchers. After the comparison and discussion, and having reached a consensus, the rest of data were divided into communication units by the researcher and the co-rater individually. In order to calculate interrater reliability number of agreements were divided with the sum of total agreements and disagreements (Miles and Huberman, 1994, p. 64).

#### Table

#### *Test of normality*

	V	/alid	Cas	ses Missing	,	Total	Shapiro-W	/ilk	
	N	Percent	N	Percent	N	Percent	Statistics	df	Р
Total Mean	126	100%	0	0%	126	100%	.992	126	.668

4

As shown in Table 4, there was a total of 126 participants, and the data collected for eliciting pre-service ELT teachers' CQ was normally distributed. This can be seen from the significance value of the test of normality. In the test of normality, if the significance value is higher than 0.05, it shows that the data was normally distributed (p > 0.05, p = 0.668). According to the result of the normal distribution of the data, it can be said that parametric statistical tests can be conducted as well as the factor analysis.

In order to conduct the factor analysis, there are some prerequisites to be met. First of all, the data shows normal distribution. Second of all, KMO and Bartlett's Test value should be higher than 0.70, which means more than 70 % of the data should be reliable and significant. The third requirement is that there should not be any autocorrelation between factors produced through factor analysis, and factors are supposed to show positive correlation in order to conduct the research.

#### Table 5

#### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.759
	Approx. Chi-Square	907.062
Bartlett's Test of Sphericity	Df	190
	Sig.	.000

As shown in Table 5, it can be seen that Kaiser-Meyer Olkin Measures of Sampling Adequacy is 0.759, and it shows a statistical significance (p = .000), which means the data

collected for the thesis study was appropriate to conduct an EFA (Exploratory Factor Analysis) type of factor analysis (p < 0.05).

Total variance as shown in Table 6 explains that there are four different factors produced from factor analysis. The table shows that all four factors explained almost 55% of the whole data (54.95%).

## Table 6

## Table of Total Variance Explained

	Initial Eigenvalues				Sums of Squared	Loadings
Compone						
nt	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5.556	27.780	27.780	2.944	14.722	14.722
2	2.139	10.695	38.475	2.730	13.648	28.369
3	1.687	8.434	46.909	2.681	13.405	41.774
4	1.607	8.037	54.946	2.634	13.171	54.946
traction N ble 7 2 Factor I		Principal Compo	nent Analysis.			
cale Item	s itive CI					.7

different cultural backgrounds.

I adjust my cultural knowledge as I interact with people from a culture that is .748 unfamiliar to me.

		34
I am conscious of the cultural knowledge I apply to cross-cultural interactions.	.773	
I check the accuracy of my cultural knowledge as I interact with people from different	.635	
cultures.		
Cognitive CI		.604
I know the legal and economic systems of other cultures.	.689	
I know the rules (e.g., vocabulary, grammar) of other languages.	.443	
I know the cultural values and religious beliefs of other cultures.	.614	
I know the marriage systems of other cultures.	.732	
I know the arts and crafts of other cultures.	.594	
I know the rules for expressing non-verbal behaviors in other cultures.	.555	
Motivational CI		.692
I enjoy interacting with people from different cultures.	.651	
I am confident that I can socialize with locals in a culture that is unfamiliar to me.	.806	
I am sure I can deal with the stresses of adjusting to a culture that is new to me.	.686	
I enjoy living in cultures that are unfamiliar to me.	.757	
I am confident that I can get accustomed to the shopping conditions in a different	.559	
culture.		
Behavioral CI		.721
I change my verbal behavior (e.g., accent, tone) when a cross-cultural interaction	.747	
requires it.		

		55
I vary the rate of my speaking when a cross-cultural situation requires it.	.698	
I change my non-verbal behavior when a cross-cultural situation requires it.	.669	
I alter my facial expressions when a cross-cultural interaction requires it.	.793	

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

Table 7 reveals the factor loading for the CQS. The factors in the research showed similar results with the original CQS. As is seen in Table 7, the first factor produced from the factor analysis is metacognitive CQ. Metacognitive CQ receives one of the highest factor loading with 0.721 Cronbach's Alpha. Metacognitive CQ consists of four items which show higher levels of Cronbach's Alphas. The third factor is motivational CQ which shows slightly lower Cronbach's alpha compared to metacognitive and cognitive CQ (Cronbach's Alpha= .692). The last factor from the factor analysis is behavioral CQ which shows a higher Cronbach's Alpha value (Cronbach's Alpha = .721).

#### Table 8

Correlation between CQ and 4 sub-factors of CQ

Correlations							
		Meta	Beha	Moti	Cog	CI	
Metacognitive CQ	Pearson Correlation	1					
	Sig. (2-tailed)						
	Ν	126					
Behavioral CQ	Pearson Correlation	.292**	1				
	Sig. (2-tailed)	.001					

	Ν	126	126			
Motivational CQ	Pearson Correlation	.382**	.294**	1		
	Sig. (2-tailed)	.000	.001			
	Ν	126	126	126		
Cognitive CQ	Pearson Correlation	.415**	.365**	.408**	1	
	Sig. (2-tailed)	.000	.000	.000		
	Ν	126	126	126	126	
CQ	Pearson Correlation	.670**	.689**	.732**	.784**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	Ν	126	126	126	126	126

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

Table 8 illustrates the factors loaded from the factor analysis and correlations of metacognitive, behavioral, motivational and cognitive CQ. As shown in Table 8 it can be clearly seen that all loaded factors demonstrate a strong and positive correlation with the CQS. To explain, metacognitive CQ indicates a positive and significant correlation with CQ (Pearson Correlation = 0.670, p< 0.05). Behavioral CQ is found positively and significantly correlated with CQ (Pearson Correlation = 0.689, p< 0.05). Cognitive CQ shows positively and strong correlation with CQ (Pearson Correlation = 0.732, p< 0.05). Motivational CQ reveals the highest, strong and positive correlation with CQ (Pearson Correlation = 0.732, p< 0.05).

#### **3.7.**Conclusion

This chapter gave an account into the details of the research methodology which included information about research setting, participant selection, data collection procedures, and data analysis. The next chapter presents the results in accordance with the research questions.

#### Chapter 4

#### **Results**

#### 4.1.Introduction

This chapter consists of four sections. The first section reports the findings of the first research question which aims to understand the participants' overall level of CQ and its subscales: metacognitive, cognitive, behavioral and motivational CQ. The second section presents the findings of the second research question, which aims to find out about the statistical difference of pre-service ELT teachers' CQ and subscales of CQ regarding participants' gender, school type, dual citizenship status, travelling abroad experience, speaking multi-languages and having international friends. The subsequent section presents the results about the last research question that attempts to understand if there is a meaningful statistical difference between the pre-service ELT teachers' CQ and 4 sub-scales of CQ with regard to their age and school categories. The last section concludes with an overall summary of this chapter.

#### **4.2.Quantitative results**

**4.2.1.Pre-service ELT teachers' overall degree of CQ.** The first research question aimed to investigate the pre-service ELT teachers' overall level of CQ and subscales of CQ: metacognitive, cognitive, motivational, and behavioral CQ. In order to find out the participants' overall degree of CQ and sub-factors of CQ, descriptive statistics were performed, and frequencies of each sub-scale were calculated and presented in Table 9.

According to the mean scores of each item, it can be reported that the mean score of strong or highly strong agreement is between 4.21 and 5. The mean score of agree is between 3.41 and 4.20. Neutral agreement or moderate agreement stands for the range from 2.61 and 3.40.

The range of disagreement is between 1.81 and 2.60 (mean score). The level of low agreement or strong disagreement ranges from 1.00 to 1.80 (Singh & Singh, 2010).

Table 9 shows the participants' level of CQ in general and within each sub-scale individually. As it is clear from the Table 9 student teachers' such dimensions of CQ as metacognitive, motivational and behavioral display a high level which is in similarity with their overall CQ. Moreover, it can be suggested that almost 75% participants showed deep level of CQ, and 15 questionnaire items showed the highest mean rank. However, participants' cognitive CQ dimension which covered 5 items (25%) in the scale showed a moderate level. Finally, the mean scores of the scale in overall reflected the participants' higher level of CQ.

#### Table 9

Scale Items	Ν	St. Deviation	%	Mean	Level of agreement
Metacognitive CI	4			4.21	Strong
Item 1	126	0.757	87.30	4.33	Strong
Item 2	126	0.727	85.70	4.15	Strong
Item 3	126	0.756	80.90	4.14	Strong
Item 4	126	0.810	84.90	4.20	Strong
Cognitive CI	6			3.39	Moderate
Item 5	126	0.894	38.90	3.25	Moderate
Item 6	126	0.986	54.00	3.48	Moderate

## Pre-service ELT teachers' overall degree of CQ

Item 7	126	0.827	72.30	3.83	Strong
Item 8	126	0.916	38.10	3.27	Moderate
Item 9	126	0.941	44.40	3.35	Moderate
Item 10	126	0.870	36.50	3.21	Moderate
Motivational CI	5			4.06	Strong
Item 11	126	0.735	88.90	4.52	Strong
Item 12	126	0.933	76.20	4.10	Strong
Item 13	126	0.905	70.70	3.93	Strong
Item 14	126	1.018	68.30	3.83	Strong
Item 15	126	0.933	73.00	3.90	Strong
Behavioral CI	5			3.76	Strong
Item 16	126	0.986	68.30	3.81	Strong
Item 17	126	0.876	64.30	3.67	Strong
Item 18	126	0.749	71.40	3.80	Strong
Item 19	126	0.855	66.70	3.75	Strong
Item 20	126	0.909	68.20	3.75	Strong
CQ	126			3.86	Strong

By way of conclusion, it can be said that that the participants' overall degree of CQ is very high, which can be seen in the strong levels of agreement and high mean scores of each questionnaire item. 4.2.2.Pre-service ELT teachers' CQ and 4 subscales of CQ in terms of gender, school type, dual citizenship status, travelling abroad experience, speaking multi-languages and having international friends.

## Table 10

Participants'	CQ	in	terms	of	gender
---------------	----	----	-------	----	--------

	Gender	N	Mean	SD.	t	Df	Р
Metacognitive CI	Female	87	16.7816	2.48449	254	124	.800
	Male	39	16.8974	2.08749	271	86.220	
Behavior CI	Female	87	19.1724	3.34527	.008	124	.038**
	Male	39	17.9231	2.95033	.106	82.338	
Motivational CI	Female	87	20.3908	3.57432	.571	124	.525
	Male	39	20.0256	2.65059	.639	96.786	
Cognitive CI	Female	87	20.5172	3.60833	.562	124	.575
	Male	39	20.1282	3.55542	.565	74.202	
CQ	Female	87	76.8621	9.52741	1.082	124	.248
	Male	39	74.9744	7.88899	1.162	87.421	

\*\*p. < 0.05

Pre-Service ELT teachers'CQ was examined according to participants' gender. In order to analyze if the participants' gender showed any statistically significant difference, independent samples t-test was applied. Independent samples t-tests are used when there are 2 different variables to find out if these two variables show any difference statistically. As seen in Table 10 the female participants' mean score (Mean=76.86) is higher than the male participants (74.98), which means the female participants' CQ is higher than the male pre-service ELT teachers. However, the male and female participants' CQ showed no statistically significant difference in terms of gender (p>0.05). According to the independent samples t-test, sig. 2-tailed value should be lower than 0.05, however, as to the gender variable, the significance value is higher than 0.05 (p=0.248).

It is worth noting that behavioral CQ showed a statistically meaningful difference in terms of the pre-service ELT teachers' gender, which illustrates that the female participants' CQ is higher than that of the male participants, because the female participants' mean score (Mean=19.17) is higher than the male participants' behavioral CQ mean score (M=17.92, p<0.05).

The second research question examined if there was any statistically significant difference between the participants' CQ and its four subscales according to the types of schools the participants attended (whether the high schools they attended were state or private schools). Again, an independent samples t-test was performed in order to find out if the participants' school type showed any statistically meaningful difference. The independent samples t-test results were presented in the table below.

School type	High	Ν	Mean	Std.	t	df	Р
	School			Deviation			
Metacognitive CI	State	112	16.8393	2.32710	.292	124	.770
	Private	14	16.6429	2.70632	.260	15.499	
Behavioral CI	State	112	18.8929	3.23092	1.041	124	.300
	Private	14	17.9286	3.56186	.965	15.792	
Motivational CI	State	112	20.2946	3.39750	.161	124	.872
	Private	14	20.1429	2.59755	.198	19.052	
Cognitive CI	State	112	20.3571	3.59894	350	124	.727
	Private	14	20.7143	3.56108	353	16.500	
CQ	State	112	76.3839	8.94955	.371	124	.712
	Private	14	75.4286	10.24856	.333	15.580	

Participants' CQ in terms of school type

P < 0.05

Table 11 shows if pre-service ELT teachers' CQ show any statistical difference in terms of the participants' school type (state or private high school). According to the independent samples t-test results, the pre-service ELT teachers who graduated from state high schools showed slightly higher mean scores than those from private high schools. To be more specific, the pre-service ELT teachers from state high schools demonstrated slightly higher levels of CQ than those from private high schools. However, the participants' school type showed no statistically significant difference (p>0.05).

When the sub-scales of CQ were examined with specific reference to the pre-service ELT teachers' school type, no statistically significant difference between state high school and private high school participants was found (p>0.05) even though the participants from state high schools produced slightly higher mean score (Mean=18.89) than those from private high schools (Mean=17.92).

Having a dual citizenship is another variable to examine the participants' CQ and four sub-dimensions of it. Independent samples t-tests were performed to investigate if the participants' CQ and metacognitive, cognitive, motivational, and behavioral CQ would show any statistically meaningful difference in terms of this variable. The independent samples t-test results were presented in Table 12 below.

Dual Citizenship		Ν	Mean	S. D	t	df	р
Metacognitive CI	Yes	13	18.0769	1.75412	2.057	124	.018**
	No	113	16.6726	2.38463	2.621	17.560	
Behavioral CI	Yes	13	18.9231	3.83974	.159	124	.874
	No	113	18.7699	3.21550	.138	14.005	
Motivational CI	Yes	13	19.4615	3.23046	939	124	.350
	No	113	20.3717	3.31984	959	15.069	
Cognitive CI	Yes	13	20.3077	3.09259	094	124	.916
	No	113	20.4071	3.64652	108	16.102	
CQ	Yes	13	76.7692	9.94279	.206	124	.837
	No	113	76.2212	9.00271	.190	14.357	

Participants' CQ in terms of dual citizenship status

P < 0.05

As is clear from Table 12, the pre-service ELT teachers' CQ revealed no statistically meaningful difference in terms of their being dual citizen status (p>0.05). when taking CQ subfactors into account, the independent samples t-test results demonstrated that there is a statistically significant difference between the participants' metacognitive CQ in terms of being a dual citizen (p<0.05). The test results showed that the participants who had dual citizenship (Mean= 18.07) demonstrated higher level of metacognitive CQ than those of having no dual citizenship (Mean= 16.67). No statistically significant differences were found between pre-

service ELT teachers' being dual citizen in terms of the participants' behavioral, motivational, cognitive CQ (p>0.05).

The participants' international travelling experience was examined to find out if there was any statistical meaningful difference between groups. An independent samples t-test was used to find the answer to the part of this research question 2. The results of independent samples t-test results were presented in table 13 below.

Table 13

	Overseas	Ν	Mean	SD.	t	df	р
Metacognitive CI	Yes	69	17.1014	2.37725	1.493	124	.138
	No	57	16.4737	2.31536	1.497	120.651	
Behavioral CI	Yes	69	18.8261	3.20366	.152	124	.879
	No	57	18.7368	3.37282	.151	117.040	
Motivational CI	Yes	69	20.8406	2.99815	2.130	124	.035**
	No	57	19.5965	3.55999	2.095	109.804	
Cognitive CI	Yes	69	20.7681	3.55687	1.283	124	.202
	No	57	19.9474	3.59276	1.282	119.097	
CQ	Yes	69	77.5362	8.94029	1.728	124	.086
	No	57	74.7544	9.05397	1.726	118.977	

Participants' CQ in terms of overseas experience

P < 0.05

Pre-service ELT teachers' international travelling or overseas experiences is one of the variables to examine in terms of the participants' CQ. As seen in Table 13, pre-service ELT teachers' CQ did not show any statistically significant difference in terms of their overseas experience (p > 0.05).

With regard to the relationship between the participants' overseas experience and four sub-scales of CQ, it can be reported that pre-service ELT teachers' motivational CQ shows a statistically significant difference in terms of their international travelling experience (p<0.05). The independent samples t-test results revealed that pre-service ELT teachers who had international travelling experience (Mean= 20.85) showed higher motivational CQ than those who did not have any international travelling experience (Mean= 19.59). Thus, international travelling of pre-service ELT teachers has a positive influence on their motivational CQ.

Speaking multi-languages is another variable in the current study. Table 14 shows the relationship between the participants' multi-language speaking abilities and their CQ. As shown in Table 14, it can be reported that pre-service ELT teachers' CQ showed no statistically significant difference in terms of speaking multi-language variable (p>0.05). It is worth mentioning that the monolingual participants' CQ mean score (Mean= 76.54) is higher than those polyglot participants (Mean=75.94).

In terms of the sub-scales of CQ and speaking multi-languages, Table 14 shows that preservice ELT teachers' metacognitive, behavioral, motivational and cognitive CQ revealed no statistically significant difference (p>0.05).

Participants' CQ in terms of speaking multi-languages

	Ν	Mean	Std. D	t	df	Р
Yes	56	17.0179	2.17833	.851	124	.389
No	70	16.6571	2.50151	.864	123.075	
Yes	56	18.3393	3.23209	-1.376	124	.171
No	70	19.1429	3.27611	-1.378	118.667	
Yes	56	20.1429	3.36522	408	124	.684
No	70	20.3857	3.28498	407	116.740	
Yes	56	20.4464	3.46368	.138	124	.890
No	70	20.3571	3.69895	.139	120.914	
Yes	56	75.9464	9.28228	366	124	.715
No	70	76.5429	8.94214	364	116.012	
	No Yes No Yes No Yes	Yes       56         No       70         Yes       56         No       70         Yes       56         No       70         Yes       56         No       70         Yes       56         No       70         Yes       56         No       70         Yes       56         No       70         Yes       56         No       70         Yes       56	Yes5617.0179No7016.6571Yes5618.3393No7019.1429Yes5620.1429No7020.3857Yes5620.4464No7020.3571Yes5675.9464	Yes5617.01792.17833No7016.65712.50151Yes5618.33933.23209No7019.14293.27611Yes5620.14293.36522No7020.38573.28498Yes5620.44643.46368No7020.35713.69895Yes5675.94649.28228	Yes5617.01792.17833.851No7016.65712.50151.864Yes5618.33933.23209-1.376No7019.14293.27611-1.378Yes5620.14293.36522408No7020.38573.28498407Yes5620.44643.46368.138No7020.35713.69895.139Yes5675.94649.28228366	Yes5617.01792.17833.851124No7016.65712.50151.864123.075Yes5618.33933.23209-1.376124No7019.14293.27611-1.378118.667Yes5620.14293.36522408124No7020.38573.28498407116.740Yes5620.44643.46368.138124No7020.35713.69895.139120.914Yes5675.94649.28228366124

 $\overline{P < 0.05}$ 

	N	Mean	S. D	t	df	Р
Yes	99	17.0707	2.30462	2.347	124	.021**
No	27	15.8889	2.37508	2.306	40.361	
Yes	99	18.8687	3.28151	.544	124	.587
No	27	18.4815	3.26250	.546	41.489	
Yes	99	20.8283	3.14299	3.758	124	.000**
No	27	18.2593	3.16948	3.740	41.033	
Yes	99	20.9495	3.46815	3.458	124	.001**
No	27	18.3704	3.30673	3.555	42.915	
Yes	99	77.7172	8.85604	3.571	124	.001**
No	27	71.0000	7.90326	3.812	45.443	
	No Yes No Yes No Yes	Yes99No27Yes99No27Yes99No27Yes99No27Yes99Yes99Yes99	Yes9917.0707No2715.8889Yes9918.8687No2718.4815Yes9920.8283No2718.2593Yes9920.9495No2718.3704Yes9977.7172	Yes9917.07072.30462No2715.88892.37508Yes9918.86873.28151No2718.48153.26250Yes9920.82833.14299No2718.25933.16948Yes9920.94953.46815No2718.37043.30673Yes9977.71728.85604	Yes9917.07072.304622.347No2715.88892.375082.306Yes9918.86873.28151.544No2718.48153.26250.546Yes9920.82833.142993.758No2718.25933.169483.740Yes9920.94953.468153.458No2718.37043.306733.555Yes9977.71728.856043.571	Yes9917.07072.304622.347124No2715.88892.375082.30640.361Yes9918.86873.28151.544124No2718.48153.26250.54641.489Yes9920.82833.142993.758124No2718.25933.169483.74041.033Yes9920.94953.468153.458124No2718.37043.306733.55542.915Yes9977.71728.856043.571124

Participants' CQ in terms of having foreign friends

P < 0.05

The current study also examined the pre-service ELT teachers' CQ in terms of having foreign friends. As Table 15 shows, there is a statistically significant difference between the participants who had foreign friends and those who did not (p < 0.05) in terms of their CQ. There were 99 participants who had foreign friends, whereas 27 participants reported not to have any foreign friends. As seen in the Table 15, the pre-service ELT teachers who had foreign friends demonstrated higher CQ (Mean= 77.72) than those who did not (Mean= 71.00). With regard to the pre-service ELT teachers' metacognitive, cognitive, motivational and

behavioral CQ, it can be seen in the table that the participants' metacognitive CQ showed a statistical meaningful difference between having foreign friends and not having them (p<0.05). To explain, the participants who had foreign friends had higher metacognitive CQ (Mean= 17.07) than those who did not (Mean=15.88). The participants' motivational and cognitive CQ also showed a statistical meaningful difference in terms of having foreign friends variable. The participants who had more foreign friends produced higher motivational (p<0.05) and cognitive CQ (p<0.05) than those who did not have any foreign friends. However, the participants' behavioral CQ showed no statistical difference in terms of having a foreign friend variable.

**4.2.3.Pre-service ELT teachers' CQ, 4 subscales of CQ in terms of age and school categories.** The last research questions aimed to investigate if there was a statistical difference between the participants' CQ and the four sub-dimensions of it in terms of their age and school categories. To compare the difference between the participants' age groups, One-way ANOVA test was used. One-way ANOVA test is one of the parametric tests in statistics, which is used to compare more than 2 groups statistically.

The participants' CQ was examined according to their age. Table 17 indicates the relationship between the participants' age and CQ. According to One-way ANOVA analysis, preservice ELT teachers' CQ showed no statistically significant difference among different age groups (p > 0.05). It can be seen in Table 16that the means scores of the participants whose age group between 18-23 is 76.20. The participants whose age ranged from 24 to 29 produced a similar mean score (Mean = 77.75) and those whose age ranged from 30 to over again a similar mean score (Mean = 74.58). It thus seemed that the participants whose age group ranged from 24 to 29 produced the highest mean scores compared to the other age groups. However, the statistical difference between different age groups was not significant (p > 0.05).

With regard to the participants' age group and 4 sub-systems of CQ, the analysis revealed that pre-service ELT teachers' behavioral CQ showed a statistically significant difference between different age groups (p < 0.05).

In terms of the participants' behavioral CQ, Table 16 shows that the participants with age range from 18 to 24, and those from 24 to 29 showed similar means scores (Mean= 19.00). However, the participants with an age range between 30 and over produced the lowest mean score compared to other age groups (Mean=16.11). Therefore, it can be concluded that the higher of the participants' age, the lower behavioral CQ the pre-service ELT teachers have.

### Table 16

Age		Ν	Mean	Std. D	Minimur	n Maximum
Metacognitive CQ	18-23	85	16.6706	2.38242	11.00	20.00
	24-29	24	17.0833	2.24416	12.00	20.00
	30 and over	17	17.1765	2.48081	12.00	20.00
	Total	126	16.8175	2.36102	11.00	20.00
Behavioral CQ	18-23	85	19.1647	3.03882	10.00	25.00
	24-29	24	19.3333	3.07397	14.00	25.00
	30 and over	17	16.1176	3.55110	11.00	23.00
	Total	126	18.7857	3.26829	10.00	25.00
Motivational CQ	18-23	85	20.1176	3.45864	12.00	25.00
	24-29	24	20.8333	3.27927	13.00	25.00
	30 and over	17	20.2941	2.59241	15.00	25.00
	Total	126	20.2778	3.30972	12.00	25.00

## Participants' CQ in terms of age

Cognitive CQ	18-23	85	20.2471	3.58869	11.00	30.00
	24-29	24	20.5000	4.00000	11.00	29.00
	30 and over	17	21.0000	3.02076	16.00	26.00
	Total	126	20.3968	3.58236	11.00	30.00
CQ	18-23	85	76.2000	8.94800	54.00	96.00
	24-29	24	77.7500	9.57011	61.00	99.00
	30 and over	17	74.5882	9.13139	59.00	93.00
	Total	126	76.2778	9.06301	54.00	99.00

The participants' CQ was investigated in terms of their school categories as well. As can be seen in Table 19, the pre-service ELT teachers' CQ showed a statistically significant difference in terms of different school categories (p< 0.05). To explain, Table 19 shows that the pre-service ELT teachers who attended Anatolian high schools had the highest mean score (Mean= 77.64) than the participants who attended science high schools (Mean= 73.88). The participants who attended religious high schools produced a slightly lower mean score (Mean= 68.83) than those who attended Anatolian and science high school. Moreover, the participants who graduated from "other high schools" produced a similar mean score (Mean= 73.33) to the science high school graduates.

With regard to the pre-service ELT teachers' school category and 4 sub-factors of CQ, motivational CQ showed a statistically significant difference between groups of schools (p < 0.05). The findings, as shown in Table 19, suggested that the participants who attended Anatolian high schools had the highest mean score, which means that Anatolian high school graduates had the highest motivational CQ (Mean=20.67). The second highest motivational CQ can be observed in the science high school graduates, whose mean score is slightly lower than the Anatolian high

school graduates (Mean= 19.27). The religious high school graduates had the lowest motivational CQ compared to the other high school graduates (Mean= 16.67), as can be seen in Table 19. Table 17

One-way ANOVA	test for	participants'	' age
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		ANOVA				
		Sum of Squares	df	Mean Square	F	Р
Metacognitive CI	Between Groups	5.721	2	2.861	.509	.602
	Within Groups	691.080	123	5.619		
	Total	696.802	125			
Behavioral CI	Between Groups	140.422	2	70.211	7.228	.001**
	Within Groups	1194.792	123	9.714		
	Total	1335.214	125			
Motivational CI	Between Groups	9.592	2	4.796	.434	.649
	Within Groups	1359.686	123	11.054		
	Total	1369.278	125			
Cognitive CI	Between Groups	8.347	2	4.173	.322	.726
	Within Groups	1595.812	123	12.974		
	Total	1604.159	125			
CI	Between Groups	101.060	2	50.530	.611	.544
	Within Groups	10166.218	123	82.652		
	Total	10267.278	125			

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		ANOVA				
		Sum of Squares	df	Mean Square	F	Р.
Metacognitive CI	Between Groups	35.663	3	11.888	2.194	.092
	Within Groups	661.139	122	5.419		
	Total	696.802	125			
Behavioral CI	Between Groups	36.381	3	12.127	1.139	.336
	Within Groups	1298.833	122	10.646		
	Total	1335.214	125			
Motivational CI	Between Groups	111.761	3	37.254	3.614	.015**
	Within Groups	1257.517	122	10.308		
	Total	1369.278	125			
Cognitive CI	Between Groups	56.425	3	18.808	1.483	.223
	Within Groups	1547.733	122	12.686		
	Total	1604.159	125			
CQ	Between Groups	707.378	3	235.793	3.009	.033**
	Within Groups	9559.900	122	78.360		
	Total	10267.278	125			

One-Way ANOVA	test for	narticipants'	school	categories
One-way moorn	iesijoi	pariicipanis	school	culegonies

 $\overline{P < 0.05}$ 

# Participants' CQ in terms of school categories

School Categories		Ν	Mean	Std. Deviation	Minimum	Maximum
Metacognitive CQ	Anatolian	90	17.1111	2.36284	11.00	20.00
	Science	18	16.5000	2.33263	12.00	20.00
	Religious	6	16.1667	1.40825	16.00	17.00
	Other	12	15.4167	2.53909	12.00	19.00
	Total	126	16.8175	2.36102	11.00	20.00
Behavioral CQ	Anatolian	90	19.1111	3.42313	10.00	25.00
	Science	18	17.8889	3.19722	11.00	23.00
	Religious	6	17.5000	3.08221	12.00	20.00
	Other	12	18.3333	1.77525	16.00	21.00
	Total	126	18.7857	3.26829	10.00	25.00
Motivational CQ	Anatolian	90	20.6778	3.17585	12.00	25.00
	Science	18	19.2778	3.30429	13.00	25.00
	Religious	6	16.6667	2.65832	14.00	20.00
	Other	12	20.5833	3.55370	16.00	25.00
	Total	126	20.2778	3.30972	12.00	25.00
Cognitive CQ	Anatolian	90	20.7444	3.65833	11.00	30.00
	Science	18	20.2222	3.04004	16.00	27.00
	Religious	6	18.5000	4.08656	11.00	22.00
	Other	12	19.0000	3.24738	14.00	24.00

						55
	Total	126	20.3968	3.58236	11.00	30.00
CQ	Anatolian	90	77.6444	8.97977	54.00	99.00
	Science	18	73.8889	9.22203	59.00	95.00
	Religious	6	68.8333	3.48807	64.00	72.00
	Other	12	73.3333	8.92732	59.00	88.00
	Total	126	76.2778	9.06301	54.00	99.00

#### **4.3.Qualitative Results**

This subsection is dedicated to the presentation of results obtained from the qualitative data by means of semi-structured interviews. A total of 13 participants were included in the semi-structured interviews. Due to Covid-19 pandemic, 10 participants were given 12 interview questions to fill out, and 3 were interviewed by using Zoom video conference software. All the interviews were fully transcribed.

The main purpose of the qualitative phase of the current study was to bring into the view of pre-service ELT teachers' general perceptions of their CQ in detail. With this object in mind, the results of the qualitative phase were presented based on the following main themes and qualitative research questions: "pre-service ELT teachers' general perception of CQ", "preservice ELT teachers' perception of their metacognitive CQ", "pre-service ELT teachers' perception of their cognitive CQ", "pre-service ELT teachers' perception of their motivational CQ", and "pre-service ELT teachers' perceptions of their behavioral CQ". Therefore, the results of semi-structured interview were reported in tables which include the example meaning units, codes, subcategories and categories.

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**4.3.1.Pre-service ELT teachers' general perception of CQ.** The first research question was asked in order to elicit pre-service ELT teachers' general perception of CQ. The interview question was "In your view, what is culture?". According to the results of the content analysis, 12 codes emerged from the interview results. The most commonly observed ones in the data were "*way of living* (n=6)", "*tradition/customs* (n=8)", "*habits* (n=3)", "*ideas and opinions* (n=2)". The other emerged codes were *manners*, *foods*, *experiences*, *values*, *totems*, *taboos*, *rules*, *materials and spiritual matters*. These three codes '*way of living*, *manners*, *foods*' were then categorized into a single subcategory, which is *lifestyles*. Moreover, *traditions/customs*, *experiences*, *habits* and *values* were subcategorized into *traditions & customs*, *taboos*, *rules*, *material & spiritual matters*, *ideas and opinions were* also subcategorized as *beliefs*. Finally, aforementioned three subcategories were collected under the main theme "perceptions of culture" (n=13).

**4.3.2.Pre-service ELT teachers' perception of their metacognitive CQ.** The second interview question was about the pre-service ELT teachers' perception of their metacognitive CQ. The second and fourth interview questions aimed to investigate the interviewees' perceptions of their metacognitive CQ, which were respectively: "What should we need for successful intercultural communication? Why?"; "Do you adopt or modify your cultural assumptions during the intercultural communication? If so how? What are these assumptions?".

When it comes to the pre-service ELT teachers' perception of their metacognitive CQ, many interviewees expressed that *openness to differences* (n=9) and *tolerance* (n=9) were the most significant factors in intercultural communication. Some other participants also regarded *respect* (n=5) highly important in communication across cultures.

When the interviewees' replies were coded, a number of codes related to metacognitive CQ were generated. To illustrate, these codes were: *openness to differences* (n=9), *tolerance* (n=9), *respect* (n=5), *having less anxiety and less interaction* (n=1), *empathy* (n=1), *sincerity* (n=1), *transparency* (n=1); *knowledge of different cultures* (n=1), *knowledge of different languages* (n=1); *prejudice* (n=2), *having low level of adaptation* (n=1), *and the fear of change* (n=1). Furthermore, these codes were put into three different subcategories, which were *attitudes*, *knowledge*, and *internal factors*. The subcategory *attitudes* included *openness to differences*, *tolerance*, *respect*, *having less anxiety and less interaction*, *empathy*, *sincerity*, *and transparency*. In addition, *knowledge*. Finally, an *internal factor* subcategory was also generated according to the nature of codes which were *prejudice*, *low level of adaptation*, and *the fear of change*. As a result, *attitudes*, *knowledge*, *and internal factors* were congregated under the main theme *perception of metacognitive CO*.

**4.3.3.Pre-service ELT teachers' perception of their cognitive CQ.** The next research questions were about eliciting the pre-service ELT teachers' perception of their cognitive CQ. To this end, interview questions 3 and 5 were asked. The third interview question was: "Can you describe yourself as an inter-culturally competent user? Why or why not?", and the fifth interview question was "What do you think you need to know about different cultures you encounter? Why? Do you already know all these?".

When the participants' replies were coded, it was seen that the majority of the participants agreed that knowing about cultural values is one of the most important factors in order to describe oneself as inter-culturally competent user. Several codes emerged here, which were *open-mindedness* (n=1), *no prejudice* (n=1), *no cultural comparison* (n=1), *cultural values* (n=6), *literature* (n=1); *represent Turkish culture* (n=1), *interest in other cultures* (n=1), *observation* 

(n=1); pragmatics (n=1), good command of English (n=1), prejudiced habits (n=1), individual mistakes (n=1), lack of cultural knowledge (n=2); education system (n=1), closed society (n=1), less exposure to target culture (n=1), religion (n=3), way of life (n=2).

Many participants in the interviews expressed that they regarded themselves as interculturally competent language users, while some other participants were less likely to consider themselves as competent intercultural communicators.

The subcategories were generated according to the similarities of the content and presented the nature of the codes. Firstly, five different codes, which were open-mindedness; no prejudice, no cultural comparison, cultural values literature, were subcategorized under "having intercultural knowledge". Secondly, the code of representing Turkish culture was put under the subcategory "having native culture representation".

Another subcategory was also found, and there were 2 codes under it: *pragmatics* and *good command of English*. Having good command of English and having pragmatic knowledge about the target cultures were also subcategorized as *"having language competence*". Besides, having interest in other cultures and observation were also put under a subcategory which was labelled as *being inquisitive*.

Some participants also expressed their sentiments about being less competent intercultural communicators. For example, the interviewees explained that having prejudiced habits or individual mistakes could be the reasons of their intercultural incompetence. In addition, some participants also expressed the educational systems, the traits of the society they have been living in, less exposure to the target cultures were likely to be the culprits for their limited competence in cross-cultural communication. According to the obtained codes, having *prejudiced habits*, *individual mistakes* and the *lack of cultural knowledge* were grouped into a subcategory as

internal factors, whereas, *education systems*, *closed society*, *less exposure to target culture*, *religion*, and *way of life* were listed under external factors.

As a result, the aforementioned 6 sub-categories shaped the main theme as the perception of cognitive CQ (n=13). Even though the majority of the participants expressed considerably positive perceptions about their cognitive CQ, there might also be some internal and external factors which may pull the participants back from intercultural communication.

**4.3.4.Pre-service ELT teachers' perception of their motivational CQ.** In order to examine the pre-service ELT teachers' perception of their motivational CQ, question 9, 10, and 11 were asked in the semi structured interviews. These questions were respectively, "How do you feel about interacting with people from different cultures? Why?", "How would you feel if you were supposed to live in a dissimilar culture? Why/not? What would you do to deal with this dissimilarity?", "Can you easily adjust yourself to a new cultural surrounding? If yes, then how do you do this?".

After analyzing the transcribed interviews, codes were formed. Almost all the participants stated that *ability to adapt* (n=13) was important. The emerged codes here were *learning cultures* (n=8), *enthusiasm* (n=2); *ability to adopt* (n=13), *openness to new cultures* (n=5), *mutual understanding* (n=3), *sympathy* (n=1), *overseas travelling* (n=1), *homesickness*(n=1), *stress*(n=1), *stress*(n=1), *the influence of native culture*(n=1), and *time* (n=1).

*Learning cultures* and *enthusiasm* were collected under the theme named "willingness to learn cultures". Ability to adopt, openness to new cultures were subcategorized to "*having abilities to adopt*". Moreover, *mutual understanding, sympathy and overseas travelling* were collected under the theme "*having previous experience*". Finally, intrinsic and extrinsic factors were also categorized based on the codes which were *homesickness, stress, stereotypes, native*  *culture influence*, and *time*. To illustrate, *homesickness*, *stress*, *and stereotypes* were subcategorized as *intrinsic factors*, while *native culture influences* and *time* were under the subcategory as *extrinsic factors*. As a result, *willingness to learn cultures*, *having abilities to adopt*, *having previous experiences*, *intrinsic* and *extrinsic factors* were all collected under one main theme as *perception of motivational* CQ (n=13).

**4.3.5.Pre-service ELT teachers' perception of their behavioral CQ.** With regard to the pre-service ELT teachers' perception of their behavioral CQ, question 12 was asked to the participants during the interview. The interview question was "Do you change how you speak in cross-cultural interaction (in terms of body language, accent, tones etc.)? Why or why not? If so, in what ways?".

When the respondents' answers were analyzed, it was observed that the majority of the participants reported to be changing how they spoke in intercultural interaction in order to have *mutual understanding* (n=3), to have better *cultural reflection* (n=2), and most commonly by using *imitation* (n=12). There was also an emerging factor such as *language personality* (n=1). To illustrate, one of the participants believed that s/he changed the way he/she speaks when s/he switched the language spoken in intercultural communication. The participant also stated that s/he used less body language when s/he spoke English, whereas s/he used body language more frequently when he/she spoke Spanish. Furthermore, s/he reported to be using body language frequently when Turkish language is spoken.

When these aforementioned codes were subcategorized, *imitation* and *mutual understanding* were collected under the theme called "*environmental influences*", and *language personality* was subcategorized as "*an emerging factor*". Furthermore, the sub-themes such as the *environmental influence and the emerging factor* were categorized as the *perception of behavioral CQ*. **4.3.6.Pre-service ELT teachers' perception of their CQ and some variables.** With the intent of examining the participants' perceptions of speaking multi-languages, being a dual citizen and graduating from state or private high schools, interview questions 6,7,8 were asked to the interviewees. The interview question 6 was "Do you speak another language? Do you feel this gives you an insight into the culture of that language? In what way?". Interview question 7 was "Do you think speaking multi-languages can make you more culturally intelligent? In what way?". Interview question 8 was "Do you think studying in a private or state school, being a dual citizen can improve one's cultural intelligence? How?".

The analysis of the interviewees' responses to the interview questions 6 and 7 revealed that 6 participants spoke other languages such as German, Spanish, Portuguese, Roman...etc. The participants who spoke other languages expressed that speaking other languages was likely to contribute to learning the *form of expressions* (n=1) in foreign languages, *adaptation* (n=1), *understanding the target cultures* (n=1), learning the ways of expressing *thoughts and emotions* (n=2), and showing *empathy* (n=1). Even though half of the interviewees did not speak other languages, they still believed that it was important to understand cultures (n=3), learn styles of speaking (n=1), learn the structure of languages (n=1). Moreover, one respondent commented that watching foreign *TV series* (n=1) may be helpful for understanding different cultures.

For instance, one interviewee noted:

"Bence etkiler. Farklı dillere ve yaşam biçimlerine aşina olmak ufkumuzun gelişmesini sağlayarak, hoşgörüyü ve empatıyı artırır. Sonuç olarak farklı kültürlere dair bilgi sahibi oluruz ve gelişiriz." "I think it affects. Being familiar with different languages and lifestyles broaden my horizon and improve my tolerance and empathy. As a result, we will have knowledge about different cultures, and we develop."

There was a participant who commented:

"Kesinlikle etkiler. Dil kültürün temelidir. Çünkü dil olmazsa aktarım olmaz, kümülatif bilgi olmazsa kültürden de bahsetmek mümkün değildir. Dolayısıyla farklı diller size farklı kültürlerin kapılarını açar ve bu şahane olmasının yanısıra kültürel zekamızı olumlu etkileyen bir şeydir."

"It definitely affects. Language is the foundation of culture. Because there is no cultural communication without languages, it is not possible to talk about culture without cumulative information. Therefore, different languages open the door of different cultures to you and this is something which positively affects our cultural intelligence and it is amazing."

Interview question 8 addressed the participants' perceptions about their CQ in terms of attending state or private high schools and being a dual citizen. A variety of perspectives were expressed by the participants, and then these perspectives were coded and categorized. For instance, as revealed in the data, going to private high schools may provide students with opportunities to interact easily with *foreign teachers* (n=1), having *advanced school facilities* (n=1), having more *frequent overseas exchange programs* (n=2), the *smaller number of students* in a classroom (n=1). However, some participants also expressed their views that the *teachers' roles* (n=1), *socio-economic conditions* (n=1) of schools, and teachers' duty on *developing students' outlook to life* (n=1) may also differ in state and private high schools.

For example, one of the interviewees reported the following about CQ and the variable attending state or private high schools:

"...Özel lisede okumanın bir avantaji, yabancı uyruklu ögretmenlerin ders veriyor olması kültürel algıyı olumlu anlamda değiştirdiğini düşünüyorum..."

"...the advantages of studing at a private high school is that you have foreign/native teachers, which is able to change the cultural perception positively..."

There was also one participant who stated:

"Özel lise ve devlet lisesine gelince, okulun imkanları kısıtlıysa elbette zordur ama öğretmenin gayreti hepsinin üstündedir."

"As well for a state and private high school, of course, if the school has limited opportunities, it could be difficult, however, teachers' effort is the most important factor to improve cultural intelligence."

Most of the participants showed positive attitude towards the idea that dual citizenship improves CQ. That is to say student teachers in the study believe that being a dual citizen could contribute to the advancement of CQ. To illustrate, some participants commented that being a dual citizen may contribute to the pre-service ELT teachers' *openness to interaction* (n=1), *having various perspectives* (n=2), *having the ability to compare cultures* (n=1), and *less obstruction in travelling* (n=1).

Commenting on being dual citizens, one respondent stated:

"Evet, çifte vatandaş birey iki kültürü de bilir ve karşılaştırma firsatı bulur."

"Indeed, an individual with dual citizenship status know both 2 cultures and they have chances to compare these two cultures."

One of the interviewees also reported:

"Çifte vatandaş olmak katkı sağlar. Çifte vatandaşlar farklı iki kültürde yaşamış inanalardır ve kültürlere sahiptirler. Bu onlara farklı bakış açıları sağlar ve farklı ortamlarda nasıl etkin olabileceklerini bilirler."

"Of course, being a dual citizen contributes to cultural intelligence. Dual citizens are people who live in 2 different cultures and who have 2 cultures. This provides them with opportunities to have different perspectives and they are conscious of how to behave in different cultural situations."

#### 4.4.Conclusion

The fourth chapter is concerned with the findings obtained in the current study. Thus, the participants' responses from the semi-structured interviews were integrated with the statistical findings.

Second of all, the participants' overall degree of CQ was elicited by calculating the mean scores of the whole data and four sub-dimensions of CQ, which suggested that the pre-service ELT teachers' CQ showed a significant strong level of agreement. Taking 4 sub-dimensions into account, metacognitive, behavioral and motivational CQ demonstrated a strong level of agreement, whereas pre-service ELT teachers' cognitive CQ showed moderate level of CQ.

Thirdly, the participants' gender, school type, dual citizenship status, overseas experience, speaking multi-languages, having foreign friends were examined by means of independent samples t-tests. To explain, pre-service ELT teachers' CQ showed no statistically meaningful difference between groups, however, the pre-service ELT teachers' behavioral CQ was statistically significant in terms of gender. Moreover, the pre-service ELT teachers' dual citizenship status revealed no statistical difference in terms of their CQ, but metacognitive CQ was found significant, which showed that the participants who had international travel experiences seemed to have higher levels of metacognitive CQ. Furthermore, the pre-service ELT teachers' overseas experience failed to show a statistical difference between groups, yet motivational CQ showed a higher mean and statistically meaningful difference. That is, the pre-service ELT teachers who had overseas experiences showed higher motivational CQ than those who did not. Over and above that, the pre-service ELT teachers' CQ was found significant in terms of having foreign friends: the pre-service ELT teachers who had more foreign friends normally possessed higher level of CQ.

Lastly, pre-service ELT teachers' CQ failed to show a significant difference in terms of the participants' age. Nevertheless, the participants' behavioral CQ was found significant. The younger participants were found to be having a higher level of behavioral CQ than those who were older. Besides, the participants' school categories showed a statistically meaningful difference between groups. The participants from Anatolian high schools showed higher levels of motivational CQ than those from science, religious and other school categories. Furthermore, all research questions were supported with the qualitative findings from the interviews. The next chapter discusses the findings of the current study with specific reference to the related literature.

#### **Chapter 5**

#### Discussion

# 5.1.Introduction

In this chapter, the results drawn from the quantitative and qualitative data are discussed and compared with the relevant literature with respect to the research questions posed in the study. First, the pre-service ELT teachers' CQ in the existing literature will be discussed. Following this, the participants' CQ will be discussed in terms of their gender, school types (state/private high school), dual citizenship status, overseas experience, speaking multi-languages, and having foreign friends. Finally, their levels of CQ is discussed in line with their age and school type factors.

## 5.2.Discussion of findings as to pre-service ELT teachers' CQ

The first research question of this study aimed to elicit information about the pre-service ELT teachers' overall degree of CQ. According to what the findings from the quantitative data indicated, the participants displayed high levels of metacognitive, motivational, and behavioral CQ, while their cognitive CQ showed moderate levels of of it.

Not only did the statistical findings, but also the pre-service ELT teachers' CQ was observed high in the semi-structured interviews which were conducted with 15 randomly selected pre-service ELT teachers. However, the participants in the interviews seemed to demonstrate considerably moderate levels of cognitive CQ. The majority of them, for example, reported that they did not believe they had sufficient knowledge of other cultures and the values, cultures, norms or traditions of them.

The responses to the interview question what 'culture' is revealed the participants' awareness on the significance of culture and CQ in a broad perspective. There are a lot of definitions of culture in the literature. For instance, culture refers to "the socially transmitted knowledge and behavior shared by some group of people" (Peoples &Bailey, 1998, p.23); earlier authors defined culture as "...to learned, accumulated experience. A culture...refers to those socially transmitted patterns for behavior characteristic of a particular social group" (Keesing, 1981, p.68); culture is also defined as "culture, or civilization, ...is that complex whole which includes knowledge, belief, art, law, morals, custom, and any other capabilities and habits acquired by man as a member of society" (Tylor, 1871, p.1); Harris also defined culture as "...the total socially acquired life-way or life-style of a group of people. It consists of the patterned, repetitive ways of thinking, feeling, and acting that are characteristics of the members of a particular society or segment of a society" (Harris, 1975, p.25).

In the semi-structured interviews, the participants described culture in three sub-themes such as lifestyles (way of living, manners, foods); tradition & customs (traditions, customs, experience, habits, values), and beliefs (totems, taboos, rules, material and spiritual matters, ideas and options).

The participants' responses in the semi-structured interviews and definitions in the literature are in line with each other. It could then be argued that the participants have some sort of awareness towards cultural experience, specifically, intercultural communication.

As it was stated in the literature review, cognitive CQ is related to having certain amount of knowledge about norms, traditions, values and beliefs of other cultures. According to the participants' answers in the interviews, the participants generally stated they did not have sufficient knowledge of other cultures due to the environment in which they live. Some participants mentioned that they did not define themselves as strong cognitive communicators, because they believed that the education system may play a role for understanding other cultures and having in-depth knowledge of other cultures. Some other participants commented in the interviews that they did not regard themselves as having a strong cognitive CQ, because they believed that it was impossible to have full and deep knowledge of other cultures.

As to the participants' motivational CQ, the quantitative data revealed higher levels of it. Many participants agreed that knowing new cultures and meeting new people made them excited. Moreover, some participants mentioned that it could be a little bit difficult in the beginning of the conversation, yet they believed that it could be easier for them to establish intercultural communication. The data from the qualitative analysis also demonstrated that the participants overall agreed to have strong willingness to communicate with people from different cultures. The majority of the participants commented that it might be difficult for them to build communication at first, but it might be easier then when sufficient time was spent in intercultural communication.

As it was mentioned in the literature review, behavioral CQ is related to an individual's flexibility of adjusting their verbal and non-verbal behavior as it is needed. As it was mentioned in the quantitative results, the participants showed a high level of behavioral CQ. The qualitative results also revealed that the participants could adapt their accent, intonation, gestures and other non-verbal and verbal behavior according to the cultural context which differed from one another. Some participants stated that they normally changed their verbal and non-verbal behavior unconsciously.

As mentioned in the literature review, a number of studies have been carried out on CQ (Barkley, 2009; Dwyer & Mary, 2004; Dwyer, Mary, & Courtney K. Peters, 2004; Gmelch, 1997; Holoviak, Verney, Winter, & Holoviak, 2019; McCrea & Z.Yin, 2012; Rustambekov & Mohan, 2017; Williams & Best, 2014). However, studies on pre-service ELT teachers' CQ are

hardly to be found in the literature. Therefore, the comparisons between the pre-existing literature and the results of this study might be challenging. However, a detailed discussion is offered in the following paragraphs.

What the study found was that the pre-service ELT teachers' overall degree of CQ was considerably higher. To elaborate, in terms of the sub-scales of CQ, it can be concluded that the participants' metacognitive, motivational and behavioral CQ were found high, whereas their cognitive CQ was at a moderate level.

First of all, a possible explanation for this finding might be that the participants included in the current study were pre-service ELT teachers from an English language teaching department. Therefore, almost all the participants exhibited a similar level of CQ due to the intensive exposure to English or international cultures. Moreover, the subjects taught at English language teaching department might be another factor that may help increase participants' CQ, such as English literature and linguistics, etc.

Secondly, the participants demonstrated a high level of metacognitive, motivational, and behavioral CQ, whereas their cognitive CQ was at a moderate level. These results may be explained on the basis of the mastership of foreign languages which is the main factor for the participants to understand, know, and acquire the cultural knowledge and behave according to the requirements of specific cultures (Alon et al., 2016; Abdul, & Jabeen, 2020; Chen et al., 2010, Ghonsooly & Golparvar, 2013; Ghonsooly et al., 2015; Kadam, Rao Ward, Fischer; Lam, & Hall, 2009; Ng & Earley, 2011; Rachmawaty et al., 2018; Rafie, Khosravi & Nasiri, 2016; Shannon & Begley, 2008).

Some participants in the semi-structured interviews mentioned that the mastery of English helped them understand, acquire, be willing to behave according to the norms, values, traditions of other cultures. This might be related to these pre-service ELT teachers' advanced proficiency in English, which might contribute to their overall CQ. That is to say, the participants might be able to access to content-related to culture because of their advanced use of the foreign language.

As it was revealed in the quantitative data, the participants' level of cognitive CQ was moderate, while their motivational, metacognitive and behavioral CQ were comparatively higher. The information from the interviews seems to provide support for this finding. As some interviewees reported, the teaching and the learning of culture received little attention in language classes in the Turkish education system. Thus, this could be the underlying reason for rather moderate levels of cognitive CQ. For example, some participants mentioned that misperceptions and discrimination were still common in society. Therefore, it might be difficult for these participants to go further research and study other cultures. Some other participants talked about their belief that they might not have adequate knowledge of other cultures due to the environment which they were surrounded. The participants in the interviews also put their inadequateness of cultural knowledge down to some external and internal factors. For instance, "prejudiced habits, individual mistakes, education systems, living in a closed society, less exposure to different cultures, religion" and so on. Therefore, these environmental factors may be the reasons for these pre-service ELT teachers' lack of cultural knowledge.

In brief, it could be concluded that the participants' overall CQ levels were high. In the literature, studies on the pre-service ELT teachers' CQ were hardly ever found. Therefore, it may be quite challenging to support it with the literature.

5.3.Discussion of findings regarding pre-service ELT teachers' CQ in terms of gender, school type, dual citizenship status, overseas experience, speaking multi-languages, and having foreign friends The next research question aimed to understand if the participants' CQ and its four subfactors showed any statistically significant difference in terms of their gender. As it was mentioned in the findings section, the participants' overall CQ showed no statistically significant difference in terms of their gender even though the female participants showed a higher mean score than the male participants. Moreover, it is very important to note that the participants' behavioral CQ was found significant in terms of gender. According to the statistical analyses, it was found that the female participants' behavioral CQ was higher than the male participants.

These findings lend support to some previous findings in the related literature on CQ (Ghonsooly & Golparvar, 2013; Muzzurco, Jesiek, & Ramane, 2012). For instance, Ghonssoly et al. (2012) suggested in their study that there was no statistically significant difference between Iranian EFL learners' CQ in terms of their gender. Moreover, the findings in the present study revealed that the female participants' behavioral CQ was found higher than the male participants.

There might be several reasons why the participants' CQ did not show any statistical difference in terms of their gender. First and foremost, the number of male and the female participants were not equal. There were 87 female participants, whereas there were only 39 male participants. Even though the female participants' mean score (Mean score= 76.86) was slightly higher than that of the male participants (74.97), the difference was not statistically meaningful.

Another sub-variable to be examined in the present study was the school types (state vs. private high school) the participants graduated from. According to the what the quantitative findings indicated the participants who attended state high schools showed a slightly higher mean score of CQ than those who attended private high schools. The higher mean score was seen in the participants' behavioral CQ which suggested the similar results. The participants from state high school schools demonstrated higher mean scores compared to the mean scores of private high school

participants. However, it is surprising to see that the participants' CQ did not show any statistical difference in terms of their school types (state/private).

Even though the type of high schools that the participants graduated from failed to demonstrate a statistical difference in terms of CQ, the semi-structured interviews suggested surprising results. According to the interview results, the school types (state/private high school) that the participants graduated from did have influence on their CQ due to the abundant sources and opportunities to encounter with foreign people, especially foreign teachers. As the interview notes suggested, private high schools in Turkey possessed sufficient resources to hire foreign teachers who might play significant roles in developing students' CQ.

In the earlier literature, there seems to be no studies carried out about the relationship between the participants' school type and their CQ. This finding thus contributes to both CQ and ELT literature in unique and new ways.

As to the participants' CQ in terms of having a dual citizenship status, even though the participants with a dual citizenship produced slightly higher mean scores than those who did not have it, there was not a significant difference between the participants with a dual citizenship and those without it. Nevertheless, the participants' metacognitive CQ revealed a statistically significant difference between two groups, which suggested that participants with dual citizenship. In the semi-structured interviews, the pre-service ELT teachers reported that having a dual citizenship may contribute to their CQ. The participants suggested that people with dual citizenships may have opportunities to compare two or more different cultures and may be able to act consciously when intercultural communication is taking place. Most of the participants stated that it was one of the contributing factors in determining the overall degree of CQ. Moreover, being a dual

citizen may provide opportunities for people to experience diverse cultures and compare the similarities or differences between these cultures. From the participants' point of view, it can be concluded that being dual citizen may make the intercultural communication easier due to the broad perspectives that a dual citizenship could provide.

To analyze the differences between the participants' CQ in terms of their overseas experience, the mean scores of the participants who had overseas experiences and those who had no overseas experiences were compared. According to the statistical findings, the participants' CQ showed no statistically meaningful difference in terms of their CQ even though the participants who had overseas experiences revealed a higher mean score (Mean score = 77.53) and those who did not have (Mean score = 74.75). Moreover, the most significant difference was found in relation to the participants' motivational CQ. To elaborate, the participants who had overseas experiences showed slightly higher motivational CQ than those who had no such experiences to other countries (p < 0.05).

The comparison of the findings with those of some other studies confirms that there is no significant correlation between CQ and having overseas experiences (Ramalu, Rose, Uli, & Kumar, 2010; Wood, Heather, & Peters, 2013). For instance, Ramalu et al.'s study (2010) supported the idea that students' CQ did not correlate with their overseas experiences. Moreover, Wood et al. (2013) suggested that there was no any significant relationship between having overseas experiences and behavioral CQ.

However, when the mean scores of the participants who had overseas experiences and those who did not have any overseas experiences are considered, it can be concluded that the participants with overseas experiences produced higher levels of mean sores than those with no such experiences. This finding broadly supports the work of other studies, linking CQ and having overseas experiences (Engle & Crowne, 2014; Imai & Gelfand, 2010; Morrel, Ravil, Ramsey, & Ward, 2013; Ng et al, 2009; Papatsiba, 2005; Ramalu et al., 2010; Tarique & Takekeuchi, 2008; Tekin & Hiç Gencer, 2013; Wood, Heather, & Peters, 2013).

As for the relationship between participants' overseas experience and their cultural intelligence, it is apparent that the current study showed no statistically significant different among groups. This has led to speculation that all of the participants were chosen from ELT department, which suggested the notion that pre-service ELT teachers had considerably similar background in terms of exposing the foreign cultures, and their predisposition to the acceptance of foreign cultures. Therefore, their overseas experience is not likely to be the main contributing factor for improving their cultural intelligence. In addition, the contribution of the technological development could not be ignored since the participants are highly likely to access to the internet sources. Thus, as living in a global village, the participants may not necessarily need to travel to improve their cultural knowledge as well as improving their relevant intercultural competence. Furthermore, analyzing the existing studies in literature, sampling was mainly focused on participants who had international travel experience, it thus leads to controlled sampling in their study. However, in the current study, a random sampling was performed regardless of the participants' overseas experience. Hence, the findings of current study were likely to be predictable to some extent. Finally, it is believed that many universities in Turkey have been concentrating on international student mobility programs, and this may provide students with opportunities to communicate international students even without leaving their own country. To sum up, the findings of the current research in terms of the participants' overseas experience and their cultural intelligence has its potential reasons why such results were obtained.

An independent samples t-test was performed to distinguish if there was any statistically significant difference between the participants who spoke multi-languages and those who spoke only Turkish and English. The findings suggested that not only did the participants' CQ showed no meaningful difference, but the other four sub-scales of CQ revealed no statistical difference. What is surprising is that the data from the interviews generated incompatible results when compared to the statistical analysis. As claimed by the participants in the interviews, almost all believed that speaking multi-languages had a positive impact on CQ. A large number of the participants stated that being a polyglot may contribute to a better understanding of dissimilar cultures. Moreover, they stated speaking multi-languages may help one have empathy towards different cultures in intercultural interaction. Besides, many participants suggested that speaking several languages may help them broaden their horizons and have more tolerance towards other people during interactive situations.

One of the aims of the current study is to gain an understanding about the relationship between speaking multi-languages and CQ. In the literature, a strong relationship between speaking multi-languages and higher CQ was reported. For instance, Baez (2014) confirmed that speaking multi-languages was associated with higher levels of CQ. This study confirmed that those who spoke more than one foreign language demonstrated a higher level of CQ (Baez, 2014). Another study produced similar findings which suggested that speaking several languages might aid in the improvement of CQ (Khodadady & Yazdi, 2014). In the present study, the findings from the quantitative data do not seem to provide support to the mentioned findings.

There may be several reasons why there was no statistical meaningful difference in terms of being multi-languages speakers. First of all, this may be due to the nature of the sampling group. To explain, the sampling groups actually share a similar educational background, which indicates that all participants speak English. Secondly, another possible alternative explanation of these findings is that the number of the participants who can speak multi-languages are far less than those who do not. Therefore, it may have led to such a finding.

Furthermore, having foreign friends was also examined as another variable in the current study. According to the statistical analyses, there was a striking difference between the participants' CQ and having a foreign friend or not. In other words, having a foreign friend showed a positive statistical difference in terms of the participants' CQ. As it was mentioned in the findings chapter, the participants who had foreign friends had much higher CQ than those who had no any foreign friends. Moreover, having a foreign friend showed a statistically significant difference with respect to the participants' metacognitive, motivational, and cognitive CQ, whereas there was no a statistical difference between their having a foreign friend and behavioral CQ.

As suggested in the literature, having foreign friends may contribute to the improvement of an individual's CQ (Williams & Johnson, 2011). Having foreign friends may push an individual to have mutual communication by speaking the same languages or sharing or understanding the other cultures. By communicating with foreign friends, one may be able to capture the similarities or differences of dissimilar cultures and act as the way the intercultural communication requires.

# 5.4.Discussion of findings on pre-service ELT teachers' CQ in terms of age and school categories

In this study, it was found that there was no any statistical difference among various age groups. This is in contrast with the findings of previous studies (Ward et al, 2009). For instance, Ward (2009) found that older participants had higher CQ than those of young ones. However, it is unsurprising to find that there was no statistically significant difference between different age

groups, this may probably be due to the ages of sampling group. The majority of participants in our study came from fourth grade of the department of English Language Education, and the participants' age normally ranged from 18 to 29. In addition, almost 68% of the participants' age group was found between 18 and 23. Therefore, the participants' age range in the current study showed considerable homogeneity. However, the previous studies corporate more nonhomogeneous age groups in their studies and they found a statistically significant difference among various age groups. Thus, the findings of current study in terms of participants' age was not in line with the findings of previous studies.

The school category was another variable in the present study, and the question was whether the school categories would demonstrate any statistical difference among different high school groups. As it was mentioned in the findings section, the pre-service ELT teachers' CQ demonstrated a meaningful statistical difference among different school groups (p< 0.05). The participants who graduated from Anatolian high schools produced the highest mean score of CQ than science and religious high school participants. The second highest CQ mean score belonged to science high schools. The least mean score was produced by the participants from religious high schools in terms of their CQ.

## 5.5.Conclusion

This chapter started off with the presentation of the discussion of the findings about the pre-service ELT teachers' overall CQ levels. Second of all, the participants' CQ was discussed according to such variables as gender, school type that the participants graduated from, having a dual citizenship, having overseas experience, speaking multi-languages, and having foreign friends. Lastly, the participants' age and school categories were discussed in terms of their CQ. In

the following chapter, conclusion will be presented along with limitation of the study, insights into future research and implications.

#### **CHAPTER 6**

#### CONCLUSION

# 6.1.Introduction

The primary goal of the current study was to investigate the pre-service ELT teachers' overall degree of CQ. The second aim of this study was to determine as to whether the preservice ELT teachers' overall degree of CQ showed any significant difference in terms of gender, types of high school (state and private high schools), having a dual citizenship, having overseas experience, speaking multi-languages, having foreign friend age, and school categories. By analyzing the pre-service ELT teachers' CQ, this study aimed to fill a gap in the literature and to provide insights into teacher development and teacher training as well as teacher education in English language education.

A mixed method research design was adopted to investigate the pre-service ELT teachers' CQ. First of all, a "CQS", which consisted of 20 scale items was administered not only to investigate the participants' CQ, but to figure out the statistical differences between the four sub-scales of CQ, namely, metacognitive, cognitive, motivational, and behavioral CQ. Secondly, semi-structured interviews were carried out with the ten percent of the whole research population to have an in-depth understanding of the quantitative data.

In terms of the sample size, 126 pre-service ELT teachers were included in the current study. 87 of the participants were female and 39 of male.

In regard to the analysis of data, a test of reliability was conducted first in order to understand if the data collected was reliable enough to proceed the next step of the research. According to the results of the reliability test, the data showed a higher reliability. Therefore, a factor analysis was carried out to ensure whether the data showed the similar sub-factors of CQ. The factor analysis provided four CQ sub-dimensions, as found in the original CQS. Afterwards, the test of normality was done in order to determine if parametric or non-parametric tests would be used for the analysis of data.

The data obtained from the participants showed normal distribution, so parametric tests were conducted to answer the research questions. These parametric tests were independent samples t-tests and one-way ANOVA tests.

# **6.2.**Conclusion

This thesis research aimed to examine the pre-service ELT teachers' overall degree of CQ. Then, the study examined if there was any meaningful statistical difference between the preservice ELT teachers' overall degree of CQ and their gender, types of high school, being a dual citizen, overseas experience, speaking multi-languages, having foreign friend age, and school categories.

The findings in the current study indicated that the pre-service ELT teachers had high levels of CQ. They displayed higher degrees of metacognitive, motivational and behavioral CQ, but moderate levels of cognitive CQ. Besides, the qualitative results revealed similar findings which were in line with the quantitative ones.

Concerning the second research question, the findings suggested that the pre-service ELT teachers' CQ showed no significant differences in terms of gender. However, their behavioral CQ revealed a statistically significant difference in terms of gender, which indicated that the female participants' behavioral CQ was higher than the male participants.

The findings in relation to the pre-service ELT teachers' CQ and having a dual citizenship suggested that there was no statistically significant difference between these two variables.

However, the participants with a dual citizenship showed a higher level of metacognitive CQ than those with a single citizenship.

In respect to the variable "having foreign friends", the results showed that the preservice ELT teachers' CQ was significantly different. Thus, the results suggested that the participants may display higher levels of CQ as they have more contact with foreign people. Moreover, the pre-service ELT teachers' metacognitive, motivational, and cognitive CQ indicated a significant difference between groups. However, there was not a statistical meaningful difference between the participants who interacted more with foreign people and those who did not in terms of their behavioral CQ. The participants' responses to the interview questions yielded results which were in support of the quantitative results of the study.

The last research question was posed to reveal the participants' level of CQ in terms of their ages and school categories. According to what the findings indicated, age did not produce any significant and statistical meaningful difference. Even though it did not display a statistically meaningful difference in terms of the participants' CQ, it was found that the participants displayed less awareness of their CQ as growing older.

With respect to the pre-service ELT teachers' CQ in terms of school categories, the participants from Anatolian higher schools demonstrated a higher level of CQ than those from science and religious high schools.

## **6.3.Limitations of the study**

The first limitation which should be acknowledged in the present study is the sampling size. The current study aimed to investigate the pre-service ELT teachers'' overall degree of CQ. Therefore, the majority of the participants were studying or doing their internship in schools affiliated to national education. Therefore, there were 126 participants who were included in the

present study. Consequently, certain variables that could be checked or worked out did not indicate any statistically significant differences in terms of the pre-service ELT teachers' CQ.

A further limitation to be considered is the unequal and unbalanced number of the sampling group. For instance, the number of some participants showed considerable unbalanced features when taking these variables into the consideration statistically. The number of the participants with dual citizenships, for example, were only 13, whereas the number of the participants with only one citizenship status was 113.

Another limitation might be the generalizability of the study due to the fact that the participants from only one state university were included in the study. Thus, more reliable and generalizable results could be produced if more pre-service teachers from the department of English languages, or even from different departments of foreign languages at different universities were included in the present study.

The following limitation should not be ignored, either: the number of interviewees invited for the qualitative data collection. Due to the Covid-19 outbreak, it was rather difficult to conduct more face to face interviews. Only three participants were invited to the online video conferencing, while the other participants for the interviews answered the interview questions by sending their answers via emails.

## **6.4.Implications for teacher education and future research**

By examining the pre-service ELT teachers' CQ in terms of various factors and variables, this study may prove useful in expanding our understanding of how CQ might be important in English language education.

First of all, the findings illuminate our understanding of the role of CQ in language teacher education programs. When considering the relevant findings of the current study, the ELT pre-service ELT teachers showed somewhat moderate levels of cognitive CQ compared to their metacognitive, motivational, and behavioral CQ. Pre-service ELT teachers are expected to have a profound understanding of different cultures in order to demonstrate the cultural awareness in intercultural interaction. Cognitive CQ can provide teacher trainers or academicians with insights about how and how much to focus on the development of pre-service ELT teachers' CQ in the course of teacher education.

Second of all, the overall findings of the study may contribute to the professional development of pre-service ELT teachers themselves. To elaborate, these pre-service ELT teachers may take these findings and the contributing or influencing factors of CQ into consideration and show extra effort to improve themselves as culturally conscious individuals in order to deliver this intercultural knowledge in their future career of English language teaching. It could be hard to deliver or spread intercultural awareness if pre-service ELT teachers are incompetent themselves.

A further contribution of the present study might be to the Ministry of National Education. The contributing factors found here in this study may provide educational authorities with some recommendations or suggestions on how to help language teachers integrate intercultural knowledge and CQ into their classes. This is because these pre-service teachers are potential teaching personnel cadre for national education. Therefore, understanding pre-service ELT teachers' CQ may help educational institutions implement some teacher training seminars based on the needs of the teacher before and after starting teaching in national education systems.

Last but not least, the present study could contribute to the existing pre-service ELT teachers' knowledge of CQ by providing a detailed explanation of contributing factors to CQ and thus preparing English or foreign language learners to be global citizens. As mentioned in the

significance of the study, one of the aims of language teaching is to equip students with intercultural knowledge in order to make it possible for them to know, aware, act, and behave with higher CQ. Thus, the findings of the study can help pre-service ELT teachers themselves become global intercultural citizens in intercultural communication.

The present study has thrown up many questions in need of further investigation. Many of the participants in the interviews stated the importance of watching movies as a factor to improve their CQ. Therefore, it is recommended that further research be undertaken to understand if exposure to linguistic and culture input in the forms of viewing and listening activities would contribute to the development of CQ.

Another interesting point that emerged from the interview results was the influence of the native culture on improving CQ. As mentioned before, the present study aimed to investigate the participants' CQ in terms of their perceptions towards foreign or dissimilar cultures. According to the interview results, the impact of their culture and the environment in which the participants live may play an important role in determining their CQ. Therefore, future research could be carried out to establish the connection between their home culture and different cultures in the process of advancing pre-service ELT teachers' CQ.

A further study could also look at the long-term effects of travelling/living overseas on pre-service ELT teachers' CQ. Almost all participants in the interviews pointed out the positive relationship between travelling or/and living in foreign countries or living in target cultures may contribute to their CQ by understanding these cultures profoundly.

This study focused on investigating the pre-service ELT teachers' overall degree of CQ at one of the state universities in Turkey. A comparative study on pre-service ELT teachers' CQ in different regions or even different countries could be carried out in order to see the contributing factors of CQ in different places or countries.

#### References

- Al-Momani, A.-l., & Atoum, A. (2016). Cultural Intelligence among Jordanian university students. *International Journal of Education & Management Studies*, *6*(1), 48-53.
- Alon, I., Boulanger, M., Meyers, J., & Taras, V. (2016). The development and validation of the business cultural intelligence quotient. *Cross Cultural and Strategic Management*, 23(1), 78-100.
- Ang, S., Van Dyne, L., Koh, C., Templer, K., Tay, C., & Chandrasekar, N. (2007). Cultural Intelligence: Its measurement and effects on cultural judgment and decision making, cultural adoptation and task performance. *Management and Organization Review*, *3*, 335-371.
- Ang, S., & Van Dyne, L. (2008). Conceptualization of cultural intelligence: Definitions,
   distinctiveness, and nomological network. In A. a. Dyne, *Handbook of cultural intelligence: Theory, measurement, and applications* (pp. 3-15). New York: M.E. Sharpe.
- Aziz, Z., Fatemi, A., Pishghadam, R., & Ghapanchi, Z. (2015, May). Investigating the Relationship between Iranian EFL learners' Cultural Intelligence and their Home Culture Attachment. *Mediterranean Journal of Social Science*, 6(3), 575-585.
- Baez, D. (2014). Cultural Intelligence in foreign language classes. Unpublished Ph.D Thesis.Terre Haute, Indiana: Indiana State University.

Bandura, A. (1997). Self-Efficacy: The Exercise of Control. New York: Freeman.

- Bandura, A. (2002). Social cognitive theory in a cultural context. *Applied Psychology: An International Review*, 269-290.
- Barkley, E. (2009). *Student Engagement Techniques: A handbook for College Faculty*. San Francisco, CA.

- Benton-Borghi, B., & Chang, Y. (2012). Critical examinations of candidates' diversity competence: Rigorous and systematic assessment of candidates' efficacy to teach diverse student populations. *The Teacher Educator*, 47, 29-44.
- Brislin, R. (1981). Cross-cultural encounters: Face-to-face interaction. New York: Pergamon.
- Brislin, R., Worthley, R., & MacNab, B. (2006). Cultural Intelligence: Understanding behaviours that serve people's goals. *Group & Organization Management*, *31*(1), 40-55.
- Broido, E. (2004). Understanding diversity in millennial students. *New Directions for Student Services*, *106*, 73-85.
- Celce-Muricia, M., Dörnyei, Z., & Thurrell, S. (1995). Communicative competence: A pedagogically motivated model with content specifications. *Issues in Applied Linguistics*, 6(2), 5-35.
- Chen, G., & Starosta, W. (1999). A Review of the Concept of Intercultural Awareness. *Human Communication*, 27-54.
- Chen, G., & Starosta, W. (2000). The Development and Validation of the Intercultural Sensitivity Scale. *Human Communication*, *3*, 1-15.
- Chen, G., Kirkman, B., Kim, K., Farh, C., & Tangirala, S. (2010). When does croos-cultural motivation enhance expatriate effectiveness? A multilevel investigation of the moderating roles of subsidiary support and cultural distance. *Academy of Management Journal*, 53(5), 1110-1130.
- Comber, B., & Kamler, B. (2004). Getting out of deficit: Pedagogies of reconnection. *Teacher Education*, 15(3).

- Derin, A., Zeynep, C., Pinar, E., Ozlem, K., & Gökçe, K. (2009). Turkish EFL teachers' opinions on intercultural approach in foreign language education. *Procedia - Social and Behavioral Sciences*, 1611-1616.
- Dwyer, Mary, & Courtney K., P. (2004). The benefits of study abroad. *Transitions Abroad*, *37*(5), 48-66.
- Earley, P., & Ang, S. (2003). Cultural Intelligene: Individual Interactions across cultures. Palo Alto: Standford University Press.
- Earley, P., & Ang, S. (2008). *Cultural Intelligence: Individual interactions across cultures*. California: Stanford Publishing House.
- Earley, P., & Mosakowski, E. (2004). Cultural Intelligence. *Harvard Business Review*, *32*(10), 139-146.
- Earley, P., & Peterson, R. (2004). The Elusive Cultural Chameleon: Cultural Intelligence as a New Approach to Intercultural Training for the Global Managers. *Academy of Management Learning and Education*, 3(1), 100-115.
- Eccles, J., & Wigfield, A. (2002). Motivational beliefs, values and goals. *Annual Review of Psychology*, *53*, 109-132.
- Emitt, M., Komesaroff, L., & Pollock, J. (2006). Language & Learning: an introduction for teaching: (Vol. 4). Melbourne: Oxford University Press.
- Engel, C. (2010). The impact of Erasmus mobility on the professional career: Empirical results of international studies on temporary student and teaching staff mobility. *International student mobility and migration in Europe, 4*, 351-363.

- Engle, R., & Crowne, K. (2014). The impact of international experience on cultural intelligence:An application of contact theory in a structured short-term programme. *Human Resource Development International*, 17(1), 30-46.
- Fatemipour, H., & Shirmohamadzadeh, V. (2014). The relationship between communication apprehension and learners' beliefs about language learning with EFL University Students' Willingness to Communicate. *International Journal of Language Learning and Applied Linguistics World*, 7(4), 112-122.
- Fondrie, S. (2009). You don't say! when preservice teachers' public discourse from private opinion. *Multicultural Perspective*, *11*(4), 217-220.
- Gajda, R., & Gravedi, L. (2006). Assimilating "Real" teachers in teacher education: Benefits and limitations of a professional development school course delivery model. *Action in Teacher Education*, 55(3), 201-213.
- Gardner, R., & Lambert, W. (1972). Attitudes and motivation in second language learning.Rowley, Mass.: Newbury House.
- Ghonsooly, B., & Shalchy, S. (2013). Cultural Intelligence and writing ability: Delving intofluency, accuracy and complexity. *Novitas-Royal (Research on Youth and Language)*, 7(2), 147-159.
- Ghonsooly, B., & Sistani, S. (2015). Cultural intelligence in foreign language learning contexts. *Cultus*, 47.
- Gmelch, G. (1997). Crossing Culture: Student travel and personal development. *International Journal of Intercultural Relations*, 21(4), 475-490.
- Harris, M. (1980). Culture, People, Nature. An Introduction to General Anthropology. New York (Harper and Row) 1980.

- Holoviak, J., Verney, T., Winter, A., & Holoviak, S. (2019, 12 17). "Assessing academic performance through study abroad: Benefits of the experience". Retrieved 12 2019, from Http: // www.aabri.com/ manuscripts/10713.pdf
- Imai, L., & Gelfand, M. (2010). The culturally intelligent negotiator: The impact of cultural intelligence (CQ) on negotiation sequences and outcomes. *Organizational Behavior and Human Decision Processes*, 112(2), 83-98.
- Kadam, R., Rao, S., Abdul, W., & Jabeen, S. (2020). A comprehensive examination of antecedents of cultural intelligence among students: testing the moderation effect of third culture kids. *International Journal of Education Management*, 34(2), 245-263.
- Keesing, R. (1981). Culture, society, and the individual. Part II, in Cultural Anthropology, a contemporary perspective, 2nd edition, Holt, Rinehart & Winston International Edition, New York.
- Khodaday, E., & Ghahari, S. (2012). Exploring the Relationship Between Foreign Language Proficiency and Cultural Intelligence. *The International Journal of Language Learning and Applied Linguistics World*, 1(1), 22-31.
- Khodadady, E., & Yazdi, B. (2014). Cultural Intelligence of Language Learners within a monocultural context. *International Journal of Psychology and Behavioral Sciences*, 4(5), 165-172.
- Kim, Y. (1991). Intercultural Communicative Competence. In S. Ting-Toomey, & F. Korzenny, *Cross-cultural Interpersonal Communication* (pp. 259-275). California: Sage Publication.
- Koester, J., & Lustig, M. (2010). Intercultural competence interpersonal communication across culture (Vol. 6). Boston: MA: Allyn & Bacon.

- Latham, N., & Vogt, W. (2007). Do professional development schools reduce teacher attrition?
  Evidence from a longitudinal study of 1000 graduates. *Journal of Teacher Education*, 58(2), 153-167.
- Leung, A., Maddux, W., Galinsky, A., & Chi, C. (2008). Multicultural experience enhances creativity: The when and how. *American Psychologist*, *63*(3), 169-181.

Levince, A. (2006). Educating schoolteachers. Washington DC.: Educational School Projects.

- Livermore, D. (2011). *The Cultural Intelligence Differences Special Ebook Edition: Master the One Skill You Cannot Do Without in Todays' Global Economy.* New York: AMACOM.
- Lustig, M., & Koester, J. (2010). *Intercultural Competence: Interpersonal Communication across Culture*. Boston: Pearson Education, Inc.
- MacDevitt, B. (2004). Negotiating the Syllabus: A win-win Syllabus. ELT Journal, 58, 3-9.
- Miles, M. and Huberman, A. M. (1994). Qualitative Data Analysis. United States of America: Sage Publications.
- Milli Eğitim Bakanlığı , (MEB) [Turkish Ministry of National Education]. (2017). İngilizce Dersi
  Öğretim Programı (Taslak) (İlkokul ve Ortaokul 2,3,4,5,6,7 ve 8. Sınıflar) [English
  Language Teaching Program (Draft) (Primary and Secondary Schools Grades 2,3,4,5,6,7
  and 8)]. Ankara: T.C. Millî Eğitim Bakanlığı.Milli Eğitim Bakanlığı , (MEB) [Turkish
  Ministry of National Education]. (2018). İngilizce Dersi
- Molinsky, A. (2007). Cross-cultural code-switching: The Psychological Challenges of adapting behavior in foreign cultureal interactions. *Academy of Management Review*, *32*, 622-640.
- Morrel, D., Ravil, E., Ramsey, J., & Ward, A. (2013). Past experience, cultural intelligence and satisfaction with international business studies. *Journal of Teaching in International Business*, 24(1), 31-43.

- Muzzurco, A., Jesiek, B., & Ramane, K. (2012). Are Engineering Students Culturally Intelligent?
  Preliminary Results from a Multiple Group Study. *Proceedings of the 2012 ASEE Annual Conference and Exposition*, (pp. 10-13). San Antonio.
- Ng, K., & Earley, P. (2006). Culture + intelligence old constructs new frontiers. *Group and Organizational Management*, *31*(1), 4-19.
- Ng, K., Van Dyne, L., & Ang, S. (2009). From experiencing to experiential learning: cultural intelligence as a learning capability for global leader development. *Academy of Management Learning & Education*, 8, 511-526.
- Otero, M., & MacCoshan, A. (2008). The Role of the Erasmus Programme in Enhancing Intercultural Dialogue. Presentation of the Results from the Erasmus Student Network Survey 2007. Proceedings of the 4th International Barcelona Conference on Higher Education. Barcelona: Higher education for intercultural dialogue and multiculturalism.
- Papatsiba, V. (2005). Student mobility in Europe: An academic, cultural and mental journey?
   Some conceptual reflections and empirical findings. *International Perspectives on Higher Education Research*, *3*, 29-65.
- Peoples, J., & Bailey, G. (2011). *Humanity: An introduction to cultural anthropology*. Cengage Learning.
- Rachmawaty, N., Akil, M., & Dollah, S. (2018). Do Cultural Intelligence and Language Learning Strategies Influence Students' Language Proficiency. *Journal of Language Teaching and Research*, 9(3), 655-663.
- Ramalu, S., Rose, R., Uli, J., & Kumar, N. (2010). Expatriate Performance in International Assignments: The Role of Cultural Intelligence as Dynamic Intercultural Competency. *International Journal of Business and Management*, 5(8), 1833-8119.

- Rustambekov, E., & Mohan, R. (2017). Cultural Immersion Trip to Southeast Asia: A Study of Cross-Cultural Intelligence. *Journal of Teaching in International Business*, 28(2), 87-103.
- Schaffer, B., & Riordan, C. (2003). A review of intercultural methodologies for organizational research: A best-practice approach. *Organizational Research Methods*, 6, 169-215.
- Shannon, L., & Begley, T. (2008). Antecedents of four-factor model of cultural intelligence. In S. Ang., & L. Van Dyne, *Handbook of Cultural Intelligence: Theory, Measurement, and Application* (pp. 41-55). New York: M.E. Sharpe.
- Singh, B., & Singh, G. (2010). The national Professional Qualification for Headship (NPQH)
   Program for Secondary Headteachers in Malaysia: An Evaluative Case Study.
   Birmingham: University of Birmingham.
- Spencer-Oatey, H. (2008). Culturally Speaking: Culture, Communication, and Politeness Theory. In H. Spencer-Oatey, *Face*, *(im)politeness, and rapport* (pp. 11-47). London: Continuum.
- Stainer, F. (1971). Culture: A motivating factor in the French Classroom. In J. C., & P. Castle, *French language education: The teaching of culture in the classroom*. Springfield: State Department of Public Instruction.
- Taguchi, N. (2007). Development of Speech and Accuracy in Pragmatic Comprehension in English as a Foreign Language. *TESOL Quarterly*, 313-338.
- Tarique, I., & Takekeuchi, R. (2008). Developing cultural intelligence: The role of international non-work experiences. In S. Ang., & L. Van Dyne, *Handbook of Cultural Intelligence: Theory, measurement, and applications* (pp. 56-70). Armond, New York.: M.E. Sharpe.
- Tekin, U., & Hiç Gencer, A. (2013). Effects of the Erasmus program on Turkish universities and university students. *Trakya Universitesi Sosyal Bilimler Dergisi*, 15(1), 109-122.

- Thomas, D., & Inkson, K. (2003). *Cultural Intelligence: People Skills for Global Business*. San Francisco: CA: Berrett- Koehler.
- Thomas, D. (2006). Domain and Development of Cultural Intelligence: The Importance of Mindfulness. *Group and Organizational Management*, *31*(1), 78-99.
- Thomas, D., Ravlin, E., Stahl, G., & Ekelund, B. (2008). Cultural Intelligence: Domain and Assessment. *International Journal of Cross-Cultural Management*, 8(2), 123-143.
- Triandis, H. (2006). Cultural Intelligence in Organizations. *Group and Organization* Management, 31, 20-26.
- Tylor, E. B. (1871). Researches into the Development of Mythology, Philosophy, Religion, Art and Custom and Primitive Culture.
- Van de Vijver, F., & Leung, K. (2009). Methodological issues in researching intercultural competence. In D. Deardorff, *The Sage handbook of intercultural competence* (pp. 404-418). Thousands Oak CA: Sage Publications.
- Ward, C., Fischer, R., Lam, F., & Hall, L. (2009). "The convergent, discriminant, and incremental validity of scores on a self-report measure of cultural intelligence". *Educational and Psychological Measurement*, 69(1), 85-105.
- Wang, K., Heppner, P., Wang, L., & Zhu, F. (2015). Cultural intelligence trajectories in new international students: Implications for the development of cross-cultural competence.
   *International Perspectives in Psychology: Research, Practice, Consultation, 4*(1), 51-65.
- Ward, C., Fischer, R., Zaid Lam, F., & Hall, L. (2008). The convergent, discriminant, and incremental validity of scores on a self-report measure of cultural intelligence. *Educational and Psychological Measurement*, 85-105.

Williams, T. (2005). Exploring the Impact of Study Abroad on Students' Intercultural Communication Skills: Adaptability and Sensitivity. *Journal of Studies in International Education*, 9(4), 356-371.

- Williams, C., & Johnson, L. (2011). Why can't we be friends?: Multicultural attitudes and friendships with international students. International Journal of Intercultural Relations, 35, 41-48.
- Wood, E., Heather, Y., & Peters, S. (2013). Short-term cross-cultural study tours: impact on cultural intelligence. *The international Journal of Human Resource Management*, 25(4), 558-570.
- Yang, T., & Chang, W. (2017). The relationship between cultural intelligence and psychological well-being with the moderating effects of mindfulness: A study of international students in Taiwan. *European Journal of Multidisciplinary Studies*, 384-391.

# Appendices

# **Appendix 1: Cultural Intelligence Scale (CQS)**

#### **Cultural Intelligence Scale**

#### Dear Participant,

The goal of this scale is to find out the cultural intelligence level of Turkish pre-service ELT teachers. The scale consists of two parts. The first part includes demographic questions describing some general features of the participants. The second part consists of 20 statements ranked on a 5point Likert scale. In the light of your personal experience, you are cordially asked to show your agreement or disagreement with the given statements.

The answers given voluntarily and anonymously on your behalf by signing the consent form below will not be used in any way to evaluate you and will be kept confidential. I thank you for your contribution to this academic work.

> M.A. Student Madina Hüseyinoğlu Uludag University ELT Department <u>madinahuseyinoglu@gmail.com</u>

None of the questions were foreseen as upsetting however, you may skip any questions you don't want to answer, and you may end the interview at any time. You can decline from the study at any time, for any reason. Your decision to stop participating, or to refuse to answer particular questions, will not affect your relationship with the researcher or the institution.

The **information** you will share with us if you participate in this study will be **kept confidential**. All information you supply during the research will be held in confidence and, **your name will not appear in any report or publication of the research.** The data will only be used for scientific purposes and anonymously. Your data will be safely stored in a locked facility and only the researchers will have access to this information. Confidentiality will be provided to the fullest extent possible. If you want to take part in the study, please sign below. I am voluntarily taking part in this study.

Signature: \_\_\_\_\_

# Part I. Demographic Information. (Please mark the information which suits you.)

#### 1.Gender:

A: Female ( )	B: Male (	)
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# 2.Age:

A: Under 18 ( ) B: 18-23 ( ) C: 24-29 ( ) D: 30 and over ( )

### 3.What type of high school did you go to?

A: State ( ). B: Private ( ).

## 4. Which high school did you go to?

A: Anatolian high school ( ). B: Science high school ( ). C: Religious high school ( ). D.
Other ( ) – Please specify\_\_\_\_\_\_.
5.Are you a dual citizen?
A: Yes ( ) B: No ( )

#### 6.Have you ever been abroad?

A: Yes ( ) If yes, please specify how long:

B: No( )

## 7.Do you speak any language besides Turkish and English?

A: Yes ( )	If yes, please specify:

B: No(

)

## 8. Do you have friends living abroad?

A: Yes ( )

B: No( )

Part II. Please show your agreement or disagreement with the					
following statements by checking the numbers in the boxes.	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
In this scale;	ly D				ongly
1= Strongly Disagree 2= Disagree 3= Neutral 4= Agree 5=	Strong				Str
Strongly Agree					
Please check the number below that indicates how much you	1	2	3	4	5
agree or disagree with each statement.					
1. I am conscious of the cultural knowledge I use when	1	2	3	5	5
interacting with people with different cultural backgrounds.					
2.I adjust my cultural knowledge as I interact with people	1	2	3	4	5
from a culture that is unfamiliar to me.					
3. I am conscious of the cultural knowledge I apply to cross-	1	2	3	4	5
cultural interactions.					
4. I check the accuracy of my cultural knowledge as I interact	1	2	3	4	5
with people from different cultures.					
5. I know the legal and economic systems of other cultures.	1	2	3	4	5
6. I know the rules (e.g., vocabulary, grammar) of other	1	2	3	4	5
languages.					
7. I know the cultural values and religious beliefs of other	1	2	3	4	5
cultures.					
8. I know the marriage systems of other cultures.	1	2	3	4	5
9. I know the arts and crafts of other cultures.	1	2	3	4	5
	I	L	L	1	I

10. I know the rules for expressing non-verbal behaviors in	1	2	3	4	5
other cultures.					
11. I enjoy interacting with people from different cultures.	1	2	3	4	5
12. I am confident that I can socialize with locals in a culture	1	2	3	4	5
that is unfamiliar to me.					
13. I am sure I can deal with the stresses of adjusting to a	1	2	3	4	5
culture that is new to me.					
14. I enjoy living in cultures that are unfamiliar to me.	1	2	3	4	5
15. I am confident that I can get accustomed to the shopping	1	2	3	4	5
conditions in a different culture.					
16. I change my verbal behavior (e.g., accent, tone) when a	1	2	3	4	5
cross-cultural interaction requires it.					
17. I use pause and silence differently to suit different cross-	1	2	3	4	5
cultural situations.					
18. I vary the rate of my speaking when a cross-cultural	1	2	3	4	5
situation requires it.					
19. I change my non-verbal behavior when a cross-cultural	1	2	3	4	5
situation requires it.					
20. I alter my facial expressions when a cross-cultural	1	2	3	4	5
interaction requires it.					
	•	•	•		•

Appendix 2: Semi-structured interview guide (English)

1. In your opinion, what is culture?

2. What should we need for successful intercultural communication? why?

3. Can you describe yourself as an inter-culturally competent user? Why or why not?

4. Do you adopt or modify your cultural knowledge during the intercultural communication? if so how?

5. What do u think you need to know about different cultures u encounter?' Why? Do u already know all these?

6. Do you speak another language? Do you feel this gives you and insight into the culture of that language? In what way?

7. Do you think being a dual citizen can improve one's cultural intelligence?

8. Do you think having a foreign friend impact your cultural intelligence? In what ways?

8. Why do you choose to become a teacher? Do you enjoy interacting with people from different cultures?

9. Do you find it important to socialize with people from other cultures? Why? and how do you feel when you do?

10. How do you feel if you were supposed to live in a dissimilar culture? Why or why not? What would you do to deal with this dissimilarity?

11. If you can easily adjust yourself to a new cultural surrounding, how do you do this?

12. Do you change how you speak in cross-cultural interaction (in terms of accent, tones etc)? why or why not? If so, in what ways?

## Appendix 3: Semi-structured interview guide (Turkish)

#### Kültürel Zekâ Mülakat Soruları

1. Size göre kültür nedir?

2. Kültürlerarası iletişimde başarılı olmak için neye ihtiyacımız vardır? Neden?

3. Kendinizi kültürlerarası yeterli bir dil kullanıcısı olarak tanımlayabilir misiniz? Neden evet veya neden hayır?

4. Kültürlerarası iletişimde kültürler ile ilgili varsayımlarınızı gözden geçirip kendi davranışınızı buna göre değiştiriyor musunuz? Evet ise nasıl değiştiriyorsunuz? Bu varsayımlarınız nelerdir?

5. Sizce karşılaştığınız farklı kültürlerle ilgili neleri bilmelisiniz? Neden? Halihazırda bunları biliyor musunuz?

6. Türkçe ve İngilizce dışında başka dil konuşuyor musunuz? Sizce bu size o dilin kültürünü daha iyi anlamaya yardımcı oluyor mu? Ne şekilde?

7. Çok dil konuşuyor olmak kültürel zekayı olumlu etkiler mi? Ne şekilde sizce?

8. Sizce özel lise veya devlet lisesinde okumak, çifte vatandaş olmak kişinin kültürel zekasının gelişimine katkı sağlar mı? Nasıl?

9. Farklı kültürlerden insanlar ile iletişim kurmak kendinizi nasıl hissettiriyor? Neden?

10. Farklı kültürü olan bir ortamda yaşamanız gerekse nasıl hissedersiniz? Neden? Bu farklılıkla baş etmek için ne yapardınız?

11. Yeni kültürel ortama kolayca alışabilir misiniz? Buna ne sebep olur?

12. Kültürlerarası etkileşimde bulunurken konuşmanızı (aksan, ton, vucut dili, vb.) göre değiştiriyor musunuz?

### **Appendix 4: Examples of Transcript of Interviews**

- Bana göre kültür toplumun gelenekleri, yaşan stili, yiyecekleri, kuşaktan kuşağa aktarılabilen maddi manevi ne varsa bunları toplamına kültür denir. Yaşam stili olabilir, artık onlar ile özdeşmiş şeyler, evet böyle.
- 2. Öncelikle, iletişimin olabilmesi için insanların karşılıklı birbirini anlaması ve empati kurabilmesi gerekiyor. Bunu başarabilmek için ise insanların ait olduğu kültüre koşulsuza fanatik olmadan başka kültürlerin de varlığını ve değerini kabul etmesi gerekir. Bu yüzden kültürlerarası iletişimde başarılı olmak için önce ön yargıyı ortadan kaldırmalı ve başka kültürlerin değerini de kabul etmeliyiz.
- 3. Sanırım olması gerektiği kadar evet tanımlarım. Bu kanıya ise kendi toplumumun düşüncelerini, yaşayış biçimlerini ve davranışlarını başka kültürler ile etkileşime geçtiğimde uygun bir dil ile ifade ettiğimi düşünüyorum. Tabi ki bu ifade tarzı geliştirilebilir.
- 4. Farklı kültürler ile bir arada olduğumda kendi kültürümü evet yansıtıyorum fakat daha önce de deneyimlediğim gibi zaman geçtikçe tamamen bir asimileden söz edemesek de bazı davranış ve yaşayış biçimlerinin yontulduğunu hissettim.
- 5. Şöyle, ben kişisel olarak cevap verirsem, önce nelerden hoşlanmadıklarını öğrenmek isterim. Öğreniyorum zaten. Ne yaparsam bu kültürde ayıptır veya sevilmez. Sevilir kısmini araştırmadın açıkçası, sevdirmeye çalışmazsın ama bazı şeyleri de yapmamaya çalışırsın gibi bir şey. Saygılı olmak amacıyla. Bu şekilde etkileşim daha etkili oluyor karşındaki insanla, mesela biri bana Türkçe konuşuyor ve Türk kültüründen esintiler görebiliyorsam eğer, a ne kadar güzel öğrenmek istiyor, bu hoşuma gider ve iletişimimizi daha da güçlendirir. Bu yüzden bana başka bir kültürden bir insana mesela İspanyol bir arkadaşım var ve İspanya ile ilgili ne biliyorsan söylersen onlar mutlu oluyorlar işte. Daha çok konuşabiliyorsun, daha çok iletişim güçleniyor. Tam öncesinde araştırdım mesela bir erasmus programına gitmeden

önce, bir sürü arkadaşım vardı. Onlar ile konuşmadan önce merak ediyordum mesela araştırıyordum neymiş bu diye. Normalde de kültürlere meraklı olan bir insanım ve bunların hoşlanmadığı şey neymiş ve en çok sevilen şey neymiş gibi stereotype gibi şeyleri araştırmaya çalışırdım.

- 6. Biraz Almanca, biraz İspanyolca ve çok az Norveççe biliyorum. Sadece fonetik bile insana bir his veriyor. Etimoloji ipuçları veriyor. Semantik ise neredeyse her şeyi ortaya koyuyor. Her şeyin temelinde lisan vardır. Kültürün de öyle. Düşünce ve duyguları ifade etmek için kullandığımız bir araç olarak seçtiğimiz kelimeler bizi ele verir bence.
- 7. Bence yükseltir, benim 3. Dil olarak Fransızca öğrenmiştim. Yani B1 seviyesi falan çok ileri değil ama, bu bana o kadar çok şey kattı ki, farklı farklı bakış açıları ve o dilde söyleyeceğimiz ve kullandığımız idiom'lar farklı pencereden de bakmamı sağladı. Veya mesela Fransızcada bir phrase vardır, onun karşılığı Türkçede yoktur, onu sadece Fransızcada kullanabiliriz ve anlatabiliriz, ama Türkçeye gelince farklı bir şekilde çeviri yaparız. Bu yüzden farklı dil bilmek bize çok farklı bir pencere açıyor bize. İngilizce de aynı şekilde İngilizcede olan bazı şeyler Türkçede yok, Türkçede olan bazı şeyler İngilizcede yok. Bu yüzden ne kadar faza dil öğrenirsek, kültürel zekâmız o kadar artar diye düşünüyorum.
- Evet, ben çifte vatandaşım ve diğer kültürleri daha iyi anlayabiliyorum. Özel lisede okumanın bir avantajı, yabancı uyruklu öğretmenlerin ders veriyor olması kültürel algıyı olumlu anlamda değiştirdiğini düşünüyorum.
- 9. Kendimi iyi hissettiriyor. Farklı kültürlere merakım var ve bu yüzden yeni kültürleri öğrendikçe daha da mutlu oluyorum.
- 10. Olabildiğince bu kültürel farklılıklara maruz kalmaya çalışırdım. Başta tuhaf gelse de daha sonraki süreçlerde alışırdım.

12. Evet, ton ve beden dili kültürü yansıtan unsurlardır.

**Appendix 5: Content analysis tables** 

Category	:	Sub-categories	Frequency	Example Meaning Unit
	i.	Lifestyles	6	"I think culture is what comprises traditions, lifestyles, foods and all the
Perceptions of CQ		1	material and nonmaterial thing that are transferred from generation to generation."	
			1	
	ii.	Tradition & customs	8	
		'traditions/customs', 'experience', 'habits', 'values'	1	
		nubus, vuiues	3	
			1	
	iii.	Beliefs	1	
	'totems', 'taboos', 'rules', 'material and spiritual matters', 'ideas and options'	1		
		1		
			1	
			2	

Category	Sub-cate	egories	Frequency	Example Meaning Unit
	i.	Attitudes	9	"Tolerance and empathy. We must be aware that cultures
		'openness to differences', 'tolerance',	9	can be different from one another and we need to respect it."
		'respect', 'less anxiety and	5	respect it.
Metacognitive		less interaction', 'empathy',	1	
CQ-themed responses		'sincerity', 'transparency'	2	
			1	
			1	
	ii.	Knowledge	1	
		'knowledge of different cultures',	1	
		'knowledge of different languages'		
	iii.	Internal factors	2	
		'prejudice',	1	
		'low level of adaption', 'fear of change'	1	

Category	Sub-cate	egories	Frequency	Example Meaning Unit
Cognitive	i.	Intercultural knowledge	1	"We must know the
CQ- themed		ʻopen-mindedness', 'no	1	important values, way of living,
responses		prejudice', 'no cultural comparison', 'cultural	1	religious beliefs,
		values', 'literature'	6	and food culture of the culture we
			1	encounter."
ii. Native culture representation		1		
		'represent Turkish culture'		
	iii.	Inquisitiveness	1	
		'interests in other cultures', 'observation'	1	
	iv. Language competence	1		
<i>'pragmatics'</i> v. Internal factors <i>'prejudiced habits',</i> <i>'individual mistakes',</i> <i>'lack of cultural</i> <i>knowledge'</i> vi. External factors	1			
	Internal factors	1		
		'prejudiced habits',	1	
		'lack of cultural	2	
	vi.	External factors	1	
		'education systems',	1	
		'closed society', 'less	1	
		exposure to target culture', 'religion', 'way	3	
		of life'	2	

Category	tegory Sub-categories		Frequency	Example Meaning Unit		
Motivational CQ-themed responses	vii.	Willingness to learn cultures <i>'learning cultures',</i> <i>'enthusiasm'</i>	8 2	"It makes me feel good and lucky. I think, adding a different color to my understanding, vision can contribute to my development and so I feel happy."		
	viii.	Adaptation	13			
		'ability to adopt', 'openness to new cultures'	5			
	ix.	Previous experience	3			
		'mutual	1			
		understanding', 'sympathy', 'overseas travelling'	1			
	х.	Intrinsic factors	1			
		'homesickness',	1			
		'stress', 'stereotypes'	1			
	xi.	Extrinsic factors	1			
		'native culture influence', 'time'	1			

Category	Sub-cate	egories	Frequency	Example Meaning Unit
Behavioral CQ-	xii.	environmental Influence	12	"Yes, I do because language learning is an imitation in a way
themed responses 'imitation', 3 'mutual understanding',	3	When learning a language from the person who speaks it, I learn the language together with that person's tone and stress."		
	xiii.	Emerging factors	1	
		'language personality' (English -use less frequent body languages, Spanish- use more frequent body languages, Turkish – use frequent body languages)		

# ÖZ GEÇMİŞ

Doğum Yeri ve Yılı:	Semerkant/ Özbekistan 1987		
Öğr. Gördüğü Kurumlar:	Başlama	Bitirme	Kurum Adı Yılı
	Yılı	Yılı	
Lise	2004	2005	Gardner Public High School, MT/ USA
Lisans	2006	2010	Eskişehir Anadolu Üniversitesi
Yüksek Lisans	2015	2020	Uludağ Üniversitesi
Bildiği Yabancı Diller ve D	üzeyi:	İngilizce-İleri	, Rușça-İleri
Çalıştığı Kurumlar:	Başlama ve A	Ayrılma	Kurum Adı Tarihleri
	2014-2016		Bursa Orhangazi Üniversitesi
	2018-2020		Bursa Eğitim Kalesi Anadolu Lisesi

# Yurt İçi ve Yurt Dışında Katıldığı Projeler:

GlobELT Conference, Ephesus, Izmir-2017.

# Yurt İçi ve Yurt Dışında Yapılan Yayınlar:

Gürsoy, E., & Hüseyinoglu, M. (2017). ELT Teacher Trainees' Self-Perceptions and Awareness of the Pronunciation Skill and Their Attitudes towards Its Instruction. *Novitas-ROYAL (Research on Youth and Language)*, v11 n2 p169-183.

# ULUDAĞ ÜNİVERSİTESİ

#### TEZ ÇOĞALTMA VE ELEKTRONİK YAYIMLAMA İZİN FORMU

Yazar Adı Soyadı	
Tez Adı	
Enstitü	
Anabilim Dalı	
Bilim Dalı	
Tez Türü	
Tez Danışman(lar)ı	
Çoğaltma (Fotokopi Çekim) İzni	Tezimden fotokopi çekilmesine izin veriyorum
	Tezimin sadece içindekiler, özet, kaynakça ve içeriğinin % 10 bölümünün fotokopi çekilmesine izin veriyorum
	Tezimden fotokopi çekilmesine izin vermiyorum
Yayımlama İzni	<ul> <li>Tezimin elektronik ortamda yayımlanmasına izin veriyorum</li> </ul>
	Tezimin elektronik ortamda yayımlanmasının ertelenmesini istiyorum 1 yıl 2 yıl 3 yıl
	<ul> <li>Tezimin elektronik ortamda yayımlanmasına izin vermiyorum</li> </ul>

Hazırlamış olduğum tezimin yukarıda belirttiğim hususlar dikkate alınarak, fikri mülkiyet haklarım saklı kalmak üzere Uludağ Üniversitesi Kütüphane ve Dokümantasyon Daire Başkanlığı tarafından hizmete sunulmasına izin verdiğimi beyan ederim.

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